

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Cape Fear River
Date: Wednesday, June 28, 2023 9:34:13 AM

I am writing to echo my concerns of the NC Coastal Federation which opposes the deepening and widening of the Cape Fear River. Below are their perspectives on this proposal:

Deepening and widening the Federal ship channel will:

- Negatively impact fish and wildlife habitats including threatened and endangered species and marine mammals;
- Degrade water and air quality;
- Increase flooding as more water can surge up the river during hurricanes and other extreme weather events;
- Cause more saltwater to intrude further up the river, changing salinity and killing trees;
- Increase wetland and shoreline erosion along the river and on adjacent oceanfront beaches. Long-term erosion trends along both Bald Head and Oak Islands have already been attributed to modifications to the ship channel. More deepening and widening of the channel, "softening" river bends, and extending the channel seaward would likely affect wave energy and sediment dynamics of the entire region. Produce larger wakes from bigger and more numerous ships which will increase already significant shoreline erosion.
- Result in more vessel strikes of turtles, mammals, and fish, and it's important to examine the impacts that increased erosion and shoreline hardening may have on sea turtle and bird nesting habitats.
- Degrade fishery and bird habitats associated with estuarine islands, shoals and mudflats that provide essential bird resting and foraging habitats.

Thank you for your time and consideration.

Regards,

[REDACTED], resident of Wilmington

From: [Cahoon, Larry](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [REDACTED]
Subject: [Non-DoD Source] Comment on proposed Wilmington harbor dredging proposal
Date: Thursday, June 29, 2023 10:28:13 AM
Attachments: [Lighters-2016-May-18.pdf](#)

Hello, I wish to provide comments about the dredging project proposal (Wilmington Harbor 403). I have attached an article I prepared in conjunction with two students in UNCW's Master's in Coastal Ocean Policy program (MCOP) several years ago that advocated for consideration of Lighter Vessels as an alternative to dredging the Cape Fear River channel to deeper depth to accommodate increasingly deeper draft vessels. Harbor dredging is a now a global phenomenon owing to the increasing size of commercial shipping, notably container vessels that are reaching the 18,000+ TEU capacity. Dredging to accommodate these larger, deeper draft vessels is unavoidable if dredging is considered the only alternative to foregoing the service of such vessels. But dredging is not the only alternative for such service. Harbors and ports in other locations either cannot dredge or cannot afford to dredge to deeper depths and have adopted the use of Lighter Vessels to transfer cargoes from larger ships to ports. Use of Lighter Vessels is, in fact, an ancient practice dating back thousands of years.

Modern technology and shipbuilding capabilities support the development of Lighter Vessels that can offload bulk cargoes, containers, and even liquid materials, and that can add portable propulsion units to aid in positioning and transit. These technologies are well under development and in use in foreign and US ports already.

Lighter vessels can assist the Port of Wilmington by transferring the portions of larger cargoes intended for that port without requiring deep-draft vessels to make the long journey up the river and out again, which can result in greater efficiencies for those larger vessels while speeding the transfer of cargoes to the Port. Lighter Vessels could meet the larger ships offshore the mouth of the Cape Fear River. Being of shallow draft, Lighter Vessels could eliminate the need for additional expensive and environmentally problematic dredging of the CFR channel and reduce the impacts of ship wakes in the river.

Further aspects of the cost-benefit analysis for the proposed dredging project would include:

1. Reduced or eliminated need for channel dredging, blasting, and maintenance, including the entire CFR channel and portions of the river mouth area;
2. Reduced volumes of dredged material that require disposal, putting less burden on the capacity of the existing Eagles Island dredge disposal site and perhaps even eliminating the need to dispose of contaminated river channel dredged material at offshore disposal sites;
3. Less disturbance of contaminated sediments in the CFR channel and resulting mitigation costs;
4. Less shoreline erosion and associated mitigation costs in the river channel and estuary, notably along developed shorelines, such as Bald Head Island, Oak Island, and Southport;
5. Reduced impact on critical habitat for sea birds (Battery Island, etc.) and endangered fishes (Atlantic sturgeon, et al.);
6. Reduced impacts of tidal height excursions at Wilmington, which has recently experienced 8 inches of high tide sea level rise since 2010;
7. Less intrusion of salt water into aquifers and into oligohaline and freshwater marshes in

the tidally impacted portions of the CFR Estuary system.

I am aware that a variety of these impacts have been identified in other comments, but it is important to consider the mitigation costs of those impacts when compared to the costs of the Lighter Vessel alternative I propose here. Lighter Vessels would engender little if any of those mitigation costs, as they would avoid the need to do such extensive dredging.

I think it is critical to consider the use of Lighter Vessels as an Alternative to the proposed dredging project.

Thank you for your consideration.

Lawrence B. Cahoon, Professor
Distinguished Teaching Professor
Distinguished Senior Scholarly Engagement and Public Outreach Scholar
Dept. of Biology & Marine Biology
UNC Wilmington
910-962-3706

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Comment Submission to: Wilmington Harbor 403, U S Army Corp of Engineers
Date: Friday, June 30, 2023 3:07:52 PM

Thank you for the opportunity to share my input on the widening and deepening of the Cape Fear River/Wilmington Harbor.

I oppose the widening and deepening of the Cape River River because:

The river ecosystem is already seriously affected by the following:

- 1 - swine and poultry farms
- 2 - paper and wood pellet mills
- 3 - chemical plants like Chemours
- 4 - coal ash ponds not yet cleaned
- 5 - small and large dams
- 6 - feed and textile mills
- 7 - fast growing commercial and residential development
- 8 - climate change that will be seriously effecting this vulnerable 9,000 square mile river basin of about two million people
- 9 - destructive salt water intrusion.

Further widening and deepening will cause serious new problems for our river ecosystem; these are the major reasons:

- 1 - sand removal will destroy nearly 1,000 acres of soft bottom habitat that are primary nursing areas for juvenile fish
- 2 - sea turtle resting and foraging on the floor of the harbor will be effected
- 3 - larger ships could increase erosion on the river banks, threatening recreation activities and shorebird habitat
- 4 - sand removed could be contaminated by PFAS
- 5 - more salt intrusion up river, further destroying our shrinking wetland storm buffers
- 6 - increased truck traffic on our already congested roads
- 7 - more infrastructure in our over-developed community

Please respect the stewardship that we have been given to protect and enjoy our treasured river.

Sincerely-

[REDACTED]
Member of CFRW and NCCF

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Cc: [REDACTED]
Subject: [Non-DoD Source] Comments regarding the Wilmington Harbor 403 Letter Report and Environmental Impact Statement (EIS) as related to the February 2020 - North Carolina State Ports Authority (NCSPA) Section 203 Feasibility Study
Date: Thursday, June 29, 2023 4:08:04 PM
Attachments: [Wilmington Harbor 403 Letter Report Comments.pdf](#)

Please find attached my comments regarding the subject issue

Sincerely

[REDACTED]

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Deepening the Cape Fear River
Date: Thursday, June 15, 2023 12:33:31 PM

I would vote yes to deep the channel if it'll help our port grow & bring more commerce & revenue into our city.

Get [Outlook for Android](#)

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Dredging the Cape Fear River to 47 feet
Date: Monday, June 19, 2023 9:50:37 AM

There has to come a time when the environment and human welfare are considered over economic considerations. You saw what deepening the channel to 42 feet did to areas around Wilmington. If the channel is dug to 47 feet what will happen to the aquifer that supplies many, in the lower Cape Fear, with fresh drinking water? I doubt that the powers that be really know how seriously that aquifer will be affected. Guess work will not help in determining something so serious. What I do know is that the river shoreline all the way to lock and dam one and up the Northeast Cape Fear to Castle Hayne will lose its beauty. Cypress and other fresh freshwater dependent trees will be gone including its freshwater mussels, crustaceans, aquatic insects, alligators and fishes.

As you may have surmised I am totally against deepening the channel to 47 feet.

Regards,

[REDACTED]

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Harbor dredging
Date: Monday, June 19, 2023 7:41:00 PM

I'm concerned that the corps is not in contact with the NC DOT. DOT is and has been discussing a new bridge across the Cape Fear river. Deepening the waterway could have a significant impact on any bridge or bridges that may be crossing the river.

I hope you both will worry together on this project.

Thank you

Sent from my iPhone

From: [Sprinkle, Hannah H](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Improvements for the Wilmington Harbor Navigation Project
Date: Wednesday, June 21, 2023 10:28:34 AM
Attachments: [image001.png](#)
[Scoping Comments for Wilmington Harbor.pdf](#)

Good afternoon,

Please find the attached comment sheet for the proposed Improvements for the Wilmington Harbor Navigation Project in New Hanover County, North Carolina.

Thank you,

Hannah

Hannah Sprinkle

Environmental Specialist II
401 and Buffer Transportation Permitting Branch
Department of Environmental Quality

(910) 308-4021 (mobile)

910) 796-7379 (office)

hannah.sprinkle@deq.nc.gov ***please note my email address has changed ***



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Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

From: [Beth Darrow](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [Chris Shank](#)
Subject: [Non-DoD Source] Initial Scoping - Wilmington Harbor 403 June 2023 - Bald Head Island Conservancy
Date: Friday, June 30, 2023 1:21:10 PM
Attachments: [Wilmington Harbor 403 Scoping Letter BHIC 063023.pdf](#)

Good afternoon,

Please accept the following letter on behalf of Bald Head Island Conservancy for the Wilmington Harbor 403 Scoping Process.

Thank you,
Beth Darrow and Chris Shank

--

Elizabeth S. Darrow, Ph.D. (she/her)
Chief Scientist

Bald Head Island Conservancy
P.O. Box 3109
Bald Head Island, North Carolina 28461
office: 910.338.0942 (please note that email is best)
darrow@bhic.org

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Please Don't Deepen the Wilmington Cape Fear Channel
Date: Saturday, June 24, 2023 10:52:13 AM

I am concerned by the State Port of Wilmington proposal to deepen and widen the ship channel from the Atlantic Ocean to downtown Wilmington, NC. I am deeply troubled by the detrimental effects this proposal will have on our city, our citizens and our ecosystem.

I am a retired wildlife biologist and have great concern for it's negative impacts upon wildlife and its supporting ecosystem, and have come to the conclusion that this project needs to be stopped!

People move to and visit our city because of its natural appeal. If we continue to degrade our rivers and marshes and wildlife, we will lose what is special about this place. It happens all the time, all across the country we shouldn't let it happen here in Wilmington. This proposal will lead to degradation of our air quality and our already jeopardized water quality! Water quality will degrade because of contamination and sedimentation from dredge material disposal, which is impacted by PFAS, other industrial contaminants and toxic materials that may be found on the river bottom. It will increase flooding up the river during extreme weather, like our frequent hurricanes. It will increase wetland and shoreline erosion along the river and on nearby oceanfront beaches. Air, water, flooding and erosion are all concerns that will impact the quality of life for Wilmington citizens. It will negatively affect tourism in Wilmington as well.

Widening and deepening the channel will have a negative effect on fish and wildlife habitats and degrade fishery and bird habitats associated with estuarine islands. Many birds use these islands for food sources and as breeding and nesting habitats. This severe dredging will cause more saltwater to intrude up the river, changing salinity and killing trees. Many people love to fish here in Wilmington. The natural attributes of the river that need protecting benefit those who fish and all lovers of nature and outdoor adventure sports. Our beautiful barrier islands will suffer, as well as the fish that live around them and birds that live on them. Primary nursery areas where development of young fish and crustaceans are found in and around the river. The lower river is a critical habitat for the endangered Atlantic sturgeon. Turtles are found near the Wilmington Port and nest on the river's neighboring beaches. Birds depend on our river and ecosystem for nesting and overwintering. We must do what we can to preserve our natural resources, not destroy them.

Please don't take the drastic and irreversible step of deepening and widening the ship channel. We don't need more container boats traveling up and down. We can thrive by keeping our city and its waterways pristine.

Use this infrastructure monies for other projects that benefit wildlife and our local ecosystems rather than negatively impacting them.

Sincerely,

[REDACTED]

Sent from [REDACTED] iPad

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Proposal to deepen & widen ship channel from Atlantic Ocean to downtown Wilmington
Date: Friday, June 23, 2023 2:03:28 PM

I am concerned by the State Port of Wilmington proposal to deepen and widen the ship channel from the Atlantic Ocean to downtown Wilmington, NC. I am deeply troubled by the detrimental effects this proposal will have on our city, our citizens and our ecosystem.

People move to and visit our city because of its natural appeal. If we continue to degrade our rivers and marshes and wildlife, we will lose what is special about this place. It happens all the time, all across the country and shouldn't happen here. This proposal will lead to degradation of our air quality and our already jeopardized water quality. Water quality will degrade because of contamination and sedimentation from dredge material disposal, which is impacted by PFAS, other industrial contaminants and toxic materials that may be found on the river bottom. It will increase flooding up the river during extreme weather, like our frequent hurricanes. It will increase wetland and shoreline erosion along the river and on nearby oceanfront beaches. Air and water quality, flooding and erosion control are all concerns that will impact the quality of life for Wilmington citizens.

Widening and deepening the channel will have a negative effect on fish and wildlife habitats and degrade fishery and bird habitats associated with estuarine islands. This severe dredging will cause more saltwater to intrude up the river, changing salinity and killing trees. Many people love to fish here in Wilmington. The natural attributes of the river that need protecting benefit those who fish and all lovers of nature and outdoor adventure sports. Our beautiful barrier islands will suffer, as well as the sea life and birds that live on and around them. Primary nursery areas where the development of young fish and crustaceans occur are found in and around the river. The lower river is a critical habitat for the endangered Atlantic sturgeon. Turtles are found near the Wilmington Port and nest on the river's neighboring beaches. Birds depend on our river and ecosystem for nesting and overwintering. We must do what we can to preserve our natural resources, not destroy them.

Please don't take the drastic and irreversible step of deepening and widening the ship channel. We don't need more container boats traveling up and down. We can thrive by keeping our city and its waterways pristine.

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Protect the Lower Cape Fear River
Date: Friday, June 23, 2023 12:44:20 AM

Mr. Gatwood,

I am writing in regards to the Wilmington Harbor Navigation Improvement Project and the impact the project would have on the environment and community - specifically the direct conflict with long-term conservation efforts within the Lower Cape Fear River watershed.

Deepening and widening the federal ship channel will:

- Negatively impact fish and wildlife habitats including threatened and endangered species and marine mammals;
- Degrade water and air quality;
- Increase flooding as more water can surge up the river during hurricanes and other extreme weather events;
- Cause more saltwater to intrude further up the river, changing salinity and killing trees;
- Increase wetland and shoreline erosion along the river and on adjacent oceanfront beaches;
- Produce larger wakes from bigger and more numerous ships which will increase already significant shoreline erosion;
- Result in more vessel strikes of turtles, mammals, and fish, and increased erosion and shoreline hardening will have an impact on sea turtle and bird nesting habitats;
- Degrade fishery and bird habitats associated with estuarine islands, shoals and mudflats that provide essential bird resting and foraging habitats.

Natural attributes of the river that need your protecting include:

- Spectacular barrier islands, tidal creeks, and marsh ecosystems teeming with wildlife. Fish habitats, vital to our state's economy, provide for a variety of species, including red drum, mackerel, cobia, bluefish, flounder, shrimp, ten shark species, and over fifty snapper-grouper species.
- "Primary nursery areas" where post-larval and juvenile development of young finfish and crustaceans takes place, and the lower river is also designated as critical habitat for the federally endangered Atlantic sturgeon, which can live up to sixty years and travels upriver to spawn.
- The Wilmington Port, and neighboring Caswell Beach and Bald Head Island are important nesting grounds for federally protected sea turtles, and within the river, sandy shorelines, shell rakes, and marsh edges are nesting sites for state-listed diamondback terrapins.
- Birds throughout the year include over 330 species spotted in this region, from bald eagles to piping plovers. Thousands of shorebirds stop over during spring and fall migration and to overwinter. Over 25% of the State's coastal waterbirds depend on the Lower Cape Fear River region for nesting.
- Water quality will degrade because of contamination and sedimentation from dredge material disposal – which is impacted by PFAS and other industrial contaminants – and the activity of dredging itself can negatively impact water quality by stirring up sediments and toxic materials that may be found on the bottom of the river.
- Harbor deepening can also reduce dissolved oxygen levels to unnaturally low levels on

the river's bottom, as well as alter the salinity profiles of the river.

I hope you take into consideration the ecological impact the Wilmington Harbor Navigation Improvement Project will have on the North Carolina costal ecosystem and stop the widening and deepening of the federal ship channel.

Thank you,

[REDACTED]

Charlotte, NC resident

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] PUBLIC COMMENT: State Port of Wilmington to deepen and widen the ship channel from the Atlantic Ocean to downtown Wilmington.
Date: Tuesday, June 20, 2023 10:52:46 AM

Please halt the plans for the port expansion! We need to take care of our river first, business second. We are still one of the MOST POLLUTED RIVERS in the US and PFAS continues to plague everyone.

No dredging of the river until we take care of PFAS first!

This project will have terrible consequences for everyone because **Water quality will degrade because of contamination and sedimentation from dredge material disposal** - which is **impacted by PFAS** and other industrial contaminants - and the activity of dredging itself can negatively impact water quality by stirring up sediments and toxic materials that may be found on the bottom of the river.

I don't see any plans to mitigate this - there isn't technology for it! Stop killing wildlife and humans!

Harbor deepening can also reduce dissolved oxygen levels to unnaturally low levels on the river's bottom, as well as alter the salinity profiles of the river.

--

[REDACTED]

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Risks to Widening the Cape Fear River Channel
Date: Tuesday, June 20, 2023 5:04:52 PM

To the Army Corps of Engineers:

As residents of Wilmington for 20+ years, we have seen the degradation of the river from past widening. This proposed plan to extensively widen and deepen the channel again threatens our water and air quality and the habitat of our wildlife populations. Among many other things, it will cause saltwater intrusion into wetland areas and significantly increase the flooding we already see in areas along the river during high tides and storm surges.

And for what purpose? New Hanover and Brunswick counties have grown exponentially in the last twenty years with a population that is fleeing polluted, overcrowded areas to enjoy the beauty of the land surrounding the Cape Fear River. Are we seriously considering destroying our river with an aggressive, poorly examined plan that will turn us into a port like those in New Jersey and Virginia? Who is benefiting and why? It certainly isn't those of us who live, work and recreate in one of the most fragile and beautiful areas in the country.

[REDACTED]
[REDACTED]
Wilmington, NC 28412

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] River Widen and deepen
Date: Friday, June 23, 2023 1:51:52 PM

Last I heard in 1970 the river is only 15 deep and you hit rock. The intercoastal waterway was built to transport military goods. It now is filling in because we have overland trucking. Sonif this is only so Carnival Cruise type ship access to downtown the it a waste of money!

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Cc: [REDACTED]
Subject: [Non-DoD Source] US Army Corps of Engineers/Wilmington Harbor 403 Report & EIS
Date: Friday, June 30, 2023 2:38:08 PM

US Army Corps of Engineers June 30, 2023
Wilmington District
ATTN: Wilmington Harbor 403
69 Darlington Avenue
Wilmington, NC 28403

My name is [REDACTED].
I live at [REDACTED].
I have been a resident in New Hanover County for the past 50 years.
Thank you for this opportunity to comment regarding the upcoming EIS for the Wilmington Harbor Navigation Project.

As a preamble to the body of this email, in concise terms, let me state that I am very concerned about the financial impact this project could have on our local economy; an economy intrinsically dependent on a healthy and sustainable natural environment.

Throughout my career as a former Mayor of Wilmington, NC State Senator and someone closely involved with the Cape Fear River and surrounding waters, I deeply value the economic benefits, good paying jobs and the pride that the NC State Ports have brought to our community and state.

However, I also recognize and give equal importance to the wealth of cultural and natural resources in our region, as well as our coastal ecosystems, which play a significant role in defining our local economy and quality of life.

It is crucial to maintain a delicate balance between all regional, national, and international economic initiatives and the protection of our local natural and cultural heritage.

The future of our marine fisheries, bird sanctuaries, ancient freshwater forests, storm mitigating marshlands, fresh water aquifers, municipal storm water systems, air and water quality, coastal tourism and quality of life conditions for generations are at stake.

Furthermore, it is essential for the USACE to thoroughly consider and assess the potential financial impact that this proposed project could have on our local economies and workforce, both positively and negatively. Specifically, commercial and recreational fishing as well as a broad spectrum of tourism related industries are at risk.

While we have received ample supportive economic data from project proponents, there is limited information available regarding the potential financial losses for existing local industries if this project proceeds. We must understand and consider not only a cost-benefit analysis but also a cost-impact analysis.

Therefore, I urge you to prioritize a comprehensive, fact based analysis of our current local economies that could be affected. This analysis should be a priority scheduled at the beginning of the EIS process, rather than treated as an afterthought at the end.

And finally we cannot ignore the undeniable reality of climate change and sea level rise and how this project would exacerbate these challenges and simply become implausible.

I am again grateful for this opportunity to share my concerns and I eagerly anticipate the public's continued

engagement in your decision making process.

Sincerely,

[REDACTED].

Sent from my iPad

From: [Wicker, Mike](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] USFWS Scoping Comments Letter and attachment
Date: Thursday, June 22, 2023 3:59:44 PM
Attachments: [USFWS Scoping Letter for Wilmington Harbor Deepening Project \(3\).pdf](#)
[Cape Fear USFWS Draft CAR WHIP Feb 2020 \(5\) \(2\).pdf](#)

From: [Beth Chase](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [Allen Oliver](#); [Craig Bloszinsky](#); [David Heglar](#); [Dennis Panicali](#); [John Ellen](#); [Mandy Sanders](#); Natalie.Nichols@ncleg.gov; [Lambeth, Chance](#)
Subject: [Non-DoD Source] Wilmington Harbor 403
Date: Thursday, June 29, 2023 11:19:20 AM
Attachments: [Wilmington Harbor 403 Public Comment.pdf](#)

Good Morning,

Please see the attached letter for the Town of Kure Beach's Public comment regarding the Wilmington Harbor 403.

Thank you,

Beth Chase

Deputy Town Clerk
Town of Kure Beach
117 Settlers Lane
Kure Beach, NC 28449
910-458-8216 (Office)

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Wilmington Harbor 403 comments
Date: Wednesday, June 14, 2023 10:42:46 AM

Hello,

I submitted these comments through your website yesterday, but got no confirmation you had received them. (Your comment page has no "submit" button.) So I am sending them by email.

It seems like the best way to understand the impact of deepening the Cape Fear River (CFR) would be to look at the previous river deepening project that occurred maybe 15-20 years ago. I think your study should include a large component of looking at the EIS from that previous project, the projected effects within the EIS, and whether they came true or not.

The thing that concerns me about the harbor deepening is that there does not seem to be a plan to continuously monitor the river and its environment before, during and after the project. If you decide the deepening will have a given set of impacts, what will be done to measure them and verify (or not) your projections?

I am particularly concerned about the salinity in the river. One gets the sense that it has been increasing over the years. The ghost forests one sees from US 74 going over to Leland is a sign of this. However, I can see nowhere that anyone has actually measured this change in a useful way. The Lower Cape Fear River Program samples the river, and measures salinity, but it does so monthly, and monthly sampling is nearly useless for determining long-term changes in such a rapidly-varying quantity. Does the ACOE measure salinity at its dock across from the port? Does the Port measure it - I would think it would be crucial information for docking container ships? Anyone else? How can you even know what the impact on salinity might be if no one is currently measuring it, i.e. there is no baseline?

Going back to the EIS for the previous deepening project, I understand that study predicted that the river would get fresher as a result. Is this true? If so, why did that study get this aspect so wrong? Or do we even know enough to decide if it was wrong or not?

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Wilmington Harbor 403 early scoping comments
Date: Friday, June 23, 2023 11:16:34 AM

Dear USACE,

I am submitting these comments on the proposed Wilmington Harbor enlargement project. The Purpose of the project is to "To contribute to national economic development by addressing transportation inefficiencies for the forecasted vessel fleet, consistent with protecting the Nation's environment." Please consider whether the Wilmington Harbor enlargement addresses transportation inefficiencies when considering the nation as a whole and not just inefficiencies that are claimed for the port of Wilmington. The port of Wilmington can continue to serve smaller vessels with efficiency without the exorbitant cost associated with the proposed project and the serious environmental damage the project would cause. Other ports are already able to serve the larger vessels and any increase in volume should be handled at those ports with lesser environmental impact.

Thank you,

[REDACTED]
[REDACTED]
[REDACTED]

From: [Shew, Roger D.](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Wilmington Harbor Port Deepening 403
Date: Friday, June 30, 2023 11:08:00 AM
Attachments: [Comments on Proposed Wilmington Harbor Deepening Project\(1\).pdf](#)

Good morning,

Please find attached my comments regarding the Harbor Deepening Project.

Thank you for the opportunity to comment.

Roger D. Shew

Roger D. Shew

Dept. of Earth and Ocean Sciences

Dept. of Environmental Sciences

UNCWilmington

shewr@uncw.edu

From: [Ann Colley](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] Comment to USACE re: Wilmington Harbor project
Date: Friday, June 30, 2023 4:34:14 PM
Attachments: [image001.png](#)
[6.30.23 LB Ltr to USACE re Wilmington Cape Fear River - Environmental Impact Statement.docx](#)

Please see below and attached a public comment on the Wilmington Harbor expansion project from Louis Bacon, owner of Orton and founder and co-chairman of the Orton Foundation. Please let me know if you have any questions.

Best,

Ann Colley

LOUIS M. BACON

June 30, 2023

To: U.S. Army Corps of Engineers
Attn: Col Benjamin A. Bennett
Commander
USACE Wilmington District

Subject: Public Comments on the Wilmington/Cape Fear River 403 Letter Report and Environmental Impact Statement to address the Feasibility of Harbor Deepening

I write as the owner of Orton, a landmark historic property along the west bank of the lower Cape Fear River, south of Wilmington. Orton consists of approximately 17,000 acres in Brunswick County, with more than 13,500 acres subject to conservation easements. Orton voluntarily participates in federal conservation programs such as the Safe Harbor Agreement and supports forest, coastal habitat, and cultural restoration projects throughout the river basin.

Since the Wilmington Harbor expansion project was authorized within the 2020 Water Resource Development Act (WRDA) and signed into law by former President Trump on December 27, 2020, we have closely followed the project's development and continue to monitor any related federal, state, local and stakeholder activities.

The health of the Cape Fear River Basin and surrounding communities is of

paramount importance to us.

Among the most important work at Orton is ongoing archaeological field work and research conducted with the University of North Carolina Wilmington to study the cultural importance and heritage of enslaved people who worked on rice fields in the area. We work to commemorate the lives of those who were critical to the development of the land by restoring 300 acres of the last remaining, fully intact rice field system in North Carolina and to honor these centuries-old rice farming practices. By preserving these fields, we work to ensure that their sacrifices are not forgotten and swept under by the Cape Fear River.

This has required significant restorative work and enhancements to protect the historic rice dikes along the river to meet the constant threat of climate change, damage from floods, rising sea levels, worsening and more frequent hurricanes, tidal surges, and increased ship wake.

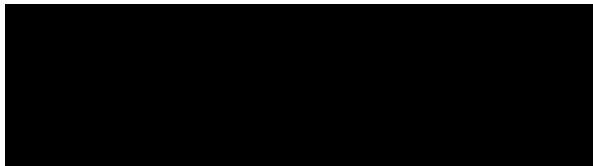
The Orton Foundation, the local affiliate of the Moore Charitable Foundation, augments this work by focusing on protecting the basin's unique wetlands, lands, forest, and wildlife habitats. It partners with leading local organizations to address the degradation of the Cape Fear River by implementing improved water quality policy and natural restoration strategies, such as living shorelines and oyster reefs. The Orton Foundation provides funding to coastal resiliency, water, and wildlife projects, and grantees already have seen first-hand the problems exacerbated by a warming climate and more frequent storms.

The expansion project takes aim at an already sensitive area that struggles to maintain ecological balance among both natural and man-made threats. Expanding the port and the channel leading to it will further exacerbate rising water levels and force salt water further upstream, disrupting the natural distribution of fresh, salt, and brackish water in the river. Increased salinity will negatively impact and destroy wetlands, causing plants and animals to migrate from their natural habitats or die. The Cape Fear region will lose the powerful natural buffer that protects wetlands and mitigates devastation from flooding.

The situation threatens to become a downward spiral. Larger ships mean bigger wakes, leading to increased water turbidity, sand and sediment contamination, more frequent and extensive erosion, and more maintenance dredging.

As this process continues, we ask that you consider the full impact on water, wetlands, wildlife, and people. It should be an all-inclusive process whose final assessment considers the knock-on effects—and the fast-growing challenges of rising sea levels and more frequent and more disastrous hurricanes—for decades to come.

With best regards,



Louis Bacon

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From: [Lisa Stites](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [David Kelly](#); [York, Dawn](#); [Sciaudone, Beth](#); [Pirrello, Mark](#); [Morrison, Sam](#)
Subject: [URL Verdict: Neutral][Non-DoD Source] comments from the Town of Oak Island re: Wilmington Harbor 403 Deepening Project
Date: Friday, June 30, 2023 2:29:32 PM
Attachments: [CommentsRegardingWilmHarbor_063023.pdf](#)

Good afternoon – please see the attached comments regarding the Wilmington Harbor 403 Deepening Project. The Town of Oak Island looks forward to remaining engaged as the project moves forward.

Regards,

Lisa P. Stites, MMC

Town Clerk
NCAMC Immediate Past President
Phone: 910-201-8004
lstites@oakislandnc.gov

4601 E Oak Island Drive
Oak Island, NC 28465
www.OakIslandNC.gov

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From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [EEMSG: Marketing][URL Verdict: Unknown][Non-DoD Source] Good idea
Date: Thursday, June 1, 2023 1:49:23 PM

With the amount of environmental impacts of this project, might as well dredge the channel to 60 feet while you're at it.

This is no spam. This email is sent through [MailLater](#) server. If you don't want to receive emails, please [Unsubscribe](#).

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Against harbor deepening
Date: Saturday, June 24, 2023 10:30:34 PM

I feel the salt water intrusion resulting from the deeper channel is an inappropriate and unnecessary abuse of a public resource, for the gain of a few.

[REDACTED]

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Cape fear disfigurement
Date: Tuesday, June 6, 2023 11:51:49 AM

I'm writing this out of disgust and distrust of Local, State and Federal governments. In my opinion the decisions have been made. This forum no matter what disclosures of info and dis info is a moot point. In the current state of the truth most of the truth is twisted by interpretation of lawyers of the rules, regs and the (what left of the respect for the constitutional laws.) Good bye America.

From: [REDACTED]
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] Deepening and widening the Federal ship channel
Date: Thursday, June 22, 2023 5:12:51 PM

This project will have so many negative effects that it is difficult to mention all of them.

Some of the most negative include

- Degradation of water and air quality: Water quality will degrade because of contamination and sedimentation from dredge material disposal, and the activity of dredging itself can negatively impact water quality by stirring up sediments and toxic materials, notably PFAS.
- Increased flooding during hurricanes and other extreme weather events;
- Cause more saltwater to intrude further up the river, changing salinity and killing trees;
- Increase wetland and shoreline erosion along the river and on adjacent oceanfront beaches. Long-term erosion trends along both Bald Head and Oak Islands have already been attributed to modifications to the ship channel. More deepening and widening of the channel, “softening” river bends, and extending the channel seaward would likely affect wave energy and sediment dynamics of the entire region. Produce larger wakes from bigger and more numerous ships which will increase already significant shoreline erosion.
- Result in more vessel strikes of turtles, mammals, and fish,
- Degrade fishery and bird habitats associated with estuarine islands, shoals and mudflats that provide essential bird resting and foraging habitats.

Natural attributes of the river that need protecting include:

- Spectacular barrier islands, tidal creeks, and marsh ecosystems teeming with wildlife. Fish habitats, **vital to our state’s economy**, provide for a variety of species, including red drum, mackerel, cobia, bluefish, flounder, shrimp, ten shark species, and over fifty snapper-grouper species. “Primary nursery areas” where post-larval and juvenile development of young finfish and crustaceans takes place
- Turtles are commonly found near the Wilmington Port, and neighboring Caswell Beach and Bald Head Island are important nesting grounds for federally protected sea turtles
- Birds throughout the year include over 330 species spotted in this region, from bald eagles to piping plovers. Thousands of shorebirds stop over during spring and fall migration and to overwinter. **Over 25% of the State’s coastal waterbirds depend on the Lower Cape Fear River region for nesting.**
- Harbor deepening can also reduce dissolved oxygen levels to unnaturally low levels on the river’s bottom, as well as alter the salinity profiles of the river.

Please do not sacrifice the long-term benefits of the existing environment for short-term gains.
We must protect the planet.

--



"With sufficient thrust, pigs fly just fine."

<http://tools.ietf.org/html/rfc1925>

From: [Dunn, Maria T.](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] NCWRC comments for Wilmington Harbor 403
Date: Friday, June 30, 2023 5:45:43 PM
Attachments: [Wilmington Harbor 403 Early Scoping NCWRC.pdf](#)

Please accept the attached for the above project. If there are any comments or questions, please do not hesitate to call or email.

Thank you.

Maria T. Dunn
Coastal Coordinator

NC Wildlife Resources Commission
943 Washington Sq. Mall
Washington, NC 27889
252-495-5554

www.ncwildlife.org

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From: [DCR - Environmental Review](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [Waters, Darin](#); [Eatman, Deans](#); [Lecount, Charles](#); [Mckee, Jim](#); [Bragg, Terry](#); mmeehan@cityofsouthport.com; jessica.baldwin@wilmingtonnc.gov
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: [External] Wilmington Harbor 403 Letter Report and EIS- Early Scoping Comment Period and Public Meeting
Date: Friday, June 30, 2023 10:44:08 AM
Attachments: [ER-23-1299.pdf](#)

Our response is attached. Thank you.

Best,

Devon L. Borgardt (she/her)

Environmental Review Assistant
State Historic Preservation Office
919-814-6586

109 E. Jones Street MSC 4603 Raleigh, NC 27699



Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

Please Note: Requests for project review or responses to our review comments should be sent to the Environmental Review mailbox at environmental.review@ncdcr.gov. Otherwise, your request will be returned and you will be asked to send it to the proper mailbox. This will cause delays in your project. Information on email project submittal is at: [NCHPO ER Project Review Checklist](#)

[Facebook](#) [Twitter](#) [Instagram](#) [YouTube](#)

From: WilmingtonHarbor403@usace.army.mil <WilmingtonHarbor403@usace.army.mil>
Sent: Tuesday, May 30, 2023 11:54 AM
Subject: [External] Wilmington Harbor 403 Letter Report and EIS- Early Scoping Comment Period and Public Meeting

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Good Morning,

The U.S. Army Corps of Engineers, Wilmington District is pleased to invite you to participate in early scoping for the Wilmington Harbor Letter Report and Environmental Impact Statement. We are hosting an open house style public meeting on June 13, 2023 at 4:00 pm, at the Cape Fear Community College Union Station Building, Auditorium, located at 502 N. Front St. Wilmington, NC. Free parking available on a first come-first serve basis in the Visitor Lot at 2nd and Walnut Streets.

The public meeting will offer opportunities to engage with members of our team at various information stations, learn about the project, ask questions, and submit written comments.

We also invite you to visit the project website to learn more: <https://wilmington-harborusace-saw.hub.arcgis.com/>

We are requesting comments be submitted by June 30, 2023.

Comments may be submitted:

Email: WilmingtonHarbor403@usace.army.mil

Mail: US Army Corps of Engineers
Wilmington District
ATTN: Wilmington Harbor 403
69 Darlington Avenue
Wilmington, NC 28403

Online: Online comments may be made through the Public Comment Tool. The Public Comment Tool can be found on the project website:

<https://wilmington-harborusace-saw.hub.arcgis.com/>

The attached public notice contains additional information.

Questions or to contact us regarding this project: WilmingtonHarbor403@usace.army.mil

Please forward this email and share the public notice with any that may be interested in this project!

We look forward to hearing from you!

From: [Dana Sargent](#)
To: [Cahoon, Larry](#)
Cc: WilmingtonHarbor403@usace.army.mil; [REDACTED]
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: Comment on proposed Wilmington harbor dredging proposal
Date: Thursday, June 29, 2023 1:38:33 PM

Thanks Larry!

FYI - so far we have 163 letters sent through our action alert. Please feel free to share if you can: https://actionnetwork.org/letters/army-corps-of-engineers-port-expansion?source=direct_link&

Dana Sargent (she/her)
Executive Director, Cape Fear River Watch
910-444-8080 (mobile)
910-762-5606 (office)
dana@cfrw.us
www.CapeFearRiverWatch.org



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"Doesn't everything die at last, and too soon? Tell me, what is it you plan to do with your one wild and precious life?" -- Mary Oliver

On Thu, Jun 29, 2023 at 10:26 AM Cahoon, Larry <cahoon@uncw.edu> wrote:

Hello, I wish to provide comments about the dredging project proposal (Wilmington Harbor 403). I have attached an article I prepared in conjunction with two students in UNCW's Master's in Coastal Ocean Policy program (MCOP) several years ago that advocated for consideration of Lighter Vessels as an alternative to dredging the Cape Fear River channel to deeper depth to accommodate increasingly deeper draft vessels. Harbor dredging is a now a global phenomenon owing to the increasing size of commercial shipping, notably container vessels that are reaching the 18,000+ TEU capacity. Dredging to accommodate these larger, deeper draft vessels is unavoidable if dredging is considered the only alternative to foregoing the service of such vessels. But dredging is not the only alternative for such service. Harbors and ports in other locations either cannot dredge or cannot afford to dredge to deeper depths and have adopted the use of Lighter Vessels to transfer cargoes from larger ships to ports. Use of Lighter Vessels is, in fact, an ancient practice dating back thousands of years.

Modern technology and shipbuilding capabilities support the development of Lighter Vessels that can offload bulk cargoes, containers, and even liquid materials, and that can add portable propulsion units to aid in positioning and transit. These technologies are well under development and in use in foreign and US ports already.

Lighter vessels can assist the Port of Wilmington by transferring the portions of larger cargoes intended for that port without requiring deep-draft vessels to make the long journey up the river and out again, which can result in greater efficiencies for those larger vessels while speeding the transfer of cargoes to the Port. Lighter Vessels could meet the

larger ships offshore the mouth of the Cape Fear River. Being of shallow draft, Lighter Vessels could eliminate the need for additional expensive and environmentally problematic dredging of the CFR channel and reduce the impacts of ship wakes in the river.

Further aspects of the cost-benefit analysis for the proposed dredging project would include:

1. Reduced or eliminated need for channel dredging, blasting, and maintenance, including the entire CFR channel and portions of the river mouth area;
2. Reduced volumes of dredged material that require disposal, putting less burden on the capacity of the existing Eagles Island dredge disposal site and perhaps even eliminating the need to dispose of contaminated river channel dredged material at offshore disposal sites;
3. Less disturbance of contaminated sediments in the CFR channel and resulting mitigation costs;
4. Less shoreline erosion and associated mitigation costs in the river channel and estuary, notably along developed shorelines, such as Bald Head Island, Oak Island, and Southport;
5. Reduced impact on critical habitat for sea birds (Battery Island, etc.) and endangered fishes (Atlantic sturgeon, et al.);
6. Reduced impacts of tidal height excursions at Wilmington, which has recently experienced 8 inches of high tide sea level rise since 2010;
7. Less intrusion of salt water into aquifers and into oligohaline and freshwater marshes in the tidally impacted portions of the CFR Estuary system.

I am aware that a variety of these impacts have been identified in other comments, but it is important to consider the mitigation costs of those impacts when compared to the costs of the Lighter Vessel alternative I propose here. Lighter Vessels would engender little if any of those mitigation costs, as they would avoid the need to do such extensive dredging.

I think it is critical to consider the use of Lighter Vessels as an Alternative to the proposed dredging project.

Thank you for your consideration.

Lawrence B. Cahoon, Professor

Distinguished Teaching Professor

Distinguished Senior Scholarly Engagement and Public Outreach Scholar

Dept. of Biology & Marine Biology

UNC Wilmington

910-962-3706

From: [Graham, Ben](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] RE: Wilmington Harbor 403 comment letter, Audubon North Carolina members
Date: Friday, June 30, 2023 5:46:53 PM

Hi,

I just sent comments on behalf of our members as a PDF and am resending the comments now in the body of this email, to ensure that the comments are received.

Thanks,

Ben Graham
Engagement Director
Audubon North Carolina

June 30, 2023

-

Bret Walters
Chief, Planning and Environmental Branch
Suzanne Hill
NEPA Team Lead
U.S. Army Corps of Engineers
Wilmington District
ATTN: Wilmington Harbor 403
69 Darlington Avenue
Wilmington, NC 28403
WilmingtonHarbor403@usace.army.mil

RE: Audubon North Carolina Early Scoping Comments on Wilmington Harbor 403, NC Navigation Project

Dear Mr. Walters and Ms. Hill:

Audubon North Carolina submits these comments on behalf of 1,031 of our members regarding the U.S. Army Corps of Engineers' Notice of Early Scoping for the Wilmington Harbor 403 Letter Report and Draft Environmental Impact Statement. The names of our members who have signed on in support of these comments are listed below. These high-level comments from our members are in addition to more detailed comments submitted by our staff.

Audubon North Carolina monitors and manages a complex of important nesting bird sanctuaries on the Lower Cape Fear River that would be impacted by this project.

These sites are on low-lying islands, and are home to 25 percent of the state's coastal nesting waterbirds, including large colonies of White Ibis, Brown Pelicans, and Royal and Sandwich terns. Nearly all of these species are state-listed species of concern, meaning they are already at risk of

serious decline and even extirpation from North Carolina.

The proposal to deepen and widen the shipping channel has the potential to drastically increase ship wake and general wave energy on the river.

The birds islands already suffer from erosion, made worse by current ship wakes and rising seas. This project could lead to substantially more erosion of these sites, significantly compromising the quality and sustainability of the habitat there.

Audubon will be closely monitoring the port project and urges the Army Corp of Engineers to closely consider the impact on nesting bird sanctuaries as the NEPA process moves forward.

Sincerely,
Ben Graham
Engagement Director, Audubon North Carolina

On behalf of Audubon member signers:

Mary	Abrams	Cary	NC	27519
Jillian	Adams	Columbia	MD	21045
Thomas	Adams	Washington	DC	20007
Kate	Adams	Durham	NC	27707
Ellen	Adelman	Raleigh	NC	27613
Della	Albury	Point Harbor	NC	27964
Judy	Allen	Winston Salem	NC	27106
Denice	Allen	Raleigh	NC	27615
Janet	Allen	Snow Camp	NC	27349
Lynn	Allison	Greensboro	NC	27410
Andrea	Almony	Supply	NC	28462
Gloria	Aman	Holly Ridge	NC	28445
Sonja	Andersen	Wilmington	NC	28403
Ruth	Anderson	Wilmington	NC	28405
Missy	Anderson	Charlotte	NC	28211
Susan And Mark L	Andrews	Winston Salem	NC	27104
Elizabeth	Angell	Durham	NC	27713
Leanne	Apfelbeck	Asheville	NC	28806
Kelli	Applegate	Havelock	NC	28532
Ricardo	Arevalo	Charlotte	NC	28227
Stephan	Armstrong	Williamsburg	VA	23185
Maggie	Ashburn	Wilmington	NC	28403
Taylor	Ashe	Cary	NC	27513
James	Atkins	Winston Salem	NC	27104
Benita	Auge	Weaverville	NC	28787
judy	aulette	Charlotte	NC	28205
Lydia	Aulisi	Raleigh	NC	27612

Mimi	Austin	Gastonia	NC	28054
Alan	Avakian	Chapel Hill	NC	27516
Maureen	Avakian	Chapel Hill	NC	27516
Linda	Bach	Vilas	NC	28692
Pam	Bacon	Lexington	NC	27292
Susan	Baehmann	Wilmington	NC	28411
Jin	Bai	Chapel Hill	NC	27514
Ember	Bailey	Old Fort	NC	28762
David	Baker	Cary	NC	27519
Nancy	Baker	Ocean Isle Beach	NC	28469
Terrie	Balino	Murphy	NC	28906
Elizabeth	Baltes	Wilmington	NC	28401
Camilla	Banks	High Point	NC	27265
Jennifer	Barbara	Waxhaw	NC	28173-6967
Lillyam	Barberi	Asheville	NC	28805
Natalie	Barbour	Raleigh	NC	27606
Danielle	Barcilon	Miami	FL	33135
Sue	Bark	Wilmington	NC	28411
Hannah	Barkey	Waxhaw	NC	28173
Josh	Barkey	Waxhaw	NC	28173
Carey	Barnes	Raleigh	NC	27607
Pilar	Barranco	Madrid	FL	28004
Nina	Barry	Wilmington	NC	28412
Kathleen	Basiewicz	Hendersonville	NC	28792
Honey Mae	Basye	Fuquay Varina	NC	27526
Wanda	Baucom	Marshville	NC	28103
Ruth	Bauer	Hendersonville	NC	28792
Cynthia	Beane	Elkin	NC	28621
Joe	Bearden	Raleigh	NC	27612
Karen And Joe	Bearden	Raleigh	NC	27612
Christine	Becker	Lewisville	NC	27023
Teresa	Becker	Charlotte	NC	28207
Robert	Belknap	Frankfort	MI	49635
Faith	Bell	Cullowhee	NC	28723
Ralph	Benfield	Charlotte	NC	28227
Offie	Benfield	Mooresville	NC	28115
Christie	Benoit	Charlotte	NC	28211
stuart	benson	Wilmington	NC	28401
Don	Bergey	Winston Salem	NC	27106
Randy	Bernard	Asheville	NC	28805
Cynthia	Bernett	Concord	NC	28027
Judith	Berry	Durham	NC	27705
Paul	Bessey	Southern Pines	NC	28387
Diane	Best	Durham	NC	27712
Mary	Blackburn	Pfafftown	NC	27040

Nadine	Blancato	Huntersville	NC	28078
Violette	Blumenthal	Durham	NC	27713
M. T.	Boatwright	Durham	NC	27705
Ann	Boback	Southport	NC	28461
George	Bodenheimer	Denver	NC	28037
Dwight	Bodycott	Charlotte	NC	28211
Shawn	Boessel	Waynesville	NC	28785
Jean	Bohs	Durham	NC	27705
Stephen	Boletchek	Apex	NC	27502
Catherine	Bollinger	Pittsboro	NC	27312
Doris	Bolt	Raleigh	NC	27607
Mary	Bond	Winston Salem	NC	27103-3622
Emilie	Booker	Charlotte	NC	28214
Barb	Borucki	Winston Salem	NC	27104
Ken	Bosch	Raleigh	NC	27609
Ryland	Bowman	Durham	NC	27707
Amelia	Boyer	Stony Point	NC	28678
Virginia	Boyle	Asheville	NC	28805
April	Boyle	Harrison	OH	45030
Fay	Bracken	Apopka	FL	32712
Sarah	Branagan	Wilmington	NC	28403
Kimberly	Brand	Winston Salem	NC	27127
Michele	Brandon	Wilmington	NC	28411
Jennifer	Brandon	Lexington	NC	27295
Barbara	Brank	Charlotte	NC	28210
Susan	Brenner	Charlotte	NC	28205
Slosek	Brian	Durham	NC	27701
Martha	Brimm	Durham	NC	27707
Andrea	Britt	Williamsburg	VA	23188
Jane	Brody	Wilmington	NC	28409-2569
Cari	Brookbanks	Oak Park	IL	60301
Barbara	Brooks	Hillsborough	NC	27278
Kim	Brower	Asheboro	NC	27205
Becky	Brown	Wilmington	NC	28409
Steve	Brown	Concord	NC	28027
Robert	Brown	Angier	NC	27501
Linda	Brown	Chapel Hill	NC	27514
Laurie	Brown	Castle Hayne	NC	28429
Audrey	Brown	Liberty	NC	27298
Sam	Bryan Jr	Durham	NC	27713
Michael	Bryant	Manteo	NC	27954
Mary Lou	Buck	Charlotte	NC	28209
Billy	Buckingham	Salisbury	NC	28144
Nancy	Buckingham	Wilmington	NC	28409
Evangelyn	Buckland	Wilmington	NC	28401

Wanda	Buckmaster	Liberty	NC	27298
A. Diane	Buerkle	Flat Rock	NC	28731
Constance	Burbank	Burlington	NC	27215-9512
Rebecca	Burmester	Raleigh	NC	27612
Eunice	Burnett	Greenwich	CT	6831
Karen W	Burnett	Weaverville	NC	28787
Karen	Burnette	Mills River	NC	28759
Joe	Burns	Apex	NC	27502
William	Burns	Washington	NC	27889
Clara	Burns-Trogdon	Chadbourn	NC	28431-0432
Shari	Burrell	Kernersville	NC	27284
Jordan	Burton	Asheville	NC	28804
Kevin	Byrne	Durham	NC	27705
Ann	Calamos	Raleigh	NC	27612
John	Calhoun	Winston Salem	NC	27101
Elaine	Cameron	Chapel Hill	NC	27517
Linda	Camp	Hendersonville	NC	28791
Joe	Campanello	Southport	NC	28461
David	Campbell	Shelby	NC	28152
Sheila	Campbell	Lillington	NC	27546
Rachel	Campbell	Charlotte	NC	28226
Chris	Canfield	Pittsboro	NC	27312
Patrice	Capan	Chapel Hill	NC	27517
Jim	Capel	Durham	NC	27701
Linda	Cardin	Goldsboro	NC	27534
Amy	Carpenter	Charlotte	NC	28277
George	Carr	Faison	NC	28341
Jane	Carroll	Swannanoa	NC	28778
Brenda	Carter	Rural Hall	NC	27045
Anna	Carter	Charlotte	NC	28209
Rhonda	Carter	Weeki Wachee	FL	34614
Catherine	Carter	Cullowhee	NC	28723
Nancy	Casey	Asheville	NC	28805
Kicab	Castaneda-Mendez	Pittsboro	NC	27312
Susan	Cates	Durham	NC	27705
Sharyn	Caudell	Durham	NC	27707
Dianne	Cavoly	Randleman	NC	27317
Eli	Celli	Chapel Hill	NC	27516
Isabel	Cervera	Salisbury	NC	28147
Jessica	Cevetello	Concord	NC	28027
Betty Lou	Chaika	Chapel Hill	NC	27517
James	Chambo	Chapel Hill	NC	27516
Elsie	Chance	Durham	NC	27713
Chad	Chandler	Raleigh	NC	27612
Elizabeth	Chappell	Julian	NC	27283

M A	Chase	Pittsboro	NC	27312
Megan	Cherry	Durham	NC	27701
Wilsonia	Cherry	Chevy Chase	MD	20815
Victoria	Childers	Mebane	NC	27302
Frank	Chludzinski	Gastonia	NC	28054
Carol	Church	Sunset Beach	NC	28468
Mary	Clark	Stella	NC	28582
Diane	Clark	Colfax	NC	27235
Michelle	Clegg	Wilmington	NC	28412
Thomas	Clemons	Raleigh	NC	27613
Kelly	Close	Oak Island	NC	28465
Robin	Coady	Naples	FL	34102
Harold	Cochran	Abingdon	VA	24211
Carmen	Cocores	Leicester	NC	28748
Natalie	Coe	Rocky Point	NC	28457
Judy	Coffman	Durham	NC	27707
Steve	Coggin	Salisbury	NC	28144
Jamie	Coll	Greensboro	NC	27409
Ann	Colley	New York	NY	10036
Sarah	Collins	Pittsboro	NC	27312
Sarah	Connette	Durham	NC	27701
John	Connors	Raleigh	NC	27604
Elizabeth	Cook	Albemarle	NC	28001
Sallie	Cooper	Wilmington	NC	28405
Maureen	Copan	Raleigh	NC	27617
Fred	Coppotelli	Cedar Mountain	NC	28718
Heide	Coppotelli	Cedar Mountain	NC	28718
Elaine	Corbitt	Cary	NC	27513
Patrick	Corkell	Beaufort	NC	28516
Krista	Cotton	Wilmington	NC	28411
Jacki	Coughlin	East Norriton	PA	19403
Marion	Cowan	Jacksonville	NC	28540
Anne	Craig	Asheville	NC	28801
Ann	Cramer	Durham	NC	27703
Susan	Craver	Lexington	NC	27295
Tracie	Creta	Greenville	NC	27834
Taylor	Crews	Arden	NC	28704
Jennifer	Crump	Lenoir	NC	28645
Jacqueline	Cuthbertson	Charlotte	NC	28227
Kerry-Ann	da Costa	Chapel Hill	NC	27517
Julie	d'Ablaing	Boston	VA	22713
Dorian	D'Agati	Chapel Hill	NC	27516
John	Daily	Durham	NC	27712
Erin	Dalpe	Raleigh	NC	27609
Megan	Damico	Greensboro	NC	27408

Camille	Daniels	Wilmington	NC	28412
Shannon	Daniels	Skandia	MI	49885
Gail	Darden	Pittsboro	NC	27312
Cynthia	Darling	Jupiter	FL	33458
Bettina	Darveaux	Hillsborough	NC	27278
Caroline	Dasch	Lexington	NC	27295
Sharon	Daugherty	Kure Beach	NC	28449-0086
Clark	David	Creedmoor	NC	27522
Robin	Davis	Greensboro	NC	27403
Cindy	Davis	Pikeville	NC	27863
Sarah	Davis	Raleigh	NC	27615
Jena	Davis	Hampstead	NC	28443
Diane	de Groot	Greenville	NC	27858
Donna	Deal	Rougemont	NC	27572
Jeffrey	DeCristofaro	Asheville	NC	28804
James	DeGrave	Arden	NC	28704
Laura	Delplace	Belmont	NC	28012
Sarah	Dendy	Durham	NC	27713
Catherine	Denham	Davidson	NC	28036
Sean	Dennis	Black Mountain	NC	28711
Daniel	Dery	Greensboro	NC	27455
Manisha	Desai	Charlotte	NC	28211
Judy	Dewar	Fayetteville	NC	28303
Wendy	Diaz	Durham	NC	27713
Margaret	Dickenson	Chesapeake	VA	23321
Gina	Diggs	Sugar Grove	NC	28679
Les	Dillard	Durham	NC	27707
Thomas	Dillon	Winston Salem	NC	27127
Christi	Dillon	Mooreville	NC	28117
Jennifer	DiMarco	Hickory	NC	28601
Bill	Dinsdale	Raleigh	NC	27609
Brenda	Dixon	Wilmington	NC	28409
Kate	Dixon	Raleigh	NC	27607
Jane	Domer	Morehead City	NC	28557
James	Donnelly	Greensboro	NC	27410
Susan	Dorchin	Delray Beach	FL	33446
Sheila	Dorey	Pittsboro	NC	27312
Joe	Dorey	Pittsboro	NC	27312
Gina	Dowden	Clayton	NC	27527
Timothy	Downs	Durham	NC	27713
Barbara	Driscoll	Chapel Hill	NC	27514
Carolyn	DuBois	Southport	NC	28461
Catherine	Duch	Cary	NC	27511
Peggy	Dula	Gastonia	NC	28056
Joanne	Dunn	Chapel Hill	NC	27517

Carole	DuPre	Carrboro	NC	27510
Virginia	Duquet	Asheville	NC	28806
Donna	Durfee	Charlotte	NC	28210
Bethany	Dusenberry	Hendersonville	NC	28791
Bill	Duston	Laurium	MI	49913
Patricia	Eagle	Asheville	NC	28803
Lawrence	East	Jacksonville	NC	28540
Kerry	Eckhardt	Winston Salem	NC	27104
Nancy	Edge	Fayetteville	NC	28306
Jeri	Edwards	Iron Station	NC	28080
Elizabeth	Efird	Leland	NC	28451
Maura	Egan	Raleigh	NC	27614
Tiffany	Ehnes	Advance	NC	27006
Michael	Elder	Ocean Isle Beach	NC	28469
Louis	Eller	Waxhaw	NC	28173
Judith	Embry	Florida	MA	1247
Louisa	Emmons	Morganton	NC	28680
Elissa	Engelbourg	Rocky Mount	NC	27804
Sarah	English	Durham	NC	27707
Mary	Etherton	Asheville	NC	28801
Suzanne	Evans	Wilson	NC	27896
Elizabeth	Evans	Carrboro	NC	27510
Elise	Everett	Cary	NC	27518
Laurel	Fabac	Hickory	NC	28601
Laura	Faber	Fayetteville	NC	28304
Margie	Fairbrother	Troy	NC	27371
Bonnie	Faith-Smith	Cambridge	MA	2139
Chanda	Farley	Canton	NC	28716
lin	farley	Waynesville	NC	28785
Steven	Fasciana	Matthews	NC	28105
Ann	Fawcett	Raleigh	NC	27608
Robert	Fearn	Corolla	NC	27927
Wilson	Feichter	Raleigh	NC	27604
Tracy	Feldman	Durham	NC	27713
Peter	Ferrin	Morehead City	NC	28557
Adrienne	Ferriss	Asheville	NC	28803
Deborah	Finn	Chapel Hill	NC	27514
Elaine	Fischer	Roanoke	VA	24018
Tom	Flagg	Waynesville	NC	28786
Michael	Fleming	Greenville	NC	27858
Shannon	Foreman	Raleigh	NC	27606
Judith	Foster	Greensboro	NC	27455
David	Fouche	Winston Salem	NC	27106
Carole	Fowler	Concord	NC	28025
Jan	Fowler	Concord	NC	28027

Philip	Fowler	Concord	NC	28027
Kim	Fox	Claremont	NC	28610
Susan	Fox	Harrisburg	NC	28075
Jen	Frank	Sherrills Ford	NC	28673
John	Franklin	Raleigh	NC	27614
Tim	Frazer	Concord	NH	3301
Mary	Frazer	Raleigh	NC	27603
Shelley	Frazier	Durham	NC	27712
John	Freeze	Asheboro	NC	27205
Marie	Freeze	Winston Salem	NC	27106
Eileen	Frost	Winston Salem	NC	27104
Peggy	Fry	Wilmington	NC	28409
Kathy	Fuller	Charlotte	NC	28270
Nina	Furry	Durham	NC	27707
Judith	Gale	Raleigh	NC	27608
Sydney	Gallek	Hillsborough	NC	27278
Lois	Galligan	Southport	NC	28461
Lena	Gallitano	Raleigh	NC	27609
Maureen	Galvin	Durham	NC	27707
Marion	Gamble	Greensboro	NC	27410
Christine	Ganis	Southern Pines	NC	28387
Ellen	Gannon	Wrightsville Beach	NC	28480
Rognvald	Garden	Charlotte	NC	28277
William	Garrard	Hickory	NC	28601
Barbara	Garrow	Wilmington	NC	28409
Lynne	Gaudette	Biltmore Lake	NC	28715
Carol	Gearhart	Pfafftown	NC	27040
Derek	Gendvil	Las Vegas	NV	89117
Carol	George	Raleigh	NC	27612
E. Alexander	Gerster	Raleigh	NC	27606
Scott	Geyer	Charlotte	NC	28211
Becky	Gibson	Chapel Hill	NC	27517
Stella	Gibson	Mocksville	NC	27028
Gary	Gilbert	Staunton	VA	24401
Judith	Gill	Greenville	NC	27834
Suzan	Gillis	Duck	NC	27949
Sally	Gillooly	Chapel Hill	NC	27516
Casey	Girard	Asheville	NC	28805
Charlotte	Goedsche	Brainerd	MN	56401-2064
Virginia	Goldrick	Wilmington	NC	28401
Ken	Goldsmith	Williamsburg	VA	23185
Terry	Goodfield	Hendersonville	NC	28739
Mary	Goodkind	Biltmore Forest	NC	28803
Tracy	Gourville	Wilmington	NC	28411
Ben	Graham	Durham	NC	27707

Daniel	Graham	Chapel Hill	NC	27517
Sharon	Grant	Salisbury	NC	28144
Alice	Grant	Durham	NC	27707
Steve	Gray	Angier	NC	27501
Jackie Neece	Gray	Carrboro	NC	27510
Michael	Gray	Wilmington	NC	28403
Jonie	Green	Burgaw	NC	28425
Karen	Grewen	Chapel Hill	NC	27516
Don	Grice	Shelby	NC	28152
Jason	Grier	Wilmington	NC	28412
Charles	Griffin	West End	NC	27376
Alissa	Grizzle	Charlotte	NC	28226
Carol	Groeschel	Cornelius	NC	28031
Elizabeth	Gulley	Durham	NC	27705
Betty	Gunz	Charlotte	NC	28209
Lynda	Haake	Chapel Hill	NC	27514
Heidi	Haehlen	Clyde	NC	28721
Jenifer	Haggard	Oriental	NC	28571
Pete	Hall	Sanford	NC	27330
Jonathan	Halperen	Raleigh	NC	27608
Traci	Hamilton	Wilmington	NC	28409
Carol	Hamilton	Hillsborough	NC	27278
Nancy	Hanley	Durham	NC	27713
Andrew	Hansen	Durham	NC	27703
Alden	Hanson	Wake Forest	NC	27587
Norma.	Hanson	Asheville	NC	28803
Leslie	Hardie	Burlington	NC	27215
Diane	Hardy	Raleigh	NC	27609
Joseph	Harper	Apex	NC	27502
Carol	Harrell	Mount Airy	NC	27030
LJ	Harris	Columbus	OH	43221
Nancy	Harrison	Cary	NC	27519
Linda	Hartford	Asheboro	NC	27203
Julia	Hartman	Alexander	NC	28701
Ann	Hass	Greensboro	NC	27410
Michele	Hathcock	Arden	NC	28704
Dave	Hattori	Apex	NC	27523
Jacquelyn	Hawkins	Red Springs	NC	28377
Wendy	Hawkins	Winston Salem	NC	27127
Janice	Heard	Raleigh	NC	27609
Kathryn	Hecker	Greensboro	NC	27410
Andrew	Hefner	Durham	NC	27703
Eberhard	Heide	Fairview	NC	28730
Kristina	Heiks	Boone	NC	28607
Christi	Heilbronner	San Antonio	TX	78252

Angela	Heinz	Mooresville	NC	28117
Jill	Heishman	Asheville	NC	28801
Mark	Hemenway	Charlotte	NC	28210
Janet	Hendrick	Columbia	SC	29203
Elizabeth	Henry	Charlotte	NC	28205
Deirdre	Herrington	Winston Salem	NC	27106-4795
Julie	Hiatt	Concord	NC	28025
Michele	Hickman	Wilmington	NC	28411
Anna Marie	Hinnant	Wilmington	NC	28403
Loren	Hintz	Chapel Hill	NC	27517
Willie	Hinze	Winston Salem	NC	27106
Sandra	Hoback	Clemmons	NC	27012
Karen	Hodges	Charlotte	NC	28205
Scott	Hoffman	Statesville	NC	28677
Elke	Hoffmann	Bahama	NC	27503
Ashley	Holden	Morganton	NC	28655
Ann	Holloman	Pittsboro	NC	27312
Richard	Holshouser	Statesville	NC	28625
Rebecca J.	Holyfield	Pilot Mountain	NC	27041
Lusally	Hong	Raleigh	NC	27617
Elizabeth	Honnold	Hendersonville	NC	28739
Meagan	Honnold	Raleigh	NC	27609
Mary	Hontz	Winston Salem	NC	27106
Gerry	Hoots	Winston Salem	NC	27104
Brian	Hopkins	Durham	NC	27705
Jean	Hopkins	Charlotte	NC	28226
David	Horsman	Huntersville	NC	28078
Robert	Horton	Garner	NC	27529
Sharon	House	Chapel Hill	NC	27516
Judith	Hoy	Asheville	NC	28803
Joyce	Hren	Cary	NC	27511
Terry	Huey	Maysville	KY	41056
Courtney	Hunt	Beaufort	SC	29906
Carolyn	Hunt	Burlington	NC	27215
William	Hunter	Chapel Hill	NC	27514
Andrew	Hutson	Durham	NC	27705
Hollianne	Ibarra	Kure Beach	NC	28449
Bridget	Irons	Philadelphia	PA	19118
Farzana	Ismail	Jamestown	NC	27282
Laura	Jackman	Durham	NC	27707
Caroline	Jackson	Wilmington	NC	28412
Diane	Jackson	Durham	NC	27713
Alicia	Jackson	Vallejo	CA	94591
Robbie-Lane	Jackson	Emerald Isle	NC	28594
Russell	James	Hampstead	NC	28443

Sara	Jarvis	Leland	NC	28451
Lisa	Jenkins	Gaffney	SC	29341
Sue and Jack	Jezorek	High Point	NC	27260
Ian	Jezorek	Bingen	WA	98605
HEATHER	JEZOREK	Tampa	FL	33604
Grace	Johnson	Huntersville	NC	28078
Philip	Johnson	Durham	NC	27705
Jen	Johnson	Wilmington	NC	28403
Keith	Johnson	Siler City	NC	27344
Harriet	Joslin	Candler	NC	28715
John D.	Joslin	Raleigh	NC	27608
Eileen	Juric	Raleigh	NC	27605
Ethan	Kahn	Apex	NC	27523
Robert	Kalinak	Apex	NC	27502-8073
Paul	Kalka	Binghamton	NY	13903
Lynne	Kane	Chapel Hill	NC	27517
Elizabeth	Kawabata	Chapel Hill	NC	27516
Louanne	Kaye	Warren	IN	46792
Linda	Kehew	Winterville	NC	28590
Ellen	Kelly	Raleigh	NC	27608
Diane	Kent	Scottsdale	AZ	85255
Debbie	Kenyon	Apex	NC	27502
Geraldine	Kerby	Wilmington	NC	28401
Stacey	Kerekgyarto	Mint Hill	NC	28227
CANDACE	KERN	Chapel Hill	NC	27516
Melvin	Kestner	New Bern	NC	28562
Norman	Kidwell	Calabash	NC	28467
Lynn	Killam	Almond	NC	28702
Kristen	Kimball	Mocksville	NC	27028
Louis	Kindman	Durham	NC	27705
Elizabeth	King	Advance	NC	27006
Lucretia	Kinney	Carrboro	NC	27510
Bruce	Kirchoff	Greensboro	NC	27410
Sharon	Kirk	Chapel Hill	NC	27514
Sharon	Kirkman	Pittsboro	NC	27312
Louise	Kistler	Asheville	NC	28804
Edythe	Klein	Pittsboro	NC	27312-8639
Stephanie	Klos-Weller	Raleigh	NC	27613
Katalin	Kluge	New York	NY	10280
Kenneth	Kneidel	Charlotte	NC	28211-1502
Jane	Kniffin	Asheville	NC	28803
Joann	Koch	Lebanon	CT	6249
Joan	Kohl	Coral Springs	FL	33065
John	Koon	Asheville	NC	28801
Monique	Korbel	Fayetteville	NC	28314

Jean	Kraus	Morehead City	NC	28557
Robin	Krause	Durham	NC	27705
Susan	Krnic	Monroe	NC	28112
Walter	Kross	Hendersonville	NC	28792
Catherine	Krug	Cornelius	NC	28031
Deborah	Kruszon	Wilmington	NC	28409
Janine	Lafferty	Charlotte	NC	28269
Lisa	Lambert	Wake Forest	NC	27587
Alexis	LaMere	Elon	NC	27244
Justin	Landry	Arden	NC	28704
Karen	Langelier	Wilmington	NC	28403
Veronique	Langlois	Wilmington	NC	28403
Ellen	Larion	Hendersonville	NC	28739
Diane	Laskowski	Wilmington	NC	28409
Tracey	Laszloffy	Wilmington	NC	28412
Kathy	Laughlin	Lenoir	NC	28645
Margaret	Laurita	Candler	NC	28715
Betty	Lawrence	Asheville	NC	28801
Suzy	Lawrence	Chapel Hill	NC	27516
Ramona	Lawson	Garner	NC	27529
Patience	Leahy	Leland	NC	28451
Thomas	Ledford	Indialantic	FL	32903
Dorothy	Lee	Weaverville	NC	28787
Rosemary	Lee	Raleigh	NC	27606
Michelle	Lee	Charlotte	NC	28226
Elise	Lehman	Aiken	SC	29801
Don	Lendle	Winston Salem	NC	27127
Alan	Lenk	Asheville	NC	28805
Patricia	Lenzo	Franklin	NC	28734
keiko	leonard	Hendersonville	NC	28739
Lynne	Lepley	Statesville	NC	28625
Traci	LeRoy	Wilmington	NC	28411
Melissa	Lester	Winston Salem	NC	27104
Janet	Letusick	Mays Landing	NJ	8330
Debra	Levin	Chapel Hill	NC	27517
Sarah	Levin	Oak Island	NC	28465
Toby	Levin	Oak Island	NC	28465
Joy	Lew	Weaverville	NC	28787
Cynthia	Lewis	Asheville	NC	28804
Mary L	Lewis	Charlotte	NC	28211-2212
Cheryl	Lezan	Winston Salem	NC	27104
Xiaoying	Li	Greensboro	NC	27410
Alvin	Lincoln	Greenville	NC	27858
Marlene	Linden	Castle Hayne	NC	28429
SusanJim	Lindenberger	Blowing Rock	NC	28605

Connie	Lipton	Asheville	NC	28806
Stefon	Lira	Salisbury	NC	28144
Carol	Litchfield	Cary	NC	27519
Jim	Little	Harrisburg	NC	28075
Douglas	Livolsi	Southport	NC	28461
Machelle	Lloyd	Burlington	NC	27215
Stuart	Locklear	Pembroke	NC	28372
Marilyn	Logan	Prairie Village	KS	66208
Jennifer	Lohmann	Durham	NC	27707
Pamela	Long	Apex	NC	27539
Elaine	Long	Monroe	NC	28110
Rhu	Longfellow Smith	Pinehurst	NC	28374
Susan	Longo	Cornelius	NC	28031
Marie	Longo	Hackensack	NJ	7601
Donald	Loosley	Salisbury	NC	28144
Beck	Lord	Wilmington	NC	28409
Mary Anne	Loughlin	Canton	NC	28716
Geraldine	Luginbuhl	Cary	NC	27518
Jaedra	Luke	Brevard	NC	28712
Patricia H	Lumans	Hillsborough	NC	27278
Laura	Luyendyk	Raleigh	NC	27615
Ginger	Lyell	Durham	NC	27713
William	Lynch	Asheville	NC	28803
Susan	Lyon Stone	Carrboro	NC	27510
Lisa	Maccaro	Horseheads	NY	14845
Glenda	Macemore	Statesville	NC	28677
Tony	Maceo	Miami Lakes	FL	33014
Mary Lee	MacKichan	Durham	NC	27705
Deirdre	MacNeil	Pinehurst	NC	28374
Mark	Maczynski	Durham	NC	27707
Connie and Frank	Madia	Charlotte	NC	28262
M	Madorma	Chapel Hill	NC	27514
Susan	Madson	North Myrtle Beach	SC	29582
Jude	Maglione	Asheville	NC	28803
Jennifer	Maher	Durham	NC	27705
Karen	Mallam	Siler City	NC	27344
Marcia	Mandel	Durham	NC	27705
Hugo	Manosalvas	Raleigh	NC	27606
Jack	Mantia	Emerald Isle	NC	28594
Hal	Marcus	Raleigh	NC	27615
Jeffrey	Marcus	Pinehurst	NC	28374
Kelsey	Maren	Naperville	IL	60565
Rebecca	Margolese-Malin	Chapel Hill	NC	27514
Catherine	Marie	Raleigh	NC	27607
Julie	Marquez	Hendersonville	NC	28791

Kristin	Marsh	Asheville	NC	28806
Ricia	Martin	Ellerbe	NC	28338
Fred	Martin	Nebo	NC	28761
Patrick	Martin	Raleigh	NC	27609
Lowell	Mason	Wilmington	NC	28408
Jane	Matanga	Hendersonville	NC	28739
Bart	Matthews	Durham	NC	27712
Thomas	Matthews	Durham	NC	27707
Tracy	Maxon	Pineville	NC	28134
Miranda	Maxwell	Port Townsend	WA	98368
Linda	Maynard	Apex	NC	27502
Carolyn	McAllaster	Durham	NC	27705
Karen	McCall	Chapel Hill	NC	27514
Heidi	McCann	Raleigh	NC	27615
Ann	McCormick	Lillington	NC	27546
Maggie	McCormick	Lillington	NC	27546
Sarah	McCormick	Raleigh	NC	27606
Betsy	McCormick	Lillington	NC	27546
Eileen	McCorry	Pittsboro	NC	27312
Richard	McCrary	Gastonia	NC	28054
Linda	McCrosky	Waynesville	NC	28786
Nancy	McCurdy	Waynesville	NC	28786
Mary	McDaniel	Huntersville	NC	28078
Matt	McDermott	Charlotte	NC	28210
Barbara	McFadyen	Chapel Hill	NC	27516
Catherine	McFeeters	Wilmington	NC	28403
Tim	McGloin	Durham	NC	27707
Lucinda	McGuinn	Boone	NC	28607
John	McHaffie	Winston Salem	NC	27104
Jeff	McInnis	Salisbury	NC	28147
Debbie	McKevitt	Lagrange	GA	30241
Adrienne	McMurdy	Hampstead	NC	28443
Heather	McVicker	Hillsborough	NC	27278
Toni	Meador	Asheville	NC	28803
Deann	Mealey	Huntersville	NC	28078
Johanna	Medeiros	Columbia	SC	29223
Martha	Mentzer	Supply	NC	28462
Gretchen	Messer	Cedar Mountain	NC	28718
Susan	Messerschmitt	Biddeford	ME	4005
Colonel	Meyer	North Port	FL	34286-2009
Donna	Michaux	Oak Island	NC	28465
Karen	Michener	Cary	NC	27511
Margie	Middleton	Candler	NC	28715
Scott	Milam	Candler	NC	28715
Terri Hirtz	Millard	High Point	NC	27265

Susan	Miller	Jamestown	NM	87347
Gail	Miller	Raleigh	NC	27603
D.	Miller	Boone	NC	28607
Anne C	Miller	Fuquay Varina	NC	27526
Saarah	Miller	Greensboro	NC	27408
Karen	Miller	Chapel Hill	NC	27514
Lesia	Mills	Clayton	NC	27528
Matthew	Milnes	Milledgeville	GA	31061
Michelle	Mitchell	Cornelius	NC	28031
Susan	Mitchell	Raleigh	NC	27604
Heather	Moir	Winston Salem	NC	27103
Carol	Moldoveanu	Winston Salem	NC	27106
Adam	Molesky	Gillette	WY	82718
Nancy	Mollenauer	Raleigh	NC	27612
Susan	Monahan	Durham	NC	27705
Thomas	Monforte	Indian Trail	NC	28079
yvonne	monroe	Chapel Hill	NC	27517
Breana	Montgomery	Hillsborough	NC	27278
Marianne	Mooney	Asheville	NC	28801
Laura	Moore	Wilmington	NC	28411
Robert	Moore	Wake Forest	NC	27587
L. S	Moore	Virginia Beach	VA	23464
Kathleen	Mora	Delmar	NY	12054
Sharon	Mora	Whittier	NC	28789
Susan	Morance	Chapel Hill	NC	27514
Michael	Morgan	Swannanoa	NC	28778
Gregg	Morris	Conifer	CO	80433
Claude	Morris	Burlington	NC	27215
Stacie	Morris	Fuquay Varina	NC	27526
Lynn	Moseley	Graham	NC	27253
Dean	Moser	Pittsboro	NC	27312
Faith	Moxham	Gastonia	NC	28054
Barbara	Mueller	Skyland	NC	28776
Lisa	Muglia	Raleigh	NC	27614
Anne	Muldoon	Oak Island	NC	28465
Janis	Mullen	Asheville	NC	28806
Barbara	Muller	Rocky Mount	NC	27803
Rita	Mullis	Charlotte	NC	28210
Adrienne	Munich	Durham	NC	27701
Linda	Muntner	Raleigh	NC	27609
Donna	Murphy	Caswell Beach	NC	28465
Melanie	Murphy	Petoskey	MI	49770
Patricia	Murtaugh	Salisbury	NC	28147
Mary	Myers	Lewisville	NC	27023
Cynthia	Mynatt	Concord	NC	28025

Marilee	Nagy	Columbus	OH	43230
Edith	Nash	Maggie Valley	NC	28751
Sharon	Nasholds	Wake Forest	NC	27587
Paul	Nelson	Marion	NC	28752
Lisa	Neste	High Point	NC	27265
George	Neste	High Point	NC	27265
Jordan	Newberry	Brevard	NC	28712
Robin	Newlin	Wilmington	NC	28409
Carole	Newsome	Emerald Isle	NC	28594-3010
Cathy	Nieman	Weaverville	NC	28787
Claudia	Nix	Asheville	NC	28803
Karen	Noftsier	Cherokee	NC	28719
VG	Norman	Raleigh	NC	27604
Stephanie	Norris	Laurel Hill	NC	28351
Ann	Norris	Durham	NC	27705
Stephanie	Nunez	Van Nuys	CA	91405
Julie	Nye	Rougemont	NC	27572
Cheryl	Oakes	Cary	NC	27519
Della	Oberst	Winston Salem	NC	27103
Tracy	OBrien	Summerfield	NC	27358
Kevin	O'Donnell	Chapel Hill	NC	27516
Jane	O'Hara	Chapel Hill	NC	27516
Tim	Oldread	Fletcher	NC	28732
Maureen	O'Neal	Portland	OR	97223
Abigail	Oneill	Durham	NC	27707
Gillian	O'Reilly	Wilmington	NC	28412
Ellen	Osborne	Pleasant Garden	NC	27313
Jimmie	Overton	Raleigh	NC	27615
Ray	Owens	Charlotte	NC	28209
Terilyn	Palanca	Asheville	NC	28805
Hannelore	Palmer	Southport	NC	28461
Janet	Palmer	Charlotte	NC	28205
Jill	Palmer	Matthews	NC	28105
Julie	Papay	Pittsboro	NC	27312
Cynthia	Papia	New Bern	NC	28560
Laurie	Parish	Wilmington	NC	28403
Evelyn	Parker	Fern Park	FL	32730
Jude	Pasqualini	Candler	NC	28715
Mahala	Pate	Wilmington	NC	28403
Kurt	Patzer	Chapel Hill	NC	27516
Dean	Paul	Durham	NC	27713
Jill	Paul	Chapel Hill	NC	27517
Patrick	Pavlak	Greensboro	NC	27455
Christin	Payden-Travers	Winston Salem	NC	27127
Cary	Paynter	Wilmington	NC	28409

David	Paynter	Wilmington	NC	28409
Clark	Pearson	Sylva	NC	28779
Mark	Peifer	Chapel Hill	NC	27516-7397
Richard	Pender	Winston Salem	NC	27127
Greg	Pennington	San Francisco	CA	94109
Janine	Perlman	Alexander	AR	72002
Sue	Perry	Asheville	NC	28804
Thomas	Phelps	Williamsburg	VA	23188
Pamela	Phillips	Durham	NC	27712
George	Phillips	Hendersonville	NC	28792
Anita	Phillips	Greeneville	TN	37745
Susan	Phillips	East Bend	NC	27018
Adair	Pickard	Clayton	NC	27527
Meryl	Pinque	Bangor	ME	4401
Betty	Pipes	Apex	NC	27502
Johanna	Pittman	Cambridge	MA	2140
Janet	Pittman	Shelby	NC	28152
Teresa	Pitts	Glen Alpine	NC	28628
Debra	Plautz	Fuquay Varina	NC	27526
Carmen	Plummer	Midland	NC	28107
Sherry	Porter	Leland	NC	28451-9515
Thomas	Potts	Oakland	CA	94610
Edward	Poucher	Castle Hayne	NC	28429
Betty	Pounders	Wilmington	NC	28412
David	Powell	Raleigh	NC	27606
Jared	Price	Durham	NC	27713
Judith	Prizio	Greensboro	NC	27406
Joyce	Pusel	Chapel Hill	NC	27517
Laura	Qualls	Durham	NC	27713
Lucy	Quintilliano	Charlotte	NC	28270
Gerald	Raffe	Winston Salem	NC	27127
Tiffany	Randall	Charlotte	NC	28212
Betsy	Randall-David	Leland	NC	28451
Ashleigh	Ranson	Carrboro	NC	27510
Margot	Raynor	Wilmington	NC	28405
Anne	Reap	Charlotte	NC	28210
William	Reavis	Kernersville	NC	27284
Jaya	Reddy	Raleigh	NC	27613
Gloria	Redmond	Wilmington	NC	28412
Lenore	Reeves	Mokena	IL	60448
lisa	regush	Marshall	NC	28753
Philip	Reibman	Charlotte	NC	28277
Stacey	Reinhorn	Chapel Hill	NC	27517
Sandra	Resner	Greensboro	NC	27409
Oscar	Revilla	Cliffside	NC	28024

Tiffany	Reynolds	China Grove	NC	28023
Marc	Ribaud	Garner	NC	27529
Caroline	Ribelin	Roaring River	NC	28669
Alysia	Richard	Raleigh	NC	27604
Lynn	Richardson	Durham	NC	27713
Susan	Richardson	Asheville	NC	28805
Malcolm	Richardson	Washington	DC	20002
Smythe	Richbourg	Durham	NC	27712
Leanne	Richbourg	Durham	NC	27705
Kimberly And Steve	Richmond	Pfafftown	NC	27040
Linda	Ricks	Beaufort	NC	28516
Gay	Ricks	Wilmington	NC	28412
Anthony	Riley	Haw River	NC	27258
Marguerite	Ringenburg	Chapel Hill	NC	27516
Charlotte	Riordan	Southport	NC	28461
Patricia	Rittenmeyer	Wilmington	NC	28409
Lyra	Rittger	Pinehurst	NC	28374
Michelle	Rivers	Mooreville	NC	28117
Elizabeth	Rives	Chapel Hill	NC	27517
Michele	Rivest	Carrboro	NC	27510
Rachelle	Roake	Chapel Hill	NC	27514
Rachel	Roberson	Asheboro	NC	27203
Joan	Roberts	Asheville	NC	28806
Suzanne	Roberts	Durham	NC	27713
Jim and Nancy	Roberts	Kirkland	WA	98033
Janet	Robinson	Jacksonville	FL	32223
Greg	Roche	Raleigh	NC	27612
Camie	Rodgers	Radcliff	KY	40160
Mary Ellen	Rogers	Oak Island	NC	28465
Allen	Rogers	Greensboro	NC	27408
Robert	Rogers III	Wilmington	NC	28406
Donald	Roland	Fletcher	NC	28732
Sarah	Romereim	Charlotte	NC	28203
Geoff	Roper	Apex	NC	27502
Steven	Rosenberg	El Paso	TX	79936
William	Rosenfeld	Pittsboro	NC	27312
D.	Rosengrant	Brevard	NC	28712
Bill	Ross	Chapel Hill	NC	27514
Francie	Ross	Hickory	NC	28601
Janet	Rountree	Suffolk	VA	23434
Lee	Rouse	Trent Woods	NC	28562
William	Rowse	Huntersville	NC	28078
Gale	Rullmann	Youngsville	NC	27596
Heather	Russell	Whitsett	NC	27377
BJ	Ryan	Greenville	NC	27834

Kristin	Ryling	Jefferson	NC	28640
Marina	Sagardua	Boston	MA	2163
Maria	Salgado	Chapel Hill	NC	27517
Brittany	Salmons	Raleigh	NC	27604
Helen	Salvia	Pittsboro	NC	27312
Cynthia	Sampson	Asheville	NC	28801
Marilyn	Sandorf	Raleigh	NC	27617
Cornelia	Sarvey	Durham	NC	27705
Joseph	Sauder	Sanford	NC	27332
Judi	Sawyer	Roan Mountain	TN	37687
Julie	Sayre	Hampstead	NC	28443
Matthew	Sayre	Hampstead	NC	28443
Stephanie	Scaramelli	Henderson	NC	27536
Anthony	Scardaci	Waynesville	NC	28786
Arielle	Schechter	Chapel Hill	NC	27517
Nancy	Scheiber	Elkin	NC	28621
Suzanne	Schenkel	Southern Pines	NC	28387
Elizabeth	Scherrer	Apex	NC	27539
Victoria	Schindler	New Hill	NC	27562
Paula	Schlesinger	Asheville	NC	28803
M Susan	Schmidt	Beaufort	NC	28516
Heidi	Schmitz	Charlotte	NC	28203
Judy	Schneider	Garner	NC	27529
Stephen	Schoon	Concord	NC	28025
Trevor	Schoonmaker	Durham	NC	27705
Tara	Schrier	Wake Forest	NC	27587
Amy	Schuler	Ocean Isle Beach	NC	28469
Kelli	Schwartz	Huntersville	NC	28078
Eric	Schweitzer	Raleigh	NC	27609
Sara	Scicluna	Wilmington	NC	28411
Tom	Scott	Chapel Hill	NC	27517
Deanna	Sedlak	Durham	NC	27705
Lori	Self	Leland	NC	28451
Devon	Seltzer	High Point	NC	27260
Suzanne	Semmes	Chapel Hill	NC	27516
Bryan	Sharp	Hilliard	OH	43026
Colleen	Sheahon	Boone	NC	28607
Gloria	Shen	Asheville	NC	28805
Lauren	Shepherd	Leicester	NC	28748
Melissa	Sherman	Raleigh	NC	27608-2255
Michael	Shrewsbury	Leland	NC	28451
Margie	Shuffler	Wilmington	NC	28412
Tina	Shull	Mint Hill	NC	28227
Toni	Sienkewicz	Chapel Hill	NC	27514
Eden	Simmons	Weaverville	NC	28787

Cynthia	Simonds	Black Mountain	NC	28711
Peter	Simpson	Wilmington	NC	28411
Catherine	Sims	Durham	NC	27713
Jill	Singer	Apex	NC	27539
Kelley	Singer	Hendersonville	NC	28739
Jessica	Sinha	Cary	NC	27513
Shari	Sinnott	Winston Salem	NC	27103
Christina	Skillin	Roanoke	VA	24016
Nils	Skudra	Greensboro	NC	27403
Robert	Smith	Durham	NC	27701
Darrylin	Smith	Hampstead	NC	28443
Peggy Ann	Smith	Wilmington	NC	28412
Cynthia	Smith	Leland	NC	28451
Shelley	Smith	Chapel Hill	NC	27516
Martha	Smith	Salisbury	NC	28144
Robin	Smithwick	Newport	NC	28570
Andrea	Snyder	Hickory	NC	28602
Jody	Soules	Leland	NC	28451
Melanie	Sovine	Montreat	NC	28757
Jennifer	Sparrow	Chapel Hill	NC	27516
Jill	Spelucin	Leland	NC	28451
Bruce And Donna	Spencer	Hillsborough	NC	27278
Giulie	Speziani	Winston Salem	NC	27106
Joyce	Sprouse	Surf City	NC	28445
William	St. George	Wilmington	NC	28403
Elisabeth	St. John	Sapphire	NC	28774
Mike	Stahl	Seattle	WA	98106
Sonja	Stahlhut	Albuquerque	NM	87107
M	Stanley	Wilmington	NC	28401
Ilex	Starenchak	Raleigh	NC	27603
Hygie	Starr	Brasstown	NC	28902
Glenda	Steel	Concord	NC	28025
Ann	Steighner	Greensboro	NC	27410
Annabelle	Stein	Pittsboro	NC	27312
Lorenz	Steininger	Stafford	VA	22554
Myles Michael	Stempin	Beaufort	NC	28516
Ann	Stevenson	New York	NY	10128
Sharon	Stewart	Wilmington	NC	28412
Leslie	Stewart	Chapel Hill	NC	27516
Mike	Stimpson	Cramerton	NC	28032
Karen	Stine	Chapel Hill	NC	27516
Esther	Stokes	Atlanta	GA	30309
Jordan	Stokes	Bunnlevel	NC	28323
Martine	Stolk	Brevard	NC	28712
Mary	Stone	Oriental	NC	28571

Stacey	Stone	Wilmington	NC	28411
William	Stone	Carrboro	NC	27510
Kathryn	Stranz	East Greenville	PA	18041
Gregory	Strauss	Chapel Hill	NC	27516
Reed	Streifthau	Wake Forest	NC	27587
Lowell	Strine	Pinehurst	NC	28374
Frank	Stroupe	Matthews	NC	28104
Don	Stuart	Davidson	NC	28036
Brooke Johnson	Suiter	Winston Salem	NC	27104
Carol	Sumers	Chapel Hill	NC	27516
Michael	Summy	Wilmington	NC	28401
Debra	Sundberg	Wilmington	NC	28403
Robert	Swett	Black Mountain	NC	28711
Claire	Szaz	Chapel Hill	NC	27517
Julie	Taber	Raleigh	NC	27608
Warren	Tadlock	Charlotte	NC	28226
Ann	Tarbet	Raleigh	NC	27615
Robert	Tarkington	Summerville	SC	29483
Tammy	Tate	Clemmons	NC	27012
Leslie	Teague	Charlotte	NC	28211
Patricia	Tennis	Hillsborough	NC	27278
Debra	Teplin	Durham	NC	27705
Nancy	Tew	Sanford	NC	27330
Jean	Theiss	Ocean Isle Beach	NC	28469
Shelley	Theye	Chapel Hill	NC	27517
Diane	Thomas	Durham	NC	27705
Patricia	Thomas	Duluth	MN	55804
Betty	Thomas	Durham	NC	27704
Jane	Thomas	Waynesville	NC	28786
Ann Scott	Thompson	Apex	NC	27539
David	Thorsen	Wilmington	NC	28403
Mary	Till	Denver	NC	28037
Robin	Tingley	Burnsville	NC	28714
Deborah	Topley	Hoschton	GA	30548
Susan	Trabka	Durham	NC	27705
Stephen	Tracy	Gastonia	NC	28054
Jonathan	Trainer	Wilmington	NC	28401
Mary	Traywick	Cary	NC	27511
Mary	Turnbull	Hampstead	NC	28443
Jeffrey	Turner	Charlotte	NC	28215
Carol	Tuskey	Hillsborough	NC	27278
Marybeth	Twining	Buford	GA	30519
Lucy	Tyndall	Spindale	NC	28160
Jennifer	Uellendahl	Waynesville	NC	28785
Caro	Urquhart	Mayfield Village	OH	44143

Peter	Urquhart	Cleveland	OH	44143
James and Heather	Van Fossen	Leland	NC	28451
Alisa	Vargas	Marion	NC	28752
kalina	veintimilla	New Bern	NC	28562
Christopher	Ventaloro	Holly Springs	NC	27540
Dr. Judith R	Vergun	Chapel Hill	NC	27516
Marilyn	Wagner	Durham	NC	27705
Karen	Wait	Waynesville	NC	28785
Priscilla and Rodger	Waldman	Seven Valleys	PA	17360
Carl	Waldron	Hillsborough	NC	27278
Scott C.	Walker	Fort Worth	TX	76123
Judith	Walker	Charlotte	NC	28215
Martin	Wall	Eden	NC	27288
Anne	Wallace	Greensboro	NC	27403
Zach	Wallace	Asheville	NC	28801
Wes	Wallace	Chapel Hill	NC	27517
Diane	Wallace	Kernersville	NC	27284
Mary	Walls	Jacksonville	FL	32218
Cathy	Walsh	Asheville	NC	28804-2846
Rhetta	Walter	Castle Hayne	NC	28429
Mike	Walters	Archdale	NC	27263
Karen	Waltman	Hendersonville	NC	28792
Mary Ann	Walton	Wilmington	NC	28411
Aurelie	Ward	Statesville	NC	28677
William	Warfel	Fayetteville	NC	28304
Liling	Warren	Apex	NC	27539
Marsha	Warren	Chapel Hill	NC	27517
Doug	Warren	Carolina Beach	NC	28428
Chris	Washington	New York	NY	10019
Kathleen	Wassell	Cary	NC	27511
Chris	Watenpool	Hendersonville	NC	28792
Pamela	Watkins	Durham	NC	27701
Karen	Watson	Wilmington	NC	28412
Wes	Weaver	Boone	NC	28607
Charles	Webb	Carrboro	NC	27510
Arthur	Webster	Marion	NC	28752-6655
Betsy	Webster	Mount Ulla	NC	28125
Gail	Weeks	Wilmington	NC	28409
Janet	Weeks	Wilmington	NC	28403
Gerhard	Weinberg	Efland	NC	27243
Marla	West	Asheville	NC	28804
Martin	West	Wilmington	NC	28412
Paul	West	Wahpeton	ND	58075
Bonnie	Westbrook	Southport	NC	28461
Cindy	Wetherington	Tampa	FL	33618

Vicki	Wheeler	Deshler	OH	43516-9798
Jean	Wheelock	Asheville	NC	28805
Gordon	Whitaker	Chapel Hill	NC	27514
Patricia	White	Asheville	NC	28805
Sheila	White	Wilmington	NC	28411
Tina	Whitted	Statesville	NC	28677
Jennifer	Wickline	Corolla	NC	27927
Leslie	Wieser	Matthews	NC	28105
Gail	Wilcox	Asheville	NC	28803
Mary Katherine	Wilcox	Charlotte	NC	28214
Deirdre	Wild	Gladwyne	PA	19035
Anna	Wilder	Raleigh	NC	27613
Joyce	Wiley	Chapel Hill	NC	27517
Stephen	Wiley	Concord	NC	28025
Dennis	Wilkerson	Durham	NC	27703
Jere	Wilkerson	Avila Beach	CA	93424
John	Wilkinson	Kiawah Island	SC	29455
Amelia	Wilkinson	Linville	NC	28646
L. L.	Wilkinson	Taos	NM	87571
anne	wilkinson	Raleigh	NC	27615
Elizabeth	Willett	Charlotte	NC	28209
Thomas	Williams	Fairview	NC	28730
Cheryl	Williams	Mint Hill	NC	28227
Geralyn	Williams	Apex	NC	27502
Kristen	Williams	Elizabeth City	NC	27909
Charles	Wilmoth	Cary	NC	27518
Jeffrey	Wilson	Matthews	NC	28105
Jan	Wilson	Asheville	NC	28801
Monika	Winchester	Durham	NC	27712
Mary	Winters	Monroe	NC	28110
Nancy	Wojtasek	Youngsville	NC	27596
Gretchen	Wolf	Hillsborough	NC	27278
Edward	Wolfsohn	Huntersville	NC	28078
Tony	Woods	King	NC	27021
Alison	Woomert	Chapel Hill	NC	27516
Rachael	Wooten	Raleigh	NC	27608
James	Wooten	Graham	NC	27253
Margaret	Worthington	Wilmington	NC	28405
Kari	Wouk	Durham	NC	27704
Kathy	Wright	Aberdeen	NC	28315
Michelle	Wright	Mebane	NC	27302
Heather	Wright	Raleigh	NC	27606
Bonnie	Wright	Durham	NC	27705
Angela	Wright	Hillsborough	NC	27278
Lucinda	Wykle-Rosenberg	Hull	MA	2045

Gareth	Wynn	Hendersonville	NC	28739
Peggy	Wynn	Hendersonville	NC	28739
Ariel	Wynn	Hendersonville	NC	28739
Bobby	Wynn	Hendersonville	NC	28739
Susan	Yarnell	Chapel Hill	NC	27516
Michelle	Yates	Cary	NC	27511
William	Yingst	Swansboro	NC	28584
Rosemary	York	Raleigh	NC	27608
Carol	Young	Durham	NC	27713
William	Younts	Davidson	NC	28036
Robert	Zinn	Hendersonville	NC	28791
Debbie	Zombeck	Asheboro	NC	27203
Nancy	Zora	Wilmington	NC	28403
Nan	Zwicky	Durham	NC	27713

From: Graham, Ben

Sent: Friday, June 30, 2023 4:54 PM

To: WilmingtonHarbor403@usace.army.mil

Subject: Wilmington Harbor 403 comment letter, Audubon North Carolina members

Hi,

Audubon North Carolina submits these comments on behalf of 1,031 of our members regarding the U.S. Army Corps of Engineers' Notice of Early Scoping for the Wilmington Harbor 403 Letter Report and Draft Environmental Impact Statement.

The names of our members who have signed on in support of these comments are included. These high-level comments from our members are in addition to more detailed comments submitted by our staff.

Thanks,

Ben Graham
Interim Engagement Director
919-880-3793

[Pronouns:](#) he, him, his

Audubon North Carolina

nc.audubon.org

From: [Ramona McGee](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [Hannah Nelson](#); [Melissa Edmonds](#); [McCorcle, Justin P CIV USARMY CESAW \(USA\)](#); [smtp-Clark, Brian](#)
Subject: [URL Verdict: Neutral][Non-DoD Source] SELC Wilmington Harbor Early Scoping Comments
Date: Friday, June 30, 2023 3:11:47 PM
Attachments: [2023.06.30 SELC Early Scoping Comments WHNIP.pdf](#)

Dear Mr. Walters and Ms. Hill:

The Southern Environmental Law Center submits the attached comments on behalf of Audubon North Carolina, Cape Fear River Watch, Center for Biological Diversity, CleanAIRE NC, North Carolina Coastal Federation, North Carolina NAACP, and North Carolina Sierra Club, regarding the U.S. Army Corps of Engineers' Notice of Early Scoping for the Wilmington Harbor 403 Letter Report and Draft Environmental Impact Statement. We appreciate the opportunity to provide comments during this early stage of the agency's environmental review.

As explained in the attached letter, this early scoping period serves as an opportunity for the Corps to step back and transparently evaluate the need for, impacts of, and alternatives to the proposed expansion. As the agency moves forward with its review, we urge the Corps to consider whether this project is truly necessary and whether there are other, non-deepening, alternatives that could meet the purported needs. Additionally, we urge the Corps to use the latest and most comprehensive sea level rise projections when conducting its project analyses.

Given email file size restrictions, please access all attachments at this link:
<https://southernenvironment.sharefile.com/d-s09bbc6f4202a41f692efa00751fe0e7d>

We look forward to remaining engaged with the Corps throughout this environmental review process. Should you have any questions about these comments, please do not hesitate to reach out.

Best,
Ramona

--

Ramona H. McGee (she/her/hers)
Senior Attorney & Wildlife Program Leader
rmcgee@selcnc.org

Southern Environmental Law Center
601 West Rosemary Street, Suite 220
Chapel Hill, NC 27516-2356

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From: [Angel Carroll](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: ["pquinn@villagebhi.org"](mailto:pquinn@villagebhi.org); ["cmccall@villagebhi.org"](mailto:cmccall@villagebhi.org); ["jkim@villagebhi.org"](mailto:jkim@villagebhi.org); [Bill Cary](#); [Charles S. Baldwin, IV](#); [Joseph A. Ponzi](#); [Matthew Tynan](#)
Subject: [URL Verdict: Neutral][Non-DoD Source] SENT ON BEHALF OF BILL CARY/JOSEPH PONZI re: Initial Scoping - WH 403: Comments Submitted June 2023 Notice
Date: Friday, June 30, 2023 10:59:11 AM
Attachments: [2023.06.30 - Letter to Chrisa Waite - USACE.pdf](#)
Importance: High

Attached please find Mr. Cary's and Mr. Ponzi's letter of today's date.

[Angel Carroll](#), Assistant to:

William P. H. Cary
James C. Adams II
Joseph A. Ponzi
Natalie K. Sanders
Erin Barker



t: 336.232.4657

2000 Renaissance Plaza
230 North Elm Street
Greensboro, NC 27401
P.O. Box 26000 (27420)

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From: [Kerri Allen](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] WHNIP Comments - North Carolina Coastal Federation
Date: Friday, June 30, 2023 9:36:33 AM
Attachments: [NCCF Comments WHNIP June 2023.pdf](#)

Mr. Walters and Ms. Hill,

On behalf of the North Carolina Coastal Federation, please accept the attached comments regarding the U.S. Army Corps of Engineers Notice of Early Scoping for the Wilmington Harbor 403 Letter Report and Draft Environmental Impact Statement for the Wilmington Harbor Navigation Improvement Project.

Sincerely,
Kerri

Kerri Allen
Coastal Advocate / Coastal Management Program Director
309 W. Salisbury St. Wrightsville Beach, NC 28480
910.509.2838 x203 (Office) 910.619.8469 (Mobile)
Visit www.nccoast.org to join or learn more
Get the latest coastal news at [Coastal Review Online](#)



From: [Graham, Ben](#)
To: WilmingtonHarbor403@usace.army.mil
Subject: [URL Verdict: Neutral][Non-DoD Source] Wilmington Harbor 403 comment letter, Audubon North Carolina members
Date: Friday, June 30, 2023 5:01:29 PM
Attachments: [Wilmington Harbor 403 Comments Audubon NC.pdf](#)

Hi,

Audubon North Carolina submits these comments on behalf of 1,031 of our members regarding the U.S. Army Corps of Engineers' Notice of Early Scoping for the Wilmington Harbor 403 Letter Report and Draft Environmental Impact Statement.

The names of our members who have signed on in support of these comments are included. These high-level comments from our members are in addition to more detailed comments submitted by our staff.

Thanks,

Ben Graham
Interim Engagement Director
919-880-3793
[Pronouns:](#) he, him, his

Audubon North Carolina
nc.audubon.org

2023

Species	All LCFR Sites	State Total	State %
---------	----------------	-------------	---------

Black Skimmer			
Black-crowned Night-Heron*			
Brown Pelican			
Caspian Tern			
Cattle Egret*			
Common Tern			
Forster's Tern			
Glossy Ibis			
Great Black-backed Gull**			
Great Egret*			
Gull-billed Tern			
Herring Gull**			
Laughing Gull			
Least Tern			
Little Blue Heron			
Royal Tern			
Sandwich Tern			
Snowy Egret			
Tricolored Heron			
White Ibis			
Wood Stork			
Total			

TBD

* These species nest inland as well; therefore numbers reflect totals of coastal populati

** Low numbers of these species are desirable.

Data provided by Audubon North Carolina, The Bald Head Island Conservancy, and N

Species	2020†		
	All LCFR Sites	State Total	State %
Black Skimmer	0	323	0.00
Black-crowned Night-Heron*	28	306	
Brown Pelican	2046	5044	0.41
Caspian Tern	0	15	0.00
Cattle Egret*	0	257	
Common Tern	0	207	0.00
Forster's Tern	0	794	0.00
Glossy Ibis	1	113	
Great Black-backed Gull**	1	122	0.01
Great Egret*	222	1782	
Gull-billed Tern	4	161	0.02
Herring Gull**	0	207	0.00
Laughing Gull	4053	19630	0.21
Least Tern	0	3475	0.00
Little Blue Heron	2	147	
Royal Tern	2934	14728	0.20
Sandwich Tern	469	2255	0.21
Snowy Egret	39	225	
Tricolored Heron	63	963	
White Ibis	5300	5612	
Wood Stork	0	609	0.00
Total	15162	56975	

† In 2020, the pandemic prevented a count of Battery Island. Therefore state proportions cannot be calculated. White Ibis were estimated from the perimeter and numbers of other species were not estimated. All other species present at Battery Island in preceding years (BCNH, CAEG, GREG, LBHE, SNEG, TRHE) were present in 2020.

ions in the state, not statewide totals.

C Wildlife Resources Commission through the NC Colonial Waterbird Database ([http:](http://)

2017			
Species	All LCFR Sites	State Total	State %
Black Skimmer	0	498	0.00
Black-crowned Night-Heron*	171	425	0.40
Brown Pelican	1293	5455	0.24
Caspian Tern	0	11	0.00
Cattle Egret*	27	545	0.05
Common Tern	0	228	0.00
Forster's Tern	0	762	0.00
Glossy Ibis	19	26	0.73
Great Black-backed Gull**	1	80	0.01
Great Egret*	384	2047	0.19
Gull-billed Tern	3	94	0.03
Herring Gull**	5	375	0.01
Laughing Gull	2889	8837	0.33
Least Tern	70	2499	0.03
Little Blue Heron	226	670	0.34
Royal Tern	3092	12065	0.26
Sandwich Tern	1179	2788	0.42
Snowy Egret	102	371	0.27
Tricolored Heron	240	631	0.38
White Ibis	10167	13019	0.78
Wood Stork	0	337	0.00
Total	19868	51763	38.4%

**Bold indicates ≥20% of state
nesting population.**

s://www.ncpaws.org/PAWS/Wildlife/ColonialWaterBird/CWBHome.aspx). Database func

2014			
Species	All LCFR Sites	State Total	State %
Black Skimmer	0	842	0.00
Black-crowned Night Heron*	201	415	0.48
Brown Pelican	1305	4400	0.30
Caspian Tern	0	15	0.00
Cattle Egret*	89	264	0.34
Common Tern	0	474	0.00
Forster's Tern	0	878	0.00
Glossy Ibis	17	394	0.04
Great Black-backed Gull**	2	181	0.01
Great Egret*	346	1782	0.19
Gull-billed Tern	18	155	0.12
Herring Gull**	7	379	0.02
Laughing Gull	8930	24037	0.37
Least Tern	1	3273	0.00
Little Blue Heron	70	750	0.09
Royal Tern	2844	12983	0.22
Sandwich Tern	1019	2904	0.35
Snowy Egret	106	479	0.22
Tricolored Heron	198	843	0.23
White Ibis	8049	12454	0.65
Wood Stork	0	285	0.00
Total	23202	68187	34.0%

**Bold indicates ≥20% of state
nesting population.**

ted in part by USACE.

Locations of American Oystercatcher Pairs

Site Name	Latitude	Longitude	Pairs
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	33.89909	-78.03086	1
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	33.91436	-78.02518	1
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	33.90694	-78.02943	1
Battery Island	33.90640	-78.01064	1
Battery Island	33.90561	-78.01145	1
Battery Island	33.91436	-78.00498	1
Battery Island	33.91108	-78.01191	1
Battery Island	33.91354	-78.00862	1
Battery Island	33.91453	-78.00553	1
Striking Island	33.90976	-77.99611	1
Striking Island	33.91041	-77.99694	1
Striking Island	33.90893	-77.99416	1
Striking Island	33.91057	-77.99754	1
Striking Island	33.90898	-77.99713	1
Striking Island	33.90765	-77.99716	1
Striking Island	33.90559	-77.99602	1
Striking Island	33.90542	-77.99589	1
Striking Island	33.90551	-77.99603	1
Striking Island	33.90552	-77.99594	1
Striking Island	33.90593	-77.99457	1
Striking Island	33.90583	-77.99506	1
Striking Island	33.90656	-77.99260	1
Shellbed Island	33.91866	-77.97986	1
Shellbed Island	33.91859	-77.97984	1
Shellbed Island	33.91864	-77.97980	1
Shellbed Island	33.91954	-77.97939	1
Shellbed Island	33.91974	-77.97940	1
Shellbed Island	33.91965	-77.97939	1
Shellbed Island	33.92021	-77.97933	1
Shellbed Island	33.91000	-77.98595	1
Shellbed Island	33.90995	-77.98608	1
Shellbed Island	33.90891	-77.98535	1
Shellbed Island	33.90871	-77.98528	1
Shellbed Island	33.90825	-77.98507	1
Shellbed Island	33.90802	-77.98499	1
Shellbed Island	33.90753	-77.98471	1
Shellbed Island	33.90694	-77.98406	1
Shellbed Island	33.91938	-77.96795	1
Shellbed Island	33.92084	-77.97513	1
Shellbed Island	33.92039	-77.97625	1
Shellbed Island	33.92065	-77.97855	1
Shellbed Island	33.91655	-77.98294	1
Shellbed Island	33.91522	-77.98411	1
Shellbed Island	33.91514	-77.98409	1
Shellbed Island	33.90960	-77.98102	1

Shellbed Island	33.92027	-77.97899	1
Smith Island	33.88835	-77.98929	1
Smith Island	33.88320	-77.98926	1
Smith Island	33.89350	-77.98815	1
Smith Island	33.89381	-77.98758	1
Smith Island	33.89440	-77.98697	1
Smith Island	33.89450	-77.98570	1
Smith Island	33.89457	-77.98463	1
Smith Island	33.89521	-77.98324	1
Smith Island	33.89784	-77.98381	1
Smith Island	33.90069	-77.98208	1
Smith Island	33.90137	-77.98166	1
Smith Island	33.90119	-77.98171	1
South Pelican Island	33.93643	-77.97405	1
South Pelican Island	33.93638	-77.97364	1
South Pelican Island	33.93604	-77.97407	1
South Pelican Island	33.93582	-77.97247	1
South Pelican Island	33.93565	-77.97355	1
South Pelican Island	33.93638	-77.97312	1
South Pelican Island	33.93607	-77.97390	1
South Pelican Island	33.93538	-77.97245	1
South Pelican Island	33.93558	-77.97315	1
South Pelican Island	33.93582	-77.97251	1
Snow's Island	33.96698	-77.95637	1
Ferry Slip Island	33.97388	-77.94174	1
Ferry Slip Island	33.97306	-77.94145	1
Ferry Slip Island	33.97285	-77.94082	1
Ferry Slip Island	33.97326	-77.94033	1
Ferry Slip Island	33.97380	-77.94091	1
Ferry Slip Island	33.97390	-77.94188	1
Ferry Slip Island	33.97394	-77.94211	1
Ferry Slip Island	33.97346	-77.94228	1
Ferry Slip Island	33.97338	-77.94171	1
Ferry Slip Island	33.97323	-77.94189	1
Ferry Slip Island	33.97372	-77.94070	1
Ferry Slip Island	33.97286	-77.94106	1
Ferry Slip Island	33.97335	-77.94216	1
No Name Island	33.98415	-77.94014	1
No Name Island	33.98389	-77.94005	1
North Pelican Island	33.99305	-77.93904	1
North Pelican Island	33.99358	-77.93905	1
North Pelican Island	33.99515	-77.93845	1
North Pelican Island	33.99593	-77.93824	1
North Pelican Island	33.99682	-77.93728	1
North Pelican Island	34.00420	-77.93615	1
North North Pelican Island	34.00768	-77.93438	1
North North Pelican Island	34.00852	-77.93318	1

North North Pelican Island

34.00817 -77.93417

1

Locations of American Oystercatcher Pairs

Site Name	Latitude	Longitude	Pairs
Battery Island	33.91052	-78.01288	1
Battery Island	33.914	-78.0076	1
Battery Island	33.9138	-78.00453	1
Battery Island	33.90597	-78.01078	1
Battery Island	33.90553	-78.01141	1
Battery Island	33.90593	-78.01291	1
Battery Island	33.91235	-78.01059	1
Battery Island	33.9145	-78.00578	1
Snow's Island	33.95506	-77.96323	1
Snow's Island	33.96725	-77.95634	1
North Pelican Island	33.9921	-77.93926	1
North Pelican Island	33.99351	-77.93869	1
North Pelican Island	34.00268	-77.93612	1
North Pelican Island	34.00744	-77.93443	1
North Pelican Island	34.00824	-77.93411	1
Smith Island	33.90484	-77.97952	1
Smith Island	33.90146	-77.98135	1
Smith Island	33.90103	-77.98188	1
Smith Island	33.90014	-77.98264	1
Smith Island	33.89898	-77.98323	1
Smith Island	33.89783	-77.98397	1
Smith Island	33.8978	-77.98394	1
Smith Island	33.89514	-77.9833	1
Smith Island	33.8949	-77.9838	1
Smith Island	33.89462	-77.98441	1
Smith Island	33.89335	-77.9883	1
Smith Island	33.89424	-77.98762	1
Striking Island	33.90676	-77.99697	1
Striking Island	33.90984	-77.99663	1
Striking Island	33.91003	-77.99684	1
Striking Island	33.9106	-77.99758	1
Striking Island	33.90676	-77.99697	1
Striking Island	33.90633	-77.99653	1
Striking Island	33.90512	-77.99657	1
Striking Island	33.90579	-77.99489	1
Striking Island	33.90574	-77.99457	1
Striking Island	33.90575	-77.99368	1
Striking Island	33.90629	-77.99258	1
Shellbed Island	33.91656	-77.98308	1
Shellbed Island	33.91521	-77.9843	1
Shellbed Island	33.9203	-77.97627	1
Shellbed Island	33.92099	-77.975	1
Shellbed Island	33.92111	-77.97417	1
Shellbed Island	33.91934	-77.96815	1
Shellbed Island	33.92052	-77.97882	1
Shellbed Island	33.90799	-77.98514	1
Shellbed Island	33.92100	-77.97840	1
Shellbed Island	33.92074	-77.97866	1
Shellbed Island	33.92046	-77.97904	1
Shellbed Island	33.92025	-77.97948	1
Shellbed Island	33.91998	-77.97951	1

Shellbed Island	33.91871	-77.97990	1
Shellbed Island	33.91901	-77.97971	1
Shellbed Island	33.92034	-77.97940	1
Shellbed Island	33.90995	-77.98646	1
Shellbed Island	33.90967	-77.98616	1
Shellbed Island	33.90923	-77.98574	1
Shellbed Island	33.90909	-77.98557	1
Shellbed Island	33.90883	-77.98540	1
Shellbed Island	33.90858	-77.98526	1
Shellbed Island	33.90766	-77.98480	1
Shellbed Island	33.90741	-77.98479	1
Shellbed Island	33.92007	-77.97952	1
Shellbed Island	33.91939	-77.97959	1
Shellbed Island	33.92069	-77.97869	1
Ferry Slip Island	33.97324	-77.94107	1
Ferry Slip Island	33.97409	-77.94164	1
Ferry Slip Island	33.97284	-77.94176	1
Ferry Slip Island	33.97403	-77.94256	1
Ferry Slip Island	33.97303	-77.94193	1
Ferry Slip Island	33.97348	-77.94189	1
Ferry Slip Island	33.97414	-77.94227	1
Ferry Slip Island	33.97406	-77.94172	1
Ferry Slip Island	33.97354	-77.94105	1
Ferry Slip Island	33.97319	-77.94109	1
Ferry Slip Island	33.97275	-77.94135	1
Ferry Slip Island	33.97372	-77.94281	1
Ferry Slip Island	33.97312	-77.9423	1
Ferry Slip Island	33.97329	-77.94225	1
Ferry Slip Island	33.97376	-77.94109	1
South Pelican Island	33.93663	-77.97422	1
South Pelican Island	33.93675	-77.97385	1
South Pelican Island	33.93670	-77.97330	1
South Pelican Island	33.93667	-77.97318	1
South Pelican Island	33.93649	-77.97267	1
South Pelican Island	33.93591	-77.97263	1
South Pelican Island	33.93622	-77.97467	1
South Pelican Island	33.93629	-77.97467	1
South Pelican Island	33.93677	-77.97459	1
South Pelican Island	33.93676	-77.97421	1
South Pelican Island	33.93668	-77.97360	1
South Pelican Island	33.93611	-77.97404	1
South Pelican Island	33.93547	-77.97372	1
South Pelican Island	33.93619	-77.97256	1
South Pelican Island	33.93638	-77.97258	1
South Pelican Island	33.93648	-77.9734	1
South Pelican Island	33.93541	-77.97353	1
South Pelican Island	33.93582	-77.97279	1
South Pelican Island	33.93615	-77.97318	1
South Pelican Island	33.93560	-77.97426	1

Locations of American Oystercatcher Pairs

Site Name	Latitude	Longitude	Pairs
Battery Island	33.91302	-78.00491	1
Battery Island	33.91357	-78.00895	1
Battery Island	33.91130	-78.01237	1
Battery Island	33.90850	-78.01459	1
Battery Island	33.90520	-78.01190	1
Battery Island	33.90600	-78.01054	1
Striking Island	33.91085	-77.99783	1
Striking Island	33.91056	-77.99758	1
Striking Island	33.90974	-77.99609	1
Striking Island	33.90977	-77.99645	1
Striking Island	33.90986	-77.99669	1
Striking Island	33.90998	-77.99683	1
Striking Island	33.90963	-77.99539	1
Striking Island	33.90647	-77.99213	1
Striking Island	33.90578	-77.99369	1
Striking Island	33.90576	-77.99461	1
Striking Island	33.90574	-77.99491	1
Striking Island	33.90539	-77.99592	1
Striking Island	33.90636	-77.99620	1
Striking Island	33.90715	-77.99693	1
Smith Island	33.90145	-77.98136	1
Smith Island	33.90137	-77.98175	1
Smith Island	33.90014	-77.98263	1
Smith Island	33.89891	-77.98318	1
Smith Island	33.89794	-77.98378	1
Smith Island	33.89761	-77.98401	1
Smith Island	33.89501	-77.98350	1
Smith Island	33.89483	-77.98388	1
Smith Island	33.89458	-77.98469	1
Smith Island	33.89457	-77.98717	1
Smith Island	33.89358	-77.98819	1
Smith Island	33.88717	-77.99087	1
Shellbed Island	33.91523	-77.98425	1
Shellbed Island	33.91520	-77.98420	1
Shellbed Island	33.91936	-77.96816	1
Shellbed Island	33.92108	-77.97423	1
Shellbed Island	33.92056	-77.97625	1
Shellbed Island	33.92096	-77.97759	1
Shellbed Island	33.92020	-77.97938	1
Shellbed Island	33.92002	-77.97947	1
Shellbed Island	33.92002	-77.97947	1
Shellbed Island	33.91983	-77.97950	1
Shellbed Island	33.91945	-77.97954	1
Shellbed Island	33.91871	-77.97994	1
Shellbed Island	33.91889	-77.97979	1
Shellbed Island	33.92028	-77.97931	1
Shellbed Island	33.91955	-77.97952	1
Shellbed Island	33.92093	-77.97796	1
Shellbed Island	33.92006	-77.97944	1
Shellbed Island	33.92063	-77.97859	1
Shellbed Island	33.90990	-77.98632	1

Shellbed Island	33.90914	-77.98565	1
Shellbed Island	33.90829	-77.98516	1
Shellbed Island	33.90805	-77.98512	1
Shellbed Island	33.90786	-77.98495	1
Shellbed Island	33.90749	-77.98472	1
Shellbed Island	33.90895	-77.98547	1
Shellbed Island	33.90879	-77.98534	1
Shellbed Island	33.90692	-77.98411	1
Shellbed Island	33.90987	-77.98620	1
North Pelican Island	33.99257	-77.93919	1
North Pelican Island	33.99520	-77.93842	1
North Pelican Island	33.99545	-77.93839	1
North Pelican Island	34.00433	-77.93602	1
North North Pelican Island	34.00754	-77.93437	1
North North Pelican Island	34.00836	-77.93416	1
North North Pelican Island	34.00855	-77.93389	1
North North Pelican Island	34.00699	-77.93464	1
No Name Island	33.98418	-77.94039	1
Ferry Slip Island	33.97340	-77.94257	1
Ferry Slip Island	33.97280	-77.94147	1
Ferry Slip Island	33.97321	-77.94103	1
Ferry Slip Island	33.97389	-77.94145	1
Ferry Slip Island	33.97386	-77.94269	1
Ferry Slip Island	33.97317	-77.94207	1
Ferry Slip Island	33.97305	-77.94197	1
Ferry Slip Island	33.97335	-77.94104	1
Ferry Slip Island	33.97350	-77.94106	1
Ferry Slip Island	33.97402	-77.94202	1
Ferry Slip Island	33.97377	-77.94125	1
Ferry Slip Island	33.97394	-77.94170	1
Ferry Slip Island	33.97312	-77.94219	1
Ferry Slip Island	33.97396	-77.94224	1
Ferry Slip Island	33.97299	-77.94125	1
South Pelican Island	33.93662	-77.97423	1
South Pelican Island	33.93669	-77.97378	1
South Pelican Island	33.93663	-77.97344	1
South Pelican Island	33.93572	-77.97427	1
South Pelican Island	33.93645	-77.97471	1
South Pelican Island	33.93623	-77.97458	1
South Pelican Island	33.93619	-77.97253	1
South Pelican Island	33.93602	-77.97239	1
South Pelican Island	33.93590	-77.97237	1
South Pelican Island	33.93577	-77.97284	1
South Pelican Island	33.93552	-77.97339	1
South Pelican Island	33.93556	-77.97362	1
South Pelican Island	33.93611	-77.97387	1
South Pelican Island	33.93633	-77.97269	1
South Pelican Island	33.93578	-77.97421	1
South Pelican Island	33.93611	-77.97426	1

Locations of American Oystercatcher Pairs

Site Name	Latitude	Longitude	Pairs
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	33.89922	-78.03102	1
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	33.90684	-78.02932	1
Battery Island	33.91154	-78.01130	1
Battery Island	33.90589	-78.01095	1
Battery Island	33.91435	-78.00498	1
Battery Island	33.90546	-78.01140	1
Striking Island	33.91052	-77.99751	1
Striking Island	33.90996	-77.99682	1
Striking Island	33.90971	-77.99602	1
Striking Island	33.90757	-77.99739	1
Striking Island	33.90716	-77.99711	1
Striking Island	33.90551	-77.99593	1
Striking Island	33.90540	-77.99608	1
Striking Island	33.90528	-77.99595	1
Striking Island	33.90564	-77.99467	1
Striking Island	33.90585	-77.99372	1
Striking Island	33.90646	-77.99245	1
Shellbed Island	33.90891	-77.98535	1
Shellbed Island	33.90864	-77.98523	1
Shellbed Island	33.91876	-77.97991	1
Shellbed Island	33.92036	-77.97626	1
Shellbed Island	33.90747	-77.98469	1
Shellbed Island	33.90998	-77.98621	1
Shellbed Island	33.90994	-77.98615	1
Shellbed Island	33.91512	-77.98410	1
Shellbed Island	33.91523	-77.98414	1
Shellbed Island	33.92020	-77.97935	1
Shellbed Island	33.91967	-77.97943	1
Shellbed Island	33.91932	-77.96819	1
Shellbed Island	33.90818	-77.98505	1
Shellbed Island	33.92013	-77.97935	1
Shellbed Island	33.90952	-77.98095	1
Shellbed Island	33.90786	-77.98489	1
Shellbed Island	33.92079	-77.97852	1
Shellbed Island	33.91883	-77.97979	1
Shellbed Island	33.91980	-77.97940	1
Shellbed Island	33.91868	-77.97991	1
Shellbed Island	33.91910	-77.97957	1
Shellbed Island	33.92090	-77.97422	1
Shellbed Island	33.92082	-77.97778	1
Shellbed Island	33.92061	-77.97860	1
Shellbed Island	33.92054	-77.97862	1
Shellbed Island	33.90946	-77.98573	1
Shellbed Island	33.90712	-77.98294	1
Smith Island	33.90144	-77.98122	1

Smith Island	33.90146	-77.98162	1
Smith Island	33.90109	-77.98207	1
Smith Island	33.89785	-77.98345	1
Smith Island	33.89513	-77.98373	1
Smith Island	33.89486	-77.98442	1
Smith Island	33.89437	-77.98671	1
Smith Island	33.89431	-77.98734	1
Smith Island	33.89451	-77.98728	1
Smith Island	33.89395	-77.98766	1
Smith Island	33.89337	-77.98815	1
Smith Island	33.89329	-77.98827	1
Smith Island	33.88856	-77.99016	1
South Pelican Island	33.93632	-77.97319	1
South Pelican Island	33.93662	-77.97380	1
South Pelican Island	33.93650	-77.97338	1
South Pelican Island	33.93616	-77.97434	1
South Pelican Island	33.93567	-77.97395	1
South Pelican Island	33.93556	-77.97360	1
South Pelican Island	33.93630	-77.97401	1
South Pelican Island	33.93607	-77.97391	1
South Pelican Island	33.93615	-77.97274	1
South Pelican Island	33.93595	-77.97245	1
South Pelican Island	33.93573	-77.97242	1
South Pelican Island	33.93585	-77.97269	1
South Pelican Island	33.93667	-77.97456	1
Snow's Island	33.96688	-77.95634	1
Ferry Slip Island	33.97386	-77.94252	1
Ferry Slip Island	33.97390	-77.94179	1
Ferry Slip Island	33.97367	-77.94126	1
Ferry Slip Island	33.97320	-77.94114	1
Ferry Slip Island	33.97379	-77.94154	1
Ferry Slip Island	33.97320	-77.94206	1
Ferry Slip Island	33.97340	-77.94205	1
Ferry Slip Island	33.97348	-77.94229	1
Ferry Slip Island	33.97301	-77.94119	1
Ferry Slip Island	33.97337	-77.94104	1
Ferry Slip Island	33.97390	-77.94208	1
Ferry Slip Island	33.97295	-77.94150	1
Ferry Slip Island	33.97358	-77.94117	1
Ferry Slip Island	33.97325	-77.94214	1
Ferry Slip Island	33.97312	-77.94149	1
Ferry Slip Island	33.97338	-77.94141	1
Ferry Slip Island	33.97342	-77.94176	1
No Name Island	33.98416	-77.94023	1
No Name Island	33.98380	-77.94002	1
North Pelican Island	33.99356	-77.93893	1
North Pelican Island	33.99520	-77.93858	1

North Pelican Island	33.99587	-77.93827	1
North Pelican Island	34.00143	-77.93672	1
North North Pelican Island	34.00672	-77.93396	1
North North Pelican Island	34.00741	-77.93429	1
North North Pelican Island	34.00819	-77.93418	1
North North Pelican Island	34.00851	-77.93383	1

Site Name	Oystercatcher Pairs		
	2013	2016	2019
AIWW Caswell Beach, Dutchman Creek, and Elizabeth River	n/a	n/a	2
Battery Island	8	6	4
Ferry Slip Island	15	15	17
No Name Island	0	1	2
North North Pelican Island	0	4	4
North Pelican Island	5	4	4
Shellbed Island	27	28	27
Smith Island	12	12	13
Snow's Island	2	0	1
South Pelican Island	20	16	13
Striking Island	11	14	11
LCFR Total	100	100	98
State Total	372	440	393
LCFR Proportion of State	26.9%	22.7%	24.9%

2022

3
6
13
2
3
6
24
12
1
10
13

93
372
25.0%

From: [Winget, Emily M CIV \(USA\)](#)
To: WilmingtonHarbor403@usace.army.mil
Cc: [Cayton, Jedidiah D CIV \(USA\)](#); [Connolly, David P CIV \(USA\)](#)
Subject: FW: Message from Unknown sender (7277366001)
Date: Wednesday, June 28, 2023 9:19:13 AM
Attachments: [VoiceMessage.wav](#)

All,

Please listen to the attached VM for further comments.

V/r,

Emily Winget
Public Affairs Specialist
U.S. Army Corps of Engineers
Wilmington District
Office 910.251.4625
Cell 910.990.4784
<https://www.facebook.com/USACE.Wilmington>
<https://twitter.com/USACEWilmington>
<https://www.linkedin.com/company/usacewilmington>

From: Cisco Unity Connection Messaging System
<unityconnection@cpcunitypub.eis.ds.usace.army.mil>
Sent: Tuesday, June 27, 2023 3:01 PM
To: Emily Winget <1556535279_mil@cpcunitypub.eis.ds.usace.army.mil>
Subject: Message from Unknown sender ([REDACTED])

Yeah, hi. You were advertising taking comments about deepening the channel in the Cape Fear River so you can get larger ships in I am assuming. And I have some comments on that. I think you're probably got bigger ships in there now than you need but I know it's a port and they're trying to make money. But the destruction to the shoreline and river with these massive wakes that come off is just going to destroy more of the ecology of the river. Already the trees are all dead in the marshlands, up the river, up the creeks and tributaries. So anyway, if I need to make an official writing or something like that call me back [REDACTED]. I am here in Wilmington, in fact I live on the river, so I see firsthand what these ships do when they come up. Talk to you later. Bye

From: WilmingtonHarbor403@usace.army.mil
Subject: FW: [Non-DoD Source] Public comment attached
Date: Wednesday, August 16, 2023 4:24:10 PM
Attachments: [Proposed Wilmington Harbor 403 Project comments.docx](#)

From: [REDACTED]
Sent: Saturday, June 24, 2023 3:06 PM
To: WilmingtonHarbor403@usace.army.mil
Subject: [Non-DoD Source] Public comment attached

Hello: Please see my comments (attached and pasted below).
thank you.

Proposed Wilmington Harbor 403 Project

Comments from a concerned citizen of Wilmington, New Hanover County, North Carolina, United States, North America, and the Earth.

I propose formation of a regional Task Force (federal, state, local regulatory agencies and scientists, and average citizens) charged to objectively analyze all the SEUS ports (or at least Savannah, Charleston, Wilmington, and Morehead City as a group) to identify individual constraints and assets of each port in a collaborative, non-competitive approach. Perhaps this Task Force could operate under the guidance of NED (although I wish it was named NEED so that equal weight is given to the economy AND the environment).

Such a study might reveal novel purposes/needs over the long term. Perhaps the port with the longest distance from the mouth should not be modified to accept the largest ships...those behemoths should call only at the port located closest to a river mouth, or to the port already deepened? A port at a greater distance from the river mouth could then be tailored to continue to serve only the mid-to large-sized ships for which it is currently configured? How long before all the mid-to large-size ships are mothballed? Decades? Why does the ship size get to continue to grow larger and larger? Who put ship builders in charge of what everyone else does? What if ports as a group just said No?

Regulators have decried "piecemealing" in regards to NEPA. Should not these repeated harbor deepening projects be looked at similarly---as one large scale regional project that must be studied and proposed holistically and not chipped away at piece by piece (port by port) as though each was stand-alone and unrelated? Regional collaboration and analysis by a task force might uncover hidden cost-savings and describe innovative and more cohesive solutions to common future threats shared by all SEUS ports instead of the typical "fists up the baseball bat" race to see which port can handle the most volume and largest vessels no matter the cost in dollars or environmental impacts. Just because we can, should we?

Probably blue-sky-thinking on my part, but in the face of climate change and run-away overconsumption, it may be well past time to discontinue business as usual where each port in succession spends millions of dollars every decade (or less) just to compete with the volumes at a nearby port. When is enough enough?

I share many of the same concerns of both known and unknown effects from previous harbor deepening projects which likely will be exacerbated by the current proposed project. These effects include in no particular order, and are not limited to: shoreline erosion, salt water intrusion, land-use impacts and environmental justice around industrialization of nearby acreages for storage and warehouses, habitat displacement and habitat degradation for both protected and unprotected species, and resuspension of potentially dangerous PFAs present in the river bed. Sediments with heavy metals and other contaminants from other dredging and deepening projects were deemed "safely" dredged and put on spoil islands in the river. While those same sediments were also

contaminated with PFAs at the time of disposal, presence of PFAs in Cape Fear River water and sediment was not identified until 2017. Will it be safe to continue to put PFAs-contaminated sediments on these same islands? If not, then where and how will these sediments with forever chemicals be disposed and contained?

Living shorelines are oft proposed as mitigation to offset shoreline erosion. But a new harbor deepening project that increases the tidal range in conjunction with ongoing sea level rise may outpace the designated life of the living shoreline mitigation project designed to offset adverse impacts of the *previous* harbor deepening.

In addition, despite best efforts, it seems that mitigation success and true cumulative effects of previous Wilmington and other harbor projects are not clearly understood and even more poorly studied post-project. Effort beyond lip-service needs to be spent to understand and offset direct and indirect, secondary, and cumulative effects and impacts.

Thank you for your work and best attempts.

Sincerely,

A small black rectangular box used to redact a signature.



2000 RENAISSANCE PLAZA
230 NORTH ELM STREET
GREENSBORO, NC 27401

T 336.373.8850
F 336.378.1001
WWW.BROOKSPIERCE.COM

June 30, 2023

Via U.S. Mail and Email

Ms. Chrisa Waite, Public Involvement Specialist
USACE Wilmington District
69 Darlington Avenue
Wilmington, NC 28403
Attn: Wilmington Harbor 403
WilmingtonHarbor403@usace.army.mil

Re: Initial Scoping--Wilmington Harbor 403 Navigation Improvement Project ("**WH 403**"):
Comments Submitted June 2023 Notice

Dear Ms. Waite:

Please accept these comments on behalf of the Village of Bald Head Island ("**VBHI**") in connection with WH 403. These comments are submitted in accordance with the Wilmington District for the United States Army Corps of Engineers ("**USACE**" or "**Corps**") June 2023 Notice soliciting public comment on WH 403. Attached to these comments (**Attachment A: VBHI Action Requests/Suggestions**) is a list of specific actions VBHI requests the Corps consider in its execution of the WH 403 Work Plan.

I. BACKGROUND AND TERMS

In 2000, the Corps approved a project (the "**2000 Project**") to deepen the Wilmington Harbor Navigation Channel of the Cape Fear River (the "**Channel**") from 40' to 44'. In fact, the Channel has not been maintained to that depth, and is effectively 42-43'. This is significant because the incremental changes proposed by WH 403 are therefore larger, and the impacts will likewise be larger, than if the starting point was 44'. The impact and import of the 2000 Project are discussed below.

On June 12, 2018, the North Carolina State Ports Authority (the "**NCSPA**") issued a public notice of its initiation of a Section 203 feasibility study "of potential improvements to the federal channels that access the Port of Wilmington...to accommodate larger, more fully laden deep draft vessels and provide net positive local, state, and federal economic benefit, while protecting the nation's environment." (emphasis added) (the "**Feasibility Study**"). As discussed below (relevant to the need for additional public involvement in *all* areas of the current review), the public was specifically **excluded** from this process and the NCSPA consistently refused to

divulge information, including refusing to respond to public records requests (despite being under a statutory duty to do so). After the final 203 Feasibility Study was completed in February 2020, the Assistant Secretary of the Army, Civil Works (the “**ASA**”) issued the May 2020 Review Assessment (the “**Assessment**”), which contained critical comments, recommendations, and conditions, and identified unresolved issues. The Assessment was submitted to Congress, which conditionally authorized the Corps to proceed with the project, “subject to such modifications or conditions as the Secretary [of the Army] considers appropriate and identifies in a final assessment that addresses the concerns, recommendations, and conditions identified by the Secretary in the applicable review assessment.” Water Resources and Development Act of 2020 (“**WRDA**”), § 403.

On September 26, 2022, the Corps and NCSA agreed to a schedule and budget for addressing the “unresolved comments” in the Assessment (the “**Work Plan**”). The Work Plan addresses both the need to complete the environmental review (the “**NEPA Review**”) and other, non-NEPA elements of the Assessment that remain unresolved or are required to be addressed, discussed below (the “**Non-NEPA Issues**”).

II. INTERESTS OF PARTY SUBMITTING COMMENTS

Bald Head Island sits at the mouth of the Cape Fear River and is immediately adjacent to the shipping channel which is the subject of WH 403. VBHI, representing the interests of its property owners, public, and the thousands of visitors to the Island, is vitally interested in, invested in, and affected by the health of the entire Cape Fear River (the “**River**”) and the near shore it directly affects. While VBHI property owners and visitors utilize vast stretches of the River, VBHI is also interested in the Channel’s impact on the sand transport systems at its mouth and near shore and their impact on the health of the adjacent beaches and aquatic and terrestrial habitats. The 2000 Project resulted in extreme, harmful effects on the Island’s beaches, roads, homes, infrastructure, and critical environmental habitat for endangered and threatened species of sea turtles, birds (including the Piping Plover and Wilson’s Plover), and other wildlife. Since 2000, VBHI has spent over \$47 million in public funds to address these direct impacts from the 2000 Project. See Attachment B: VBHI Mitigation Costs of [2000 Project] Channel Impacts. In addition to deepening the Channel, the Feasibility Study’s proposal to significantly widen the channel in the area of the Island will have a major, detrimental impact on the sand transport systems and the adjacent beaches. Based upon the experience of the 2000 Project, as well as on consultation with experts, the harm to VBHI from the Project as proposed in the Feasibility Study will be at least comparable to that experienced since 2000. In addition, VBHI believes there will be other synergistic, harmful effects to the River and adjacent environs, habitats, residents, and visitors.

III. IMPACT OF 2000 PROJECT LITIGATION

The 2000 Project resulted in strong objections from VBHI (and other ocean front communities) and the N.C. Dept. of Environment and Natural Resources (“**NCDENR**”) (now Dept. of Environmental Quality) concerning the impacts to sand transport systems and the adverse effects of the 2000 Project on beaches and critical aquatic and terrestrial habitats and threatened/endangered species. NCDENR threatened to withhold its Coastal Zone Management Act concurrence for the Project unless this threat was adequately addressed. As a result, the parties negotiated an agreement and the Corps delivered a letter from the Wilmington District Commander Colonel Delony (the “**DeLony Letter**”) committing to comply with a specific sand management plan, including a specific schedule of renourishment of the area’s affected beaches. NCDENR then issued its CZMA concurrence, specifically conditioned on the terms of the DeLony Letter. The Corps then issued its Finding of No Significant Impact (“**FONSI**”), stating: “We will comply with the conditions indicated in the [CZMA] letter.” Copies of these letters and the FONSI are attached as **Attachment C: VBHI v. Corps Litigation Summary**.

When the Corps later failed to comply with the terms of the DeLony commitments, and the predicted ill-effects to the area beaches became evident, VBHI brought an action against the Corps under the Administrative Procedure Act (“**APA**”) in the US District Court for the Eastern District of N.C. There, the Corps argued that the DeLony letter was not binding on the Corps and contained no specific, enforceable commitments. In addition, the Corps argued that the District Commander (Col. DeLony) does not have the authority to enter into a “multi-year commitment concerning the placement of sand upon beaches.” The District Court ruled against VBHI, which appealed to the Fourth Circuit Court of Appeals. That Court likewise ruled that the commitments in the DeLony Letter and the FONSI are not enforceable. *Village of Bald Head Island v. U.S. Army Corps of Engineers*, 7114 F.3d 186 (4th Cir. 2013). The Court’s opinion is also included in Attachment C. As a result of the 2000 Project Litigation outcome, VBHI was left to self-fund its beach renourishment activities necessary to mitigate the impacts of the 2000 Project.

The lesson from this litigation is that, going forward, some other **enforceable** mechanism is necessary to assure that the full impacts of any WH 403 approved Project are mitigated. Addressing this complex issue spans the definition of the Action (discussed below) and the Mitigation required by NEPA and WRDA (also discussed below). Both the initial construction phase (“**Phase 1**”) and the subsequent related and necessary construction phases (periodic dredging and beach renourishment: “**Phase 2**”) should be recognized in both the Action definition and the Mitigation requirements. Relegating Phase 2 activities to “maintenance” could mean they become discretionary and unenforceable as to performance and mitigation.

Initial suggestions for addressing this problem, which should be the subject of the scoping investigation, include:

- Define the Project Action to include on-going sand management and maintenance of beaches as part of the on-going Project;

- Specific inclusion of sand management and beach renourishment in the Mitigation requirements mandated by WRDA;
- Pre-funding the Phase 2 performance and Mitigation; or
- A Federal Court consent decree in which the relevant parties agree to perform Phase 2 (and hence can be held in contempt should they fail to do so); recognizing that the Corps cannot guarantee that Congress will always adequately fund its Phase 2 obligations can be met, the Corps could agree to include Phase 2 activities and Mitigation in its annual budget requests and financial resources necessary for Phase 2 could be guaranteed by NCSPA (and pre-funded, if necessary under NC law). For example, each planned dredging event could be pre-funded with the fund replenished before the next dredging event.
- Condition Phase 2 construction (i.e., periodic “maintenance dredging”) on the availability of funds to fully provide the necessary Mitigation therefor.

IV. COMMENTS ON WH 403 INITIAL SCOPING

The approval of this project in WRDA 2020 is conditional on the Secretary of the Army addressing the concerns and conditions in the Assessment, which include, but are not limited to, completing the NEPA review. The Work Plan likewise addresses NEPA and Non-NEPA issues, although some are related. Therefore, VBHI is submitting these comments on aspects of the Work Plan, both NEPA and Non-NEPA.

A. Concerns Common to NEPA and Non-NEPA Review

The Work Plan in numerous areas builds on the NCSPA work during the preparation of the Feasibility Study.¹ Section 203 of WRDA required NCSPA to follow Corps procedures in assuring full public involvement in the preparation of the Feasibility Study, but that did not happen. The seriousness of this failure affects the scope of work necessary under the Work Plan. To highlight:

- There was only one opportunity for public comment, an August 8, 2018 “Public Information meeting,”² which was limited to an open-to-the public display of descriptive posters about the proposed project. There were no speakers or opportunity for comment.
- At that “meeting,” the only instruction for the public to submit comments was a poster stating that public comments should be posted on the website “WH203NCPorts.com.” In reality, that website did not then exist and was never activated. The copy of this poster included in the materials submitted by NCSPA to the Corps (as part of its Public Involvement Plan) *changed* this website reference to the active NCSPA email address, thus wrongly representing that the

¹ For example: Sections 3(a)(ii)(2), 4(a)(1), 4(a)(ii)(3), 4(a)(ii)(4), 4(a)(ii)(7), 4(a)(ii)(9), 5(b)(10)

² This meeting was **not** noticed in any state-wide newspaper or the North Carolina Register, which is done for state agency public notices.

public had been informed of a method for commenting that would actually work. The 203 Sponsor in-box was closed.

- VBHI made numerous requests (formal and informal) to NCSPA for information about the preparation of the Feasibility Study, including Public Record Requests pursuant to N.C. Gen Stat. Chapter 132, all of which NCSPA ignored. When VBHI requested a copy of the Feasibility Study, NCSPA said it was unable to provide it because of the sheer volume and because NCSPA was incapable of transmitting the information electronically, despite the fact NCSPA had just done so (as required by Corps procedures) in submitting it to the Corps. The 203 Sponsor out-box was closed.

We raise these points to show the exclusion of the public from meaningful information and opportunity to engage in the 203 process, despite the NCSPA's obligation to engage with the public.³ On August 29, 2019, in a letter to the NCSPA Executive Director, these allegations of exclusion of the public and withholding of project information were detailed, including references to the numerous Corps regulations and Guidance documents mandating compliance. The NCSPA never responded.

All of the reports and information included in the Feasibility Study have not had the benefit of having been prepared with public input or even been subject to public review. The development of the WH 403 objective, purpose and need, and economic justification should all be reopened to allow meaningful public involvement. Likewise, all the elements of the NCSPA "Environmental Report" cannot form a baseline, as discussed in more detail below.

B. Non-NEPA Review Issues

1. Purpose and Need

If any WH 403 Project is approved, this will be a Federal project not a NCSPA project. The Feasibility Study, prepared privately by NCSPA, was entirely parochial.⁴ In contrast, Corps Planning Guidance Notebook (the "PGN")⁵ Chapter 2, Section 2-2 stresses the importance of focusing on the Federal objective, problems, and opportunities related to this project.

The Federal problem is the emergence of larger container ships challenging the capacity of many ports (not just Wilmington) and limited Federal funds to assist ports in the accommodation of the same. The Federal opportunity is the coordination of a national maritime transportation strategy that makes the best and least environmentally damaging use of the facilities of all east coast ports, and targets Federal dollars for port enhancements in a way that

³ 33 U.S.C. § 2231(b); ER 1165-2-209 at B-4; ER 1105-2-100 at 2-15 and App. B

⁴ The Report itself undercuts a finding of a Federal, rather than a purely State, interest when it reveals that 87% of the Wilmington container cargo is either from or bound to a destination in North Carolina. Feasibility Study, p. 26, Table 2-4.

⁵ ER 1105-2-100, Corps Planning Guidance Notebook.

advances that overall strategy in a rational manner. The relevant National Economic Development (the “NED”) is not the Wilmington Harbor impact on NED but the total impact on NED of the strategy that best addresses these new challenges. That is the alternatives analysis and the cost-benefit analysis that should be embraced as the first step of the scoping of this project. As the Assessment points out, the economics analysis necessary to justify this as a Federal project has not been established (discussed below), and the assumption that the NCSPA must expand to survive is unsupported by empirical data and recent experience.

The preparation of the Feasibility Study was required to include public involvement in evaluating the Federal Objective. Nevertheless, the WH 403 Purpose and Need are already stated in the WH 403 Notice for Public Comment as if it has been decided:

Purpose and Need for the Proposed Action

Purpose is to contribute to national economic development (NED) by **addressing transportation inefficiencies** for the forecasted vessel fleet, consistent with protecting the Nation’s environment. The proposed action is intended to address the **constraints that contribute to inefficiencies** in the existing navigation system’s ability to safely serve forecasted vessel fleet and forecasted cargo types and volumes.

- Objective 1: Contribute to the NED by reducing costs to transport import and export cargo through Wilmington Harbor.
- Objective 2: Contribute to the NED by addressing constraints that induce navigation-related operating practices that contribute to delays, including limited passing and one-way traffic in some channel reaches.

The existence of transportation inefficiencies and constraints has been assumed, without public input. Actual experience since the preparation of the Feasibility Study belies the existence of at least some of those inefficiencies. Partially laden Panamax vessels are in fact calling on Wilmington (contrary to the NCSPA prediction). Whether there is a good economic justification to do so fully laden (in light of other ports being the traditional first and last East Coast ports of call and of the additional transit distance up Channel) is a question worthy of investigation not only as it relates to the economic justification (discussed below) but as it relates to the underlying assumption of Need. Is the current configuration of the Channel in fact creating a constraint and inefficiency, and, if so, how (depth; width) and to what extent? Analysis of these feasibility needs is critical to formulation of the correct Purpose and Need, which in turn drives the actions and alternatives analyses.

Similarly, the Screening Criteria and Measures sections of the Feasibility Study, which have been criticized by the Assessment (Work Plan Item 2), should not only be scrutinized by the Corps, they should be the specific subject of a public comment opportunity.

2. Economic Justification

There are numerous criticisms in the Assessment of the Feasibility Study's economic justification analyses. *See* Assessment Summary and section C. The Work Plan (Item 1) details numerous studies the Corps (and its consultants) will undertake. These should all have been done as part of the 203 Study where the public would have been aware of what was being studied and how it was being studied, and then could comment before proceeding to the NEPA review. To remedy the failure of the Feasibility Study in this regard, we ask that the Corps make these analyses fully transparent on an on-going basis, rather than have the public await the conclusion and then invite comments. Disclosing and discussing how these analyses will be conducted (in detail), including the factors included and excluded, would enable the public to provide meaningful, timely input and ways to improve the analyses. It would also streamline the input from commenters' experts. The process would be better served if there were a more public discussion and disclosure of the economic analysis process, so that such additional input is informed by the Corps plan and efforts.

As discussed below in the NEPA Resilience section, we also request that these analyses specifically provide detail on the truck/rail characteristics of the Port of Wilmington and the ports to which the cargo will be diverted in the "no-action" alternative, so that proper consideration of climate effects can be considered.

C. NEPA Review Issues

1. Scoping Generally

In undertaking a scoping analysis, the Corps is directed to assess similar actions, cumulative impacts, and direct and indirect effects—including the incremental impact of the Project when added to other past, present, and reasonably foreseeable future actions. The Corps' scoping analysis should therefore account for each of the following.

a. Lessons learned from prior projects.

The NEPA review should consider the history of Federal projects affecting the River. The proposed WH 403 Project is the latest in a series of such projects, and we should learn from the experience of the previous efforts. A review of the effects of the 2000 Project, with a specific call to the public to provide information about their post-2000 experience, should be undertaken. A generic call for public comments does not alert the audience to this retrospective analysis.

Before Congress conditionally authorized this WH 403, the Corps had begun a NEPA review of the NCSA 203 Feasibility Study, including a September 16, 2019 Public Meeting and call for public comments and a November 19, 2019 Stakeholder Meeting. Nearly 100 comments were submitted (*see* **Attachment D: 2019 Public Comments Summary**). VBHI asks that these comments be incorporated into the record now being compiled and considered by the Corps and its consultants.

Prior attempts at Channel realignment have not been successful, and the deepening targets have not been reached and maintained. This not only calls into question the efficacy of any proposed WH 403 alternative, it must be considered in adjusting the “baseline” when measuring the differential impact of such proposals: we are not starting from the assumed dimensions of the prior authorized projects. In addition, especially in light of the failure of VBHI’s efforts to enforce the FONSI conditions and the resultant damage to its beaches, the design of any alternative should take into account the demonstrated effect of the current Channel maintenance activities and address ways to reduce and mitigate the current effects as part of the Project design.

VBHI has noted the impacts it has suffered from the 2000 Project (over \$47 million). We are aware of other direct impacts—impacts that will be exacerbated by any WH 403 approved Project. For example, Brunswick Town/Fort Anderson (“BT/FA”), a NC Historic Site, was threatened with destruction of pre-Revolutionary War structures as a result of the dramatically accelerated erosion caused by the passage of larger displacement vessels following the 2000 Project. Damage could be observed on a daily basis. As a result, BT/FA had to seek emergency permitting authorization from NCDENR to protect those relics. The Corps concluded the accelerated erosion was not an impact of the 2000 Project, since the physical act of deepening the channel did not impact BT/FA. Even though the 2000 Project was undertaken specifically to allow the passage of these larger displacement vessels, the impact of their passage was not considered. We cannot repeat this mistake. See discussion of Definition of Action, below. As a result, BT/FA has had to spend millions to construct long term solutions. Likewise, the Military Ocean Terminal Sunny Point (“MOTSU”) shoreline, immediately down-River from BT/FA, is also suffering the effects of large-displacement vessel induced accelerated erosion. Many others along the length of the River have almost certainly had similar experiences, and the extent and nature of those should be collected, rather than await public comment on the WH 403 Project generally, which might not be seen as eliciting information about impacts from the 2000 Project.

b. Resilience issues.

The BT/FA experience highlights another issue of significance, especially in light of recent additional regulatory guidance: the effects of the WH 403 Project on the resilience of the River and its associated environs.⁶ Not only will sea level rise be a climate change factor, the increased number and severity of storms, coupled with the increased tidal range in the River, will pose significant resilience challenges to public and private property owners the length of the River.

⁶ Because the accelerated erosion at BT/FA increased its exposure to severe storms, BT/FA sought and received \$2 million post-Florence funding to improve resilience. MOTSU is required by the Defense Authorization Act of 2018 and implementing Department of Defense guidance to incorporate resilience assessments and response strategies in its master plans.

As pointed out in the Assessment, Section D2, because of the shape of this estuary and the impacts of prior deepening projects, increased tidal range, nuisance flooding, and salinity changes are occurring and will be exacerbated by further deepening and widening. Not only should these direct impacts be evaluated, their impact on the resiliency of the affected environs and infrastructure must also be evaluated.

Similarly, ocean front properties (like VBHI) will be increasingly exposed because of any WH 403 approved Project. The demonstrated negative effect on beaches (discussed below in Mitigation), even if adequately addressed, is cyclical. Beach renourishment is not continual. In the cycle immediately before restoration, the ocean front property is degraded and increasingly vulnerable to the effects of severe storms—i.e., is less resilient. VBHI asks the Corps to provide detailed information on its WH 304 website about the Corps' new Coastal Engineering Resilience Index ("CERI") as it could be applied to Bald Head Island, Oak Island, and other area ocean front beaches potentially affected by the sand transport systems in the area.

On January 9, 2023, the Council for Environmental Quality published in the Federal Register **National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change** ("CEQ Resilience Guidance"). This reinforces that Climate Resilience itself is an "ecological resource," damage to which must be considered and mitigated (discussed below). See Section IV, A. This is one of many examples of Climate Resilience as a Federal priority that must be accounted for. See also, USACE Guide to Planning (1 December 2020), EP 1100-1-5, and the statutes, executive orders, and guidance documents related to resilience listed at pp. 14-20.

In addition to evaluating the impact of each alternative on resilience,⁷ this new CEQ Resilience Guidance also has relevance to analysis of the potential impact on greenhouse gas ("GHG") issues in several respects. First, the Port of Wilmington is served by only one rail carrier and hence has particular dependence on trucks for transport of goods to and from the Port. The NCSA assertion that the no-action alternative will shift significant cargo to other Ports, which have a different mixture of rail/truck service, thus has consequences for the potential GHG emissions that will result from each alternative. Analysis of the relative mix of rail/truck service at NCSA and the competing ports is therefore necessary, as well as realistic projections of the net changes that will occur under each alternative and the net GHG impact.

Second, as noted below in the discussion of Mitigation, any WH 403 alternative could impact the area's salt marshes (and there are extensive marshes at VBHI). While salt marshes only account for 2% of the ocean's waters, they hold 50% of the carbon trapped in the ocean system.⁸ The CEQ Resilience Guidance (Section IV, I) pays special attention to the importance of and impact on carbon "sinks," of which salt marshes are the prime example.

⁷ Particularly on System Resilience and Community Resilience. See EP 1100-1-5, p. 9.

⁸ F. Wang, X. Lu, C. Sanders, and J. Tang, "Tidal Wetland Resilience to Sea Level Rise Increases Their Carbon Sequestration Capacity in United States," *Nature Communications* 10 (2019): 5434, <https://doi.org/10.1038/s41467-019-13294-z>.

c. Differential effects of widening and deepening.

The Feasibility Study proposes not only to deepen the channel but also to significantly widen it at specific points. Several of the Channel Reaches proposed for widening are in areas VBHI believes will have direct and adverse impact on the sand transport systems affecting all of the area beaches (not just VBHI). The WH 403 analyses of potential project alternatives and impacts of each alternative should be undertaken to differentiate the impacts of widening and deepening, so that the relative costs and benefits of each element of the proposed project can be weighed, and more flexible alternatives considered.

2. Purpose and Need

As discussed above in the Non-NEPA Review section, the development of a statement of Purpose and Need should not be assumed to be foreclosed by the conditional approval of the project by Congress. The NEPA process has a separate Purpose and Need element, and it should be seen as an opportunity to re-visit and address the deficiencies in the original, closed-to-the-public Feasibility Study.

The project Purpose and Need is critical, in that it establishes the universe of reasonable alternatives to be considered. As drafted by NCSPA, the Purpose and Need assumes inefficiencies and assumes the need for channel expansion to address them in order to contribute to the NED, thus artificially limiting its alternatives to various channel expansion depths. The Project Purpose and Need should not be defined in reference to channel expansion—which necessarily excludes other reasonable alternatives—but in reference to contribution to the NED. Only then can the NEPA process fairly consider all reasonable alternatives, which is the heart of the NEPA analysis.

3. Definition of Action

As pointed out earlier, the Feasibility Study proposed project purports to address long-term needs of the Port of Wilmington and cannot be seen as a one-time dredging project: it would be a colossal (\$834 million) waste to deepen and widen the Channel, only to then ignore it and allow it to revert to its natural condition. In addition, deepening and widening are not being sought for their own sake: the NCSPA stated goal is “to accommodate larger, more fully laden deep draft vessels”. NCSPA Public Notice, June 12, 2018. As was demonstrated at BT/FA after the 2000 Project, the transit of such vessels has a continuing impact beyond the effect of the initial deepening work. The framing of the definition of the Action being approved must be sensitive to both of these issues and seen as “Connected Actions”:

To determine the scope of environmental impact statements, agencies shall consider:

(1) Actions (other than unconnected single actions) that may be **connected actions**, which means that they are **closely related** and therefore should be discussed in the same impact statement. Actions are connected if they:

(i) Automatically trigger other actions that may require environmental impact statements;

(ii) **Cannot or will not proceed unless other actions are taken** previously or simultaneously; or

(iii) **Are interdependent parts of a larger action and depend on the larger action for their justification.**

(2) Alternatives, which include the no action alternative; other reasonable courses of action; and mitigation measures (not in the proposed action).

(3) Impacts.

40 C.F.R. § 1501.9(e). This is re-enforced by the requirement to discuss in the environmental evaluation “any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented.” 40 C.F.R. § 1502.16(a)(4).

Accommodating the transit of larger, fully laden deep draft vessels will require continuously maintaining the final Project specifications and both the act of transiting such vessels and the periodic re-deepening and widening to accommodate their continued use of the Channel are thus Connected Actions, the long-term cost and impacts of which must be included in the NEPA evaluation. Defining the Action any more narrowly will defeat the purpose of the Act.

4. Mitigation Issues

The definition of the Action will directly affect the scope of mitigation required. The shoreline and cultural resource damages caused at BT/FA were ignored because the action—deepening the Channel—was not seen as the “cause” of the resulting erosion; the planned (indeed, the Project’s intended) transit of larger displacement deep draft vessels was not connected to the harm it caused. Likewise, the on-going destruction of beaches caused by the inevitable slough back into the Channel and the Corps’ failure to renourish the beaches to prevent damage were relegated to project maintenance in the Corps’ discretion. If seen as statutorily **required** Mitigation, the result might have been different both on the beaches and along the estuarine shoreline.

a. Mitigation Responsibilities

WRDA has two overlapping but distinct mitigation requirements:

- i. Prior/Concurrent Mitigation (“**P/C Mitigation**”), applicable to “losses to fish and wildlife losses):

Where “construction of [the project] ... necessitates the **mitigation of fish and wildlife losses**, including the acquisition of lands or interests in lands to mitigate losses to fish and wildlife, as a result of such project, such mitigation, including acquisition of the lands or interests--

(A) shall be undertaken or acquired **before any construction** of the project (other than such acquisition) commences, or

(B) shall be undertaken or acquired **concurrently** with lands and interests in lands for project purposes (other than mitigation of fish and wildlife losses)”.

33 U.S.C. § 2283(a)(1)(emphasis added). Proper identification of P/C Mitigation is thus important for timing as well as for allocation of financial responsibility. *See* 33 U.S.C. § 2283(e). These elements together ensure that mitigation in fact occurs and that Corps water resource projects are fiscally and environmentally sound. *See* 33 U.S.C. § 2281(b)(1) (“Assessments. For all feasibility reports for water resources projects completed after December 31, 2007, the Secretary shall assess whether (1) the water resources project and each separable element is cost-effective”). The P/C Mitigation requirement was added because of Congressional frustration with non-public project sponsors shirking their mitigation commitments after the federal funds have been expended to construct the project.⁹

- ii. “Planned Mitigation,” applicable more broadly to any damage to an ecological resource:

“... [T]he Secretary shall not submit any proposal for the authorization of any water resources project to Congress in any report, and shall not select a project alternative in any report, unless such report contains (A) a recommendation with a **specific plan to mitigate for damages to**

⁹ The Senate Report to the 1986 reauthorization of WRDA, which revamped the mitigation requirement, states: “Non-Federal interests often are reluctant to support fish and wildlife mitigation efforts once a project is in place and consequently this work is frequently not performed. To assure balanced development, this section seeks several basic goals.” S. Rep. No. 99-126, at 24 (1985), reprinted in 1986 U.S.C.C.A.N. 6639, 6661.

ecological resources, including terrestrial and aquatic resources, and fish and wildlife losses created by such project....”

33 U.S.C. § 2283(d)(1)(emphasis added). The regulation goes on to specify requirements for elements to be included in the Plan and responsibility for monitoring and determination of success. The Plan will be an on-going undertaking. P/C Mitigation must be included in the Mitigation Plan.

b. Sand

As was demonstrated with the 2000 Project, the disruption of the sand transport systems directly impacted the ocean-front beaches used by birds and sea turtles for nesting. Gently sloping beaches conducive to nesting became inhospitable escarpments. Shockingly, the Feasibility Study ignores the actual experience of the post-2000 Project real world and relies on a model¹⁰ that predicts “minimal effects on sediment transport and shoreline erosion rates along the beaches of Bald Head Island and Oak Island.” Feasibility Study, p. 244, section 8.13. The Feasibility Study therefore relies on the use of hopper dredges (versus cutter-head suction dredges), which are not suitable for beach renourishment.

The definition of the Action will impact what kind of Mitigation is required: if only the initial Project construction is considered, on-going sand management should be addressed in the Mitigation Plan. If, as argued above, the on-going necessity of re-dredging is seen as a Connected Action and part of the Action definition, the need to mitigate the effects of periodic re-dredging is P/C Mitigation, subject to advance or concurrent mitigation. Either way, the Mitigation requirements must contain assurances of funding and enforceability.

Most importantly, sand and the near-shore sand transport systems should be seen as an “ecological resource,” impact to which must be evaluated and mitigated. A baseline should be established in light of the actual experience post-2000 Project demonstrating the real sand budgeting needs of the area beaches are not being met even under the current Channel maintenance practices, and a realistic budget (sand and fiscal) developed for each alternative, including the no-action alternative.

c. Erosion

Erosion of ocean front beaches will, as has been demonstrated, accelerate as the adjacent Channel is deepened, widened, and maintained. These effects must be mitigated under an enforceable mechanism. In addition, the passage of larger, fully laden deep draft vessels will greatly exacerbate the erosion rate of beaches and estuarine shorelines merely by the large displacement of water in a narrow system, as demonstrated at BT/FA. Assuming deeper draft vessels will attempt to time their transit to make best use of tidal conditions, there is also the

¹⁰ While the Feasibility Study says the model is “described in Section 8.2.2,” that provision was deleted from the Feasibility Study.

interplay of such timing with vessel speed and the resultant wake size. It is important that these displacement and wake effects be included in the impacts/alternatives/mitigation analysis. The range of these impacts along the Channel is also important, especially as it could impact public and private properties and sensitive habitats (such as aquatic, avian, and other wildlife nesting and nursery areas), including SAV and salt marsh¹¹ areas (which are also carbon sinks).

d. Tides, Floods, and Salinity

As observed in the Assessment, past projects in the Channel have exacerbated problems with tidal reach, periodic nuisance flooding, and salt-water intrusion. A WH 403 approved Project will compound these effects. The Work Plan posits as “Key Assumptions” [4(a)(ii)(9) and 5(b)(10)] that NCSPA’s Feasibility Study has “fully addressed” evaluation of salt-water intrusion into the Castle Hayne and Pee Dee aquifers, and effects on end users. However, this seems inconsistent with Work Plan 5(a)(ii), calling for (as noted in the Assessment 5D2) a sea level change analysis in compliance with ER 1100-208162 (another requirement not included in the Feasibility Study). Any evaluation of salt-water intrusion that fundamentally underestimates the impact of sea level change (as the Assessment found) is inherently unreliable. In light of this and the absence of any public involvement in that evaluation, the Corps should revise the Work Plan to provide for a new, independent evaluation of salt-water intrusion effects, including, but not limited to, effects on the aquifers.

e. “Forever” pollutants

Since initial preparation of the Feasibility Study, it has become clear that for decades PFAS and other “forever” pollutants have been dumped into the River and presumably accumulated in its sediments. Any WH 403 alternative that would entail disturbing those sediments could must be evaluated for down-stream impacts as well as ground-water impacts. Before any such analysis is possible, a baseline is needed—a full evaluation of the range and extent of contaminated sediments in the areas which will or could be disturbed (directly or indirectly) by a WH 403 alternative. The Work Plan should be adjusted to reflect this needed work.

f. Resilience

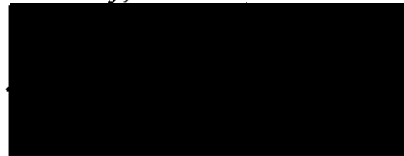
Resilience is an “ecological resource” specifically recognized in the new CEQ Resilience Guidance, impairment of which requires inclusion in the Mitigation Plan. As discussed above, evaluating resilience under any WH 403 alternative is more than considering the impact of future storms and sea level rise, it includes evaluating the interplay of the degrading effect the alternative could have on resilience in a without-project scenario.

¹¹ VBHI calls the Corps’ attention the recently announced South Atlantic Salt Marsh Initiative (“SASMI”), a range-wide initiative to protect, restore, and extend this vital ecosystem. <https://www.fisheries.noaa.gov/feature-story/new-plan-outlines-strategies-conserving-south-atlantic-salt-marsh-habitat>

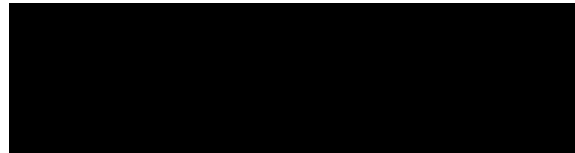
V. SUMMARY AND CONCLUSION

In summary, VBHI asks the Corps to undertake specific steps, including alterations to the Work Plan, discussed above and summarized in Attachment A: VBHI Action Requests/Suggestions. VBHI looks forward to working with NCSPA, USACE, and stakeholders on this project to ensure that proper processes and sufficiently thorough and detailed analyses occur for the protection of all affected stakeholders, the public, the project sponsors, and the environment.

Sincerely,



William P. H. Cary



Joseph A. Ponzi

cc: Peter Quinn, Mayor, Village of Bald Head Island
(via email: pquinn@villagebhi.org)
Chris McCall, Manager, Village of Bald Head Island
(via email: cmccall@villagebhi.org)
Jae Kim, Assistant Manager, Village of Bald Head Island
(via email: jkim@villagebhi.org)
Justin McCorcle, Wilmington District Counsel, U.S. Army Corps of Engineers
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Braxton Davis, Director, Div. of Coastal Management, NC DEQ
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Daniel Govoni, Federal Consistency Coordinator, Div. of Coastal Management, NC DEQ
(via email: daniel.govoni@ncdenr.gov)
D. Reid Wilson, Secretary, N.C. Dep't of Natural and Cultural Resources
(via email: reid.wilson@ncdcr.gov)
Deborah Ahlers, Mayor, Town of Caswell Beach
Elizabeth White, Mayor, Town of Oak Island

ATTACHMENT A

Attachment A

VBHI Action Requests/Suggestions

1. The current Work Plan encompasses NEPA and non-NEPA 203 elements identified by the Assessment. Because the public was excluded from the 203 process, VBHI requests that the Objective and Purpose and Need statements included in the recent public notices of the project be specifically re-opened for public comment and involvement in refining them.
2. For the same reason as in #1, the economic analyses referenced in Section 1 of the Work Plan should likewise be opened for meaningful public involvement *before* they are completed.
3. The Work Plan should be amended to specifically notice and request comments from the public (including State and Federal agencies) on their experience with the effects of the 2000 Project and prior projects.
4. The Work Plan should be amended to specifically study and report on why prior projects have failed their stated goals (e.g., specific depths and widths), so that analysis of each WH 403 alternative can address how it will prevent reoccurrence of such failures.
5. The Work Plan should be amended to specifically study the impacts of the current Channel maintenance activities on the sand transport system in the near-shore area affected by the River and establish a baseline for sand budgets for the affected beaches.
6. The Corps should adopt and incorporate into the current WH 403 the comments submitted in the 2019 public comment process.
7. The Work Plan should be amended to add a specific analysis of sediments in the proposed project area so that a baseline evaluation of the presence of PFAS and other “forever” chemicals can be established.
8. All analyses should differentiate the potential impacts of widening versus deepening.
9. Climate resilience should be recognized as a specific “ecological resource” [33 U.S.C. § 2283(d)(1)], so that the impact and of and necessary mitigation for each potential alternative will be specifically evaluated against this criterion.
10. The Work Plan should be amended to commission a specific study of truck/rail service at the Port of Wilmington and competing Ports so GHG impacts of each alternative can be assessed.

11. The Work Plan unjustifiably relies (see Key Assumptions) on the Feasibility Study, prepared without public input. There was no public access to these studies and assessments. Those elements should be specifically publicized, so that meaningful public comment can occur and then submitted to consultants or the Corps for scrutiny and a separate, full analysis. In particular, the salt water intrusion analysis [see Work Plan Sections 4(a)(ii)(9) and 5(b)(10)] was prepared without the benefit of the correct sea level rise analysis. The Work Plan should be amended accordingly.
12. The project Action should be defined to include not just the initial construction activities, but also the “Connected Actions” [40 C.F.R. § 1501.9(e)] of the passage of larger displacement, deep draft vessels, and the future necessary work to maintain the efficacy of the project, including dredging and beach renourishment.
13. The effects (direct, indirect, and cumulative) of the Connected Actions should each be analyzed as an element requiring mandatory Mitigation.
14. The mandatory Mitigation requirement should recognize the obligation to regularly re-nourish the beaches and other areas adversely impacted by disruption of the sand transport systems.
15. The Mitigation responsibilities between P/C Mitigation [33 U.S.C. § 2283(a)(1)] and the Mitigation Plan [33 U.S.C. § 2283(d)(1)] should be differentiated.
16. In light of *Village of Bald Head Island v. U.S. Army Corps of Engineers*, 7114 F.3d 186 (4th Cir. 2013) (holding that the Corps’ agreement in the FONSI to certain sand management practices is unenforceable), each alternative should include a legally enforceable mechanism to ensure enforcement and funding of the continued Mitigation obligations, specifically including sand management.

ATTACHMENT B

[illegible]

Previous Projects

• Engineered Beach Project 2009/2010		
• Dredging Contract	\$	14,800,000
• Interest Expense	\$	1,536,000
• Permitting – <i>Land Management Group, Inc., Olsen Associates, Inc., Legal</i>	\$	1,000,000
• Sand Filled Geotextile Groinfield		
• 1995	\$	320,000
• 2005	\$	850,000
• 2009/2010	\$	1,150,000
• Road Overwash		
• South Bald Head Wynd Road Repair 2004	\$	250,000
• Sandbag Revetment Wall	\$	250,000
• Sandpiper Trail Sandbag Wall + 2009 Repairs	\$	65,000
• 2007 Sand Placement (Assist USACOE- limited funds)	\$	900,000
• Periodic Beach Profile Monitoring	\$	595,000
• Required Jay Bird Shoal Biological Monitoring per Permit	\$	50,985
• Required Beach Front Biological Monitoring per Permit	\$	30,030
• Install Emergency Sandbag Revetment at the Point	\$	230,000
• Repair & Maintenance of Revetment at the Point	\$	8,000
• BH Creek 2006 dredging Project w/ sand placed on West Beach	\$	<u>737,858</u>
Total	\$	<u>22,772,873</u>

Additional Expenditures Reimbursed through FEMA Public Assistance Funds

• Bald Head Creek Dredging Project (Emergency Sand Source to mitigate Erosion due to Hurricane Irene)	\$	1,230,000
• Sand-filled Tube Groin Field Repairs due to Hurricane Irene	\$	<u>650,000</u>
	\$	<u>1,880,000</u>

Additional Expenditures Reimbursed through State of NC/DENR Water Resources Development Grant Funds

- Bald Head Creek Dredging Project 2006 (Southwind Construction Co.) \$ 260,000

The Terminal Groin Project (2015)

- Terminal Groin GO Bond Expenditures @ 2-28-18 (2015 Project)
(Phase I Construction/Orion w/ Corps 2015 O&M Sand)
 - Terminal Groin Construction, part of the T6 project, placing approximately 1 million for the fillet sand to place behind the T6 structure \$ 7,876,858
 - Harbor Jetty Extension w Spurs \$ 1,456,316
 - West Beach and Row Boat Row (Bald Head Creek Dredging) \$ 1,261,026
 - Army COE Reimbursement \$ 105,341
 - MECA Reimbursement 830,514
 - Contract Reimbursements 140,363
 - Total \$ 1,076,218 \$ (1,076,218)
- Total Cost, Phase I \$ 9,517,982
- Breakwaters Project:
 - Construction of two detached rock breakwaters located north of the Marina
 - Intercoastal Maine, LLC \$ 895,052

Current Projects

Sand Re-nourishment / Groin Tube Project (2019)

- Sand Re-nourishment / Groin Tube Replacements (2019 Project)
(Phase II Construction/ SJ Hamill Construction, Bradley Textile Tubes)
 - Beach Nourishment 1million cubic yards, including mobilization \$ 11,767,000
 - Groin Tube manufacture and installation 1,514,429
 - Engineering Costs, entire project 445,000
 - Legal Costs \$ 62,500
 - Total Cost, Phase II \$ 13,788,929

Marina Channel Maintenance Program

(Grant received from Department of Environmental Quality Resource Development Project to reimburse the Village for 66% of the cost, current expiration of Grant May 2019.)

- Village portion of expenses paid for Dredging the Channel:
September 2017 – February 2019: \$ 68,857

Beach Monitoring

- Seasonal and monthly monitoring surveys FY19 to March 2018 \$ 105,440

Total Accumulated Costs Associated with the Mitigation of the Navigation Channel \$47,149,133.

Attachment C
***VBHI v. Corps* Litigation Summary**

1. Delony Letter, June 9, 2000
2. Moffit (CZMA) Letter, June 15, 2000
3. FONSI (excerpts), August 2000
4. Corps assertions in briefs
5. Fourth Circuit Opinion, April 15, 2013



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402-1890

IN REPLY REFER TO

June 9, 2000

Project Management Branch

✓ Honorable Freeman A. Berne
Mayor of the Village of Bald Head Island
Post Office Box 3009
Baldhead Island, North Carolina 28461

Honorable Harry Simmons
Mayor of Caswell Beach
707 Caswell Beach Road
Caswell Beach, North Carolina 28465

Honorable Joan Altman
Mayor of Oak Island
4601 East Oak Island Drive
Oak Island, North Carolina 28465

Honorable James W. Lowell
Mayor of Holden Beach
110 Rothschild Street
Holden Beach, North Carolina 28462

Dear Mayors:

After years of effort by many, it is a pleasure to see the various elements of the Wilmington Harbor Navigation project (hereinafter the "Project") coming together. As we approach the decision point for the Finding of No Significant Impact (FONSI), I want to bring everyone up to date on the status of our plan to place beach quality sand excavated for the project on Bald Head Island, Caswell Beach, Oak Island, and Holden Beach.

As you know, the details of our plan are presented in the Environmental Assessment, in particular, Appendix A - Sand Management Plan, in the Wilmington Harbor Monitoring Plan, and in the Section 933 Evaluation Report. The shoreline segments recommended to receive sand are the Village of Bald Head Island (up to 16,000 linear feet), Caswell Beach (up to 25,000 linear feet), Oak Island (up to 25,600 linear feet), and Holden Beach (up to 10,600 linear feet). This represents a maximum shoreline length of 77,200 linear feet.

Bald Head Island will be the site of initial beach disposal associated with construction. This site, along with the easternmost 25,000 linear feet of Caswell Beach-Oak Island, represents the least cost alternative of disposal available to the Project; accordingly, placement will be accomplished at Project cost and at no cost to the Village of Bald Head Island.

Placement will be according to the March 31, 2000 memorandum from Erik J. Olsen, consultant to the Village of Bald Head Island referencing the Village of Bald Head Island Beach Disposal Plan (2000/2001) (enclosed and incorporated by reference) to the U.S. Army Corps of Engineers, Wilmington District (hereinafter "Corps").

Once disposal has begun at the Village of Bald Head Island, fill operations will continue until the estimated minimum of 1,536,000 cubic yards of sand in the channel prism allocated to the Village of Bald Head Island (based on channel surveys conducted in October and December 1999) have been dredged and placed on the beach in accordance with the March 31, 2000 memorandum. Assuming a potential effective reduction of 20 percent in the gross fill dredged, the final in-place fill volume is expected to range between 1,228,000 cubic yards and 1,536,000 cubic yards.

Project construction beach disposal operations at the Village of Bald Head Island will be performed along both West Beach and South Beach, as indicated by the March 31, 2000 memorandum. The Village of Bald Head Island will provide all requisite easements necessary to construct the template(s) provided for by the March 31, 2000 memorandum.

Once the placement of beach quality sand at the Village of Bald Head Island is complete, placement along approximately 25,000 linear feet of shoreline at the easternmost end of Caswell Beach-Oak Island will be accomplished. Placement will be made in accordance with the template agreed to by the Corps, NCDENR, and the communities of Caswell Beach and Oak Island. The final in-place fill volume is expected to range between 1,451,000 cubic yards and 1,814,000 cubic yards. Since this reach comprises the balance of the least cost alternative for disposal available to the Project, placement will be at Project cost and at no cost to those communities. All requisite easements will be provided by the communities at no cost to the Project.

Under the provisions of the draft Section 933 report, the remaining beach quality sand will be placed along approximately 25,600 linear feet of the westernmost shoreline of Oak Island and along approximately 10,600 linear feet of the eastern shoreline of Holden Beach. Placement will be made in accordance with the template agreed to among the Corps, NCDENR, and the affected beach communities and cost shared at the rate of 65 percent Federal (currently estimated at \$6,500,000) and 35 percent non-Federal (currently estimated at \$3,500,000). The final in-place fill volume along the cost shared reach of Oak Island is expected to range between 1,272,000 cubic yards and 1,590,000 cubic yards. The final in-place fill volume along the cost shared reach of Holden Beach is expected to range between 528,000 cubic yards and 660,000 cubic yards. The communities will provide all required easements at no cost to the Project.

After construction of the Smith Island and Bald Head Island Shoal portions of the project, the U.S. Army Corps of Engineers will conduct periodic maintenance dredging of the navigation channels. The disposal of all beach quality dredged material will be accomplished in accordance with the Environmental Assessment of Preconstruction Modifications of Authorized Improvements, Wilmington Harbor, North Carolina, dated February 2000 and its Sand Management Plan (Appendix A), and the Wilmington Harbor Monitoring Plan (enclosed and incorporated by reference). The associated disposal will be as called for therein, namely:

- Year 2: Placement at Bald Head Island (estimated @ 1Mcy)
- Year 4: Placement at Bald Head Island (estimated @ 1 Mcy)
- Year 6: Placement at Caswell Beach and easternmost end of Oak Island (estimated @ 1 Mcy).

This disposal cycle is planned for the life of the project. As provided on page 8 of the Environmental Assessment and on page 12 of the sand management plan, in some cases problem shoaling involving small quantities of sand may develop in the channel between regular dredging events, making use of a pipeline dredge unfeasible and the sand may need to be deposited in the ocean disposal area.

Prior to each disposal operation at either the Village of Bald Head Island, or Caswell Beach, or the easternmost shoreline of Oak Island, the community receiving the sand may provide advance guidance to the Corps regarding placement distributions and fill template design. The Corps will follow that guidance to the maximum extent practicable.

The Corps will conduct a monitoring program as referred to in the Environmental Assessment and Sand Management Plan, and as set out in the Wilmington Harbor Monitoring Plan, which is enclosed and incorporated by reference. An annual report will be prepared, as described in the Monitoring Plan. The Corps will use this monitoring data to evaluate and adjust the Sand Management Plan, as determined necessary, after coordination with interested parties.

All initial and future disposal activities at the Village of Bald Head Island, Caswell Beach, and easternmost Oak Island, (as described in the Environmental Assessment and its Sand Management Plan, and in the Wilmington Harbor Monitoring Plan) will be at no cost to either community.

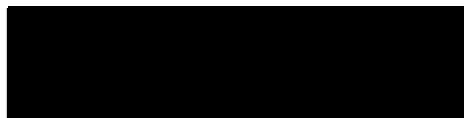
If the Project causes significant adverse effects on adjacent beaches, the Corps and the Sponsor will respond by adjusting the Sand Management Plan, after consultation with interested parties. If the Project causes significant adverse effects that cannot be dealt with by

modifications to the Sand Management Plan, the Corps and the Sponsor will promptly seek and use their best efforts to implement appropriate corrective measures, such as additional nourishment, subject to consistency review.

Our current schedule for execution of the FONSI is June 14, 2000. Our current schedule for our higher headquarters approval of the draft Section 933 Evaluation Report is July 31, 2000. We expect to award a contract to construct the inshore reaches of the Ocean Bar entrance channel on or about November 15, 2000. We are moving prudently but aggressively to make this important Project a reality.

The support of the members of the Brunswick Beaches Consortium and our Project sponsor represented by Mr. John Morris in optimizing this unique opportunity for nourishing your beaches has been wise, energetic, and timely. We salute your efforts and look forward to continued close coordination through to the successful completion and operation of the Project and the associated beneficial use of beach quality sand.

Sincerely,



James W. DeLony
Colonel, U.S. Army
District Engineer

Enclosures

Copies Furnished:

Mr. John N. Morris, Director
Division of Water Resources
North Carolina Department of Environment
and Natural Resources
1611 Mail Service Center
Raleigh, North Carolina 27699-1611

Ms. Donna D. Moffitt, Director
Division of Coastal Management
North Carolina Department of
Environment and Natural Resources
1638 Mail Service Center
Raleigh, North Carolina 27699-1638



NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF COASTAL MANAGEMENT

RECEIVED
EXECUTIVE OFFICE

June 15, 2000

2000 JUN 26 A 11: 03

JAMES B. HUNT JR.
GOVERNOR

Colonel James W. DeLony
District Engineer
U.S. Army Corps of Engineers
Wilmington District
P.O. Box 1890
Wilmington, NC 28402-1890

BILL HOLMAN
SECRETARY

Action: PM-C

CF: DE

DX

DP

TS

OC

DONNA D. MOFFITT
DIRECTOR

REFERENCE: DCM00-14 EA and CD - Preconstruction Modifications of
Authorized Improvements, Wilmington Harbor 96 Project

Dear Col. DeLony:

On May 17, 2000 the State of North Carolina completed its review, pursuant to 15 CFR 930 Subpart C - Consistency for Federal Activities, of the referenced document describing proposed modifications to the authorized Wilmington Harbor 96 Project in New Hanover and Brunswick Counties, North Carolina. The Corps of Engineers submitted the document to the state on February 17, 2000, and the project was assigned the number DCM00-14 for our review purposes.

During the course of our review several environmental concerns were raised by state agencies regarding potential impacts on the resources of the coastal zone. These comments were forwarded to the Corps for its consideration. As the consistency deadline was approaching, we extended our original consistency deadline 15 days, pursuant to 15 CFR 930.41, at the end of March. On April 10, 2000, our review was again extended to allow concerned state agencies to review the Corps' responses to comments on the Environmental Assessment (EA). The Division of Coastal Management received the Corps' responses on May 3 and again solicited comments from concerned state agencies.

The modifications that the Wilmington District Corps of Engineers seeks authorization for are as follows:

1. Construction and maintenance of the Wilmington Harbor entrance channel along a new alignment across the ocean bar.
2. Backfilling the abandoned channel length with dredged material not suited for beach or littoral zone disposal.



MAILING: 1638 MAIL SERVICE CENTER, RALEIGH, NORTH CAROLINA 27600-1638
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Col. James W. DeLony

June 15, 2000

Page 2

3. Placement of material dredged from the new channel alignment and other portions of the project on area beaches in New Hanover and Brunswick Counties.
4. Establishment of a comprehensive plan for dredging and disposal operations for each portion of the harbor, including hopper dredge with overflow.
5. Utilization of blast pressure criteria to measure impacts of blasting on aquatic resources and the elimination of the bubble curtain during blasting operations.
6. Placement of dredged material that does not go to the old channel, the littoral zone, the beaches, or other existing disposal sites, into the Offshore Dredged Material Disposal Site (ODMDS).

The Corps proposes to construct the new entrance channel alignment and place all suitable material on the nearby beaches over an approximately eighteen month period covering two winter seasons and one summer season. Turtle monitoring and shorebird surveys of affected beaches will be conducted. Details of the disposal operations for construction and maintenance of the channel are documented in a Sand Management Plan (SMP). In addition, the Corps has clarified details of the placement, timing, costs, and amount of sand to be deposited on the beaches of Bald Head Island, Caswell Beach, Oak Island, and Holden Beach in a letter dated June 9, 2000 from Colonel James W. DeLony, District Engineer, to the mayors of the respective beach towns. We understand that disposal of dredged material from construction and maintenance of the project will be conducted according to the SMP and letter, as agreed to by the NC Division of Water Resources, the Brunswick County beach communities and the Corps of Engineers. We also understand that the use of hopper dredge with overflow will be limited to times of year and reaches of the project in which impacts on coastal resources will be minimized.

Based upon our review of the EA and the Corps of Engineers' response to comments, we do not disagree with your determination that the proposed construction and changes in harbor maintenance procedures are consistent with the North Carolina Coastal Management Program to the maximum extent practicable, provided that the project is performed according to the EA (including the Sand Management Plan and other appendices) and the Corps' responses to comments from the EA, and to Colonel DeLony's letter of June 9, 2000 (including attachments), and that the conditions below are met.

Col. James W. DeLony

June 15, 2000

Page 3

1. Principal amongst the issues raised were potential impacts on sea turtles, shore and water birds, beach and benthic infauna, fisheries, and water quality parameters. It is extremely important that the impacts of this multifaceted project be well documented in order to evaluate the effects on these resources and on the overall coastal environment. The Corps of Engineers will pursue an integrated monitoring plan to address the resources noted in the first sentence of this paragraph, and will coordinate all monitoring efforts with the appropriate state agencies. This will include but not be limited to the North Carolina Division of Coastal Management, the Wildlife Resources Commission, the Division of Marine Fisheries, and the Division of Water Quality. We understand that the Corps intends to initiate monitoring coordination with the resource agencies in June of 2000.
2. As additional mitigation for impacts on fisheries resources, a fish passage structure will be constructed at Lock and Dam 1 on the Cape Fear River. In addition, fish passage alternatives for Lock and Dams 2 and 3 will be investigated. The Corps of Engineers and, as the Wilmington Harbor Project Sponsor, the State of North Carolina, have agreed to these actions.
3. The placement, timing, costs, and amount of sand to be deposited on Bald Head Island, Caswell Beach, Oak Island, and Holden Beach, both during construction and future maintenance; monitoring; and response to impacts shall be in accordance with Col. DeLony's letter of June 9, 2000, to the mayors of the respective towns receiving the sand (attached and incorporated by reference). If the towns, Corps, and project sponsor's representative mutually agree to modifications to the SMP or Col. DeLony's June 9, 2000 letter, those modifications shall be submitted to the North Carolina Division of Coastal Management for a determination of whether another consistency review is necessary on the modifications.
4. The state must have the opportunity to review the project, including monitoring results, to determine if it continues to be consistent with the North Carolina Coastal Management Program in two situations: 1) After five years from the date of this letter, and 2) before any subsequent modifications for future maintenance or other requests to modify the Wilmington Harbor 96 Project are considered. The Corps shall request this review and provide documentation of impacts (or lack thereof) on the coastal resources of concern.

Col. James W. DeLonoy

June 15, 2000

Page 4

5. If in the future the Corps considers requesting authorization to conduct hopper dredging with over flow or to place maintenance dredge spoil on a beach, outside of the established time periods or locations, a separate consistency review will be required for each of these activities.

While the State of North Carolina supports beach nourishment and the placement of suitable spoil material on the beaches, we remain concerned about the short term and long term impacts on the biologic and ecologic resources of the coast. We maintain that the best time for such beach nourishment and renourishment is outside of the period of peak impacts on infauna, sea turtles, and fisheries. The State discourages individuals and agencies from seeking authorization to perform work outside established moratoria, and caution that our response is not to be interpreted as a precedent assuring authorization for future renourishment or disposal of sand on beaches outside of established dredging and disposal moratoria. We understand that summer beach disposal is necessary only during the construction phase of the project and that maintenance of the harbor channels will be conducted within established biological time frames.

Finally, with the increasing number of beach disposal and renourishment projects, much of the state's southern coast beaches will be in the placement or recovery phases in any given year. To this end, the Division of Coastal Management requests that the Corps consider combining the monitoring studies and environmental considerations of this project, the Wrightsville Beach, Carolina Beach, Kure Beach projects, and all of the Brunswick County Beaches projects to achieve a more comprehensive and cumulative impact analysis. Although these projects are separate in authorization and funding, we feel that concurrent studies could provide beneficial insights on impacts to resources from beach disposal and nourishment along this extended reach of shoreline.

If you have any questions regarding our findings, conditions, or recommendations, please contact Ms. Caroline Bellis, Division of Coastal Management, at (919) 733-2293. Thank you for your consideration of the North Carolina Coastal Management Program.

Sincerely,


Donna D. Moffitt

Col. James W. DeLony
June 15, 2000
Page 5

Attachment

cc: Bob Stroud, Division of Coastal Management, Wilmington
Franklin McBride, NC Wildlife Resources Commission
Bennett Wynne, NC Wildlife Resources Commission
Ruth Boettcher, NC Wildlife Resources Commission
Fritz Rohde, NC Division of Marine Fisheries
Mike Street, NC Division of Marine Fisheries
John Dorney, Division of Water Quality
Frank Yelverton, US Army Corps of Engineers
John Meshaw, US Army Corps of Engineers



**US Army Corps
of Engineers®**
Wilmington District

FINDING OF NO SIGNIFICANT IMPACT

**PRECONSTRUCTION MODIFICATIONS
OF
AUTHORIZED IMPROVEMENTS**

**WILMINGTON HARBOR
NORTH CAROLINA**

August 2000

and about \$20 million for elimination of the air curtains. Environmentally the new ocean bar channel would avoid live coral bottom. The air curtains are eliminated because they did not provide the environmental protection anticipated, and environmental impacts in their absence are anticipated to be minor.

3.00 PUBLIC AND AGENCY COORDINATION: On February 7, 2000, the EA referenced above was mailed to Federal and State agencies and the interested public for a 30-day review and comment period. Based on a request from the North Carolina Clearinghouse and others, the response date was extended about 2 weeks until April 3, 2000. Everyone providing comments on the EA will be mailed a copy of the Finding of No Significant Impact (FONSI). A notice of availability of FONSI will be mailed to others on the project mailing list. Comments on the EA were received from the following:

Federal Agencies

- US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service
- US Environmental Protection Agency, Region IV
- US Department of the Interior, Fish and Wildlife Service

State Agencies

- North Carolina Ports
- NC Department of Environment and Natural Resources
- NC Division of Coastal Management
- NC Department of Cultural Resources
- NC Division of Water Quality
- NC Department of Commerce
- NC Wildlife Resources Commission
- NC Division of Marine Fisheries

Local Agencies

- Brunswick Beaches Consortium

Elected Officials

- New Hanover County Board of Commissioners
- Representative Daniel F. McComas
- Mayor Harry Simmons, Town of Caswell Beach
- Mayor Joan L. Altman, Town of Oak Island

Conservation Groups

- National Audubon Society

Interested Businesses, Groups, and Individuals

- Burlington Industries, Inc.
- H. Spalding Craft
- Star Shipping, Inc.
- Solar International Shipping Agency, Inc., General Agent for Yang Ming Line
- Andrew Koeppe

- OxyChem
- Morehead City Terminals, Inc.
- Hanjin Shipping Company, Ltd.
- North Carolina Citizens for Business and Industry
- Frank S. Conlon
- Laela S. Sayigh
- Brooks, Pierce, McLendon, Humphrey & Leonard, L.L.P, firm representing Village of Bald Head Island

In addition, all the required environmental clearances or coordination documents have been received for the proposed action. They were received after April 3, 2000, the end of the EA comment period, and are as follows:

- Water Quality Certification No. 3085 Issued October 17, 1996, was modified by letter dated April 10, 2000 to cover the proposed action.
- Supplement to the Final Fish and Wildlife Coordination Act Report, Wilmington Harbor, North Carolina, 96 Act, New Hanover and Brunswick Counties, North Carolina, April 2000, transmitted by letter dated April 28, 2000. Responses to recommendations are indicated in Paragraph 5.06 above.
- US Fish and Wildlife Service Biological Opinion for the Proposed Preconstruction Modifications of Authorized Improvements, Wilmington Harbor, North Carolina, May 3, 2000. We will comply with the incidental take statement, associated reasonable and prudent measures, and terms and conditions implementing them.
- Environmental Protection Agency letter of May 1, 2000, indicating concurrence with our Tier 1 evaluation under the Ocean Dumping Act that the new work and maintenance dredged material is acceptable for ocean disposal in the Wilmington ODMDS.
- National Marine Fisheries Service Biological Opinion for the Proposed Preconstruction Modifications of Authorized Improvements, Wilmington Harbor, North Carolina, August 3, 2000. We will comply with the incidental take statement, associated reasonable and prudent measures, and terms and conditions implementing them.
- NC Division of Coastal Management letter of June 15, 2000, providing a statement of concurrence that the proposed action is consistent with the NC Coastal Management Program. We will comply with the conditions indicated in the letter.

4.00 RESPONSES TO COMMENTS ON THE EA AND RESOLUTION OF ISSUES: All comments received on the EA and other correspondence indicated above were considered in making the decision to sign a FONSI. Copies of the letters commenting on the EA are included in Attachment 1. Pertinent comments from each commentor are summarized and addressed below. All comments received on the EA have been resolved either through providing additional information in this FONSI or agreeing to develop appropriate monitoring as indicated in paragraph 11 of this FONSI. As indicated in paragraph 1.00 above, monitoring is proposed for limited aspects of the project where some uncertainty exists regarding project impacts. However, the results of this monitoring are not anticipated to alter the Corps position that the proposed modifications will not significantly affect the quality of the human environment.

CORP'S OTHER ASSERTIONS IN BRIEFS

1. DeLony Letter; June 9, 2000

DeLony Letter was not a contract/binding commitment because:

a. **No intent to be binding:**

"Plaintiff erroneously concludes that there was a 'mutual intent to contract with respect to the beach protection and sand management issues,' but Colonel DeLony stated in the letter that he was only wanting to bring everyone up to date on the status of our plan. . . . Colonel DeLony's letter informing other parties of the United States' intention does not somehow transform that intention into a contractual obligation."¹

"There is no such commitment to dredge under the EA/FONSI, or the SMP [Sand Management Plan] or under an alleged contract."²

"Wayne Bissette was the Corps project manager 'responsible for the overall development and implementation' of the channel deepening project, and he participated in 'numerous meetings and discussions' with state and local authorities. Mr. Bissette did not consider the EA, FONSI or the DeLony Letter as creating any 'binding commitment by the Corps' to dredge the Inner Ocean Bar every two years."³

"The letters relied upon by the Village were simply correspondence sent as part of the Government's management plan. There was no agreement and no consideration for any agreement."⁴

"The DeLony Letter did not separately commit the Corps to renourish the Municipalities' beaches; nor did it commit the Corps to do so for free. The DeLony Letter does not create any legal obligation on the part of the Corps to dispose of dredged sand on nearby beaches at any particular time."⁵

¹ Case 7:10-cv-00251-BO; Defendants' Memorandum in Support of Motion to Dismiss Plaintiffs' Complaint Under Rule 12(b)(1) and 12(b)(6); Document 39 filed March 23, 2011 ("Defs' Motion to Dismiss Brf."), p. 43.

² Case 7:10-cv-00251-BO; Defendants' Memorandum in Opposition to Plaintiff's Motion for Preliminary Injunction; Document 109 filed October 11, 2011 ("Defs. Inj. Brf."), p. 7.

³ *Id.*, p. 18.

⁴ *Id.*, pp. 21-22.

⁵ Appeal 11-2366; Brief for Appellants [Corps, etc.]; Document 20 filed April 9, 2012 (Defs' Appeal Brf.), p. 54.

b. No "consideration" for Corps' agreement.

"Plaintiff asserts that it received the Corps' agreement to perform the project 'in conformity' with the details in the letter and that the Corps received 'Plaintiff's agreement not to challenge' the project. This assertion fails to demonstrate consideration because, even if Plaintiff elected not to challenge the project, there is no assertion that the Corps requested that Plaintiff withhold from any course of action."⁶

c. No offer and acceptance.

"Colonel DeLony's Letter cannot serve as an offer, counteroffer, or acceptance because the letter simply states the Corps' intention concerning the project."⁷

d. Colonel DeLony had no authority to bind the Corps.

"The authority to perform the project and to issue permits does not also mean that Colonel DeLony had authority to obligate the United States by contract to a multi-year commitment concerning the placement of sand upon beaches."⁸

2. The Moffitt Letter; June 15, 2000

The Moffitt Letter was not a contract/binding commitment because:

"... the Letter from NCDENR says nothing about a contract or reciprocal obligations between any of the parties named in Plaintiff's complaint. Similarly, the Complaint fails to allege consideration because the only purported consideration to the United States - Plaintiff's 'agreement not to challenge' the project, ... was something for which the United States is not even alleged to have bargained. Third, there are no assertions of an unambiguous offer and acceptance. Plaintiff contends these elements were met during discussions concerning whether the NCDENR would object to the project, ... but there is no allegation of any specific offer or acceptance. Finally, even if these other elements were met, the letter was sent to Colonel DeLony, and Plaintiff fails to allege facts sufficient to show that he possessed authority to bind the United States to this type of contract."⁹

"The Moffitt Letter did not impose obligations on the Corps."¹⁰

⁶ Defs. Motion to Dismiss Brf., p. 43.

⁷ Defs. Motion to Dismiss Brf., p. 44.

⁸ Defs. Motion to Dismiss Brf., p. 44.

⁹ Defs. Motion to Dismiss Brf., p. 45.

¹⁰ Defs. Appeal Brf., p. 55.

In addition, VBHI is not entitled to reply on the letter:

"In this case, even if there were a contract between the United States and the NCDENR, Plaintiff is not a third party beneficiary to it."¹¹

3. CZMA

CZMA does not create enforceable obligations:

"CZMA does not impose substantive obligations on the Corps to undertake any actions identified in those documents. CZMA is a procedural statute that requires agencies to provide states with determinations that any federal activities will 'be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies' of the state's coastal zone management program. 16 U.S.C. §§ 1456(c)(1)(A); 1456(c)(1)(C); 15 C.F.R. §§ 930.34(a)(1), 930.39(c). The Act does not specify a remedy against federal agencies for failing to comply with actions identified by federal and state consistency determinations."¹²

"In the Coastal Zone Management Act, Congress requires the Corps to seek all affected states' concurrences before commencing with a project, 16 U.S.C. § 1456(c)(3)(A), and governing regulations require states to 'inform the Federal agency of its concurrence with or objection to the Federal agency's consistency determination at the earliest practicable time.' 15 C.F.R. § 930.41(a). The Corps' request for concurrence and a state's response to that request could not create binding contractual obligations because, absent a special statutory scheme or something above what was required in the regulations, the exchange simply fulfilled the entities' legal responsibilities."¹³

¹¹ *Id.*, p. 47.

¹² Defs. Appeal Brf., p. 57.

¹³ Defs. Motion to Dismiss Brf., pp. 45-46.

714 F.3d 186
United States Court of Appeals,
Fourth Circuit.

VILLAGE OF BALD HEAD
ISLAND, Plaintiff-Appellant,

v.

UNITED STATES ARMY CORPS OF ENGINEERS;

United States of America; The Honorable
John McHugh, in his official capacity; Lt.
Gen. Robert L. Antwerp, Jr., in his official
capacity; Maj. Gen. Todd T. Semonite, in his
official capacity; Col. Jefferson M. Ryscavage,
in his official capacity, Defendants-Appellees,

v.

Town of Caswell Beach; Town of Oak Island,
North Carolina, Intervenor/Defendants.
Village of Bald Head Island, Plaintiff,

v.

United States Army Corps of Engineers; United
States of America; The Honorable John McHugh, in
his official capacity; Lt. Gen. Robert L. Antwerp, Jr.,
in his official capacity; Maj. Gen. Todd T. Semonite,
in his official capacity; Col. Jefferson M. Ryscavage,
in his official capacity, Defendants-Appellees,

v.

Town of Caswell Beach; Town of Oak Island, North
Carolina, Intervenor/Defendants-Appellants.

Nos. 11-2366, 11-2368.

Argued: Oct. 25, 2012.

Decided: April 15, 2013.

Synopsis

Background: Village brought action against United States, and Army Corps of Engineers and its officers, alleging violations of National Environmental Policy Act (NEPA), Administrative Procedure Act (APA), and federal regulations in relation to Corps' dredging and maintenance of harbor channel, as well as breach of contract and breach of maritime contract. Two towns located near channel intervened. Defendants moved to dismiss and village moved for summary judgment and for preliminary injunction. The United States District Court for the Eastern District of North Carolina, Terrence W. Boyle, J., 833 F.Supp.2d 524, granted defendants'

motion and denied other motions. Village and towns appealed.

Holdings: The Court of Appeals, Niemeyer, Circuit Judge, held that:

[1] Army Corps of Engineers' implementation of harbor dredging project did not constitute agency action, let alone final agency action, as required for judicial review under APA, and

[2] Army Corps of Engineers' alleged contracts with village and North Carolina Division of Coastal Management were not "maritime contracts" within district court's admiralty jurisdiction.

Affirmed.

West Headnotes (5)

[1] Environmental Law

☞ Water, wetlands, and waterfront conservation

Environmental Law

☞ Finality

Army Corps of Engineers' implementation of harbor dredging project, which village alleged failed to adequately protect and renourish its beaches, did not constitute agency action, let alone final agency action, as required for judicial review under Administrative Procedure Act (APA); village challenged neither an agency determination nor an action that was circumscribed and complete, such as the formal approval of the project, rather, village challenged the Army Corps of Engineers' day-to-day operations in performing project work. 5 U.S.C.A. § 704.

16 Cases that cite this headnote

[2] Administrative Law and Procedure

☞ Agency Action

Term "action" as used in the Administrative Procedure Act (APA) is a term of art that does not include all conduct such as, for example, constructing a building, operating a program, or performing a contract; rather, the APA's definition of agency action focuses on an agency's determination of rights and obligations, whether by rule, order, license, sanction, relief, or similar action. 5 U.S.C.A. § 704.

15 Cases that cite this headnote

[3] **Administrative Law and Procedure**

⇒ Nature, Scope, or Effect of Agency Action

To be subject to review under the Administrative Procedure Act (APA), the challenged agency action must be circumscribed and discrete. 5 U.S.C.A. § 704.

21 Cases that cite this headnote

[4] **Environmental Law**

⇒ Water, wetlands, and waterfront conservation

Army Corps of Engineers' alleged failure to adequately protect and renourish village's beaches when implementing harbor dredging project did not constitute a "failure to act" subject to judicial review under Administrative Procedure Act (APA); in approving project, Army Corps of Engineers had outlined a planned disposal cycle that included depositing beach-quality sand on village's beaches, but Army Corps of Engineers had made no binding commitment to deposit sand. 5 U.S.C.A. §§ 704, 706(1).

1 Cases that cite this headnote

[5] **Admiralty**

⇒ Services

Army Corps of Engineers' alleged contracts with village and North Carolina Division of Coastal Management were not "maritime contracts" within district court's admiralty jurisdiction, in village's action alleging Army Corps of Engineer failed to adequately protect and renourish village's beaches when implementing harbor

dredging project; principal objective of the alleged contracts was not maritime commerce, but the preservation of area beaches.

2 Cases that cite this headnote

Attorneys and Law Firms

***188 ARGUED:** George W. House, Brooks, Pierce, McLendon, Humphrey & Leonard, Greensboro, North Carolina, for Appellants. Thekla Hansen-Young, United States Department of Justice, Washington, D.C., for Appellees. **ON BRIEF:** William P.H. Cary, Alexander Elkan, Joseph A. Ponzi, Brooks, Pierce, McLendon, Humphrey & Leonard, Greensboro, North Carolina; Steven J. Levitas, Todd S. Roessler, Kilpatrick Townsend & Stockton LLP, Raleigh, North Carolina, for Appellants. Ignacia S. Moreno, Assistant Attorney General, Jennifer Scheller Neumann, Environment & Natural Resources Division, United States Department of Justice, Washington, D.C.; Brooke Lamson, District Counsel, U.S. Army Corps of Engineers, Wilmington, North Carolina, for Appellees.

Before NIBMAYER, GREGORY, and THACKER, Circuit Judges.

Affirmed by published opinion. Judge NIBMAYER wrote the opinion, in which Judge GREGORY and Judge THACKER joined.

OPINION

NIBMAYER, Circuit Judge:

The Village of Bald Head Island, a coastal town in North Carolina, commenced this action under the Administrative Procedure Act ("APA") and admiralty jurisdiction against the U.S. Army Corps of Engineers to require it, through an order of specific performance and injunction, to honor commitments made to the Village and other North Carolina towns when developing its plans to widen, deepen, and realign portions of the Cape Fear River navigation channel. The Village alleged that when implementing the project, the Corps failed to honor commitments to protect the adjacent beaches against the adverse effects of the project and to restore ***189** sand to the beaches, in violation of the National Environmental Policy Act, the Coastal Zone Management

Act, the Rivers and Harbors Act, Corps Regulation 33 C.F.R. § 337.10, and contract principles.

The district court dismissed the complaint for lack of subject-matter jurisdiction, concluding that the Corps' alleged failure to implement the project in accordance with its commitments was not "final agency action" that was subject to judicial review under the APA and that it lacked admiralty jurisdiction over the complaint's contract claims.

We agree with the district court's holding that the Corps' failure to implement "commitments" made to the Village during development of the plans for the project was not final agency action subject to judicial review, and we also conclude that the alleged contracts on which the Village relies for its contract claims are not maritime contracts that justify the exercise of admiralty jurisdiction. Accordingly, we affirm.

I

Since the 1800s, the U.S. Army Corps of Engineers has maintained a navigation channel in the Cape Fear River that allows vessels coming from the Atlantic Ocean to access the deep-water port in Wilmington, North Carolina. In the 1980s and 1990s, the Corps advanced proposals to widen and deepen the 37-mile channel, and Congress approved them in the 1986 and 1996 Water Resources Development Acts. Pub.L. No. 99-662, § 202(a), 100 Stat. 4082 (1986); Pub.L. No. 104-303, § 101(a)(23), 110 Stat. 3658 (1996). Shortly thereafter, it combined these projects into a single project, *see* Energy and Water Development Appropriations Act, Pub.L. No. 105-62, tit. I, 111 Stat. 1320 (1997), referred to here as the Wilmington Harbor Project.

In June 1996, the Corps prepared an Environmental Impact Statement for the project and scheduled construction to begin in 2000. Before construction began, however, the Corps discovered an area of rock at the bottom of the channel that would require extensive blasting to remove and learned that the planned extension of the channel would cut through a substantial amount of live coral, causing ecological damage. As a result, it proposed several revisions to the project, including a realignment of the channel's entrance closer to Bald Head Island. It also proposed to dispose of beach-quality sand dredged during the project's construction and subsequent maintenance on the adjacent beaches of Bald Head Island and Oak Island, two barrier islands located on either side of the entrance to the Cape Fear River.

In connection with these proposed revisions, the Corps issued an Environmental Assessment in February 2000, evaluating the revised project's environmental impacts, as well as its consistency with North Carolina's Coastal Management Plan. The Environmental Assessment included a Sand Management Plan, which described in detail the Corps' plan for depositing dredged beach-quality sand on nearby beaches during construction of the project and predicted the need, after work was complete, to perform "maintenance dredging" every two years. Because a study showed that approximately two-thirds of the sediment at the entrance of the channel came from Bald Head Island and one-third from Oak Island, the Sand Management Plan provided that the dredged beach-quality sand would be placed on Bald Head Island in years two and four following the completion of the project and on Oak Island in year six and that this "disposal cycle" would be followed thereafter.

*190 The Corps also developed the Wilmington Harbor Monitoring Plan, which established a "routine monitoring program" to observe "the response of the adjacent beaches and the shoaling patterns in the entrance channel" and to use the data derived from those observations to make an "initial assessment of the impacts of the sand management plan on the system." The monitoring plan provided that "[a]ny changes in the sand management plan ... [would] be fully coordinated with all interested parties prior to implementing any such change."

Both before and after the Corps conducted its Environmental Assessment, the Village of Bald Head Island provided numerous comments to the Corps. The Village contended generally that the Corps' operation and maintenance of the channel in the past had adversely impacted Bald Head Island's shoreline, and it expressed concern that the planned realignment of the channel's entrance closer to the Island, along with the channel's deepening and widening, would exacerbate these effects. The Village informed the Corps that it would oppose the project and consider legal action unless "it received written agreement from the Corps that the project would include sand management and [beach] protection measures or otherwise would be constructed and operated in a manner so as not to adversely impact Bald Head Island or, if the project caused adverse impacts, the project would be modified and the impacts would be corrected." During this period, as the Village alleges, it entered into negotiations with the Corps and the North Carolina Department of Environment and Natural Resources "in an effort to reach agreement

on ... measures that would protect Bald Head Island or address project impacts,” and these negotiations resulted in the issuance of two letters, one from U.S. Army District Engineer Colonel James W. DeLony, dated June 9, 2000, and the other from Donna D. Moffitt, Director of North Carolina's Division of Coastal Management, dated June 15, 2000.

Col. DeLony's letter, which was addressed to the mayors of the Village of Bald Head Island, Caswell Beach, Oak Island, and Holden Beach, stated that it was designed “to bring everyone up to date on the status of our plan to place beach quality sand excavated for the project” on adjacent beaches. After addressing the placement of sand during the construction phase of the project, the letter stated that “the U.S. Army Corps of Engineers will conduct periodic maintenance dredging of the navigation channels” and that “[t]he disposal of all beach quality dredged material will be accomplished in accordance with” the Environmental Assessment, its Sand Management Plan, and the Wilmington Harbor Monitoring Plan, reiterating that the disposal would follow the six-year cycle described in those plans. The letter added that the “disposal activities ... will be at no cost to either community.” Finally, DeLony's letter stated that the “Corps will conduct a monitoring program ... as set out in the Wilmington Harbor Monitoring Plan” and that “[t]he Corps will use this monitoring data to evaluate and adjust the Sand Management Plan, as determined necessary, after coordination with interested parties.” In this respect, the letter stated:

If the Project causes significant adverse effects on adjacent beaches, the Corps and the Sponsor [North Carolina] will respond by adjusting the Sand Management Plan, after consultation with interested parties. If the Project causes significant adverse effects that cannot be dealt with by modifications to the Sand Management Plan, the Corps and the Sponsor will promptly seek and use their best efforts to implement appropriate *191 corrective measures, such as additional nourishment, subject to consistency review.

The second letter, dated June 15, 2000, from Director Moffitt to Col. DeLony, summarizes the North Carolina Division of Coastal Management's review of the revised project, pursuant to its opportunity to comment on the project's conformance with state policies under the Coastal Zone Management Act, 16 U.S.C. §§ 1451–1466. Moffitt's letter stated:

Based upon our review of the [Environmental Assessment] and the Corps of Engineers' response to comments, we do not disagree with your determination that the proposed construction and changes in harbor maintenance procedures are consistent with the North Carolina Coastal Management Program to the maximum practicable, provided that the project is performed according to the [Environmental Assessment] (including the Sand Management Plan and other appendices) and the Corps' responses to comments from the [Environmental Assessment], and to Colonel DeLony's letter of June 9, 2000 (including attachments), and that the conditions below are met.

As relevant here, one of five listed conditions provided:

The placement, timing, costs, and amount of sand to be deposited on Bald Head Island, Caswell Beach, Oak Island, and Holden Beach, both during construction and future maintenance; monitoring; and response to impacts shall be in accordance with Col. DeLony's letter of June 9, 2000.... If the towns, Corps, and project sponsor's representative mutually agree to modifications to the [Sand Management Plan] or Col. DeLony's June 9, 2000 letter, those modifications shall be submitted to the North Carolina Division of Coastal Management for a determination of

whether another consistency review is necessary on the modifications.

In August 2000, about six months after the issuance of the Environmental Assessment for the revisions to the project, the Corps issued a Finding of No Significant Impact ("FONSI") (which obviated the need for an Environmental Impact Statement), concluding that the modifications "will not significantly affect the quality of the human environment." The FONSI also stated that the Corps "will comply with the conditions indicated in [Moffitt's] letter."

On September 20, 2000, the Corps formally approved the proposed revisions to the Wilmington Harbor Project, and construction commenced in December 2000. Consistent with the plan, beach-quality sand that was dredged during the widening and deepening of the channel was placed on Bald Head Island during the summer of 2001.

Following completion of the project in 2002, the Corps also performed maintenance dredging during the winters of 2004–2005, 2006–2007, and 2008–2009. The sand dredged during the first two of those maintenance operations was placed on Bald Head Island, and the sand from the third was placed on Oak Island. But as the winter of 2010–2011 approached, the Corps informed the Village of Bald Island that the Corps' maintenance for that winter would have to be curtailed for budgetary reasons. It reported that it "ha[d] sufficient funding to dredge a portion of the Channel [that winter], but [did] not have the funding for dredging the portion of the Channel nearest Bald Head Island or for disposing of beach-quality sand onto Bald Head Island beaches."

In response to the Corps' notice, the Village of Bald Island commenced this action *192 against the Corps, several of its officers, and the United States, and the Towns of Caswell Beach and Oak Island subsequently intervened as defendants.¹ The complaint alleged that the Corps had breached its commitments regarding how it would implement the Wilmington Harbor Project, as revised. In particular, it claimed that the Corps had breached (1) a commitment to deposit beach-quality sand from maintenance dredging on the adjacent beaches every two years for the life of the project; (2) a commitment to prevent the project from causing long-term harm to the adjacent beaches; (3) a commitment to adjust the Sand Management Plan if the project caused significant adverse effects to the adjacent beaches; (4) a commitment to take additional remedial steps if there were

significant adverse effects that could not be dealt with by modifying the Sand Management Plan; and (5) a commitment that the Village would bear no cost for the disposal of beach-quality sand on its beaches. The claims were stated in eight counts, six of which relied on the APA, alleging that the Corps violated the National Environmental Policy Act and its implementing regulations (Count I); the Coastal Zone Management Act (Count II); the Rivers and Harbors Act (Count III); Corps Regulation 33 C.F.R. § 337.10 (Count IV); and contract rights with respect to the commitments stated in the DeLony and Moffitt letters (Counts V and VI). Counts VII and VIII alleged that the DeLony and Moffitt letters constituted "maritime contracts" that the Corps had breached. For relief, the complaint sought declaratory and injunctive relief, including an order of specific performance requiring the Corps to comply with the commitments it had made to the Village and Towns.

1 The Town of Caswell Beach and the Town of Oak Island intervened as *defendants*, but they admitted virtually all of the allegations in the Village's complaint. They apparently chose to join as defendants to claim competing relief. On appeal, however, the Towns support the positions taken by the Village, except with respect to Counts VII and VIII.

On the Corps' motion to dismiss, the district court entered an order, dated November 14, 2011, dismissing the complaint under Federal Rule of Civil Procedure 12(b)(1) for lack of subject-matter jurisdiction. *Village of Bald Head Island v. U.S. Army Corps of Eng'rs*, 833 F.Supp.2d 524 (B.D.N.C.2011). With respect to the Village's APA claims, the court concluded that "[i]mplementation or continued operation of a project [was] not ... federal agency action," *id.* at 532, and that "[e]ven assuming, *arguendo*, that Plaintiff ha[d] in fact alleged agency action, Plaintiff ha[d] failed to show that any of the alleged agency actions [were] final agency actions that might confer jurisdiction on the Court," *id.* at 531. The court also concluded that the Village did not justify any claim under the provision of the APA that allows a court to compel "agency action that was unlawfully withheld or unreasonably delayed," 5 U.S.C. § 706(1), because none of the project's "documents create[d] an independent duty on the Corps to dredge the Inner Ocean bar according to a particular schedule in order to deposit sand on the neighboring beaches." *Village of Bald Head Island*, 833 F.Supp.2d at 532. Finally, the court determined that it did not have admiralty jurisdiction over the contract claims, concluding that the alleged contracts were not "maritime contracts" that would be subject to admiralty jurisdiction. *Id.* at 534–35.

From the district court's judgment, the Village and intervening Towns filed this appeal.

*193 II

[1] The Village contends that the district court erred in concluding that the Village's APA claims do not challenge a "final agency action" that is subject to judicial review under the APA. It maintains that there are two lenses through which to view the "agency action" at issue in this case. First, as it explains, the Corps' "physical activities in the field"—its implementation of the project by relocating, widening, and deepening the channel without also performing specified maintenance commitments designed to protect the adjacent beaches—constitute "agency action" that is "final" and hence subject to judicial review under the APA. *See* 5 U.S.C. §§ 702, 704. Alternatively, the Village claims that the Corps' failure to perform the beach-protection commitments constitutes a "failure to act," which amounts to the type of agency inaction that is subject to judicial review under the APA. *See id.* § 706(1). The Village admonishes that, without judicial review of such agency action or inaction, federal agencies will be left unaccountable for "implement[ing] a project differently from the plans, promises, and conditions generated during the pre-project environmental review."

The Corps contends that the district court correctly concluded that project implementation is not final agency action within the meaning of the APA. It also contends that the Village has not identified a *discrete* agency action that the Corps was *required to take* but failed to perform, as required for judicial review of an agency's failure to act under the APA. *See Norton v. Southern Utah Wilderness Alliance ("SUWA")*, 542 U.S. 55, 64, 124 S.Ct. 2373, 159 L.Ed.2d 137 (2004). It argues that allowing "judicial review of the Village's claims would place a burden on courts to manage ongoing agency actions and would eviscerate Congress' carefully crafted scheme for judicial review."

[2] Section 704 of the APA provides that *final agency action* is subject to judicial review, 5 U.S.C. § 704, and "agency action" is defined to "include[] the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof, or failure to act," *id.* § 551(13). The term "action" as used in the APA is a term of art that does not include all conduct such as, for example, constructing a building, operating a program, or performing a contract.

Rather, the APA's definition of agency action focuses on an agency's *determination* of rights and obligations, *see Bennett v. Spear*, 520 U.S. 154, 177–78, 117 S.Ct. 1154, 137 L.Ed.2d 281 (1997), whether by rule, order, license, sanction, relief, or similar action. The term is similar in concept to the meaning of "final decision" as used in describing the appealability of court orders. *See, e.g.*, 28 U.S.C. § 1291.

In this case, the Corps formally approved the revisions to the Wilmington Harbor Project in September 2000, and the revised project included the Corps' plans on how it would make beneficial use of the sand recovered from periodic maintenance dredging by depositing it on the neighboring beaches. That *approval* was a "determination" that surely amounted to "agency action." But thereafter, over the course of ten years, the Corps *performed* the work that had been approved in September 2000. The Village does not challenge the *approval* of the project; rather it challenges the Corps' *performance* of it, particularly focusing on a period in 2010. It commenced this action to challenge the adequacy of the performance and to require the Corps to do what it had undertaken to do when approving the project. Essentially, the Village sued the Corps for failing to adequately protect and renourish *194 its beaches. While that alleged failure was a failure to take "action" in its broadest sense, it was not a determination—*i.e.*, a "rule, order, license, sanction, relief, or the equivalent"—that is "action" as used in the APA. 5 U.S.C. § 551(13).

[3] Moreover, the Corps' performance in maintaining the Wilmington Harbor Project was not action that was circumscribed and discrete. "Agency action" not only has a limited meaning, but it also must be "circumscribed [and] discrete," as those characteristics are inherent in the APA's enumeration of the categories of agency action subject to judicial review—*i.e.*, rule, order, license, sanction, or relief. *SUWA*, 542 U.S. at 62, 124 S.Ct. 2373. As the *SUWA* Court explained, limiting judicial review to *discrete* agency action "precludes ... broad programmatic attack[s]," *id.* at 64, 124 S.Ct. 2373, and helps ensure that courts are not injected "into day-to-day agency management," *id.* at 67, 124 S.Ct. 2373. By contrast, were a court to review the Corps' performance to determine whether the project here had caused "significant adverse effects on adjacent beaches," whether those adverse effects could be addressed by modifying the Sand Management Plan, and whether they required additional "appropriate corrective measures," it would then be injecting itself into the role of monitoring whether the Corps had complied with vague, undefined corrective measures. The

obvious inability for a court to function in such a day-to-day managerial role over agency operations is precisely the reason why the APA limits judicial review to discrete agency actions. *SUWA*, 542 U.S. at 62–64, 66–67, 124 S.Ct. 2373.

The Village protests that it *is* challenging agency action that is circumscribed and discrete. It asserts that it is not “challenging a regional or nationwide dredging program for shipping channels” but, instead, the implementation of “a *specific* dredging project at a *specific* coastal site.” Yet, by challenging the Corps’ ongoing real world physical actions, even at a localized level, the Village is essentially “demand[ing] a general judicial review of the [Corps’] day-to-day operations” in maintaining the channel, the type of review the Supreme Court has explicitly held the APA does not authorize. *Lujan v. Nat’l Wildlife Fed’n*, 497 U.S. 871, 899, 110 S.Ct. 3177, 111 L.Ed.2d 695 (1990); *see also SUWA*, 542 U.S. at 64, 66–67, 124 S.Ct. 2373.

We therefore conclude that the Corps’ implementation of the Wilmington Harbor Project, including the ongoing periodic maintenance dredging and resulting nourishment of nearby beaches, does not constitute “agency action” within the meaning of the APA.

Section 704 of the APA *also* requires that “agency action,” to be subject to judicial review, be “*final* agency action.” 5 U.S.C. § 704 (emphasis added). The Village has not explained how its challenge to the ongoing maintenance of the channel can satisfy this finality requirement.

The Supreme Court has held that “[a]s a general matter, two conditions must be satisfied for agency action to be ‘final.’” *Bennett*, 520 U.S. at 177, 117 S.Ct. 1154. “First, the action must mark the consummation of the agency’s decisionmaking process—it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which rights or obligations have been determined or from which legal consequences will flow.” *Id.* at 177–78, 117 S.Ct. 1154 (internal quotation marks and citations omitted); *see also Franklin v. Massachusetts*, 505 U.S. 788, 797, 112 S.Ct. 2767, 120 L.Ed.2d 636 (1992) (“The core question is whether the agency has completed its decisionmaking process, and whether the result of that process is *195 one that will directly affect the parties”). Here, the Corps made a *final* determination for purposes of the APA when it announced formal approval of the revised project in September 2000. That approval, not the Corps’ subsequent activities in carrying it out, was the final agency action. *See Bennett*, 520 U.S.

at 177–78, 117 S.Ct. 1154. Thus, in the context of this case, “project implementation” is neither “agency action” nor “final” agency action subject to judicial review under the APA.

[4] The Village contends, as an alternative argument, that the Corps’ “failure to act” consistent with its commitments to maintain and protect the beaches adjacent to the channel is subject to judicial review under 5 U.S.C. § 706(1), which provides that a “reviewing court shall ... compel agency action unlawfully withheld or unreasonably delayed.” But, again, the APA’s use of the term “agency action” in § 706(1) limits judicial review to discrete determinations of rights and obligations. *See SUWA*, 542 U.S. at 62–63, 124 S.Ct. 2373; *Bennett*, 520 U.S. at 177–78, 117 S.Ct. 1154. As the *SUWA* Court explained, the term “failure to act” is “properly understood as a failure to take an *agency action*—that is, a failure to take one of the agency actions (including their equivalents) earlier defined in § 551(13).” 542 U.S. at 62, 124 S.Ct. 2373. The Court therefore noted that the term “‘failure to act’ is properly understood to be limited, as are the other items in § 551(13), to a *discrete* action,” providing as examples “the failure to promulgate a rule or take some decision by statutory deadline.” *Id.* at 63, 124 S.Ct. 2373.

Moreover, § 706(1) only authorizes the compulsion of agency action *that is legally required*. *SUWA*, 542 U.S. at 63, 124 S.Ct. 2373. In this sense, the Court explained, § 706(1) is like the mandamus remedy, “empower[ing] a court only to compel an agency ‘to perform a ministerial or non-discretionary act,’ or ‘to take action upon a matter, without directing *how* it shall act.’” *Id.* at 64, 124 S.Ct. 2373 (quoting Attorney General’s Manual on the Administrative Procedure Act 108 (1947)). Thus, it concluded, “a claim under § 706(1) can proceed only where a plaintiff asserts that an agency failed to take a *discrete* agency action that it [was] *required to take*.” *Id.*

More telling for the case before us, the *SUWA* Court applied that principle to circumstances similar to those here. The plaintiff there sought to compel the Bureau of Land Management to comply with certain “commitments” in its land use plans, which stated that a certain area “will be monitored and closed if warranted.” *SUWA*, 542 U.S. at 67–68, 124 S.Ct. 2373. The Court, however, was unwilling to “conclude that a statement in a plan that [the Bureau] ‘will’ take this, that, or the other action, is a binding commitment that can be compelled under § 706(1)” — “at least absent clear indication of binding commitment in the terms of the plan.” *Id.* at 69, 124 S.Ct. 2373.

Here, the Village would have us compel the Corps, under § 706(1), to perform “commitments” in DeLony’s letter to deposit beach-quality sand on the adjacent beaches every two years for the life of the project. But, as in *SUWA*, the DeLony letter *does not commit* the Corps to do so. Rather, it outlined the *planned* disposal cycle that would follow periodic maintenance dredging “as called for” in the Sand Management Plan, and the Sand Management Plan makes clear that the plan to dredge every two years was the Corps’ *projection* as to how often *dredging would be required*. These are hardly binding commitments; rather, they are statements of intent about future performance that *196 are expressly conditioned on unknown conditions and wide-open judgments.

At bottom, we conclude that the Corps’ continuing implementation of the Wilmington Harbor Project, as revised, does not constitute final agency action that is subject to judicial review under the APA. And even though “agency action” includes a “failure to act,” such agency inaction can only be judicially compelled when it is a discrete “agency action” that the agency was required to take, which is not the type of claim the Village has presented. Accordingly, we affirm the district court’s judgment dismissing the Village’s APA claims.

III

[5] As to Counts VII and VIII for breach of contract, the Village contends that the DeLony and Moffitt letters created “maritime contracts” that the district court could enforce within its admiralty jurisdiction. In those counts, the Village sought an order of specific performance and other forms of equitable relief. The district court dismissed these counts, concluding that the letters were not *maritime* contracts and that the court therefore lacked admiralty jurisdiction over them. *Village of Bald Head Island*, 833 F.Supp.2d at 534–35.

We agree with the district court. In Count VII, the Village alleged that the DeLony letter of June 9, 2000, “constitut[e]d a valid and enforceable express or implied contract between the Village and the Corps” to deposit the spoils of maintenance dredging on adjacent beaches every two years and to take other steps, as necessary, to prevent the project from causing the beaches harm. And in Count VIII, the Village similarly alleged that the Moffitt letter of June 15, 2000, constituted a valid and enforceable contract between the North Carolina

Division of Coastal Management and the Corps for the same purposes. We conclude that such contracts—to nourish area beaches with dredged sand and to protect them from further erosion—are not maritime contracts.

The Supreme Court has recognized that the “boundaries of admiralty jurisdiction over contracts” are “conceptual rather than spatial,” so that whether a contract qualifies as maritime “depends upon [its] nature and character”—namely, “whether it has reference to maritime service or maritime transactions.” *Norfolk S. Ry. Co. v. Kirby*, 543 U.S. 14, 23–24, 125 S.Ct. 385, 160 L.Ed.2d 283 (2004) (internal quotation marks omitted). In this respect, the Court has explained that the “fundamental interest giving rise to maritime jurisdiction is the protection of maritime commerce” and that “[t]he conceptual approach vindicates that interest by focusing [the] inquiry on *whether the principal objective* of a contract is maritime commerce.” *Id.* at 25, 125 S.Ct. 385 (second emphasis added) (internal quotation marks omitted).

It is clear that the “principal objective” of the contracts claimed by the Village was not “maritime commerce,” but the preservation of area beaches. Indeed, the Village expressly alleged that it “entered into negotiations with the Corps and [the North Carolina Department of Environment and Natural Resources] in an effort to reach agreement on project conditions or measures that *would protect Bald Head Island or address project impacts*.” (Emphasis added). To be sure, the principal purpose of the Wilmington Harbor Project was to protect maritime commerce by ensuring that vessels could continue to access the port in Wilmington, North Carolina. But the alleged contracts—which were negotiated in response to the project in order to limit its impact on area beaches—were not designed to protect or engage in maritime commerce. Rather, they were sought *197 to serve the recreational and aesthetic interests of the Village, as well as the property interests of property owners in the Village. Because the alleged contracts were not maritime contracts, the Village could not invoke the district court’s admiralty jurisdiction.²

2 It is also far from clear that the Village could successfully invoke the court’s admiralty jurisdiction *only* to achieve equitable relief. Historically, it was understood that admiralty courts could not grant equitable relief. See *Rea v. The Eclipse*, 135 U.S. 599, 608, 10 S.Ct. 873, 34 L.Ed. 269 (1890) (discussing the limited power of admiralty courts). The Supreme Court in 1950, however, recognized that equitable relief may be granted in admiralty. See *Swift & Co. Packers*

v. *Compania Colombiana Del Caribe, S.A.*, 339 U.S. 684, 691-92, 70 S.Ct. 861, 94 L.Ed. 1206 (1950) ("We find no restriction upon admiralty by chancery so unrelenting as to bar the grant of any equitable relief even when that relief is subsidiary to issues wholly within admiralty jurisdiction"). Citing this language and Congress' extension of the Federal Rules of Civil Procedure to admiralty cases in 1966, the First Circuit has held that "where equitable relief is otherwise proper under usual principles, it will not be denied on the ground that the court is sitting in admiralty." *Pino v. Protection Maritime Ins. Co.*, 599 F.2d 10, 16 (1st Cir.1979). Nonetheless, the Court in *Swift & Co. Packers* still held to the proposition that "a court of admiralty will not enforce an *independent equitable claim* merely because it pertains to maritime property." 339 U.S. at 690, 70 S.Ct. 861 (emphasis added). Because of our conclusion that the alleged contracts are not maritime contracts, we need not resolve whether a court exercising admiralty jurisdiction may hear claims seeking only equitable relief.

Moreover, while we conclude that the contracts alleged in Counts VII and VIII were not maritime contracts, we have also concluded, as discussed above in connection with the Village's APA claims, that the negotiations between the Village and the Corps did not result in "binding commitments" that could be contractually enforced. *See ante* at 195-96.

We therefore affirm the district court's judgment dismissing the Village's breach of maritime contract claims for lack of jurisdiction.

AFFIRMED

All Citations

714 F.3d 186, 76 ERC 1265

ATTACHMENT D

Subject	Comment
Cost (Project and Mitigation)	Emergency treatment cost of sea turtle dredge survivors should be paid by the dredging operations responsible for the takes
Cost (Project and Mitigation)	The deepening of the channel will have hard-to-predict effects on BHI's South Beach, which has been re-nourished at a cost of tens of millions of dollars over the last decade, and will likely become even more expensive to maintain after the deepening of the channel is done.
Cost (Project and Mitigation)	Require that the USACE approval is contingent on fully funding the mitigation plan
Cost (Project and Mitigation)	Requirement for the NC State Ports Authority to provide funds for sand placement on the islands.
Cost (Project and Mitigation)	Since our NC taxes helped fund this Study, and we're directly impacted from its negative impacts, we ask that you work with the Bald Head Island Village to address the above concerns.
Cost (Project and Mitigation)	We encourage that USACE examine the potential economic impacts of the proposed project to property values, workforce housing and transport, and the costs and benefits to the local and regional economy.
Cost (Project and Mitigation)	1. The report correctly uses the FY 19 price level and discount rate. However, if future versions of the report cross into FY 20 then it will be necessary to update the recommended plan at that time. This is a proactive comment for awareness and requires no action at this time. Appropriate updates should be made prior to the final report to ASA(CW).2. Update the economic analysis to demonstrate that IDC was calculated correctly. 3. Correct the economic analysis to use appropriate number of TEUs for the benefiting USEC-Asia traffic or clearly explain and defend the dramatic difference in the number of TEUs used (i.e., between the WOSC data and that used in the analysis). 4. Update the economic analysis to document a more reasonable assumption of the FVOP as the USEC-Asia fleet having a distribution rather than an unrealistic assumption of 100% PPX3 and greater. 5. Notwithstanding the other comments that could change the economic analysis and assuming the transition assumption remains, the economic analysis must be updated to only count land-side costs for those TEUs where the Port of Wilmington is actually closer than alternative ports AND the analysis must include rail as a potential least cost alternative. 6. Present clear evidence that validates the assumptions being made. 7. Update the economic analysis to use reasonable assumptions, determine the NED Plan, and document/support plan selection. 8. Update the economic analysis to show benefits for depths below -47FT and then identify the NED Plan. 9. For the recommendations in section 14, the report describes only the first cost and annual incremental operations and maintenance cost to the federal government. No reference is made to the mitigation required for the project. Provide the total project cost at FY 2019 price levels in the recommendations section of the report. Indicate the expected federal and non-federal cost-share amounts. Summarize the mitigation for the project as well.
Cost (Project and Mitigation)	Should the deepening of the channel pass, it must be accompanied by a commitment to mitigate the erosion damage to Bald Head Island, Caswell Beach and Oak Island.
Cultural and Historic Resources	BOEM requests to be informally involved in any cultural resource survey effects conducted in the Outer Continental Shelf for this project.
Cultural and Historic Resources	We ask that a thorough archaeological study be performed on the site and an active conversation be established with the Gullah-Geechee communities so that they stay informed in this process and ensure their interests are protected.
Cultural and Historic Resources	Given that larger ships and container vessels would not be passing historic properties along and in the river "but for" the proposed deepening and widening, we believe that the effects on all Cape Fear River historic resources must be considered as part of the proposed undertaking. Close collaboration with the Underwater Archaeology Branch will be necessary, as alternatives are considered, and archaeological surveys are planned, to ensure there are no adverse effects to potentially significant, submerged historic resources. The USS North Carolina and the Fort Fisher (Battery Buchanan) site, as National Historic Landmarks, are provided special consideration under Section 106 of the National Historic Preservation Act and potential adverse effects to these resources needs to be addressed in consultation with the National Park Service and Advisory Council on Historic Preservation. Brunswick Town/Fort Anderson State Historic Site has also suffered extreme shoreline erosion attributed to an earlier widening of the Upper Midnight Channel Range.
Cumulative Effects	How does the channel alteration and the addition of more, bigger and deeper ships affect the depositional sediments at MOTSU?
Cumulative Effects	Potential increases in invasive species hitchhiking on ship hulls and inside ballast tanks that will have a negative impact on the riverine environment. We ask that you evaluate the potential risks and uncertainties related to introduction of invasive species.
Cumulative Effects	1. National Gypsum's vessels are currently experiencing significant delays and issues with Post Panamax vessels transiting the navigation channel. Since it is already issue, we are extremely concerned that widening the channel could prevent us from being able to utilize the Company dock to its full capacity. 2. Given the location of National Gypsum's berth, we are concerned that deepening the channel adjacent to our berth would prevent us from being able to properly maintain the depth of our berth and that any maintenance dredging to the new navigation channel will result in excessive silt in our berth that would not happen naturally. 3. The National Gypsum berth is already within the setback limits of the channel and widening the channel could impact our ability to maintain structures or add additional structures.
Cumulative Effects	The Corps must incorporate resilience strategy into the DEIS to assess the true vulnerability of the project area.
Cumulative Effects	Failure to consider the historical experience of the last widening/deepening project, which encountered significant unanticipated logistical problems in removal of unexpected materials, impacting cost and schedules; these same materials can be anticipated in the same Reaches project to be widened and deepened and must therefore be considered in alternative selection.

Cumulative Effects	The Corps must also evaluate the impact of induced development resulting from the expanded Port facility. The DEIS must carefully consider how and where the Project might induce growth throughout the region, including the resulting impacts to communities and natural resources. 2. The DEIS should also take a hard look at whether the Project may exacerbate existing and reasonably foreseeable environmental threats in the lower Cape Fear River.
ESA Protected Species	Installation of a turtle-sized hyperbaric chamber to mitigate dredging impacts and increase chance of sea turtle survival.
ESA Protected Species	Significant erosion on eastern point of oak island that has decreased the amount of suitable habitat for shorebirds. Oak Island is listed as Loggerhead Sea Turtle Terrestrial Critical Habitat. Oak Island/Caswell Beach is designated as Critical Nesting Habitat. Fort Caswell would like to know what actions will be taken to preserve these critical areas on our shoreline since the project will increase erosion.
ESA Protected Species	Per federal standards, we request the Corps' participation in a systematic process of interagency coordination with USFWS and NMFS.
ESA Protected Species	The NMFS is concerned about potential impacts to sturgeon from blasting, pile driving, interactions with dredge equipment, and vessel traffic. NMFS is also concerned about potential impacts to Atlantic sturgeon critical habitat, specifically removal of soft substrate, the location of the upstream salt wedge, and water quality changes (e.g., temperature and concentration of dissolved oxygen).
ESA Protected Species	Firstly, the DEIS must evaluate the Project's impacts on threatened and endangered species listed under the federal ESA, as well as species protected under North Carolina state law. This evaluation should cover, at minimum, shortnose and Atlantic sturgeon, manatees, turtles, piping plovers, red knots, as well as the critically endangered North Atlantic right whale, including any critical habitat for these and other federally listed species within or near the Project site. Increased ship traffic and larger ships are likely to lead to more vessel strikes of protected species and must be considered in the DEIS. Additionally, the DEIS must examine any impacts of increased erosion and shoreline hardening on nearby sea turtle and bird nesting habitats.
Fish and Wildlife and Plants	We feel the dredging will significantly impact bird habitats, notably on Battery Island, which supports 25% of the State's nesting coastal water birds, as well as the marsh ecosystems that support many varieties of marine life.
Fish and Wildlife and Plants	The addition of stress to the marine life is also not been adequately explored after successive dredging projects.
Fish and Wildlife and Plants	Consider the environmental impacts on birds that nest on spoil islands. Visit Battery Island to look at the erosion that impacts nesting ibis.
Fish and Wildlife and Plants	A deeper channel to accommodate post-panama ships that draw 48' will create an environmental hazard from a potential spill to increased pollution negatively impacting our bird, fish, turtle wildlife, and marsh vegetation.
Fish and Wildlife and Plants	The Corps must also assess potential adverse impacts from the Project on Venus flytraps, which are currently being considered for federal listing under the ESA and thus may become subject to ESA protections before the Corps completes the NEPA process. 2. The expansion of the Harbor has the potential to facilitate the introduction of invasive species through the discharge of ballast water from deep draft vessels. The DEIS must examine whether increasing the amount of ballast water exchange within the Wilmington Harbor could adversely affect the surrounding environment.
Groundwater/Castle Hayne Aquifer	Freshwater aquifer would be compromised
Groundwater/Castle Hayne Aquifer	The aquifer is basically at 47 feet of depth, the depth to which the channel is to be dredged. Obviously, salt water may intrude into the aquifer. BHI's primary water source, if such dredging occurs.
Groundwater/Castle Hayne Aquifer	The Castle Hayne Aquifer, which BHI draws and depends upon for its potable water, is estimated to lie at 47'. Any attempts to further deepen the channel would have a permanent destructive impact on this critical water supply.
Groundwater/Castle Hayne Aquifer	We are deeply concerned that the deepening of this channel into bedrock will damage and crack the fragile limestone beds that protect our Castle Hayne aquifer. The last thing we need is more saltwater intrusion into our important water supply source.
Inlet Morphology	Would deepening the channel mean widening the channel? It most certainly would.
Inlet Morphology	Carolina Beach Inlet. Please address, if any, potential effects on navigation and shoreline management elements resulting from an increased design template, volumetric flow and rate? Please specifically address potential effects on Snow's Cut, the AIWY crossing, CB Inlet, CB Inlet shoulders and NHC's Inshore Dredge Material Management Site.
Inlet Morphology	The analysis of the operation of the relevant sand transport systems (discussed further below) is deeply flawed. E.g., littoral transport rates cited are to a large degree based on a 1999 ERDC Report (CHL-99-18) which has proven to be grossly inaccurate. Proper understanding of these systems and the potential impact on them of each possible project alternative is necessary to a proper alternatives and cost-benefit analysis.
Inlet Morphology	The DEIS should also consider impacts to tidal marshes, which serve important ecosystem functions along the Cape Fear Basin. Shoreline armoring associated with the Project would likely impede marsh migration, and this should be carefully considered in the DEIS.
Mitigation	Will the Port be required to establish mitigation for this study including the GHG impacts caused by the increased size of the container ships and the amount of inbound and outbound rail and truck traffic required to move that increased freight volume?

Mitigation	FUND THE MITIGATION PLAN. Not only for the duration of construction, but also for the long term and ongoing environmental changes this will cause. Fund mitigation for beach maintenance, preservation of the terminal groin and the textile groins, and other structures that may be required to keep the sand on Bald Head Island's beaches and out of the Cape Fear River channel. ASSIST with identifying sand sources to replace sand for Bald Head Island's beaches that falls in the channel. REVISE the sand sharing plan among local beaches to more equitably share beach-quality dredged sand where impacts are greatest.
Mitigation	The EPA recommends that alternatives to preservation as compensatory mitigation utilize both the Northeast Cape Fear River and Town Creek options since the project effects will be spread throughout several Lower Cape Fear tidally influenced streams and rivers. The consideration to restore approximately 10,000 linear feet of tidal creek (Alligator Creek) and tidal wetland enhancement of Eagle Island is dependent upon a detailed analysis of the approach and reference system to be utilized for construction. Use of in-kind mitigation is preferable and the sponsor should continue to exhaust potential sources of mitigation credit suitable to replace functional loss in tidally influenced fresh water wetlands.
Mitigation	Measures should be incorporated into plans to protect, preserve, or restore environmental quality in the project area. Shoreline monitoring and mitigation strategies of our property should be requirements. We ask that we be made aware of any public/stakeholder meetings regarding this project and our concerns addressed in writing.
Mitigation	If the project proceeds as planned, at a minimum, significant funds in the hundreds of millions of dollars should be allocated to mitigate the potential problems listed above. BHI residents and homeowners should not bear the full burden of offsetting impacts to the beaches, protective dunes, and infrastructure of BHI caused by the WHNP.
Mitigation	Prepare a comprehensive mitigation plan for the construction impacts as well as the long-term anticipated and unanticipated consequences
Mitigation	A perpetual mitigation plan that addresses the recurrent erosion that will happen to the bird nesting islands be required as part of the operation and maintenance of the shipping channel.
Mitigation	The Environmental Consequences section needs to include the adverse and unavoidable effects that the proposed and preferred alternatives will have on environmental resources. In addition, this section must outline a clear strategy for mitigating such consequences.
Mitigation	The mitigation recommendations are not linked to an explicit consideration of the level of significance of the resources and impacts and may imply a greater commitment to mitigation than is justified. Recognizing that the cost effectiveness/incremental cost analysis would be premature at this stage, revise the mitigation plan section to clearly establish the significance of the resources and impacts following the procedures in ER 1105-2-100, then provide only those mitigation options (without commitments) that would be required to ensure that the recommended plan would not have more than negligible adverse impacts on ecological resources and may fully justified.
Mitigation	The Draft Report makes no commitment to retaining beach quality sand in the coastal sand transport system or placing it strategically on the beaches that will be directly affected by this project. Proper analysis of this project and alternatives to this project must consider these impacts, the costs of mitigating these impacts, and the parties who will bear the responsibility for this mitigation. 2. to assure that future harm is avoided or mitigated, and to assure the on-going need for sand placement on beaches to retain sand in the delicate ecosystems of which it is a part, the project design itself must incorporate mitigation elements as project elements with the cost thereof projected and included in the cost-benefit analysis of the project, as required by WRDA. It appears that in other Corps Districts this is accomplished through the policies and principles associated with Regional Sediment Management, as adopted by SAD.
Mitigation	The Feasibility Study failed to include any beneficial use of dredged material. The DEIS must consider how dredged material can be used to create, protect, and enhance habitat, such as nesting bird habitat, that would be harmed by the project.
Modeling and Analysis (all types)	The EPA recommends the Corps and/or project sponsor commit to 10 years of post-construction monitoring. Additionally, we recommend that the sponsor conduct or provide conclusive baseline functional assessments in order to evaluate long-term trends in water and habitat quality. We also recommend the Corps fully develop and describe an adaptive management plan for the proposed project in the EIS. The adaptive management plan should include the formation of an Interagency Coordination Team that can collaboratively review the monitoring data (vegetation and water quality) and assess the accuracy of the model predicted impacts. If the observed impacts are different from predicted, the Corps should develop an adaptive management plan for how mitigation will be addressed.
Modeling and Analysis (all types)	A policy compliant climate hydrology analysis should be performed using EOB 2018-14 guidance. The climate discussion should be summarized in the main report, with the detailed material included in Appendix A (Engineering). The results should be integrated into the key assumptions in the future with and without project assumptions, and inform any adjustments to risk register and current cost risk assumptions in the report. 2. Engineering Analysis/Hydrodynamic Modeling - Future without project, future with project modeling is likely underestimating impacts since the RSLR rates are low by a significant amount. Changes in flood risk for the with project condition was not investigated. In addition to the impacts of future conditions described in earlier comments, when assessing coastal storm risk in the estuary, wind loading should be considered.
NEPA Process	From Bald Head Island to Caswell, the existing channel width is 500ft but the proposed channel is 800ft. Fort Caswell would like to know how close the potential widening will occur to our shoreline and specifically the projections for increased ship wake in our area.
NEPA Process	The risk to private property owners is disproportionately stacked against us. A more thoughtful plan with all interests in mind, is needed. I urge you to pause this and allow for community participation as outlined in Federal guidelines.
NEPA Process	I do not see why the channel cannot be shifted to the west, to make it more centered between BHI and Oak Island, thus mitigating the effect on BHI's West Beach.
NEPA Process	Provide additional opportunities for more public input with meetings in the affected communities along the Cape Fear River and complete a thorough EIS.
NEPA Process (Public Input, Purpose and Need, Alternatives Analysis)	1. We request the Corps reject the findings of Section 203 Feasibility Study due to the lack of public involvement, since the Port failed to develop an "effective public involvement strategy" and the Corps guidelines in ER 1165-2-209 have not been satisfied. 2. Based on the evidence presented by the Assistant Secretary of the Army, the Corps cannot rely on the 203 Study performed by the Ports Authority. The Corps must completely reject the findings of the study and perform its own study and analysis complying with the NEPA requirements. 3. The purpose and need statement as described in 40 CFR §1502.13 needs to explain why an action is necessary from the perspective of a Federal agency that is proposing the action. 4. We request the Corps assemble a Project Review Team for the proposed action. The federation would subsequently like to express interest in participating on such team. 5. The Alternatives and the Proposed Action section should also clearly state the preferred and selected alternative. Thus, all viable alternatives, not just the implementation alternative presented in the 203 Study, must be fully explored and considered in a comparable way. 6. This Affected Environment section must describe the environment to be affected by the proposed Project. To ensure that sufficient measures are taken to protect vital habitat, protected and commercially important species and localized water quality, we request a formal and public interagency review and coordination process.

NEPA Process (Public Input, Purpose and Need, Alternatives Analysis)	As written, the planning objectives are unclear and could potentially lead to the pre-selection of an alternative plan. As written, it is not quantifiable or measurable against other plans, and seems to have been used to eliminate potential measures or alternatives that include light loading by establishing a minimum depth for the deepening alternatives. In this instance, as the objectives were not correctly written, the planning process and selection of a plan would be inherently flawed. Revise the objectives to be policy compliant and conduct a new iteration of plan formulation and evaluation. 2. Correctly utilize the criteria (technical, economic, environmental, social, etc.) in the future project condition and eliminate any screening criteria that may errantly or artificially constrain the planning process. Review the study plan formulation to ensure that potential measures and/or alternatives were not errantly eliminated from consideration. 3. After revision of the project objectives, conduct a new iteration of the formulation and screening of management measures. 4. Include additional environmental alternatives in the detailed evaluation. 5. Review the report and ensure that summary statements accurately reflect the magnitude of effects described in the preceding text, particularly, accurately describing long term or permanent effects vs. short term effects. Clearly distinguish the difference in effects between the new areas affected by improvement dredging and those that are regularly exposed to maintenance dredging. 6. In many cases, the report uses qualifying words, such as may, potentially, and just, to lessen the description of project impacts. Remove qualifiers to provide more objective predictions of effects. 7. Revise the text to say, "8.25.6 Future Environmental Considerations – The following actions will be considered during the preparation of a NEPA document." 8. Conduct an IEP or obtain an IEP exclusion from the Chief of Engineers. 9. Nuisance flooding frequency will likely increase as a result of the project. As the tide range expands, some stormwater drainage outfalls to Wilmington harbor will be impacted, resulting in decreased gravity drainage performance. Future salinity changes in the estuary have been underestimated. Future freshwater inputs from the watersheds may tend upward under climate change ameliorating the impacts of the deepening slightly. 10. Coordinate with Navigation POX, FH&C, CPR Corp's, vertical team for specific direction. 11. The study authority cited in section 1.2 of the report should be updated to include the modifications to the authority made by section 1152 of WRDA 2018. The non-federal interest also should review the "Implementation Guidance for Section 1152 of the Water Resources Development Act of 2018, Studies of Water Resources Development Projects by Non-Federal Interests," dated 2 May 2019. 12. The tentatively selected plan recommended generally should be referred to in sections 6.1 and 10.1 and throughout the report and its appendices as "deepening" the federal navigation channel, rather than simply "dredging" the federal navigation channel. 13. It is not clear to what "removals" refers, particularly given that no real estate plan was provided. Explain what "removals" refers to in the recommendations section of the report. The non-federal sponsor would be responsible to perform or ensure performance of all relocations determined necessary for the project. 14. A REP consistent with the requirements of Section 12-16(c) in Chapter 12 of ER 405-1-12 should be added to the report. Per the guidance from Section 12-16(c), the Real Estate Plan must identify a number of requirements, such as "a description of the LER required for the construction, operation and maintenance of the project including those required for relocations, borrow material and dredged or excavated material disposal." The Corps recognizes that if it is doing the construction for the project, no land must be acquired for the dredging itself, but the Mitigation, Monitoring, and Adaptive Management Plan is missing a number of requirements relating to the lands needed for mitigation that would be in the REP.
NEPA Process (Public Input, Purpose and Need, Alternatives Analysis)	NCSA should withdraw the report in order to fully involve the public in the scoping and analyses required, as contemplated by Section 203. 2. Corps to lead a NEPA process, based on the already-prepared draft environmental report submitted with the NCSA Report. The Village objects to this approach for two reasons. First, such a post hoc analysis cannot cure the failures (discussed above) to comply with the requirements for the other portions of the Report. Second, it cannot cure the failure to involve the public in the NEPA process from the beginning, as required by the Corps guidelines applicable to Corps projects generally and Section 203 feasibility studies specifically. 3. The Village's overriding concern is that it may be denied the opportunity for it and the public to provide input on the alternatives, the evaluation, and the outcome in the meaningful way contemplated by the Corps' mandate of robust public involvement. 4. Section 203 requires that a non-Federal feasibility study and the process under which it was developed comply with Federal law. The NCSA Report does not. NCSA should withdraw its Report and, in conjunction with a Corps-led NEPA process, re-open all the elements of the feasibility study to move forward with a full, fair, and transparent process required by Federal law.
NEPA Process (Public Input, Purpose and Need, Alternatives Analysis)	The efficacy of the last channel re-alignment. Part of that re-alignment has failed (cannot be maintained to current design) in the area of BHI Reach 1, and any further project modifications in that Reach must account for this in considering alternatives. 2. We urge public involvement in both scoping and all other phases of the analysis of this project and its environmental impacts, as required by the rules and guidelines implementing NEPA. 3. In addition to being held early, scoping meetings should focus on specific issues and have multiple meetings if necessary to target specific issues and audiences. 4. In addition to stakeholders specifically interested in environmental consequences of the proposed project, and in light of the technical complexity of the alternatives, VBHI suggests that a technical advisory committee also be formed. 5. Make the extent date easily available to the public by having the NCSA also post their reports on its webpage.
NEPA Process (Public Input, Purpose and Need, Alternatives Analysis)	The Corps must not select a statement of project purpose that artificially restricts its analysis to alternatives that benefit the Ports Authority to the exclusion of other reasonable alternatives. The Port Authority, in turn, must not finalize its WRDA Section 203 Feasibility Report until the NEPA process is complete and the Port has full information about the environmental impacts of all available alternatives. 2. This analysis must contain a "no-action" alternative. For example, the Corps must include in its alternatives analysis an evaluation of whether another harbor could be deepened for less money and with fewer environmental impacts.
New Wilmington ODMDS	The EPA recommends the new work material for the proposed project be fully evaluated to ensure it meets ODC. The New Wilmington ODMDS capacity should be examined in the DEIS. The EPA recommends the Corps review the presented data in the Section 203 report and consult with the EPA Region 4 ODMDS staff to determine the remaining capacity in the New Wilmington ODMDS.
New Wilmington ODMDS	Finally, if beach compatible material is ultimately placed in the ODMDS or other inland/upland disposal area, the Town asks that the beach compatible material be placed in a specific compartmentalized area so that this material could be retrieved at a later date by local interests.
New Wilmington ODMDS	The DEIS must rigorously assess how contaminants potentially found in this dredged material may harm human health and wildlife. Moreover, the Corps must carefully study how the deposit of large quantities of dredged sediments in the water column and on beaches would affect the surrounding environment.
Noise and Air Quality Impacts	Will the Port be required to establish green house gas impacts for this study including the GHG impacts caused by the increased size of the container ships and the amount of inbound and outbound rail and truck traffic required to move that increased freight volume?

Noise and Air Quality Impacts	The EPA recommends the Corps develop current and local modeling to evaluate statements and other general conclusions described above regarding potential emissions presented in the Section 203 report. The EPA also requests an air emissions inventory be conducted for the Port of Wilmington. To determine how landside emissions impact local area air quality, with an emphasis on port traffic effects in potential environmental justice (EJ) areas, the EPA requests that dispersion modeling be conducted. The EPA requests a screening-level risk assessment to evaluate the potential impacts associated with emissions of air toxics related to the harbor deepening and its operation. The future condition analysis should extend through the entire 50-year life of the project. In addition, the requested dispersion modeling for criteria pollutants should include air toxics emissions. Modeling results should be used in the requested screening-level risk assessment to help delineate effects on landside sensitive receptors such as potential EJ areas located along road/rail corridors from localized emissions.
Noise and Air Quality Impacts	USACE must also consider the individual and cumulative effects to the ecosystem caused by hard bottom removal that will be required for this channel dredging project. There is research that clearly indicates that increased subaqueous noise levels may erode and degrade the aquatic acoustic habitat vital for migrating, mating and foraging.
Noise and Air Quality Impacts	The Corps needs to assess the impacts of greenhouse gas emissions and their effect on local air quality.
Noise and Air Quality Impacts	The DEIS should also evaluate the ways in which increased light pollution from the Project, all road and railway infrastructure, and induced development and associated habitat loss are likely to affect migratory birds, sea turtles, and other species. 2. The DEIS should carefully analyze the impacts of noise associated with the Project. In addition to noise from direct activities like construction (e.g., pile driving) or sediment excavation (e.g., blasting) activities, the DEIS must also look at long-term, indirect noise impacts associated with increased vessel traffic (e.g., engine noise and fog horns), crane container operations, and land-based transportation (at the site, on new roads and railways, and extending onto the existing regional transportation network). This evaluation should not only encompass impacts on the human environment, but must also include impacts to fish and wildlife. 2. The DEIS must carefully examine impacts to air quality from the Project, particularly how the deepening would impact the type and number of ships visiting the Wilmington Port, and how the nature of this new shipping traffic would impact air quality. In addition, the DEIS must also examine how increased truck trips would contribute to air quality problems in the region. Specifically, we recommend that additional truck emissions and congestion be evaluated for the entire Port 3. In addition, the Corps must evaluate the public health impacts of declining air quality associated with the Project. This must include detailed dispersion modeling to accurately assess impacts to local communities and to account for the fact that those nearest the source face the greatest threat from exposure to air toxins. Given the wide and growing recognition of the significant harm port-generated air pollution can do to human health, the Corps should include a risk-based health impact study.
Salinity/Saltwater Intrusion	Saltwater intrusion, changes to the ecosystem of the river and marshes
Salinity/Saltwater Intrusion	Two salinity causing factors dismissed by the Draft Report, are likely to occur with regularity. 2. The impact of that increased salinity on adjacent and connected ground waters, and its influence on the advancing "wedge" of salt water related to ongoing sea level rise should be understood, especially considering the fact that many residents are dependent on groundwater for their drinking water.
Salinity/Saltwater Intrusion	The DEIS must carefully investigate potential impacts from this proposed deepening to surface and groundwater supplies. Another concern of saltwater intrusion is the loss of freshwater wetlands upriver, such as the bottomland cypress forests. Over time, plants that are adapted to live in freshwater conditions may no longer be able to survive when the water becomes saltier. This potential loss of vegetation and associated ecosystem services as a result of the Project should be thoroughly examined in the DEIS.
Sand Management/Beneficial Use of Material	We encourage the Corps to work with the EPA through the development of beneficial use of dredge material options to ensure compliance with the CWA and MPRSA.
Sand Management/Beneficial Use of Material	Confined Disposal Facility (CDF) #4- Will a revised Dredge Material Management Plan retain CDF #4 along the Horseshoe Shoal Reach as a management site for beach compatible material? If so, what are the anticipated beach quality new construction and maintenance volumes? If the new work and maintenance material remain within beach quality standards, may Pleasure Island be designated as having first right of refusal for beneficial reuse?
Sand Management/Beneficial Use of Material	The Town of Holden Beach would like to know if the project would yield beach compatible sand. If so, we would be interested in being considered as in 2000 when a similar project occurred.
Sand Management/Beneficial Use of Material	1. While the current documents and Appendix R reference a USACE Sand Management Plan which mentions an eight-year interval, other documents and the current practice is for a six-year interval. 2. On Page 93 in the integrated main report (Table 2-24) there is a reference to West Oak Island (WOI) as a placement area. Please explain the meaning of "west". 3. Also, while it is understood that Figure A-6 is only an example of potential beach placement areas, the Town of Oak Island believes that placement of material from this project should occur further westward and should be permitted/allowed across the entire island. 4. The Town of Oak Island requests to be included in any discussions concerning the management of materials being dredged for the project as well as any potential adjustments to the current preferred plan concerning potential channel realignments, etc. in later studies and the upcoming EIS. The Town also requests that the USACE and NC Ports would look to maximize beach placement of all material that currently meets regulatory requirements. Based on a review of the documents and appendices (especially Appendix B), it appears that numerous channel reaches contain beach compatible material. This material should be placed on adjacent shorelines to the maximum extent practicable. The Town of Oak Island requests that the permits for this proposed project and subsequent maintenance projects should expand the allowable placement area on Oak Island to cover the entire island to maximize use of this precious resource.

Sand Management/Beneficial Use of Material	The DEIS should also include a discussion of the ways in which dredged materials from the Harbor would be used for beach nourishment or to protect or enhance nesting habitats, as well as all related monitoring data collected with respect to the use of dredged materials for these purposes.
Sea Level Rise/Flooding	The overall wetland impact analysis should consider the project effects independent of the projected sea level rise (SLR) since the analysis masks the effects of the project on shifting isopleths during the life of the project. This may result in unanticipated or drastically different impacts to tidally influenced fresh water-wetlands for the life of the project. The EPA recommends that wetland impacts-anticipated for the duration of the project be the primary focus of impact analysis.
Sea Level Rise/Flooding	One of our greatest concern lies with the future impacts of this project as it relates to global warming. We ask that your evaluation of this project look well forward into the future and contain a thorough examination of the full range of risks and uncertainties related to greenhouse gas emission impacts and required mitigation. We strongly suggest that USACE review and analyze the findings and observations related to climate change and its impacts on stream flow and runoff patterns as well as the warming of lakes and rivers, with effects on thermal structure and water quality.
Sea Level Rise/Flooding	1. Plan Formulation-Future without project and future with project discussions do not fully integrate impacts of climate change to hydrology and changes in sea level. Future changes in water levels, salinity intrusion due to RSLR and further channel alteration are likely understated. The section listing constraints does not include increases in water levels or induced flooding. 2. Economics/Planning - The non-structural measure "tidal advantage" should perform better under the intermediate/high scenarios since the tidal range is increasing. Has a sensitivity analysis been done showing performance of larger tidal ranges on tidal advantage?
Sea Level Rise/Flooding	The flooding effects of the project are not even explored in the Draft Report. We believe the precepts (and inputs) from the South Atlantic Coast study are an important factor to be considered in the assessment of this project.
Sea Level Rise/Flooding	The DEIS should consider the added potential of increased flood hazards resulting from the Project. Storm surge and rainfall become even more damaging when added to rising sea levels. This evaluation should take into account projections of these impacts over the next 100 years, including an assessment of potential flooding in areas likely to be developed in response to the Project. The Corps' evaluation should also account for how loss of wetlands from the Project would affect the flooding and storm surge vulnerability of surrounding communities. 2. Rising sea levels will continue to put additional stress on the coastline, through increased erosion and higher storm surges, and this must be considered in the DEIS. The DEIS should evaluate the long-term viability of the Port under such expected conditions. Potential effects of sea level rise under scenarios that reflect low, moderate, and high rates of change should be considered.
Socio-economic and Environmental Justice Impacts	The EPA recommends the Corps identify minority and low-income populations within a mile of the proposed project. If EJ populations reside within this area, the DEIS should fully assess the potential impacts from the proposed project on these populations. The Corps should evaluate whether EJ populations will be disproportionately impacted by the proposed project. The EPA recommends the Corps and project sponsors actively engage the surrounding communities during the NEPA process to help them understand the proposed project, the potential impacts of the project, and the mitigation opportunities. Most of the communities surrounding the project have elevated levels of minority and low-income populations, therefore, project effects on potential EJ communities and children's health should be considered in future project development. These analyses should include potential landslide emission effects on nearby populations (as previously requested above General Air Quality). Public concerns and their follow-up outcomes, and disclosure of the demographics of children under age 18 within the project area should be included in the DEIS.
Socio-economic and Environmental Justice Impacts	We recommend that the US Army Corps of Engineers (USACE) adequately identify EJ communities within and adjacent to the project area and evaluate the EJ direct, indirect and cumulative impacts associated with increased river and highway traffic, noise, vibration, land use, as well as riparian, fisheries and watershed impacts and air quality. We are also concerned with the proposed project's impact to the Gullah Geechee Cultural Heritage Corridor and encourage the USACE leaders to work with the Gullah Geechee Cultural Heritage Commission, National Park Service, and the Gullah Geechee community to avoid, minimize, and mitigate any potential impacts. We also encourage the USACE to reach out and engage local Gullah Geechee groups and individuals in our community and other EJ communities in a meaningful way to solicit their input on this project.
Socio-economic and Environmental Justice Impacts	The 203 study does not take into consideration potential impacts of the Project on said populations. Before coming to any decisions on potential alternatives, impacts to Environmental Justice populations must be wholly considered.
Socio-economic and Environmental Justice Impacts	There are numerous public health and safety concerns associated with the Project that should be evaluated in the DEIS. These include the risk of additional injuries associated with increased traffic, as well as emergency response delays caused by such congestion. 2. The DEIS should also assess impacts on recreational activities, with particular focus on water-borne recreation, including boating, fishing, oyster harvesting, shrimp, and bird-watching. 3. Finally, the DEIS must evaluate disproportionate impacts of the Project on low-income and minority populations. The DEIS should consider the EJ communities alongside the port and canal from increased land-based traffic, toxic air pollution, water quality impacts, and potential displacement as a result of the Project.
Underwater Utilities/Structures	We encourage you to identify, locate and safely relocate any and all utilities, pipelines and underwater structures that may be in harm's way of the proposed project.
Vessel Wakes/Shoreline Erosion	Fort Caswell is concerned about the increased shoreline erosion, increased area waka, and ecological impacts to our historic property.

Vessel Wakes/Shoreline Erosion	Gigantic ships will produce gigantic wakes during high tides.
Vessel Wakes/Shoreline Erosion	Increased erosion from additional dredging at BHI's West Beach will directly, negatively impact BHI by narrowing the beach buffer that protects the west side of the island, and by reducing the usable beach there.
Vessel Wakes/Shoreline Erosion	Minimize erosion to multiple bird sanctuary islands contained within the area of the shipping channel
Vessel Wakes/Shoreline Erosion	BHI already suffers from beach erosion from previous deepening and widening of the river channel. Further attempts to deepen/widen will have a more aggressive significant impact for erosion to our beaches. Not only are these beaches important from the areas vacation/tourism perspective, but further erosion will also have a significant detrimental impact on home market values.
Vessel Wakes/Shoreline Erosion	1. We ask the Corps to address the effects of previous and current erosion in the project area combined with the potential for new erosion. 2. Consequently, we ask the Corps to include the effects of the turning basin into the analysis of the cumulative and indirect ecosystem effects of the Project. 3. As part of the DEIS the Corps should perform the Section 111 study to determine what extent of the erosion will the deepening of the navigation channel cause to the region, and what it needs to do to mitigate the effects of erosion.
Vessel Wakes/Shoreline Erosion	Zekes Island/Buzzard Bay Rock Revetment- Please address, if any, the potential for revetment scouring, increased tidal topping and sound side impacts on southern NHC's Fort Fisher recreational beach front including the potential re-emergence of the former Corncake Inlet.
Vessel Wakes/Shoreline Erosion	Sensitive habitats (such as aquatic, avian, and other wildlife nesting and nursery areas) will be damaged by the significant increase in erosion forces. The Draft Report does not even acknowledge the existence of these estuarine impacts (the discussion of erosion is limited to coastal beach erosion; Draft Report Section 2.2 and Section 8). And the Draft Report's analysis of the erosion impacts of the larger vessels is both frightening and appallingly naive.
Vessel Wakes/Shoreline Erosion	The DEIS should assess whether the Project may contribute to increased wetland and shoreline erosion along the Cape Fear River and on adjacent oceanfront beaches. Deepening or widening the channel, "softening" river bends, and extending the Port seaward would likely affect the wave energy and sediment dynamics of the entire region. Furthermore, shipping wakes from larger and more numerous vessels would alter the wave energy in and around the river. The Corps should take a hard look at how these changes would affect the erosion already occurring both on neighboring beaches and inshore on islands and wetlands marshes lining the river channels. In addition, the DEIS should consider the secondary effects of any resulting increased use of erosion control methods like sandbags, bulkheads, and beach nourishment. Furthermore, the Corps must address any impacts associated with increased beach nourishment events resulting from the Project. Habitat value for foraging shorebirds, like piping plovers and nesting sea turtles can be significantly degraded after a beach nourishment event, and these effects must be given consideration in the DEIS.
Water Quality Impacts	The EPA recommends that the Corps include a discussion of potential impacts from the WHNIP on summer DO conditions in the Cape Fear River in the Draft Environmental Impact Statement (DEIS). The EPA is willing to assist with the review of data and model results of predicted DO conditions and other relevant water quality parameters for the TSP to ensure that Wilmington Ports Authority uses comparable water quality modeling tools to NCDENR to assess nutrient and organic enrichment impacts in the Cape Fear estuarine system.
Water Quality Impacts	We are deeply concerned with the potential environmental impacts of the proposed project on the local waterways and Cape Fear River, which some residents use to sustain themselves via fishing traditions. We are aware that the oxygen levels in our local water courses are desperately low. We need to protect our local fisheries by replenishing oxygen in the river to levels adequate to promote sustainable populations of fish. In addition to contamination and sedimentation from dredge material disposal, the activity of dredging itself can negatively impact water quality by stirring up sediments and toxic materials that may be found on the bottom of the river. Harbor deepening can also reduce dissolved oxygen levels to unnaturally low levels on a river's bottom, as well as alter the horizontal and vertical salinity profiles of the river. Such changes in the aquatic chemistry of the region can impact wildlife and fisheries62 and must be studied carefully in the DEIS, especially within protected areas like critical habitat areas and PNAs. Moreover, the Corps must comprehensively evaluate anticipated impacts to wetlands in the vicinity of the Port. The Port has been dredged for over a century, which has led to salinity and tidal range changes as well as extensive changes to wetlands in the area. Finally, indirect impacts from increased truck traffic and induced growth can lead to additional impacts from stormwater runoff through the addition of harmful pollutants into surrounding watersheds.
Wind Energy	Wind Energy Areas are within the project area. Coordinate with WPA Wakes regarding all potential use conflicts related to Office of Renewable Energy Programs activities.

[illegible]

OBJECTID	Email	Affiliation	Comment Name (one line description)	Select Yes	Comment	Comment (2000 character limit, please submit an attachment to provide additional information if required)	Location	Do you live here	x	y
6			Move Port	other	ad	Rather than going through the Cape Fear River shipping channel deepening/widening cycle over and over, why not move the port closer to the mouth of the river? I know this will take a massive effort but balanced against increased flooding, environmental harm due to saltwater intrusion, and higher maintenance costs, it might be worth it.			-77.776	34.29292
7	reinberg25@mail.wlu.edu	Indepen	Concerning Impacts of Harbor Navigation Improvement Project	problem	ej	I am an undergraduate student and resident of Wilmington in New Hanover County. The expansion of the harbor has many concerning impacts I would like to point out. First, the expansion of the harbor would allow more salt water from the ocean to intrude into our wetlands, which are habitats for many endangered species. Plants would also not be able to survive, and Wilmington would lose the valuable buffer the wetlands provide against extreme weather events like hurricanes. Second, the dredging of the sand of the river to widen the harbor will destroy soft bottom habitat, which is nursery areas for species, and lead to more erosion. Last, the harbor will increase the rate and scope of size of warehouses in the area, which brings to conflict land development and zoning, just like Savannah has experienced. This new growth made lead to displacement of low-income communities and an increase in noise and air pollution for all residents. To summarize, the improvement project of the Wilmington harbor would change the water, sand, and community of Wilmington. Because of this, there is an opportunity to consider what is best for Wilmington, its community, and the environment we depend on. At what cost are we going to compete for industry with ports in the Southeast?		o/a	-77.9564	34.21992
8			Risks of Planned Shipping Channel Project	resource	ecological	Making room for larger ships by the proposed deepening and widening of the harbor could exacerbate saltwater intrusion, a phenomenon already occurring with sea level rise, through to the Northeast Cape Fear River, Sturgeon Creek and Town Creek. Increased salinity is worrisome because saltwater encroachment will force species to either migrate or altogether cease to exist in the river, kill off freshwater plants and habitat and destroy wetlands, which are nature's storm buffers. The proposed project will change the river's tidal range and increase the mean high water level throughout the channel because the project would reduce the speed at which the water flows. Millions of cubic yards of sand will have to be removed, destroying nearly 1,000 acres of soft-bottom habitat and converting that habitat into deepwater habitat. Many of those acres make up primary nursing area for juvenile fish. Sea turtles, including endangered loggerheads, rest and forage on the floor of the harbor. Additionally, bigger ships could increase erosion rates on the river banks, threatening recreational use of the river, shorebird habitat, communities, including environmental justice communities, and cultural resources. Furthermore, there's also concern that the sand that would be moved during construction of the proposed project could be laden with PFAS, which are human-made chemicals that have contaminated the river, the raw drinking water source for tens of thousands of people in the region, for decades. Other possible impacts to communities on both sides of the harbor are increased vehicle traffic transporting containers, noise and land development. For example, land in both Georgia and South Carolina on either side of the Savannah Harbor has experienced a building boom of industrial warehouses since that harbor's expansion project wrapped last year. Between 2019 and 2022, 77 warehouses of various sizes were built in the area around the expansion.	Larger use		-77.9552	34.21871
9		CFRW	Additional Environmental Impacts to be considered	problem	ecological	An potential environmental impact that should be considered is the ballast water that is transported and potentially released when a ships arrives from other parts of call. Especially organisms that entail foreign ports of call and bigger ships, could entail releasing invasive water species and/or microorganisms that affect water quality and the ecology of the river itself.	Castle st		-77.947	34.27802
10		CFRW	Increased Ship Ballast Water Discharge	problem	ecological	If the harbor and river are widened/deepened (respectively) to allow bigger (and more) container ships, this will increase the potential for larger discharges of ballast water into our waterways as these ships discharge such water to take on new cargo.				
11			Impacts to Southport riverfront	problem	property	As far as know, this water is not treated. Especially as such vessels arrive from foreign ports, there is the potential of introducing invasive species or harmful micro-organisms into the surrounding environment that may have an additional negative impact on estuary wildlife and plant life.	Residence		-77.947	34.22802
12			Erosion of Battery Island, bird nesting site	problem	ecological	Increased ship traffic will add to erosion issues that exist at Southport. As a taxpayer in the city I will be expected to pay towards erosion reduction efforts.	E. Bay St. Southport		-78.0186	33.91659
13			Erosion to spoil islands	problem	ecological	Widening channel could make erosion more advanced at Battery Island which is a prime nesting site for Bbbs and other sea birds. Loss of nesting location will negatively impact bird species.	Battery Island		-78.0114	33.91146
14			Risk to historic parkland	problem	cultural	Spoil islands used by sea birds will be at risk for sand loss from increased ship traffic.			-77.9365	33.99913
15			salwater intrusion into marsh	problem	ecological	Brunswick Town the state's oldest known settlement is already losing land due to shoreline erosion. Increased ship traffic and dredging to maintain deeper channel will negatively effect Brunswick Town shoreline.	Brunswick Town		-77.9609	34.14012
16			Loss of river bottom vegetation	problem	ecological	Risk of greater salinity into marsh areas along river. This will cause tree loss and habitat changes that will negatively impact native species.			-77.9692	34.15212
17			The Map of Biodiversity Importance provides a portfolio of maps that identify areas critical to sust	problem	ecological	Removal of river bottom for deepening will impact Endangered Species Act listed shortnose sturgeon and other bottom feeding fish.	Entire length of proje		-77.9271	34.07367
18	hinghamf@uncw.edu	UNCW Wilin	Monitoring needed	other	yes	The lower Cape Fear River is a location that has been identified as extremely rich in species diversity. Species survive in the current conditions. Changes to the geography of the river will change habitat and imperil species.	Entire proposed proje		-78.008	33.87699
19				problem	ecological	It seems like the best way to understand the impact of deepening the Cape Fear River (CFR) would be to look at the previous river deepening project that occurred maybe 15-20 years ago. I think your study should include a large component of looking at the EIS from that previous project, the projected effects within the EIS, and whether they came true or not. The thing that concerns me about the harbor deepening is that there does not seem to be a plan to continuously monitor the river and its environment before, during and after the project. If you decide the deepening will have a given set of impacts, what will be done to measure them and verify (or not) your projections? I am particularly concerned about the salinity in the river. One gets the sense that it has been increasing over the years. The ghost forests one sees from US 74 going over to Leland is a sign of this. However, I can see nowhere that anyone has actually measured this change in a useful way. The Lower Cape Fear River Program samples the river, and measures salinity, but it does so monthly, and monthly sampling is nearly useless for determining long-term changes in such a rapidly-varying quantity. Does the ACDE measure salinity at its dock across from the port? Does the Port measure it? I would think it would be crucial information for docking container ships? Anyone else? How can you even know what the impact on salinity might be if no one is currently measuring it, i.e. there is no baseline? Going back to the EIS for the previous deepening project, I understand that study predicted that the river would get fresher as a result. Is this true? If so, why did that study get this aspect so wrong? Or do we even know enough to decide if it was wrong or not?			-77.956	34.19463
20		property	waterfront skirt	problem	property	The increased ship traffic has & will negatively impact the marsh habitat, cause erosion to the shoreline, & potentially damage private & public bulkheads. I am aware of recent discussions regarding a protective living shoreline. This project needs to be prioritized and in place before increasing the amount of ship traffic to this waterway in order to protect the safety of the environment, residents, & infrastructure.	Southport	Prioritize	-78.0145	33.91836
21		Cape Fear		problem	ecological	Good Morning, I am a property owner on the waterfront of Southport. I have resided here since 1997 and have seen significant erosion on the water over the past 25 years. A test project was done 4 years to the north ago. 15 years ago where a stone skirt was placed at mean high water. The land in that area has grown in height and marsh grass, while all other land North and South have severely eroded. Pictures and compressions of these two will show how a skirt can positively effect our waterfront. Roads, sidewalks, bulkheads and docks are all being destroyed at high rate all along the Southport waterfront. I encourage the to come to my property and look at the difference between the skirted and unskirted property and results. Please consider skirting Southport's waterfront. Thank You.	314 E Bay	Onsite vis	-78.0132	33.91919
22		Concerned	Erosion from vessel traffic	problem	ecological	Our region is already significantly impacted by the previous Cape Fear dredging done to enhance and maintain commercial shipping. One only needs to go above Wilmington on the NE Cape Fear to see this in the dead vegetation. The less visible effects on fish habitation and fresh water marshes are even more serious. Further dredging will increase these effects geometrically. This project is yet to establish a clear case of need which is certainly required before moving forward with even more ecological damage. Please heed the environmental warnings and require that any economic need clearly outweigh this irreversible damage.	Cape Fear River harbo		-77.9496	34.28004
23		CFRW	Wilmington Harbor Expansion	resource	wq	I notice eroding wetlands along the river even with current boat sizes. If we make the channel deeper for bigger boats, the erosion will get worse and we'll lose all the marginal wetlands on the cape fear river. Go down to Brunswicktown and see for yourself. This is a major issue that the government needs to mitigate for or we lose these important environments forever. Unless the government hates wetlands in their estuaries, because that's what we will have!!! This expansion would impact every living thing in and around the river. It is not worth the impact of degrading our water, killing aquatic species, trees and other vegetative buffers along the river. Wilmington can't handle the increased tides. Brunswick County gets its water from source beneath the river. Dredging might remove the limestone dome over the Fresh water. This project is just too dangerous for all.	Shoreline	Yes	-77.9434	34.03913
24		Resident	Protect the Lower Cape Fear River	problem	ecological	I got these talking points from the NC Coastal Federation, but I agree with all of them very strongly. Deepening and widening the Federal ship channel will: Negatively impact fish and wildlife habitats including threatened and endangered species and marine mammals; Degrade water and air quality; Increase flooding; Cause more saltwater to intrude further up the river; Increase wetland and shoreline erosion along the river and on adjacent oceanfront beaches. Produce larger wakes, increasing already significant shoreline erosion. Result in more vessel strikes of turtles, mammals, and fish. Degrade fishery and bird habitats associated with estuarine islands, shoals and mudflats that provide essential bird resting and foraging habitats. Natural attributes of the river that need protecting include: Barrier islands, tidal creeks, and marsh ecosystems teeming with wildlife. Fish habitats, vital to our state's economy, provide for a variety of species. "Primary nursery areas" where post larval and juvenile development of young finfish and crustaceans takes place, and the lower river is also designated as critical habitat for the federally endangered Atlantic sturgeon, which can live up to sixty years and travels upriver to spawn. Nesting grounds for federally protected sea turtles, and within the river, sandy shorelines, shell rakes, and marsh edges are nesting sites for state-listed diamondback terrapins. Thousands of shorebirds stop over during spring and fall migration and to overwinter. Over 25% of the State's coastal waterbirds depend on the Lower Cape Fear River region for nesting. Water quality will degrade because of contamination and sedimentation from dredge material disposal. The impact of deepening and widening the Cape Fear River based on a 2018 study by the Port of Wilmington will be environmentally devastating. Public opinion has changed since 2018.	Wilmington Harbor		-77.9885	34.29092
25				problem	ecological		Cape Fear	Post your	-77.9178	34.19391

						<p>Deepening and widening the Federal ship channel will:</p> <p>Negatively impact fish and wildlife habitats including threatened and endangered species and marine mammals;</p> <p>Degrade water and air quality;</p> <p>Increase flooding as more water can surge up the river during hurricanes and other extreme weather events;</p> <p>Cause more saltwater to intrude further up the river, changing salinity and killing trees;</p> <p>Increase wetland and shoreline erosion along the river and on adjacent oceanfront beaches. Long-term erosion trends along both Bald Head and Oak Islands have already been attributed to modifications to the ship channel. More deepening and widening of the channel, "softening" river bends, and extending the channel seaward would likely affect wave energy and sediment dynamics of the entire region. Produce larger wakes from bigger and more numerous ships which will increase already significant shoreline erosion.</p> <p>Result in more vessel strikes of turtles, mammals, and fish, and it's important to examine the impacts that increased erosion and shoreline hardening may have on sea turtle and bird nesting habits.</p> <p>Degrade fishery and bird habitats associated with estuarine islands, shoals and mudflats that provide essential bird resting and foraging habitats.</p> <p>Natural attributes of the river that need protecting include:</p> <p>Spectacular barrier islands, tidal creeks, and marsh ecosystems teaming with wildlife. Fish habitats, vital to our state's economy, provide for a variety of species, including red drum, mackerel, cobia, bluefish, flounder, shrimp, ten shark species, and over fifty snapper-groupers species.</p> <p>"Primary nursery area" where post larval and juvenile development of young flounder and crustaceans takes place, and the lower river is also designated as critical habitat for the federally endangered Atlantic sturgeon, which can live up to sixty years and travels upriver to spawn.</p> <p>Turtles are commonly found near the Wilmington Port, and neighboring Caswell Beach and Bald Head Island are</p> <p>Increasing the channel depth in the Cape Fear will surely increase an already existing erosion problem. Greed is the only possible reason to even consider this.</p>	Lower Cape Fear	-75.5298	39.71548
26		citizen	port deepening proposal	other					
27		Resident	Southport resident	problem	ei				
28				problem	ecological	<p>I strongly oppose the deepening and widening of the Port of Wilmington's river channel. Environmentally this will likely result in increased erosion and degrade fish and wildlife habitats. With increased sea level rise a certainty due to climate change, it makes no sense to deepen the channel. From Southport to downtown Wilmington, we have already seen an increase in number of flooding tides. The Battleship NC has seen nearly 1,000 flooding incidents in the past 10 years, leading to a 4.1/2 million dollar investment to protect the ship and its grounds. Downtown Wilmington, an economic engine to our city, has continuous flooding issues and deepening the channel will only add to the city's problems. While the ports are certainly a plus for our local economy, it is likely that any monetary benefits that come from accommodating larger container ships will be offset by the dollars spent to protect properties from the increased flooding due to the deepening. While deepening the channel will benefit the ports, it will be a negative for the overall local economy (a tourist-based economy) and the river environment that is home to an incredibly diverse number of species.</p>	Wilmington river cha	-77.9535	34.23362
29			Wilmington Harbor Navigation Improvement Project	resource	nega	<p>I am writing regarding the proposed Wilmington Harbor Navigation Improvement Project.</p> <p>Many elements of this proposed project would directly conflict with long term conservation efforts within the Lower Cape Fear River watershed, so considerable caution and meticulous oversight are warranted before proceeding with such a project. The process under which the feasibility study on this project was developed has been wholly insufficient to comply with Federal laws and regulations, as is detailed extensively in the comments submitted by the North Carolina Coastal Federation. A decision on this project cannot be made until thorough and proper analysis has been done, including full public involvement. There's a reason we have a policy in place for guidelines and procedure for such projects, and we count on you to ensure that policy is followed. Thanks for all the good work you do!</p>		-77.9517	34.24128
30	jaddison@audubon.org	Audubon	Shorebird roosting	resource	ecological	<p>This robust emergent shoal system provides high-tide roosting habitat for flocks of >3,000 long-distance migrants, including Red Knots. Other shorebird species that occur in numbers >200 include Short-billed Dowitcher, Semipalmated Sandpiper, Western Sandpiper, Dunlin, and Black-bellied Plover. At low tide, the same species will forage on the mudflats.</p> <p>The shoals accrete and erode periodically, and are attracting more roosting activity with the erosion of other sites. Therefore, roosting habitat is a valuable and important resource for migratory shorebirds on the LCFR. Retaining sediment in the area to allow for shoal formation is important.</p>	soils SE of Battery Is	-78.0116	33.90267
31	jaddison@audubon.org	Audubon	Shorebird nesting and roosting	opportun	ecological	<p>This severely eroded beach (called Middle Beach by Bald Head Island Conservancy Staff) is roosting and nesting habitat for migratory shorebirds. In recent years, it has become too low and too frequently flooded to support nesting. It used to have up to four pairs of American Oystercatchers and several pairs of Wilson's Plovers. Flocks of roosting long-distance migrant shorebirds have also decreased in size as the habitat quality has declined.</p> <p>Shorebird species that use it for roosting during the non-breeding and migratory seasons include Red knot, American Oystercatcher, Short-billed Dowitcher, Semipalmated Sandpiper, Western Sandpiper, Dunlin, and Black-bellied Plover.</p> <p>An opportunity exists to restore this habitat, which would not only return roosting nesting habitat, but protect the marsh which is receding as the sand fronting it is no longer there.</p>	Middle Beach (near	-77.9908	33.88632
32	jaddison@audubon.org	Audubon	American Oystercatcher nesting habitat - Southport-adjacent Marsh	resource	ecological	<p>About 25% of North Carolina's breeding population of American Oystercatchers nest on the LCFR. The pairs that nest on the shell rakes and sandy marsh shorelines in this area are subject to overwash from king tides, storms--and ship wakes. Widening the river 100-300' in this area and increasing either the tonnage or frequency of ships calling on the port will increase the frequency of nest loss due to overwash, as well as increase erosion to the marsh shoreline. Large tidal wave-type displacement wakes hit this shoreline every time a ship passes. Wave height as well as run-up wipe out nests.</p> <p>In addition to nesting habitat for oystercatchers, the saltmarsh here supports other avian species, including the Seaside Sparrow and the Clapper Rail, as well as provides nursery habitat for many taxa of marine life, including commercial and recreationally fished species.</p> <p>The 2000 EIS did not capture these impacts, which have been impacting the marsh and birds nesting in it for over 20 years, making it doubly important that the new EIS consider these effects.</p>		-78.0293	33.90685
33		Federal	Loss of Property and wildlife; increase in flooding; River Contamination from Ships	problem	economic	<p>We have lived on River Road on the river side since 2000. Over the 23 years we have seen and documented through photos the damage caused by larger and larger ships being allowed to come to the Wilmington port. For instance, clams and sand crabs had rgn colonies on the river banks. They are no longer on the shore because large ships cause huge waves and destroy the river banks and wash away. With crabs gone, there are less herons and egrets. This wave action from the ships also take away grasses and sand banks. We have lost property and our steps to our pier have had to be moved back. This is a loss of property and is becoming costly to us and anyone along the river. Our Marsh use to have dry periods. It now is wet all year long. Especially since the last dredge operations. Flooding has increased. We built close to the road on high ground. However since the last dredge for larger ships normal high tides in the fall are coming closer and closer to our home. This didn't happen until the last couple of dredges. I priority is again given to the port, homes that never flooded before will be flooded and lost of homes will occur. Insurance companies are already pulling out of other states. Homeowners will not be able to acquire insurance to replace their homes and/or repair damage. Gov. Flood insurance will not be able to cover all the costs. There are so concerns that need to be addressed with this continued dredging. That includes the problem we already have with sea level rise. Why is the Corps considering increasing the flooding problem? The other concern with allowing larger ships should be the probabilities of a ship accident occurring on the river. What contingencies are being addressed for a oil, fuel or cargo spill or loss? Finally, I have many concerns, but we have found evidence of invasive species while catching bait in the river. The species we caught are not usually found in this area. So ship ballast is already creating havoc with the native species.</p>	3 acres on	-77.9217	34.08017
34		Resident	Economic Advantage Outweighs Minor Eco Impacts	opportun	economic	<p>I believe that this project will continue to add to the economic diversity of the Cape Fear Region. Allowing the ease of passage for such a strong economic advantage will continue to allow us the growth of tax base to be able to support the mitigating and ecological projects that we all want. This looks like a big project but on scale to the river itself, the ecological impact appears to be minor.</p>	Port of W	-77.9502	34.19117
35	jaddison@audubon.org	Audubon	Battery Island	problem	ecological	<p>Battery Island is a globally significant Important Bird Area, home to as many as 14,000 pairs of White Ibis and over 1,000 pairs of other wading bird species. Its mature tree thickets are unusual in estuarine islands in North Carolina and are what attract most of the nesting birds. The marshes on its eastern side are home to additional nesting species, including Seaside Sparrows. Wakes from passing ships contribute to direct loss of nests from overwash and to erosion along its shoreline. A 2017 shoreline change analysis found erosion is most acute along the western and southwestern shores. Though birds nest along the entire sandy shoreline, it's notable that the large wading bird colony is located on that same southwestern shoreline. Mature cedar trees regularly fall into the water or die of saltwater intruding into their root systems.</p> <p>The proposed deepening of the channel will exacerbate these problems. Additionally, the channel is proposed to be significantly widened in the area as well, which will further worsen erosion and make shoreline protection on Battery--as well as Southport--more difficult.</p> <p>The 2000 EIS failed to capture these impacts (among many others) and that failure has led to over 20 years of unmitigated impacts to one of the largest wading bird colonies in North Carolina. A far more considered approach is needed this time, especially as the largest ships are already calling at the port today, without any further dredging in the area.</p>	Battery Island	-78.0097	33.91011
36	jaddison@audubon.org	Audubon	Striking Island	resource	ecological	<p>Striking Island is a state-significant Important Bird Area for a variety of species, including the American Oystercatcher. Although it is not located adjacent to the navigational channel, wakes from the larger post-Panamax ships are now affecting its shoreline, with large waves causing run-up into nesting areas and exacerbating erosion along its marsh shoreline. We observe this directly when boating around the island during our regular monitoring work.</p>	Striking Island	-77.9954	33.90789
37	jaddison@audubon.org	Audubon	Shelbird Island	resource	ecological	<p>Shelbird Island is part of the state-significant Important Bird Area called Bald Head Smith Island for a variety of species, including the American Oystercatcher. Although it is not located adjacent to the navigational channel, wakes from the larger post-Panamax ships are now affecting its shoreline, with large waves causing run-up into nesting areas and exacerbating erosion along its marsh shoreline. We observe this directly when boating around the island during our regular monitoring work.</p>	Shelbird Island	-77.9799	33.91745
38	jaddison@audubon.org	Audubon	South Pelican Island	problem	ecological	<p>South Pelican Island is an Important Bird Area for a variety of species, including the American Oystercatcher, Brown Pelican, and Royal and Sandwich Terns. It is one of only five or six sites in the state where Royal and Sandwich Terns nest and typically hosts about 20-30% of the state's population of these species.</p> <p>The island is impacted by ship wakes, which exacerbate erosion and cause direct nest loss when waves and run-up flood nests or sweep away small chicks. Additional ships or heavier ships will worsen these effects.</p>	South Pelican Island	-77.9733	33.9361
39	jaddison@audubon.org	Audubon	Wave impacts to the Rocks	resource	ecological	<p>The Fort Fisher rocks are a historic rock wall installed in the late 1800s to the north and south of Zek's Island (this point is on the south rocks). They provide substrate for shellfish and as such are one of the primary foraging areas for American Oystercatchers. 25% of the state's breeding population nests on the Cape Fear River, and it is also one of the largest wintering site for oystercatchers as well. Additionally, thousands of migratory shorebirds stop over or winter in the LCFR and roost on the rocks.</p> <p>It's unknown how wakes from more or heavier ships will affect the integrity of the rock structure and what impacts from any changes might be, but they are a unique ecological and historical feature of the LCFR.</p>	The Rocks - linear st	-77.9558	33.93283
40	jaddison@audubon.org	Audubon	Ferry Slip Island	problem	ecological	<p>Ferry Slip Island is an Important Bird Area for a variety of species, including the American Oystercatcher, Brown Pelican, and Royal and Sandwich Terns. It is one of only five or six sites in the state where Royal and Sandwich Terns nest and is also one of the most productive islands for American Oystercatchers on the LCFR.</p> <p>The island is impacted by ship wakes, which exacerbate erosion and cause direct nest loss when waves and run-up flood nests or sweep away small chicks. Additional ships or heavier ships will worsen these effects. Additionally, the larger ships (Yang Ming size and up) cause refraction of the Federal Point shoreline back onto the eastern side of Ferry Slip, so it is struck from all sides by ship wakes.</p>	Ferry Slip Island	-77.9415	33.97313
41	jaddison@audubon.org	Audubon	Federal Point shoreline	resource	ecological	<p>With the advent of ships the size of the Yang Ming and larger calling on the port, we began to see a new phenomenon where significant wakes would crash past Ferry Slip Island, make their way all the way to the mainland shoreline, and then refract off of them back westward onto Ferry Slip Island. The mainland is narrow in this bay and the bay itself has some anemone oyster reefs in it. Increase wave energy could affect the marsh shoreline as well as the suitability of the area for oysters.</p>	Mainland shoreline o	-77.9224	33.97149
42	jaddison@audubon.org	Audubon	No Name Island	problem	ecological	<p>This small island hosts up to two pairs of American Oystercatchers and a handful of other nesting species, including Willets and Laughing Gulls.</p> <p>The island is impacted by ship wakes, which exacerbate erosion and cause direct nest loss when waves and run-up flood nests or sweep away small chicks. Additional ships or heavier ships will worsen these effects.</p> <p>Sites like these have the potential for bird and marsh habitat creation as well, if they were expanded. However, design would need to take into consideration even the current ship wake regime.</p>	Unnamed island bet	-77.9403	33.9838

						North Pelican Island is an important Bird Area for a variety of species, including the American Oystercatcher, Brown Pelican, and several wading bird species such as the Tricolored Heron and Glossy Ibis. The wading birds and pelicans nest in the marsh, in four main areas where historical dredge deposits created enough elevation to support shrub thickets of cedar, marsh elder, and other salt tolerant plants.				
43	laddison@audubon.org	Audubon	North Pelican Island	problem	ecological	The island is impacted by ship wakes, which exacerbate erosion and cause direct nest loss when waves and run-up flood nests or sweep away small chicks. Additional ships or heavier ships will worsen these effects.	North Pelican Island	-77.9351	33.99704	
44	laddison@audubon.org	Audubon	Diamondback Terrapin nesting	resource	ecological	Diamondback Terrapins nest throughout the LCFR on dredge and marsh islands. We see them every place where we monitor nesting birds, that is to say, on the entire river system from North North Pelican Island south to Battery Island. Their nests are distinctive conical depressions in the substrate, and they nest both in sand and on shell piles. We see hundreds of nests annually in these habitats. Exacerbated erosion from more frequent and more extreme ship wakes overwash these areas (direct impacts) and over time erode away suitable nesting habitat (indirect impacts).	Marshes and dredge	-77.9811	33.90776	
45	laddison@audubon.org	Audubon	North North Pelican Island	problem	ecological	North North Pelican Island (the two small islands north or larger North Pelican Island) hosts a variety of species, including the Seaside Sparrow, American Oystercatcher, Brown Pelican, and Great Egret. The island is impacted by ship wakes, which exacerbate erosion and cause direct nest loss when waves and run-up flood nests or sweep away small chicks. Additional ships or heavier ships will worsen these effects. We already have seen significant loss of habitat on this island, resulting in much smaller pelican and egret colonies in recent years. Pelican nests can already be seen from a distance being hit by tall standing wakes as they come ashore onto the island. As with all impacts to islands on the LCFR, these effects were not well captured in the 2000 EIS and nothing has been done to address them in the years since.	North North Pelican	-77.9335	34.00793	
46	laddison@audubon.org	Audubon	Tricolor Island	resource	ecological	This island, which has no official name, but has this name in the NCRWC Colonial Waterbird Database, is the northernmost of the current bird nesting islands on the LCFR. It's primarily a spartina marsh, with small numbers of waterbirds such as Tricolored Herons, Laughing Gulls, and Clapper Rails on it. Like all of the river islands, it stands to see more erosion and more flooding from heavier ships or more frequent port calls.	Tricolor Island	-77.9309	34.01888	
47			Rejection of widening the shipping channel	problem	ej	As a citizen of Wilmington I reject the findings of the 203 study to widen and deepen the shipping channel. The negative impacts of this environmental impact will put every resident at harm through the degradation of water and air quality, as well as jeopardize the surrounding ecosystems, including trees and fish/marine mammals. Furthermore, the possibility of increased flooding is very concerning as a property owner. We must prioritize the needs of our environment if we want to preserve the rich beauty we have in our community.	Carolina P Social Me	-77.946	34.23497	
48						Please do not move forward with the proposal. NC Coastal Federation outline multiple ecological and marine life impacts of further widening and deepening the Cape Fear. They cannot be ignored. I have lived in this area most of my life and my family has been here since we were brought here as slaves. This project impacts me but it also impacts transplants, tourists, and whoever else visits the area. The Cape Fear and it's surrounding beaches, tidal creeks, and marine estuaries are resources for all locals and tourists to enjoy. They are the main reason people are attracted to the area. It is our responsibility as stewards of conservation to ensure those resources are protected for future generations of residents and guests. The Cape Fear is critical to the culture and heritage of all people here. While increased freight traffic may be good for certain segments of our local industry and job market, our coastal resources are the backbone of our economy. Real estate, construction, golf, tourism, food/entertainment, and many other segments rely on healthy marine resources to attract tourists and homebuyers. I will not dive deeper into the Coastal Federation's marine life concerns as they are more knowledgeable than I and presented them better than I can. I will say those potential impacts are of high concern to me, especially the concern for any damage to Atlantic Sturgeon habitat. There are not many places in the world that has healthier populations of Atlantic Sturgeon than the lower Cape Fear. An animal that is on the brink of extinction in many habitats is so numerous on the Cape Fear that I've seen at least one breaking the top water almost everytime that I've been on the Cape Fear or it's surrounding estuaries in a vessel.	Rocky Poi Leverage	-77.7831	34.40436	
49			Please do not move forward with the proposal	resource	ecological	Please consider the impact of this port dredging project on the Wilmington area colonial waterbird colonies on the low lying islands in the Cape Fear River in Audubon Society sanctuaries. They house 25 percent of NC coastal nesting waterbirds, nearly all being state-listed species of concern. These islands are already subject to erosion from wave energy and this project has the potential to drastically increase the wave energy and associated erosion on the islands. Please work to mitigate the effects of this project on these important nesting islands.	Port of W Project Ne	-77.9492	34.23275	
50		NC citizen	Wilmington Coastal Bird Colonies	resource	ecological	Thank you.				
51	curtis.smalling@audubon.org	Audubon	Important Bird Areas of the LCFR	resource	ecological	While we are submitting extensive formal comments on the bird islands impacted by this project, it is also important to note that other resources onshore of the river are also critical habitat for birds and other taxa. Locations like Eagles Island and mainland associated forests and wetlands provide critical habitats. For birds in particular, places to feed and rest during migration are often concentrated along riparian zones. These natural areas also provide space for the conversion of forests and wetlands to marsh complexes in the face of sea level rise, and they are limited in scope along the river. The effects of sea level intrusion, wave energy and other factors should be considered for the channel adjacent mainland as well as the flagship nesting islands and marshes which occur within the river channel.	project area extent	-77.9631	34.19107	
52		Cape Fear	Effects of Subsidence, Erosion and Sea Level Rise on the Wetland Communities of the CFR Estuary	problem	ecological	Please see my comments attached	Cape Fear Frequent	-77.9792	34.2427	
53						Erosion of Bald Head Island (BHI) beaches and sediment movement from east to west (from BHI's south and west beaches to the river channel) were severely underestimated during the 2000 channel realignment. Sediment fluxes along BHI's incredibly dynamic south and west beaches need to be carefully measured, and a fine-scale 3D model of sediment movement at the river mouth should be constructed, using current and location-specific data. This is a complex and vulnerable area and great care should be taken to be as accurate as possible with predicted impacts. Further impacts of erosion include: * Loss of beach nesting habitat for listed species of concern, including Loggerhead, Green, and Kemp's Ridley sea turtles, and shorebirds such as least Terns, American Oystercatchers, and Wilson's Plovers. Tides/storms have been the largest threats to BHI sea turtle nests over the past 5 years, and these impacts are also expected to increase with climate change and sea level rise. * Impacts of erosion and beach loss to individual home and business owners and the local and state economy * Increasing vulnerability of barrier islands (BHI, Oak Island) and other coastal communities to climate change related sea level rise and predicted increased storminess * Impacts of erosion and sediment dynamics on back-barrier creeks and marshes, including tidal flushing and water quality				
54	darrow@bhic.org	Bald Head	Impacts of channel deepening to sediment dynamics at the river mouth	resource	ecological	A location-specific 3D model of aquifer surface water dynamics should be created, including scenarios for channel deepening/widening at different potential depths, and the impacts of sea level rise. This model should include impacts to the Castle Hayne aquifer, but also interactions with specific semi-confined aquifers on barrier islands. Model should also include scenarios for changes to riverine tides and salinity that will result from changes to hydrogeography. Saltwater intrusion is already occurring on BHI's west and south beaches. Further encroachment of salinity caused by channel deepening/widening will reduce the size of BHI's only freshwater source to island ecosystems.	Cape Fear Increased	-78.0125	33.86908	
55	darrow@bhic.org	Bald Head	Impacts of channel deepening to the freshwater aquifer	resource	eq	Saltwater intrusion is already occurring on BHI's west and south beaches. Further encroachment of salinity caused by channel deepening/widening will reduce the size of BHI's only freshwater source to island ecosystems BHI's maritime forest (Bald Head Woods Coastal Reserve) is fed by this aquifer, is the second-largest maritime forest in the state, is considered a globally-imperiled forest subtype, and is protected by the NC Natural Heritage Program. Several listed plant species are found on BHI.	Bald Head Attend V	-78.0068	33.86754	
56	darrow@bhic.org	Bald Head	Bald Head Island maritime forest	resource	ecological	Saltwater intrusion is already occurring on BHI's west and south beaches. Further encroachment of salinity caused by channel deepening/widening will reduce the size of BHI's only freshwater source to island ecosystems and the public.	Bald Head Local me	-77.9858	33.85611	
57	darrow@bhic.org	Bald Head	Loss of drinking water source	resource	social	Loss of a drinking water resource to the public. Most of BHI's drinking water is groundwater-derived. The Village of BHI has invested in careful environmental monitoring and study of responsible water use to not impact natural resources on the island.	Bald Head Village of	-77.9855	33.85764	
58	darrow@bhic.org	Bald Head	Threats to Bald Head Island aquifer: freshwater wildlife habitat	resource	ecological	Channel deepening/widening could cause loss of/salinization of freshwater wildlife habitat through impacts to the Bald Head Island aquifer. The freshwater ponds and lagoons fed by the aquifer are home to one of the largest breeding populations of protected American alligators in the state, and also provide important roosting and feeding grounds for a variety of waterbird species.	Bald Head Village of	-78	33.86092	
59	darrow@bhic.org	Bald Head	Increased channel maintenance dredging: wildlife impacts	resource	ecological	Impacts of dredging and increased shipping on wildlife and fisheries. The initial impacts of increasing channel depth and width will be substantial. It is currently unknown how often channel maintenance dredging will occur, but we expect that it will need to occur more often and for longer periods than currently. Already, channel maintenance dredging kills or injures numerous sea turtles and shorebirds each year. BHI Conservancy leads emergency wildlife response on the island, and we spend hundreds of hours each year transporting and providing care for animals hit by boats or caught in dredging equipment (those that survive the initial injury). These animals are also cared for by nonprofit organizations such as Sea Biscuit Wildlife Shelter and the Karen Beasley Sea Turtle Hospital, who rely solely on donations for support. The lights and noise from dredging equipment can disturb and change behavior of foraging and nesting sea turtles. We have observed this directly causing false crawls and misorientation of emerging hatchlings. Dredging has immediate impacts on the benthic environment, including benthic invertebrates that provide the forage base for sea turtles and important fisheries species. Increasing the magnitude, geographic scale, and frequency of this dredging will have longer-lasting effects throughout the food chain, and impacts on the fisheries economy in the Cape Fear watershed.	Cape Fear Social me	-78.0097	33.87224	
60	darrow@bhic.org	Bald Head	Erosion, flooding, and salinization impacts to marshes and wetlands	resource	ecological	Impacts throughout the Cape Fear River and watershed. The Port of Wilmington is 28 miles from the Atlantic Ocean, which is 28 miles of direct impact to the river. Other regional ports such as Savannah (18 miles) and Charleston (5.5 miles) have shorter distances to the open sea. The scale of hydrodynamic impacts of a project of this size cannot be underestimated. Our concerns include: Erosion, flooding, and salinization impacts to marshes and wetlands, including the Bald Head Island/Smith Island Complex. Eroding marshes bordering developed areas will have no space to migrate, and marsh loss due to sea level rise may be accelerated. Marshes provide buffer to storm surge, habitat to wildlife and fisheries species, water filtration, and carbon sequestration benefits. Channel deepening and widening will cause increased flooding impacts to vulnerable areas and populations which have already been stressed by Hurricane Florence, PFAS contamination, and are not fully recovered (e.g., residential areas in downtown Wilmington and Brunswick County, wastewater treatment facilities).	Bald Head Island Nat	-77.9796	33.88221	
61	darrow@bhic.org	Bald Head	Increased flooding impacts to vulnerable areas and populations	problem	ej	New 3D models need to be developed for sediment transport and hydrodynamics, especially of the Cape Fear mouth. These should be done by outside experts and be independent of the 203 process. Data feeding into these models needs to be location specific and recent. Shorelines are incredibly dynamic and feeding incorrect data into models is "garbage in, garbage out."	Downtown Willingm	-77.9493	34.23295	
62	darrow@bhic.org	Bald Head	Use recent and location-specific data	opportunity	ecological	As a Wilmington resident, I am already concerned about the pace of development, loss of green space, and lack of infrastructure planning in our small community. Wilmington is an peninsula, which means that there is a lack of land availability for outward expansion with development. This means that any development fills in the existing community's footprint by removing forests, filling in wetlands, and changing the character of the community. I am not interested in increasing the number of trucks, trains, and warehouses in our small downtown and shipyard area. The distance from the port to the open ocean is 28 miles, which is much longer than ports like Savannah and Charleston. Surely the USACE can focus its resources on these existing deepwater ports for the fully-laden post-Panamax ships. Our community is already stressed from the threats of hurricanes (residents still dealing with mold-filled homes from Florence), PFAS pollution, and residential development/genitification pressures. I think that you should make a better effort to reach the residents who live along the river and downtown to see what they think about increasing the traffic, flooding, impervious surfaces, and water and air pollution in their community. Who really benefits from this? I do not think that our local community will.	River mnu Contact U	-78.0074	33.87917	
63		None	Look for alternatives	opportunity	ad		Wilmington Please fo	-77.9501	34.23506	

Voice memo transcript:

Yeah, hi. You were advertising taking comments about deepening the channel in the Cape Fear River so you can get larger ships in I am assuming. And I have some comments on that. I think you're probably got bigger ships in there now than you need but I know it's a port and they're trying to make money. But the destruction to the shoreline and river with these massive wakes that come off is just going to destroy more of the ecology of the river. Already the trees are all dead in the marshlands, up the river, up the creeks and tributaries. So anyway, if I need to make an official writing or something like that call me back [REDACTED]. I am here in Wilmington, in fact I live on the river, so I see firsthand what these ships do when they come up. Talk to you later. Bye