

Orton Plantation Holdings, LLC

October 31, 2025

Submitted via Fed Ex and Electronically

US Army Corps of Engineers
Wilmington Corps
ATTN: Wilmington Harbor 403
69 Darlington Avenue
Wilmington, NC 28403
WilmingtonHarbor403@usace.army.mil

Dear U.S. Army Corps of Engineers,

Orton Plantation Holdings, LLC ("Orton") respectfully submits these comments on the Section 403 Draft Letter Report and Draft Environmental Impact Statement (collectively, the "Draft EIS" or "DEIS") prepared by the Army Corps of Engineers, Wilmington District (the "Corps") for the Wilmington Harbor Navigation Project, CEQ ID EISX-202-00-K7P-1755163795 (the "Project"). Please add these comments to the administrative record for the Project.

ORTON'S INTEREST IN THE PROJECT

Orton owns the Orton Property, located on the western shore of the Cape Fear River, just north of the historic Brunswick Town. Orton Point sits at the eastern edge of the Property.

The Orton Property is widely regarded as one of the River's most historically significant and intact sites. Founded by Roger Moore in the early 1720s, Orton anchored the first wave of settlement associated with nearby Brunswick Town. The Property predates North Carolina's statehood by more than half a century.

Today, the Orton Property is approximately 14,000 acres, with over 830 acres of the Orton Property listed on the National Register of Historic Places ("NRHP"). The NRHP Boundary includes historic freshwater wetlands, rice fields, a historic system of dikes, revetments and water control structures, and extends 500 feet into the Cape Fear River to protect underwater archeological resources. Orton's restoration and protection of the historic rice field system, the dike and the water control systems recognize and honor the important cultural history of enslaved African Americans working in the antebellum and postbellum period in the South, and whose backbreaking labor created these structures previous to the era of modern machinery. Orton continues to actively support ongoing archaeological field work and research with the University of North Carolina Wilmington into the cultural importance and heritage of enslaved African Americans working in the antebellum and postbellum freshwater wetland rice fields.

I purchased the Orton Property in 2010. I am a lineal descendant of Roger Moore, the founder of the Orton Property. Through Orton Plantation Holdings, LLC, I

have endeavored to protect, preserve, enhance, and restore the Property and its significant cultural, historic, and environmental resources. I take seriously my role as custodian of the Orton Property's rich cultural, historic, and natural heritage.

In 2012, at Orton's request, the Corps authorized Orton to undertake a comprehensive restoration project at the Property. Orton invested more than \$29 million, and significant time and resources over the last fifteen years, to restore 350 acres of the last-remaining, fully intact rice field system in North Carolina, and the historic earthen dike, revetments, and water control structures that protect and support the rice fields. Orton restored and repaired about 6,800 feet of earthen dike, protected about 2,000 feet of the shoreline with a rip-rap revetment, and restored and repaired 13 water control structures.

That work restored and preserved the earthen dike structure along the Cape Fear River front that has been in place since the 1700s, and restored over 350 acres of historically significant rice fields.¹ Orton preserved 187.5 acres of high-quality freshwater wetlands through the grant of a conservation easement to the North Carolina Coastal Land Trust, irrevocably transferring some of its property rights in furtherance of the Corps'-approved restoration plan. In addition to the restoration cost, Orton has incurred more than \$5 million to maintain the unique and historic rice fields built by enslaved African Americans over 150 years ago.

Orton has a direct and substantial interest in the Project and its consequences. The Project threatens to damage the Orton Property, the listed cultural and historic resources at the Property, and Orton's significant investment in the preservation, restoration, and protection of those resources. Binding Corps policy requires that the agency conduct detailed, site-specific geotechnical analyses to ensure the dredging will not compromise shoreline stability or critical infrastructure, such as the Orton dike. The Corps has ignored that policy, and ignored the adverse impacts of the Project on the Orton Property.

The maps on the following pages show that Project dredging will occur inside the NRHP Boundary for the Property and adjacent to the listed historic dike at the Orton Property.

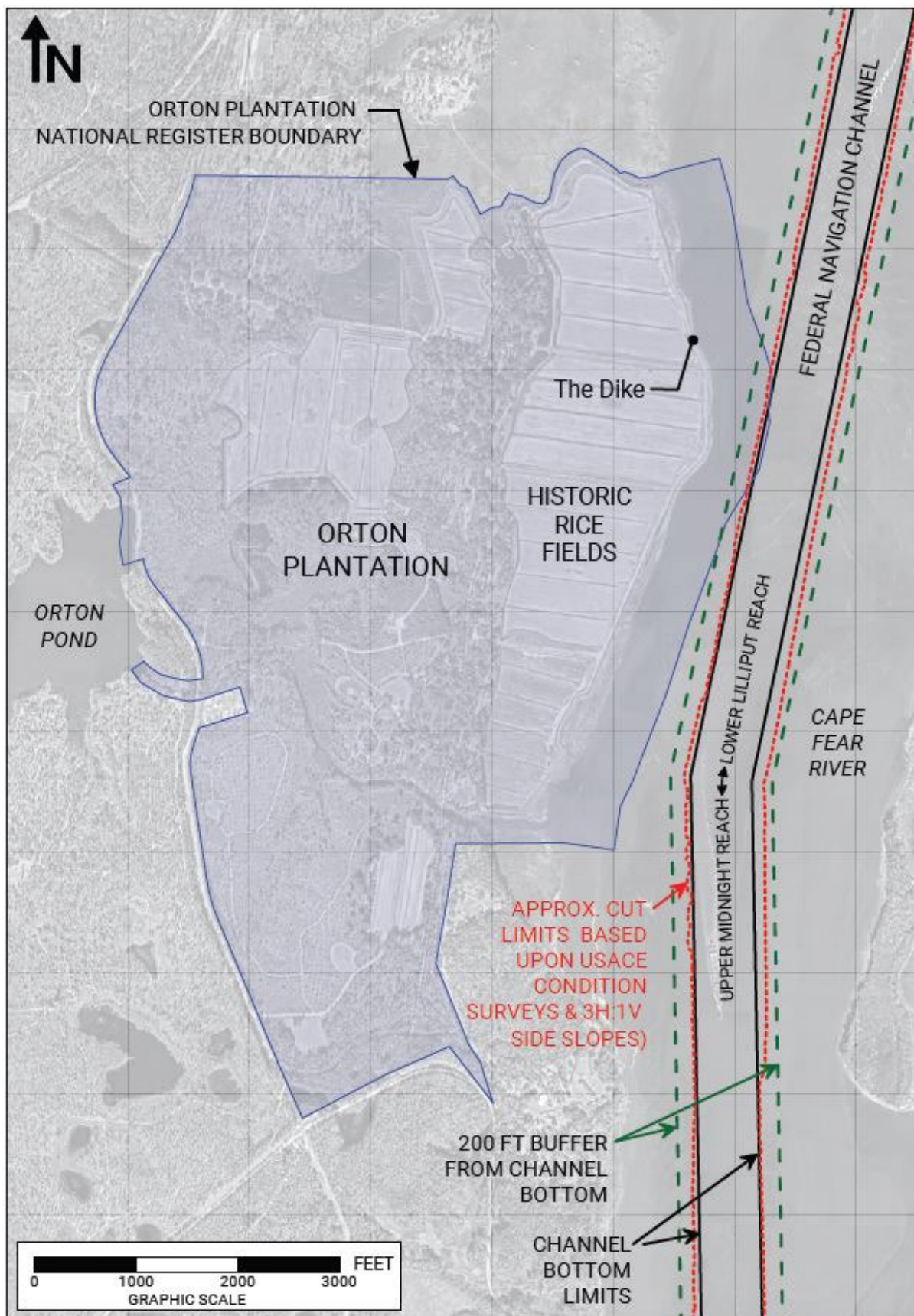
Readily available geotechnical data demonstrates that the Corps' proposal to dredge in proximity to the historic earthen dike creates an unacceptable risk of global failure of the dike. Failure of the dike will necessarily result in a collapse of the historic rice fields and the freshwater ecological system at Orton.

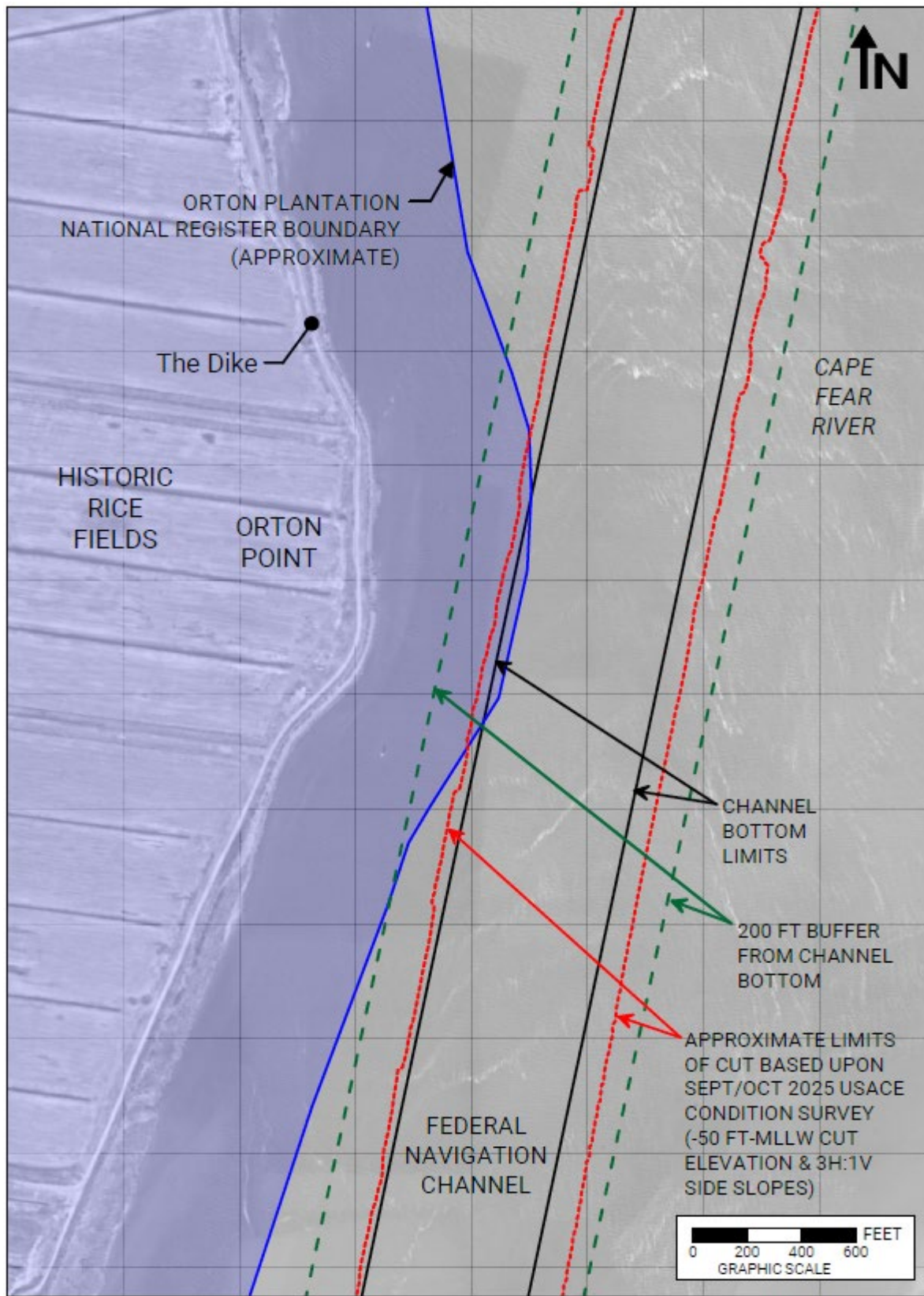
The preserved historic rice fields, revetment and dike system, underwater archeological resources, and freshwater water systems and wetlands are the historic and cultural landscape of the Orton Property. But the Corps has failed to acknowledge in the Draft EIS the obvious adverse impacts of the Project on those same resources.

¹ See *generally* Dept. of Army Permit, Permit No. SAW-2011-00624 (Nov. 2012) ("2012 Permit"), attached as Exhibit 4.

Nor has the Corps acknowledged the unacceptable risk that the Project will cause the failure of the dike that Orton restored. Failure of the dike will result in a cascading series of unacceptable events. It would flood the rice fields and freshwater ponds with saltwater, erasing what stands today as a preserved monument to enslaved African Americans dating back centuries.

Orton submits these comments to urge the Corps to adhere to its legal obligations and prevent the Project from damaging the unique cultural, historical and ecological resources at the Orton Property.





SUMMARY OF ORTON'S COMMENTS ON THE DRAFT EIS

Summary of Foth and Lynker Technical Reports. Orton retained Foth Infrastructure & Environment, LLC and Lynker Corporation to review the Draft EIS and assess its analysis of the anticipated effects of the Project on the Orton Property. The reports accompany these comments and the content of each report is part of, and incorporated into, these comments. Orton submits the Foth and Lynker Reports as comments on the Draft EIS and requests the Corps to respond to the comments in the Foth and Lynker Reports in the Final EIS. Those comments include, but are not limited to, the following.

1. Foth Report (Exhibit 1)

- The Draft EIS's conclusion that the Project "will not adversely impact the Orton shoreline is misleading and incorrect. The modeling results presented in the DEIS predict an increase in wave heights, a known contributor to marsh shoreline instabilities and erosion, along the Orton shoreline." Foth Report at 2.
- The Draft EIS ignores binding, non-discretionary, agency policy that requires the Corps to conduct site-specific geotechnical analyses to prevent failure of slopes and infrastructure such as the Orton dike. Foth Report at 17.
- The Draft EIS fails to model slope stability within the Lower Lilliput reach, which includes Orton Point and the Orton Property. Foth Report at 12. Available geotechnical data demonstrates that the soils in the vicinity of Orton's historic dike system do not support the construction of a 3H:1V slope. Foth Report at 14.
- The proposed 3:1 side slope for the navigation channel will cut into the toe of the slope supporting the historic Orton dike. Foth Report at 12. The removal of toe material from the existing slope carries significant risk. *Id.*
- The proposed dredging activity adjacent to the Orton Property carries "a high risk of destabilizing the slope" supporting the historic dike system, and creates the potential for a "deep-seated, global failure" of the slope currently supporting the dike. Foth Report at 14.
- The Draft EIS does not analyze the obvious and foreseeable impacts of vibrations during the dredging process on the sensitive soil structure supporting the historic dike system at Orton. Foth Report at 14-15.
- The Blasting Mitigation Plan for the Project fails to address the "structural effect of vibrations on coastal and upland structures," including the Orton Property's historic system of dikes and revetments. Foth Report at 15.

2. Lynker Report (Exhibit 2)

- The Draft EIS contains “methodological deficiencies, questionable assumptions, and internal inconsistencies that undermine the DEIS’s conclusions regarding impacts to coastal processes, bank stability, and estuarine habitats.” Lynker Report, Appendix 1 at 1.
- The Draft EIS reaches two contradictory conclusions on the Project’s erosive impacts. Lynker Report, Appendix I at 1. On the one hand, the Draft EIS concludes that the Project will have “a net beneficial effect from reduced vessel traffic.” *Id.* Other analysis in the Draft EIS, however, demonstrates “increased erosive forces from larger vessels.” *Id.* The Draft EIS fails to reconcile these conflicting conclusions.
- The Draft EIS arbitrarily concludes the Project will have a net beneficial impact on shoreline erosion. Lynker Report, Appendix I at 1. The Draft EIS incorrectly relies on the average, annualized change in wave and wake energy to reach this conclusion. *Id.* Erosion, however, “is a threshold-dependent process driven by peak forces from individual vessel transits, not annual averages.” *Id.*
- The Draft EIS relies on a single design vessel size to model the wake and erosional energy of future vessel traffic. Lynker Report at 1. That vessel, at 12,400 TEUs, is smaller than the larger vessels using the port today. *Id.* The Corps’ reliance on this vessel size is directly contradicted by the stated purpose of the Project to allow the port to accommodate “larger, deeper-draft vessels,” as the “number and size of Post-Panamax vessels at the port are expected to increase.” Draft EIS at 1-8; Lynker Report, Appendix I at 7-8. “This discrepancy leads to a systemic underestimation of future bank erosion, habitat loss, and required mitigation.” Lynker Report, Appendix I at 1.
- The Corps’ hydrodynamic modeling wrongly assumes sustained “flat water” conditions, and fails to account for compounding real-world conditions, including wind and tidal influences, that exacerbate wake and wave energy. Lynker Report at 3.
- The Draft EIS effectively ignores and grossly underestimates the Project’s adverse impacts on the historic rice fields and freshwater wetlands at the Orton Property from increased saltwater intrusion. Lynker Report at 3-5, Appendix II-III. The Draft EIS ignores the scientifically established historical effects of dredging on saltwater intrusion and propagation in the Cape Fear River and uses a groundwater model that is “grossly oversimplified, relying on static model states and regionally averaged conditions that ignore the

complex hydrogeology of the project area and the Cape Fear River system more broadly.” Lynker Report at 3-5, Appendix II-III.

- The Draft EIS ignores the scientifically established historical negative effects of dredging on saltwater intrusion in the Cape Fear River. Recent numerous peer-reviewed scientific studies confirm that the historical channel deepening of the Cape Fear River “has led to widespread intrusion of saltwater, loss of forested wetlands, and the rapid expansion of ‘ghost forests’ of dying bald cypress.” Lynker Report at 4. These impacts were not accurately assessed in the Corps’ prior environmental reviews, and the Draft EIS continues to discount these known impacts. Lynker Report at 4-5.
- The Draft EIS relies on flawed regional groundwater modeling that underestimates the frequency and magnitude of salinity intrusion events, and the localized impact of those events on the freshwater wetlands and historic rice fields at the Orton Property. Lynker Report at 4-5, Appendix II-III. The Corps’ groundwater model is “grossly oversimplified, relying on static model states and regionally averaged conditions that ignore the complex hydrogeology of the project area and the Cape Fear River system more broadly.” Lynker Report at 4.
- The Draft EIS’s flawed analysis of increased wave and wake energy, and failure to accurately account for the compound effects of wind events, storms, tides, and sea-level rise. Lynker Report at 2, 5. “This approach fails to capture the energetic, real-world interactions that can produce rapid water level surges and drive overtopping at the Orton Plantation dike.” Lynker Report at 3.

SUMMARY OF LEGAL DEFICIENCIES IN DRAFT EIS

National Environmental Policy Act. The Draft EIS is deficient. The Draft EIS confirms that the Project will cause material adverse direct and indirect impacts to the historically significant rice fields, dike, revetments, and water control structures at the Orton Property. Those direct and indirect impacts are obvious, identified in detail in the Foth and Lynker reports, yet the Draft EIS does not acknowledge or adequately disclose them. Nor does the Draft EIS propose any specific mitigation or design alternatives to avoid, minimize, or mitigate these foreseeable adverse impacts. See Foth Report at 18; Lynker Report at 3. The Draft EIS does not satisfy the mandatory requirements of the National Environmental Policy Act (“NEPA”) as articulated by the Supreme Court, and prescribed in the Corps’ binding NEPA regulations, because it fails to disclose the obvious direct and indirect impacts of the Project on the Orton Property, and it fails to identify practicable mitigation measures to avoid these effects. See *Seven Cnty. Infrastructure Coal. v. Eagle Cnty., Colorado*, 145 S. Ct. 1497, 1512-13 (2025); 33 C.F.R. § 333.61(d), (n).

Coastal Zone Management Act. The Draft EIS demonstrates that the Corps has not fulfilled its mandatory, non-discretionary obligation under the Coastal Zone

Management Act (“CZMA”). The CZMA requires the Corps to ensure that the Project “shall be carried out in a manner which is consistent to the maximum extent practicable” with North Carolina’s Coastal Area Management Act (“CAMA”). 16 U.S.C. § 1456(c)(1)(A). The Corps certified to North Carolina that the Project is consistent with North Carolina’s program. DEIS, Appendix N at 17. That determination does not bear scrutiny. The CAMA protects the historic resources at the Orton Property from irreversible damage because they are located in Areas of Environmental Concern. 15A NCAC §§ 7H.0208(a)(2)(C), 7H.0209(d)(7). The Foth and Lynker Reports show that the Project will damage protected resources at Orton. The Draft EIS does not disclose those impacts. The Corps acknowledges that it has not yet determined the Project’s effects on historic and cultural resources. The Corps cannot certify that the Project is consistent with the CAMA when it has not actually analyzed whether the Project is consistent with the North Carolina CAMA at the Orton Property. Nor has the Corps demonstrated that the Project will “be carried out in a manner which is consistent to the maximum extent practicable with” North Carolina’s CAMA, as required by 16 U.S.C. § 1456(c)(1)(A), when the Corps failed to identify any avoidance or mitigation to prevent the obvious adverse effects of the Project on the protected resources at the Orton Property.

National Historic Preservation Act. The Corps has not fulfilled its mandatory obligations under Section 106 of the National Historic Preservation Act (“NHPA”). The Corps claims that “[t]ime and budgetary constraints” prevented it from identifying and evaluating affected cultural and historical resources or “establish[ing] methods to avoid, minimize, or mitigate those adverse effects, prior to completion of the DEIS.” DEIS, Appendix N at 14. Section 106 of the NHPA requires that the Corps consult with Orton and the North Carolina State Historic Preservation Office (“SHPO”) to identify and analyze whether the Project will “directly or indirectly” impact the Orton Property, and to identify avoidance and mitigation to prevent these effects. 36 C.F.R. §§ 800.5(a)(1), 800.16(d). That work has not occurred. The Draft EIS incorrectly states that Orton did not respond to the invitation from the Corps to consult under Section 106 on the impacts of the Project on the Orton Property. Orton timely accepted the Corps’ invitation on May 30, 2025. The Corps must consult with SHPO and Orton on the Project’s foreseeable direct and indirect effects on the Orton Property, and on feasible mitigation measures to avoid these effects.

The duties imposed on the Corps under NEPA, the CZMA, the NHPA and the Corps’ own binding policy are mandatory, non-discretionary obligations. The Draft EIS demonstrates that the Corps has not fulfilled its obligations under those statutes and policies. The Project poses obvious risks to the Orton Property that, if the adverse consequences occur, will cause great damage to Orton and to the preserved cultural and historical legacy of enslaved African Americans in the dike, the rice fields, and the supporting water systems.

Orton prepared these comments to identify the shortcomings in the Draft EIS and to aid a productive consultation process with the Corps. The Foth and Lynker Reports identify the Project’s adverse effects on the Orton Property. Orton submits these comments and the Foth and Lynker Reports to (i) help the Corps identify in the Final

EIS the direct and indirect impacts of the Project on the Orton Property that are absent from the Draft EIS, (ii) facilitate a constructive consultation process with the Corps, SHPO, and the State of North Carolina, and (iii) urge the Corps to adopt avoidance and mitigation measures to prevent the obvious adverse effects of the Project on the Orton Property.

DETAILED COMMENTS OF ORTON ON DRAFT EIS

1. The Orton Property is a culturally rich and historically significant property that merits protection.

The Orton Property is nationally recognized as a historic place worthy of preservation. The National Parks Service first listed the house and gardens at the Orton Property in the NRHP in 1973. U.S. Dept. of Interior, National Parks Service, NRHP Ref. No. 73001294 (1973).² The National Parks Service expanded the listed boundary for the Orton Property in 2013 to include an additional 826 acres in recognition of the Property's historical significance. U.S. Dept. of Interior, National Parks Service, NRHP Ref. No. 13000698, 37 (2013).³

The 2013 NRHP Designation is Exhibit 3 to these comments. It provides over 100 pages of descriptions, pictures, and maps detailing the rich cultural and historical heritage of the Orton Property in support of the NRHP designation.

The NRHP Boundary includes the Orton Property's historic rice fields located along the Cape Fear River. The historic rice fields stand as a preserved monument to centuries of enslaved African Americans. The boundary of the historic designation extends 500 feet into the Cape Fear River to protect identified underwater archaeological resources. 2013 NRHP Designation at 3; *id.* at 107-109 (designation boundary maps). The Cape Fear River Shipping Channel sits only 450 feet from the historical dike and revetment structures that protect the rice fields along the eastern edge of the NRHP Boundary. *Id.* at 11-12.

The NRHP Boundary includes the historically significant rice fields dating back to 1820. *Id.* at 11. The rice fields are "evocative reminders of Orton's statewide significance in the history of rice production in North Carolina." *Id.* at 54.

The rice fields at the Orton Property are iconic. The Orton Property is "visually dominated by its historic rice fields, which exhibit the forms and patterns extant during the period of significance." *Id.* at 4. The historic rice fields provided an economic boom for the plantation in the nineteenth and early twentieth centuries. *Id.* at 3. Orton was

² *Available at:*

https://s3.amazonaws.com/NARAprdstorage/opastorage/live/97/7190/47719097/content/electronic-records/rg-079/NPS_NC/73001294.pdf ("1973 NRHP Designation").

³ *Available at:* <https://files.nc.gov/historic-preservation/nr/BW0717.pdf> ("2013 NRHP Designation").

the first rice plantation in the Lower Cape Fear Region and one of the largest in North Carolina. Orton and other Lower Cape Fear plantations were key factors in maintaining the development and success of the southern-based rice economy.⁴

The water management system of canals, dikes, roads, dams, ditches, and control structures are in and around the rice fields. The water management system itself “survives from the period of significance, having been continuously maintained by a succession of owners,” with replacement of more modern materials over time to protect the integrity of the system. 2013 NRHP Designation at 11. Along the eastern side of the NRHP Boundary are the front rice fields separated from the Cape Fear River by earthen dike initially constructed over 250 years ago. *Id.* At the time of construction, an expansive and stable marsh separated and protected the dike system from the open water of the river. *Id.*

The marsh flat has since become unstable and largely disappeared due to the “increased wave action coming from ships in the shipping channel.” *Id.* at 11-12. The Orton Property dike and revetment system is now directly exposed to the river’s hydraulic forces and the increased wave action coming from the shipping channel. *Id.* at 11-12. Owners of the Orton Property have endeavored to maintain the dike and revetment structures that protect the rice fields from the Cape Fear River. *Id.* at 5, 12. The most recent and most significant of these efforts is the restoration project approved by the Corps in 2012 and initiated, funded, and undertaken by Orton. Orton restored and repaired 6,800 feet of earthen dike, about 2,000 feet of rip rap revetment, 13 water control structures, and 12 field access points, and restored over 350 acres of historic rice fields. See Exhibit 4. Orton invested \$29 million in the restoration effort and continues to incur on average \$1 million per year to maintain the structures. And as a condition of its approval, to offset the loss of wetlands as part of the rice field restoration, Orton executed a permanent conservation easement on the Property to preserve an additional 187.5 acres of high-quality riverine swamp forest wetlands. *Id.* at 9.

Orton’s restoration efforts, conducted in coordination with the Corps and State of North Carolina, demonstrate Orton’s steadfast commitment to restore and protect the rich historic and cultural heritage of the Orton Property. The Project, however, threatens to cause irreversible damage to the significant cultural, historic, and natural resources at the Orton Property. The Corps cannot and should not ignore the obvious adverse impacts of the Project on the Orton Property, and should implement all feasible and practicable measures to avoid and prevent these impacts.

⁴ Island Life NC Magazine, Orton Plantation: A Legacy of the South. *Available at:* <https://islandlifenc.com/orton-plantation-a-legacy-of-the-south/>.

Summary of Historic Resources at Orton

- The National Park Service listed 830 acres of the Orton Property on the National Register of Historic Places.
- The NRHP Boundary extends 500 feet into the Cape Fear River to protect identified underwater archaeological resources.
- Orton, in coordination with the Corps, restored and repaired the listed historic resources at the Property.
- The Project will adversely impact these resources without appropriate avoidance and mitigation.

2. The Project will have foreseeable adverse impacts on the Orton Property that must be prevented.

The Foth and Lynker Reports demonstrate that the Project will adversely impact the listed historic resources and ecological integrity of the Orton Property. See Exhibits 1 and 2.

The purpose of the Project is to induce and support ship traffic from larger vessels. Draft EIS at 1-8. These larger vessels will necessarily increase wake and wave energy that will increase erosion of the Orton Property's historic dike and revetment system threatening the sustainability of the Property's historic rice fields. Lynker Report, Appendix I at 7-10. Scientifically sound wave and wake modeling that accounts for real-world conditions from wind, tides, storms, and sea-level rise demonstrate that the increased wakes from larger vessels will be amplified even further. *Id.* The result is a significant adverse increase in the erosion rate at Orton. Lynker Report, Appendix I at 11-12.

The channel deepening will continue the troubling historical trend of saltwater intrusion into the coastal shoreline, including the historic rice fields and ecologically significant wetlands at the Orton Property. Lynker Report, Appendix III-IV. Sodium content in the soils of the rice fields "is elevated and worsening, likely due to their proximity to the coast of Cape Fear River" and its increasing salinity level near Orton Point. Lynker Report, Appendix IV at 1. Peer-reviewed scientific studies confirm that the historical channel deepening of the Cape Fear River "has led to widespread intrusion of saltwater, loss of forested wetlands, and the rapid expansion of 'ghost forests' of dying bald cypress." Lynker Report at 4. This increased saltwater intrusion threatens the ecologically significant wetlands adjoining the Orton rice fields. Lynker Report, Appendix III at 9-10.

The dredging design and construction plan present yet another distinct threat of harm to the listed historic resources at the Orton Property. The dredging will occur inside the NRHP Boundary for the Property and impact identified underwater archeological resources. See Pages 3-4 (Figures showing dredging footprint relative to

NRHP Boundary). And dredging adjacent to the historic dike system, without an adequate buffer, carries “a high risk of destabilizing the slope” supporting the dike. Foth Report at 14. The planned dredging will foreseeably result in a risk of direct, acute failure of the dike and a long term risk of instability, and ultimately failure, as the foundation and dike soils are eroded and “the effects of water intrusion, surface sluffing, and flow forces become cumulatively more detrimental and accelerate the rate of structural destabilization.” Foth Report at 11-15.

Summary of Foreseeable Adverse Effects at Orton

- Increased vessel size will increase erosion from the wake energy caused by ship traffic in the channel.
- Increased wave size caused by increased vessel size when combined with wind, tides, storms, and sea-level rise will exacerbate this erosive effect.
- The channel deepening will worsen impacts from saltwater intrusion to Orton’s historic rice fields and adjoining wetlands.
- The Project’s dredging design threatens the near-term and long-term stability of the slope supporting Orton’s historic dike and revetment system.

3. The Draft EIS does not satisfy the National Environmental Policy Act.

The Draft EIS is inadequate under NEPA. As the Supreme Court recently ruled, an EIS must analyze the “direct impacts” of a project and disclose a “manageable line” for the analysis of indirect effects with a reasonably close causal relationship to the project. *Seven Cnty. Infrastructure Coal.*, 145 S. Ct. at 1512-13. The EIS must consider, and the Record of Decision must state, “whether the agency has adopted all practicable means to avoid or minimize environmental harm from the alternative selected, and if not, why the agency did not.” 40 C.F.R. § 1505.2(a)(3) (2020).

None of the detail about the Orton Property and the obvious impacts of the Project on it, summarized in these comments and in the Foth and Lynker Reports, appear in the Draft EIS. The Draft EIS is deficient because it ignores the obvious adverse direct impacts of the Project on the Orton Property. The Draft EIS fails to establish a reasonable line for the evaluation of the foreseeable indirect Project impacts on the Property. Nor does the Draft EIS analyze any practicable means to avoid or minimize these effects. These are mandatory requirements under NEPA that the Corps has not satisfied. The Final EIS must include an analysis of the Project’s effects on the Orton Property. The Final EIS also must consider and state whether the Corps has adopted all practicable means to avoid these effects.

a. The Corps did not analyze the direct impacts of the Project on the historic resources at the Orton Property.

The Project's dredging plan will directly impact listed historic resources within the NRHP Boundary for the Orton Property. This impact is known and obvious. The Final EIS must analyze and disclose these effects. The Draft EIS does not contain any of that analysis.

The Corps proposes dredging within the Orton Property NRHP Boundary. The NRHP Boundary for the Orton Property extends 500 feet into the Cape Fear River to protect historically significant underwater archaeological resources. 2013 NRHP Designation at 3, 16, 115. Underwater and shoreline investigations conducted in and along the Cape Fear River identified 32 objects of historical significance in this area. *Id.* at 16. The contributing objects include breakwater pilings, dock pilings, ballast piles, and features associated with Orton Point Light—a former lighthouse representing the maritime heritage of the Lower Cape Fear River and the Orton Property. *Id.* at 16, 66.

The Cape Fear River Shipping Channel sits less than 500 feet from Orton Point. *Id.* at 12. The dredging footprint for the Project includes the Channel and a 200-foot lateral buffer to either side of the Channel. DEIS, Appendix E at 27. The dredging footprint overlays and includes the Orton Property NRHP Boundary and the listed underwater archaeological resources protected by that boundary. See Pages 3-4 (Figures showing shipping channel and 200-foot lateral dredging boundary overlaying NRHP Boundary).

Failure of the historic dike is a foreseeable direct impact of the proposed dredging design. The proposed design slope for the Project is 3H:1V. Foth Report at 2. Available geotechnical data demonstrates that the soils in the vicinity of Orton's historic dike system do not support the construction of a 3H:1V slope. Foth Report at 2, 14. The proposed dredging activity, accordingly, carries "a high risk of destabilizing the slope" supporting the historic dike system, and creates the potential for a "deep-seated, global failure" of the slope currently supporting the dike. Foth Report at 14. The proposed dredging, within 450 feet of the historic dike, may also "damage lateral support, increasing the risk of slope instability or localized failure, especially in zones with high silt and organic content." Foth Report at 15-16. Binding Corps policy requires the agency to conduct detailed, site-specific geotechnical analyses to ensure the dredging will not compromise the Orton dike. Foth Report at 17 (citing EM 1110-2-5025). The Corps has ignored the policy and failed to conduct that mandatory site-specific analysis, posing adverse impacts to Orton.

Agencies "obviously" must assess the significant direct effects from a project. *Seven Cnty. Infrastructure Coal.*, 145 S. Ct. at 1512. This a bedrock principle of NEPA. 42 U.S.C. § 4332(2)(C)(i). The Corps' own NEPA regulations, which are binding on the agency, require it to address the obvious direct impacts of the Project, including the Project's effects on historical and cultural resources. 33 C.F.R. § 333.61(d). The Draft EIS, however, nowhere identifies, analyzes, or discloses the obvious direct impact that Project dredging – within the NRHP Boundary – will have on listed historic resources at

the Orton Property. And the Draft EIS fails to analyze or disclose the reasonably foreseeable direct adverse effects of dredging in extreme proximity to a historic earthen dike, despite the fact that the Corps' own guidance cautions against dredging in proximity to infrastructure without detailed analysis and protective setbacks. Foth Report at 17.

The Draft EIS's failure to analyze and disclose the Project's direct impacts to the historic resources at the Orton Property renders the Draft EIS inadequate under NEPA. The Corps cannot defer this analysis to a later consultation stage. To comply with the statute, Supreme Court precedent, and the Corps' binding NEPA regulations, the Final EIS must analyze and disclose the direct effects that dredging will have on the listed underwater archeological resources within the NRHP Boundary for the Orton Property.

b. The Corps must analyze and disclose the reasonably foreseeable indirect effects of the Project on the historic resources at the Orton Property.

The Corps must analyze all Project effects that "are reasonably foreseeable and have a reasonably close causal relationship" to the Project. 33 C.F.R. § 333.61(d). This includes the indirect effects from the Project that will occur later in time if those effects are reasonably foreseeable and have a reasonably close causal relationship to the Project. DEIS at 3-1. Effects are "reasonably foreseeable" when they are "sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision." 33 C.F.R. § 333.61(n).

The Project will cause multiple obvious adverse indirect effects to the historic and cultural resources at the Orton Property. These include impacts from (i) increased wake activity, (ii) increased salinity, and the (iii) the impacts of channel deepening on the stability of the Orton Property shoreline and the historical water control system it supports.

Increased wake activity from larger vessels will adversely affect the Orton Property's historic dikes, revetments, and water control structures. The Draft EIS states that the purpose of the Project is to allow the port to accommodate "larger, deeper-draft vessels," as the "number and size of Post-Panamax vessels at the port are expected to increase." Draft EIS at 1-8. The economics supporting the Project are "predicated on accommodating a 'forecasted vessel fleet' of larger, more efficient vessels." Lynker Report, Appendix I at 2 (citing DEIS, ES-2, 1-8). The wakes generated by larger vessels in the Cape Fear River will be the primary driver of increased erosive forces on the shoreline of the River. Lynker Report, Appendix I at 7. The DEIS fails to adequately model these erosive impacts. A reasonable, technically sound modeling of these impacts demonstrates that the increased vessel size allowed by the Project will necessarily result in increased erosion that threatens the long-term stability of the Orton Property's historic dike and revetment system. Lynker Report, Appendix I at 8-10.

The Project will increase salinity intrusion in the historic rice fields at the Orton Property. The Orton Property is a "particularly vulnerable area for saltwater intrusion."

Lynker Report, Appendix II at 1. The Draft EIS relies on flawed groundwater modeling that grossly underestimates the frequency and magnitude of salinity intrusion events, and the impact of those events on the freshwater wetlands and historic rice fields at the Orton Property. Lynker Report, Appendix II at 2-3. Available groundwater data suggests that salinity levels are increasing in the aquifer that feeds the Orton Pond, “and any project-induced changes to this hydrological relationship could accelerate saltwater intrusion to levels that render the pond unusable as an irrigation source for the historic rice fields.” Lynker Report, Appendix I at 4. This is in addition to the fact that the foreseeable increased wave and wake energy, and failure to accurately account for wind events, storms, tides, and sea-level rise, will foreseeably increase the frequency of the overtopping events that already occur at the Orton Property, while sodium levels in the historic rice fields “is elevated and worsening.” Lynker Report at 2, 5, Appendix IV at 2.

The proposed channel deepening will impact the stability of the Orton Property riverfront shoreline and the stability of the Property’s historic dike, revetments, and water control structures. As described in detail above, and in the accompanying Foth Report, the proposed dredging design carries “a high risk of destabilizing the slope” supporting the historic dike system. Foth Report at 3, 14. This risk includes the acute risk that the slope supporting the historic dike will fail as a direct result of the dredging. Foth Report at 14. It also includes the reasonably foreseeable indirect effect that the dike system fails, over time, as a result of decreased slope stability. Foth Report at 11-14. As the foundation and dike soils are eroded, as a result of the dredging and channel widening, “the effects of water intrusion, surface sluffing, and flow forces become cumulatively more detrimental and accelerate the rate of structural destabilization.” Foth Report at 11. And the consequences are not limited to destruction of the historic dike, failure of the dike system will necessarily result in a collapse of the historic rice fields and the freshwater ecological system at Orton.

All of these effects are sufficiently likely to occur and have a close causal relationship to the Project. A person of “ordinary prudence” would consider these foreseeable impacts to significant historic and cultural resources when making a decision on project approval and design. 33 C.F.R. § 333.61(n). While the Corps is tasked, in the first instance, with drawing a “manageable line” of analysis that captures the Project’s reasonably foreseeable effects, *Seven Cnty. Infrastructure Coal.*, 145 S. Ct. at 1512-13, the line drawn by the Corps as applied to the Orton Property is not manageable nor reasonable. It is non-existent.

The Corps’ binding NEPA regulations and the Supreme Court’s recent holding in *Seven County Infrastructure Coalition* require that the Corps analyze the Project’s reasonably foreseeable indirect effects. The Project will have obvious adverse effects on the listed historic resources at the Orton Property. An analysis of these effects is wholly absent from the Draft EIS. This analysis cannot be deferred. The Final EIS must analyze these reasonably foreseeable indirect effects on the listed historic and cultural resources at the Orton Property to satisfy the agency’s obligations under NEPA.

c. The Corps must analyze and disclose the reasonably foreseeable effects of the Project on the Orton Property's exceptional wetland ecosystem.

Recent peer-reviewed research demonstrates that the historical dredging in the Cape Fear River estuary resulted in significant wetland losses and that projections in the Corps' 1996 EIS for the 2000-2002 Cape Fear River dredging project substantially underestimated the potential for these impacts. Lynker Report, Appendix III at 1. The studies show that the "region has experienced widespread conversion of forested wetlands to emergent marsh and open water, including the formation of 'ghost forests' of dying bald cypress, driven by saltwater intrusion from channel deepening." *Id.*

There are six classified wetlands surrounding the rice fields at the Orton Property. Lynker Report, Appendix III at 6. The Orton wetlands are classified as "Exceptional" under the North Carolina Coastal Region Evaluation of Wetland Significance. Lynker Report, Appendix III at 9. The rating confirms that the wetlands adjacent to Orton's rice fields "are among the most highly valued and functionally important freshwater wetlands in coastal North Carolina," emphasizing "the significance of any potential impact or conversion." Lynker Report, Appendix III at 6. Any "[l]oss or degradation of these wetlands would be a disproportionate harm to regional ecological health and the resilience of Orton's historic rice-field landscape." Lynker Report, Appendix III at 10.

The Draft EIS does not adequately analyze or address the very real risk the Project poses to these ecologically significant wetlands. The Draft EIS, instead, "relies on outdated datasets and coarse-scale regional modeling that does not reflect the current state of the system" and it "underestimates the exposure and sensitivity" of the "Exceptional" wetland system at the Orton Property and the adjacent historic rice fields threatened by the same saltwater intrusion. Lynker Report, Appendix III at 10. The Final EIS must accurately analyze and disclose these foreseeable impacts.

d. The Corps must use sound scientific methodology in the Final EIS.

The Draft EIS is riddled with discrepancies, unfounded assumptions, and flawed scientific methodologies and analyses that do not withstand scrutiny. Those errors cannot support the proposed action. The errors include:

- The arbitrary and incorrect reliance on the average, annualized increase in wave and wake energy to support the conclusion that the Project will have a net beneficial impact on shoreline erosion, when erosion "is a threshold-dependent process driven by peak forces from individual vessel transits, not annual averages." Lynker Report, Appendix I at 1.
- Reliance on a single vessel size that is smaller than the larger vessels using the port today to model the wake and erosional energy of future vessel traffic when the stated purpose of the Project to allow the port to accommodate larger shipping vessels. Lynker Report, Appendix I at 2, 7-8.

- Reliance on oversimplified hydrodynamic modeling that wrongly assumes sustained “flat water” conditions, and fails to account for real-world and foreseeable future conditions, including wind and tidal influences, that exacerbate wake and wave energy. Lynker Report, Appendix I at 1-2.
- Additional key methodological deficiencies in the Corps’ analysis of the project’s erosive effects on Orton as summarized in Appendix I, Table 1.2 of the Lynker Report.
- The Draft EIS grossly underestimates the Project’s adverse impacts on the historic rice fields and freshwater wetlands at the Orton Property from increased saltwater intrusion and propagation by ignoring the historical effects of dredging on saltwater intrusion in the Cape Fear River and using a groundwater model that is “grossly oversimplified, relying on static model states and regionally averaged conditions that ignore the complex hydrogeology of the project area and the Cape Fear River system more broadly.” Lynker Report at 3-5, Appendix II-III.
- The Draft EIS’s flawed analysis of increased wave and wake energy, and failure to accurately account for the compounding effects of wind events, storms, tides, and sea-level rise, results in the Draft EIS ignoring the overtopping events that increase salinity in the Orton Property’s historic rice fields. Lynker Report at 2, 5.
- The Draft EIS fails to use available geotechnical data to accurately assess the Project’s foreseeable impacts on the integrity of the soils and slope supporting the Orton Property’s historic dike system. Foth Report at 11-15.
- The Draft EIS ignores and fails to address binding Corps policy that requires site-specific geotechnical analyses to protect adjacent infrastructure and resources during dredging activities. Foth Report at 17.

The Corps must articulate a “satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Manufacturers Ass’n of the United States, Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)).

The Draft EIS fails this test. The Foth and Lynker Reports identify the Draft EIS’s methodological errors and oversights in detail. See Exhibits 1 and 2. The Foth and Lynker Reports also provide scientifically accepted, reasonable solutions. The Corps must correct these deficiencies in the Final EIS.

e. The Corps must identify all practicable means to prevent the Project's obvious adverse impacts on the Orton Property.

The Corps' binding NEPA regulations require it to consider mitigation measures that will "avoid" or "minimize" the Project's effects on the Orton Property. 33 C.F.R. § 333.61(g). The ROD must "[s]tate whether the agency has adopted all practicable means to avoid or minimize environmental harm from the [Project], and if not, why the agency did not." 40 C.F.R. § 1505.2(a)(3) (2020).

The Draft EIS does not identify any mitigation for the Orton Property. None. "This omission leaves the only remaining example of historic rice cultivation on the lower Cape Fear River unprotected against the very impacts the DEIS's models underestimate, including accelerated shoreline erosion, dike overtopping, and salinization of freshwater resources." Lynker Report at 3.

That does not satisfy the Corps' NEPA obligations. The Final EIS must analyze the feasible and practicable options to protect the Orton Property and its important historic, cultural, and ecological resources.

Summary of the Corps' Failure to Satisfy the National Environmental Policy Act

- The Draft EIS does not satisfy the Corps' obligations under NEPA.
- The Draft EIS does not analyze the obvious adverse impact of dredging within and adjacent to the Orton Property NRHP Boundary.
- The Draft EIS does not analyze the foreseeable indirect Project impacts of ship traffic, wave energy, erosion and induced salinity on the listed historic resources at the Orton Property.
- The Draft EIS includes no discussion of mitigation measures to protect the Orton Property.
- The analyses and conclusions in the Draft EIS are based on flawed methodologies, obvious oversights, and arbitrary assumptions.
- The Corps cannot defer this analysis under NEPA.
- The Final EIS must analyze the Project's direct and indirect impacts on the Orton Property, rely on rational assumptions, and analyze feasible mitigation measures to avoid these impacts.

4. The Corps has not satisfied its obligations under the Coastal Zone Management Act.

a. The Coastal Zone Management Act requires the Corps to ensure that the Project is consistent to the maximum extent practicable with the North Carolina Coastal Area Management Act.

The Federal CZMA mandates that a federal project “that affects any land or . . . natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable” with the applicable state coastal zone management program. 16 U.S.C. § 1456(c)(1)(A). This duty applies to the Corps and to this Project. See DEIS, Appendix N.

The Corps’ CZMA consistency obligation is both a procedural and substantive requirement.

The CZMA procedural requirement mandates that the Corps evaluate the Project’s “reasonably foreseeable direct and indirect effects on any coastal use or resource.” 15 C.F.R. § 930.33(a)(1). Agency action that “has minimal or no environmental effects may still have effects on a coastal use,” including “protection of historic property,” if the “activity initiates an event or series of events where coastal effects are reasonably foreseeable.” *Id.*

The CZMA substantive requirement mandates that the Corps carry out the Project “in a manner which is consistent to the maximum extent practicable with” the North Carolina CAMA. 16 U.S.C. § 1456(c)(1)(A); 15 C.F.R. § 930.30 (same). The Corps must “consider the enforceable policies of [the CAMA] as requirements to be adhered to in addition to existing Federal agency statutory mandates.” 15 C.F.R. § 930.32(a)(2).

b. The North Carolina Coastal Area Management Act protects the historic and ecological resources at the Orton Property.

i. The North Carolina Coastal Area Management Act protects Areas of Environmental Concern.

The North Carolina CAMA governs North Carolina’s approved coastal management program. N.C.G.S.A. §§ 113A-100 to 113a-134.9. The CAMA imposes enforceable standards to protect natural, historic, and cultural resources in coastal areas. N.C.G.S.A. § 113A-118(a). The CAMA prohibits development within coastal shoreline and estuarine water Areas of Environmental Concern (“AECs”) that will cause irreversible damage to wetland ecosystems and to documented archaeological or historic resources within the AEC. 15A N.C.A.C. §§ 7H.0209(b), (d)(4), (7); 7H.0208(a)(2)(A), (C).

The CAMA regulations explicitly state the ecological significance of protecting coastal shorelines:

Development within coastal shorelines influences the quality of estuarine and ocean life and is subject to the damaging processes of shore front erosion and flooding. The coastal shorelines and wetlands contained within them serve as barriers against flood damage and control erosion between the estuary and the uplands.

15A N.C.A.C. 7H.0209(b).

CAMA prohibits development activities within coastal shoreline AECs that will be detrimental to the biological and physical functions of the estuarine and ocean system. “Every effort shall be made by the permit applicant to avoid or minimize adverse impacts of development to estuarine and coastal systems through the planning and design of the development project.” *Id.* at § 7H.0209(d). Development within a coastal shoreline AEC “shall not have a significant adverse impact on estuarine and ocean resources,” including “development that would directly or indirectly . . . increase shoreline erosion.” *Id.* at § 7H.0209(d)(6).

The CAMA regulations similarly describe the ecological significance of estuarine water AECs: “Estuarine waters are the dominant component and bonding element of the entire estuarine and ocean system, integrating aquatic influences from both the land and the sea. Estuaries are among the most productive natural environments of North Carolina.” *Id.* at § 7H.0206(b). CAMA is intended to “conserve and manage the important features of estuarine waters so as to safeguard and perpetuate their biological, social, aesthetic, and economic values.” *Id.* at § 7H.0206(c). Development in coastline shoreline and estuarine waters AECs must be consistent with the directives and objectives of CAMA. *Id.* at §§ 7H.0209(d); 7H.0206(d).

ii. The Orton Property is in Areas of Environmental Concern and protected by the North Carolina Coastal Area Management Act.

The Orton Property is subject to, and protected by, the North Carolina CAMA. The Orton Property includes lands classified under the CAMA as estuarine water and coastal shoreline AECs. *Id.* §§ 7H.0206(a), 7H.0209(a)(1). The 2012 CAMA permit issued in connection with the 2012 Corps permit at Orton confirms that the CAMA applies to, and protects, the Orton Property. See Exhibit 4 at 21 (includes CAMA Permit No. 83-12 issued to Orton for development inside AEC). That permit expressly acknowledges that the Orton Property is an “Area of Environmental Concern” and is protected by North Carolina’s CAMA.

The AEC lands at the Orton Property contain documented historic resources. See 2013 NRHP Designation at 1 (N.C. Department of Natural and Cultural Resources nomination to include the Orton Property in the NRHP as an area worthy of historic preservation). The CAMA protects these historic resources. N.C.G.S.A. § 113A-102(b)(4)(e). The 2012 CAMA permit, for example, required that Orton avoid the submerged archeological resources within the Orton Property boundary and protect the historic integrity of the rice fields and water management system. See Exhibit 4 (CAMA Permit No. 83-12, Conditions 16 and 17).

The AEC lands at the Orton Property also contain “exceptional” wetland habitat. The Orton wetlands “are among the most highly valued and functionally important freshwater wetlands in coastal North Carolina.” Lynker Report, Appendix III at 6. The “loss or degradation” of these wetlands “would be a disproportionate harm to regional ecological health.” Lynker Report, Appendix III at 10.

Under the CZMA, the Corps must demonstrate that the direct and indirect effects of the Project will not cause irreversible damage to the exceptional wetlands and to the documented historic resources within the Orton Property AEC lands, including the historic rice fields, water management system, and underwater archaeological resources. 16 U.S.C. § 1456(c)(1)(A); 15A N.C.A.C. §§ 7H.0208(a)(2)(A), (C); 7H.0209(b), (d)(4), (7). The CAMA protects these resources and under the CZMA the Corps must ensure that its Project design does as well. The Corps cannot demonstrate consistency with the CAMA until it undertakes the requisite analysis and demonstrates that the Project’s design and mitigation measures will protect these resources.

c. The Project will have obvious impacts on the Orton Property.

The Project will directly and indirectly impact the exceptional wetlands and the listed historic resources within Orton’s NRHP Boundary. Indirect effects include both cumulative and secondary effects “resulting from the incremental impact of the federal action when added to other past, present, and reasonably foreseeable actions, regardless of what person(s) undertake(s) such actions.” 15 C.F.R. § 930.11(g).

The NRHP Boundary for the Orton Property includes historic rice fields, a historic system of dikes and revetments, and water control structures, and it extends 500 feet into the Cape Fear River to protect historically significant underwater archaeological resources. 2013 NRHP Designation at 3, 16, 115. The Project’s direct dredging footprint is inside the Orton Property NRHP Boundary.

The Orton Property contains a comprehensive, intact system of coastal freshwater wetlands. Lynker Report, Appendix III. The wetlands are classified as “Exceptional” under the North Carolina Coastal Region Evaluation of Wetland Significance. Lynker Report, Appendix III at 9. The wetlands at the Orton Property play a critical and significant role in supporting Orton’s historic rice fields and the overall ecological integrity of the Property by providing “important ecosystem services.” Lynker Report, Appendix III at 2 (detailing the importance of the wetland ecosystem services). The “wetlands regulate temperature, moderate flooding, and trap sediments.” *Id.* “As saltwater advances up the Cape Fear River with deeper channel dredging, the loss or conversion of these freshwater wetlands would erode many of these stabilizing functions.” *Id.*

The Project will undoubtedly result in “reasonably foreseeable direct and indirect effects” on the wetland ecosystem and the listed historic rice fields, dikes and revetments, water control structures, and underwater archaeological resources at the Orton Property. 15 C.F.R. § 930.33(a)(1). These impacts are obvious and foreseeable. They are explained in detail in the preceding sections and in the accompanying Foth

and Lynker Reports. See Exhibits 1 and 2. The CZMA imposes a substantive obligation on the Corps to mitigate these direct and indirect effects to ensure that the Project is carried out in a manner consistent with the CAMA “to the maximum extent possible.” 16 U.S.C. § 1456(c)(1)(A).

d. The Corps has not satisfied its statutory duty under the Coastal Zone Management Act to demonstrate consistency with the North Carolina Coastal Area Management Act.

The Corps claims that the Project is consistent with North Carolina’s CAMA as required by the CZMA, 16 U.S.C. § 1456(c)(1)(A). See September 17, 2025 Corps Certification Letter, Draft EIS, Appendix N.⁵ That assertion is erroneous and does not withstand review.

The Corps acknowledges in the letter that Project areas are located in several AECs, including estuarine water and coastal shoreline AECs. *Id.* at 14. The Corps concludes:

the proposed project for the Wilmington Harbor area is consistent, to the maximum extent practicable, with North Carolina’s Coastal Management Program. This determination is based on the review of the proposed project against the enforceable policies of the State’s coastal management program, which are principally found in Chapter 7 of Title 15A of North Carolina’s Administrative Code. The USACE requests that NCDCM concur with this consistency determination.

Id. at 17.

The Draft EIS confirms that the Corps has not satisfied its procedural or substantive duties under the CZMA because it has not yet undertaken the analysis.

i. The Corps has not analyzed the reasonably foreseeable direct and indirect effects of the Project on the Orton Property.

Despite the Project’s obvious direct and indirect effects on the Orton Property, the Corps admits that it has not conducted the required CZMA analysis. Simply put, the Corps has made no attempt to analyze the effects of the Project on the historic or wetland resources at Orton that the North Carolina CAMA protects. The Corps admits it has not done the work. It explained that it failed to “sufficiently identify and evaluate cultural resources, fully determine adverse effects of the action alternative on historic properties, or establish methods to avoid, minimize, or mitigate those adverse effects, prior to completion of the DEIS” due to “[t]ime and budgetary constraints.” DEIS, Appendix N at 14.

⁵ Although the letter is dated September 17, 2025, the North Carolina Division of Coastal Management communicated that the letter was not received until October 17, 2025.

Perceived time and budgetary constraints do not excuse the Corps from its CZMA consistency duty. The CZMA regulations specify that “[f]ederal agencies shall not use a general claim of a lack of funding or insufficient appropriated funds or failure to include the cost of being fully consistent in Federal budget and planning processes as a basis for being consistent to the maximum extent practicable with an enforceable policy of a management program.” 15 C.F.R. § 930.32(a)(3). “A Federal agency cannot avoid any State requirement that it finds burdensome simply by not funding the required action.” 65 Fed. Reg. 77,124, 77,134 (Dec. 8, 2000) (preamble to the final rule adopting CZMA regulations).

The Corps cannot logically satisfy its duty under the CZMA to demonstrate consistency with the CAMA “to the maximum extent practicable” based on work it admits it has not performed. The State of North Carolina, Orton, and the public are unable to determine whether the Project is consistent with the historical preservation requirements of the CAMA “to the maximum extent practicable” at sites like Orton within designated AECs unless the Corps first provides an analysis of the Project’s direct and indirect effects on those same resources. The Corps’ failure to provide this analysis – while claiming it has satisfied it – improperly circumvents the CZMA consistency obligation.

This letter and accompanying Foth and Lynker Technical Reports demonstrate that the direct and indirect effects of the Project will cause irreversible damage to the Orton Property’s exceptional wetland ecosystem and to the historically significant rice fields, water management system, and underwater archaeological resources. See Exhibits 1 and 2. Those Orton Property resources are located within coastal shoreline and estuarine water AECs and are protected by the CAMA.

To provide a rational predicate to demonstrate consistency with the CAMA, and satisfy its obligation under the CZMA, the Corps first must identify the direct and indirect effects of the Project on the Orton Property. The Draft EIS has not done so. The Corps has not identified the obvious impacts that the Project will have on the wetland and historic resources at the Orton Property. This falls short of the Corps’ binding duty under the CZMA to evaluate the Project’s “reasonably foreseeable direct and indirect effects on any coastal use or resource” as part of the analysis to determine whether the Project will be carried out in a manner which is “consistent to the maximum extent practicable” with the CAMA. 15 C.F.R. § 930.33(a)(1); 16 U.S.C. § 1456(c)(1)(A).

ii. The Corps has not satisfied its statutory duty to carry out the Project in a manner consistent to the maximum extent practicable with the CAMA’s requirements to protect ecological and historic resources in AECs at Orton.

The CZMA requires more than procedural analysis of direct and indirect effects of the Project at Orton. The CZMA consistency requirement mandates that the Project “shall be carried out in a manner which is consistent to the maximum extent practicable” with the CAMA. 16 U.S.C. § 1456(c)(1)(A). The binding federal regulations confirm that the CZMA “was intended to cause substantive changes in Federal agency decision

making within the context of the discretionary powers residing in such agencies.” 15 C.F.R. § 930.32(a)(2). That requires the Corps to identify specific mitigation, avoidance, and protection measures to ensure the Project will not cause irreversible damage to the protected coastal resources within the Orton Property. The Corps has made no attempt to do so in the Draft EIS, and has not complied with 16 U.S.C. § 1456(c)(1)(A).

e. The Corps should work with North Carolina and Orton in good faith to develop appropriate mitigation conditions to demonstrate consistency with the North Carolina Coastal Area Management Act.

The CZMA regulations encourage the Corps to coordinate with North Carolina to informally develop conditions that would allow the state to concur with the federal action. 15 C.F.R. §§ 930.4(a), 930.34(a)(1). This informal coordination is supposed to be conducted prior to the Corps providing the consistency determination to North Carolina, rather than after-the-fact as appears to have occurred here. 15 C.F.R. § 930.34(a)(1). The Corps is encouraged to engage in early consultation with North Carolina and “should obtain the views and assistance of the State agency regarding the means for determining that the proposed activity will be conducted in a manner consistent to the maximum extent practicable with the enforceable policies of a management program.” *Id.* § 930.34(d).

To satisfy these coordination directives and the Corps’ CZMA consistency obligation, the Corps should work in good faith with the North Carolina Division of Coastal Management to develop specific mitigation, avoidance, and protection measures to ensure the Project will not damage the protected natural, cultural and historic resources within the Orton Property. Orton requests that it participate in these mitigation discussions.

Summary of the Corps' Failure to Satisfy the Coastal Zone Management Act

- The CZMA requires the Corps to carry out the Project in a manner which is consistent to the “maximum extent practicable” with the North Carolina CAMA.
- The CAMA prohibits development within AECs that will damage historic resources.
- The listed historic resources at the Orton Property are within an AEC and are protected by the CAMA.
- The CAMA also prohibits development that will damage the exceptional wetland ecosystem at the Orton Property.
- The Corps cannot state that the Project is consistent with the CZMA when it admits it has not analyzed the obvious direct and indirect impacts to the protected natural and historic resources at the Orton Property.
- The Corps should meaningfully consult with North Carolina and Orton to develop specific mitigation and avoidance to prevent adverse impacts to the protected resources at the Orton Property.

5. The Corps has not fulfilled its obligations under the National Historic Preservation Act.

Section 106 of the NHPA requires the Corps to analyze whether the Project will “directly or indirectly” impact properties that are listed, or eligible for listing, on the NRHP. 36 C.F.R. §§ 800.5(a)(1), 800.16(d). The Corps must consider all “reasonably foreseeable effects caused by the [Project],” including those “that may occur later in time, be farther removed in distance or be cumulative.” *Id.* 800.5(a)(1). The Corps’ binding regulations under Section 106 specifically require it to consider the Project’s effects “that may occur outside the permit area.” 33 C.F.R., part 325, Appendix C, 5(f); *see also Pye v. United States*, 269 F.3d 459, 469 (4th Cir. 2001) (“Even if no shovels or backhoes will touch [an] historic area, damage to historic areas can occur in less direct ways.”).

The Draft EIS does not mention or attempt to analyze the obvious adverse impacts the Project will have on the listed historic resources at the Orton Property. That oversight must be corrected in the Final EIS. The direct dredging footprint for the Project is inside the Orton Property NRHP Boundary. The Project will result in readily foreseeable indirect effects on the listed historic rice fields, dikes and revetments, and water control structures at the Orton Property. *See* Pages 5-6, 10-14 (summarizing in detail the foreseeable adverse effects of the Project on the Orton Property); *see also* Exhibits 1 and 2. The only mention of potential impacts to the Orton Property, however, is the result of SHPO identifying the Orton Property as a potentially impacted property to the Corps. DEIS, Appendix E at 32-33.

The Corps cannot ignore the Project's obvious and foreseeable direct and indirect impacts on the Orton Property. The Corps must analyze whether the Project "may alter, directly or indirectly," any character-defining feature of the historic Orton Property. 36 C.F.R. § 800.5(a)(1) (emphasis added).

a. The Corps must revise the Programmatic Agreement to comply with the requirements of Section 106.

Due to "[t]ime and budgetary constraints," and uncertainty in final Project scope and design, the Corps has not yet conducted "all necessary surveys to sufficiently identify and evaluate cultural resources, fully determine adverse effects of the action alternative on historic properties, or establish methods to avoid, minimize, or mitigate those adverse effects." DEIS, Appendix N at 14, Appendix E at 27. The Corps has deferred these studies and analyses, and the consultation required under the NHPA, until the pre-construction, engineering, and design phase of the Project. DEIS, Appendix E at 1-2. To satisfy its obligations under Section 106, at this stage, the Corps has proposed execution of a Programmatic Agreement with SHPO and other consulting parties.

The Draft EIS incorrectly states that Orton did not respond to the invitation from the Corps to be a consulting party under Section 106 and the Programmatic Agreement. *Id.* at 2, 38. Orton timely accepted the invitation on May 30, 2025, within thirty days of receiving the Corps' letter requesting Orton's participation. Orton requests that the Corps correct that mistake in the Final EIS, engage with Orton on execution of the Programmatic Agreement, and meaningfully consult with Orton and SHPO as required under Section 106 of the NHPA.

Orton provides the following specific comments on the draft Programmatic Agreement.

The Project's Area of Potential Effects must include on-shore and near-shore properties, including the Orton Property. The Corps' preliminary Area of Potential Effects ("APE") for the Project does not comply with federal law. The Corps' preliminary APE is limited to the dredging footprint for the Project. DEIS, Appendix E at 27. Section 106 requires that the Project APE include the "geographic area or areas" within which the Project "may directly or indirectly cause alterations in the character or use of historic properties." 36 C.F.R. § 800.16(d) (emphasis added). The Corps may not arbitrarily limit its analysis to the direct impacts caused within the dredging footprint of the Project and exclude properties like Orton that will obviously be indirectly affected by wave action and other consequences of the Project. *E.g.*, 33 C.F.R., part 325, Appendix C, 5(f) (requiring consideration of effects outside permit area).

North Carolina SHPO made clear in its comments to the Corps that the Project APE needs to include on-shore and near-shore historic properties. DEIS, Appendix E at 32. It is inaccurate for the Programmatic Agreement to state, as proposed by the Corps in the Draft EIS, that the "APE for the Project was determined by the Corps based on Project engineering and design and in consultation with the SHPO." *Id.* at 39. SHPO

has already stated that it disagrees with the limited APE proposed by the Corps, requested further consultation on this issue, and SHPO conditioned its agreement to enter into the Programmatic Agreement on the understanding that the APE would be determined through that process in consultation with SHPO. *Id.* at 32. The Corps must consult with SHPO on the Project APE to fulfill its obligations under Section 106. 36 C.F.R. § 800.4(a)(1).

Orton agrees with SHPO that Section II of the Programmatic Agreement needs to specifically state that the Project APE will be determined through further consultation with SHPO and other consulting parties, and through site-specific study of the Project's direct and indirect effects on historic properties. *Id.* The Programmatic Agreement cannot adopt and memorialize the legally deficient APE objected to by SHPO.

The Programmatic Agreement must incorporate the binding regulatory definition of adverse effects. The draft Programmatic Agreement does not specifically define adverse effect. The Programmatic Agreement should explicitly incorporate and adopt the definition of "adverse effect" from 36 C.F.R. § 800.5 that defines an adverse effect to include all direct, indirect, and cumulative effects from the Project.

The Corps should clarify the dispute resolution rights of the consulting parties. The Dispute Resolution procedures in Section VIII should be strengthened and clarified. The Section should clarify that any Signatory or Consulting Party may initiate dispute resolution regarding any action proposed or the manner in which the terms of this Agreement are implemented. The Section should require that the Corps provide a written response that includes the rationale for its final decision and consideration of all comments received. The Section should provide the ACHP with sufficient time to make a decision, sixty or ninety days, and make the decision of the ACHP binding on the Corps. The Corps should not be able to ignore the decision of the ACHP as proposed. And finally, the Section should explicitly state that nothing in the Agreement, or in the dispute resolution procedures, operates to waive, limit, or prejudice the rights of any Signatory or Consulting Party to seek judicial review or otherwise challenge any final decision or action taken pursuant to the Agreement in any court of competent jurisdiction.

Orton requests that the Corps adopt its proposed revisions to the Programmatic Agreement and consult with Orton on the Project's effects on the historic Orton Property under the Programmatic Agreement. Orton looks forward to consulting with the Corps and SHPO on feasible avoidance and mitigation measures to prevent these effects.

Summary of the Corps' Failure to Satisfy the National Historic Preservation Act

- The Orton Property contains approximately 830 acres of shoreline, near-shoreline, and underwater property listed on the NRHP.
- The Project will dredge inside the Orton Property NRHP Boundary.
- The Project's dredging plan directly threatens the integrity of the Orton Property historic dike system.
- The Project will result in readily foreseeable indirect impacts to the listed historic rice fields, dikes, and revetments at the Orton Property.
- The NHPA requires the Corps to consult with SHPO and Orton on the Project's direct and indirect effects on the Orton Property, and on mitigation measures to avoid these effects.
- The Draft EIS incorrectly states that Orton did not respond to the invitation from the Corps to be a consulting party under Section 106 and the Programmatic Agreement.
- The Corps must adopt revisions to the Programmatic Agreement to comply with Section 106 of the NHPA.

6. The Corps must acknowledge the obvious adverse impacts of the Project on the Orton Property in the Final EIS and protect the Property's important historic, cultural, and ecological resources.

NEPA, the NHPA, the CZMA, and the Corps' own binding policy impose mandatory, non-discretionary obligations on the Corps. The Draft EIS demonstrates that the Corps has not fulfilled its obligations under those statutes. The Project poses obvious risks to the Orton Property that, if the adverse consequences occur, will cause great damage to Orton.

The structural integrity of the dike is Orton's number one concern. The Project poses a real and unacceptable risk of catastrophic failure of the dike system. Failure of the dike will result in a cascading series of events including saltwater intrusion into the historic rice fields, rendering them incapable of growing rice and destroying the freshwater ecological water system at the Orton Property. Failure of the dike would flood the rice fields and freshwater ponds with saltwater, erasing what stands today as a preserved monument to enslaved African Americans dating back centuries.

Binding Corps policy requires that the Corps prevent the Project from causing the failure of the dike. That policy requires the agency to conduct detailed, site-specific geotechnical analyses to ensure the dredging will not compromise the Orton dike. The Corps has ignored that policy, and ignored the adverse impacts of the Project on the Orton Property.

The Corps must describe the obvious adverse impacts of the Project on the Orton Property in the Final EIS. The Final EIS must disclose the adverse impacts of the Project on the unique cultural, historical, and ecological resources at the Orton Property. The Corps must adopt design and implementation measures to protect the Property's important historic, cultural, and ecological resources. NEPA, the NHPA, the CZMA, and the Corps' own binding policies require this.

This is a public project that will use nearly \$900 million in public funds for public benefit. The adverse impacts of the Project should not be borne by Orton, a private property owner that is preserving the legacy of our past and protecting a site nationally recognized as an historic place worthy of preservation by listing in the National Register of Historic Places.

We look forward to consulting and coordinating with the Corps to identify appropriate measures to prevent the obvious adverse effects of the Project on the Orton Property.

Sincerely,

DocuSigned by:
Louis Bacon
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Louis Moore Bacon
Chairman
Orton Plantation Holdings, LLC

cc: Dillon Epp, Orton Property Manager
Henry L. Kitchin Jr, Esq., McGuireWoods LLP
Ezekiel J. Williams, Esq., Williams Weese Pepple & Ferguson

Exhibits:

- Exhibit 1: Foth Technical Report
- Exhibit 2: Lynker Technical Report
- Exhibit 3: 2013 National Park Service National Register of Historic Places Designation at Orton
- Exhibit 4: 2012 Corps Permit