

FINDING OF NO SIGNIFICANT IMPACT

West Onslow Beach and New River Inlet (Topsail Beach) and Surf City and North Topsail Beach Coastal Storm Damage Reduction Projects

Pender and Onslow Counties, North Carolina

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1.0 INTRODUCTION

The National Environmental Policy Act of 1969, as amended (NEPA), requires consideration of the environmental impacts for major federal actions. The proposed action and the environmental impacts of the proposed action were addressed in the Environmental Assessment (EA) for direct impacts of the West Onslow Beach and New River Inlet (Topsail Beach) and Surf City and North Topsail Beach Coastal Storm Damage Reduction Projects, Pender and Onslow counties, North Carolina, dated July 2013. This EA was a supplement to the Final EIS documents and Records of Decision issued for both of these 50-year storm damage reduction projects; the narrow focus of the supplemental EA was to address the issue of borrow source sand compatibility with these beaches.

The EA was coordinated with various regulatory agencies and the public and comment letters and memoranda were received. These comments are included with this Finding of No Significant Impact (FONSI) (Appendix A). The purpose of this FONSI is to ensure the environmental consequences of the proposed action are considered, that environmental and project information are available to the public, and to document the decision that no significant impacts would occur if the proposal is implemented.

This FONSI has been prepared pursuant to NEPA in accordance with the Council on Environmental Quality (CEQ) regulations as contained in 40 CFR Parts 1500 to 1508, which directs federal agencies on how to implement the provisions of NEPA. It has also been prepared in accordance with Untied States Army Corps of Engineers (USACE) NEPA regulations at 33 CFR Part 230.

2.0 ALTERNATIVES

2.1 Proposed Action – Wilmington District Compatibility Practice

The purpose of the West Onslow Beach and New River Inlet (Topsail Beach) and Surf City and North Topsail Beach (SCNTB) Coastal Storm Damage Reduction (CSDR) projects is to reduce storm damages resulting from beach erosion and waves along the ocean shoreline of the study area. To accomplish this, a dune and berm system will be constructed along Topsail Island beach segments. Sand for the beachfill would be delivered from offshore borrow areas by hydraulic dredging methodologies.

Based on the Study phase geotechnical investigations, it appeared that sufficient sediment was available to meet the 50 year project life. More complete geotechnical investigations of the borrow areas have since been conducted during the Pre-construction Engineering and Design (PED) phase for both projects. The additional analyses resulted in a refinement in the borrow area characterizations. A borrow area utilization plan needs to be developed which provides compatible beach material for a 50 year project life for each project.

The proposed action is to implement a borrow area utilization plan which includes the Wilmington District's compatibility practice for beach placement of sediment. Specifically, this includes, but is not limited to, implementation of: (1) a visual classification and laboratory analysis of vibracore sediment samples, (2) use of the federal guidelines for calculating overfill ratios (Section V-4-1.e.(2)i. of the U.S. Army Corps of Engineers Engineer Manual (EM) 1110-2-1100, part V, titled Coastal Engineering Manual) and (3) an average weighted fine-grained sediment content of less than 10% passing the #200 sieve. The proposed action would provide approximately 13.6 million cubic yards (MCY) for Topsail Beach and approximately 14.6 MCY for SCNTB of compatible dredged material for placement on the beach in order to meet the 50 year project life of both projects. A combination of dredging operational techniques (i.e. coarsening of material through losses of fine-grained sediment during dredging and placement activities), construction management measures (i.e. quality control monitoring, coordination, and contingency planning), and screening measures (i.e. physical removal of incompatible granular material) will be implemented to assure that sediment placed on the beach is "compatible" with the native sediment. The proposed action would maintain the current borrow area acreage impacts evaluated in the Topsail Beach and SCNTB EISs and avoid the impacts associated with additional offshore investigations for borrow areas and actual dredging and conveyance of sediment from those sites.

2.2 Alternatives Considered

The EA also considered a No Action Alternative. Under the no action Alternative, no changes would be made to the preliminary borrow area utilization plans identified in the Topsail Beach and SCNTB EISs. The authorized borrow areas would be utilized in compliance with the North Carolina sediment compatibility standards found at 15A NCAC 07H.0312. These standards have not been made part of the State's approved Coastal Management Plan for purposes of federal Coastal Zone Management Act (CZMA) consistency. The District has informed the North Carolina Division of Coastal Management (NC DCM) of its concerns relating to these sediment compatibility standards. One concern raised by the District is applicable to this project: that the state restriction on fine-grained borrow material not exceeding the fine-grained content on the native beach by more than 5% can work an unnecessary hardship when the native beach has very little fine-grained component (in this case, sometimes less than 2%). The result is that very good sand with a fine-grained component of approximately 7% can be considered incompatible by State standards.

Under this alternative, the State standard would be followed. The borrow areas would be used until all identified beach compatible material, as defined by the State standard, is exhausted. Due to very minor differences in fine-grained percentages between some borrow sources and the State standard, this alternative would not provide sediment volumes to support the 50 year project life of both projects. Additional borrow areas located further offshore would be required resulting in incremental direct and indirect environmental impacts, and increased cost to both projects.

3.0 IMPACTS OF THE PROPOSED ACTION

Table 1. Summary and comparison of impacts to each resource category relative to the selected and no action alternatives.

Resource	Proposed Action	No Action Alternative
Water Quality	 Localized short term increase in turbidity within the offshore dredging location, in the surf zone, and in the immediate area of sand deposition. The percentage of increase in fine-grained sediment is negligible and impacts are not expected to exceed the threshold evaluated in the original EISs. 	 Localized short term increase in turbidity within the offshore dredging location, in the surf zone, and in the immediate area of sand deposition. Additional borrow areas would likely be pursued further offshore resulting in the potential cumulative increase in total area of dredging related turbidity within the water column offshore.
Surf Zone Fishes	 Localized short term turbidity disturbance confined to the beach placement location during construction. The percentage of increase in fine-grained sediment is negligible and impacts are not expected to exceed the threshold evaluated in the original EISs. 	 Localized short term turbidity disturbance confined to the beach placement location during construction. Additional borrow areas would likely be pursued further offshore resulting in the potential increase in construction duration and risk of extending into the peak recruitment and abundance periods of surf zone fishes.
Benthic Resources –Surf Zone	 Localized, short-term, and reversible impacts to benthic intertidal macrofauna from direct burial, increased turbidity in the surf zone, or changes in the sand grain size or beach profile. The percentage of increase in fine-grained sediment is negligible and impacts are not expected to exceed the threshold evaluated in the original EISs. 	 Localized, short-term, and reversible impacts to benthic intertidal macrofauna from direct burial, increased turbidity in the surf zone, or changes in the sand grain size or beach profile. Additional borrow areas would likely be pursued further offshore resulting in the potential increase in construction duration and risk of extending into the peak recruitment and abundance periods of intertidal macrofauna.
Benthic Resources - Nearshore Ocean	Localized and temporary turbidity impacts would not exceed the impact threshold considered in the referenced EISs.	 Localized and temporary turbidity impacts. Additional borrow areas would likely be pursued further offshore resulting in the potential increase in cumulative acreage of direct benthic resource impacts.

Resource	Proposed Action	No Action Alternative
EFH – Hard Bottoms	The percentage of increase in fine- grained sediment is negligible and would not result in an incremental effect not previously evaluated or result in an increase in sediment dispersion that would require a reevaluation of buffer distances.	Additional borrow areas would likely be pursued further offshore with a high likelihood of encountering additional moderate and high relief hard bottom communities requiring additional surveys, coordination, and development of mitigative buffers.
Endangered and Threatened Species	The project May Affect, Not Likely to Adversely Affect the piping plover, seabeach amaranth, and loggerhead, leatherback, and green sea turtle and Not Likely to Aversely Modify critical habitat for piping plovers.	Additional borrow areas would likely be pursued further offshore. Increased haul distances could require additional time to complete a nourishment event; thus, increasing the risk of sea turtle entrainment.
Recreation and Aesthetic Resources	The percentage of increase in fine- grained sediment is negligible and would not result in a discernible increase in impacts to recreational and aesthetic resources.	Additional borrow areas would likely be pursued further offshore. Increased haul distances could require additional time to complete a nourishment event and extend into the peak recreation season.

4.0 CHANGES TO THE ENVIRONMENTAL ASSESSMENT

Section 1.1 referenced the West Onslow Beach and New River Inlet (Topsail Beach), North Carolina and SCNTB CSDR projects for more extensive background information pertaining to project related environmental impacts in accordance with the NEPA of 1969, as amended. This section has been revised to include the following paragraph, which reflects that the Bureau of Ocean Energy Management (BOEM) is a cooperating agency on the SCNTB project and clarifies their involvement in the NEPA process:

The U.S. Bureau of Ocean Energy Management (BOEM) served as a cooperating agency on the 2010 SCNTB EIS. Any use of borrow areas located on the Federal Outer Continental Shelf (OCS) would require authorizations from BOEM to undertake the proposed project. The BOEM has jurisdiction over mineral resources on the Federal Outer Continental Shelf (OCS) pursuant to section 8(k)(2)(d) of the OCS Lands Act. The USACE serves as lead federal agency for ESA Section 7 and the EFH consultations on this project. Further, the USACE also serves as the lead federal agency for the NHPA Section 106 and CZMA Section 307 compliance with BOEM acting in a consulting role.

5.0 PUBLIC AND AGENCY COORDINATION

On 17 July 2013 the EA for direct impacts of the <u>West Onslow Beach and New River Inlet</u> (<u>Topsail Beach</u>) and <u>Surf City and North Topsail Beach Coastal Storm Damage Reduction</u> <u>Projects, Pender and Onslow counties, North Carolina</u> was mailed to federal and state agencies and the interested public for a 30-day review and comment period.

The EA and the comments received from the public have been considered in the decision to prepare this FONSI in accordance with NEPA requirements. Letters and memoranda on the EA were received from the following:

Federal Agencies

- Bureau of Ocean Energy Management
- Office of Surface Mining Reclamation and Enforcement
- Environmental Protection Agency
- US Fish and Wildlife Service

State Agencies

- North Carolina Department of Administration State Clearing House
- North Carolina Department of Environment and Natural Resources
 - North Carolina Department of Cultural Resources State Historic Preservation Office
 - North Carolina Division of Water Resources, Public Water Supply Section
 - North Carolina Wildlife Resources Commission
 - North Carolina Office of Conservation, Planning, and Community Affairs, National Heritage Program
 - North Carolina Department of Transportation

- North Carolina Division of Emergency Management, Floodplain Management Program
- North Carolina Division of Land Quality

Elected Officials

None

Local Agencies/Entities

None

Conservation Groups

None

Universities

None

None of the comments received identified any reasonable alternatives or major issues that were not already addressed in the EA or the projects' respective EIS documents. Clarifications regarding Endangered Species effects, range of alternatives, and CZMA consistency can be found in the USACE responses to comments in the following Appendix, and confirm that each of these issues has been adequately addressed. All comments and associated responses are included in Appendix A.

6.0 FINDING OF NO SIGNIFICANT IMPACT

I have reviewed the EA for direct impacts of the supplemental actions identified in the West Onslow Beach and New River Inlet (Topsail Beach) and Surf City and North Topsail Beach Coastal Storm Damage Reduction Projects, Pender and Onslow counties, North Carolina Environmental Assessment, dated July 2013, the information provided by interested parties, and the information contained in this Finding of No Significant Impact, and I find that the proposed action will not significantly affect the quality of the human or natural environment. Therefore, preparation of an Environmental Impact Statement pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, is not required.

Date: 3. April 2014

Steven A. Baker Colonel, U.S. Army District Commander

APPENDIX A

RESPONSES TO ENVIRONMENTAL ASSESSMENT COMMENTS

1. Office of Surface Mining Reclamation and Enforcement

Email dated 24 July 2013

<u>Comment</u>: The Office of Surface Mining has reviewed the Environmental Assessment for West Onslow Beach and New River Inlet (Topsail Beach) and Surf City and North Topsail Beach Coastal Storm Damage Reduction Projects, Pender and Onslow Counties, NC. In this regard, we have no comments. Thank you for the opportunity to review this document

Response: Noted.

2. Bureau of Ocean Energy Management

Email dated 13 August 2013

<u>Comment 1:</u> Thank you for the opportunity to comment on the EA addressing the refinement in utilization of borrow areas located offshore of Topsail Island for the CSDR at Topsail, Surf City, and North Topsail Beaches. The BOEM does not have any specific comments regarding your determination.

Response 1: Noted.

<u>Comment 2:</u> BOEM is a cooperating agency on this project and recommends the following language be incorporated into the EA to indicate BOEM involvement in the NEPA process:

"The U.S. Bureau of Ocean Energy Management (BOEM) served as a cooperating agency on the 2010 SCNTB EIS. Any use of borrow areas located on the Federal Outer Continental Shelf (OCS) would require authorizations from BOEM to undertake the proposed project. The BOEM has jurisdiction over mineral resources on the Federal Outer Continental Shelf (OCS) pursuant to section 8(k)(2)(d) of the OCS Lands Act. The USACE serves as lead federal agency for ESA Section 7 and the EFH consultations on this project. Further, the USACE also serves as the lead federal agency for the NHPA Section 106 and CZMA Section 307 compliance with BOEM acting in a consulting role."

Response 2: Concur. Section 1.1 of the EA has been updated to include this recommended language. Additionally, Section 4.0 of the FONSI discusses this change.

<u>Comment 3</u>: In regards to the affected environment and general water quality impacts, you may find some more recent relevant references in the Michel et al. 2013 (BOEM 2013-0119) report that support your determinations.

Response 3: Concur. This reference has been reviewed and considered in the effect determinations that were made.

3. North Carolina Department of Cultural Resources, State Historic Preservation Office

Letter dated 30 July 2013

<u>Comment</u>: We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

Response: Noted.

4. Environmental Protection Agency

Email dated 16 August 2013

Comment 1: EPA request[s] clarification regarding language presented in section 3.2 – No Action – "A NEPA document would be prepared to assess additional offshore borrow area alternatives which contain compatible sediment in accordance with the State compatibility standard." EPA is unclear on why the COE did not include an alternative in this EA that addressed potential additional borrow areas that could provide material that is compatible with the State standard. This alternative would provide the public with an opportunity to better understand the cost and environmental benefits associated with meeting this standard. EPA believes the proposed suit[e] of alternatives, as presented in the EA, are too narrow.

Response 1: We do not agree that the suite of alternatives is too narrow. This EA was prepared for the limited purpose of examining sediment compatibility issues raised as we gathered more data about proposed borrow sources. The Corps does not believe that the inclusion of additional borrow area alternatives further offshore is warranted for this EA, particularly given the negligible environmental impact of the selected alternative.

The No Action Alternative compares present borrow area utilization plan actions against the proposed action alternative. CEQ allows grouping of existing plans and policies into an alternative to show the impacts of implementing them in the future. The "no action" alternative means continuing with the present borrow area utilization plan until that plan is changed. A component of the existing plan, outlined in the underlying EIS documents, consisted of a requirement or commitment to do additional environmental and NEPA analysis if new or additional offshore borrow areas are proposed. Additionally, an updated planning document (i.e. Limited Re-evaluation Report) would be prepared by the Corps to assess potential changes to the formulation, evaluation, and selection of alternatives based on the use of borrow areas located further offshore. The statement referenced in the EPA comment is referring to this contingency commitment, which continues to be a part of the existing plan.

Specific details for both the West Onslow Beach and New River Inlet (Topsail Beach), North Carolina (NC) and Surf City and North Topsail Beach (SCNTB) Coastal Storm Damage Reduction (CSDR) projects were incorporated by reference in the following reports:

- U.S. Army Corps of Engineers, 2009. Final Integrated General Reevaluation Report and Environmental Impact Statement, Shore Protection, West Onslow Beach and New River Inlet (Topsail Beach), NC. February 2009.
- U.S. Army Corps of Engineers. 2010. Final Integrated Feasibility Report and Environmental Impact Statement, Coastal Storm Damage Reduction, Surf City and North Topsail Beach, North Carolina. December 2010.

These two reports contain extensive information pertaining to potential borrow areas. They completely and adequately discuss potential borrow areas. Additional investigations were not conducted for this EA.

<u>Comment 2</u>: EPA request[s] the COE provide clarification on the need to meet the 50-year project life for compatible sand supply. Based on our reviews of the draft and final EISs supporting this EA it doesn't appear that the 50-year project life and need for compatible sand over that period was discussed.

Response 2: In accordance with USACE regulations for how Corps of Engineers Civil Works projects are formulated, evaluated and selected for implementation (ER 1105-2-100), the planning objectives for both studies consider a 50 year period of analysis. Specifically, section 4.01, "Goals and Objectives" of the SCNTB report states that the study objective is: "Over a 50-year period of analysis, provide coastal storm damage reduction (as measured by increases in NED benefits) to the shoreline in Surf City and North Topsail Beach, while minimizing or avoiding impacts to natural resources." The opening sentence of the Executive Summary of the SCNTB report states: "The purpose of this study is to evaluate coastal storm damage reduction for the towns of Surf City and North Topsail Beach, North Carolina, and develop the most suitable plan of damage reduction for the present and future conditions for a 50-year period of analysis." The 50 year period served as the required basis for evaluation, comparison, and selection of alternatives for both projects. This was adequately addressed in each underlying EIS.

<u>Comment 3</u>: EPA is concerned that the preferred alternative presented in the EA will result in the use of beach fill material that is not consistent with current beach material potentially impacting T&E species. EPA strongly recommends consultation with the USFWS regarding the proposed change and any potential impacts to T&E species.

Response 3: Based on the analysis and subsequent conclusions of the EA, the Corps confirms that the preferred alternative will result in the use of beach fill material that is fully compatible with accepted standards. The use of Corps standards, rather than State standards, for determining compatibility of sand will not adversely affect species, including T&E species. The Corps has

consulted with the USFWS on this project and, in accordance with Section 7 of the Endangered Species Act (ESA), the USFWS has reviewed and provided comments on the EA (via letter dated 13 August 2013) regarding potential impacts to protected resources. The Corps received the USFWS concurrence via letter (see USFWS 4a below) on 14 March 2014, which confirmed that the projects' effects on listed species is unchanged from previous determinations.

<u>Comment 4:</u> EPA continues to be concerned with potential impacts to hard bottom areas. We continue to recommend rigorous delineation of all hard bottom resources within the proposed borrow areas to avoid impacts to hard bottom resources.

Response 4: As discussed in the referenced Topsail Beach and SCNTB EISs, extensive hard bottom and associated biological characterization surveys were completed to identify and support appropriate buffer determinations relative to hard bottom relief. No hard bottom resources were identified within the borrow areas located offshore of Topsail Beach; however, low, moderate, and high relief hard bottom features were identified within borrow areas located offshore of Surf City and North Topsail beaches. Avoidance buffers were established, in coordination with the Resource Agencies, in order to minimize and/or avoid direct and indirect impacts to mapped hard bottom resources. Commitments to avoid hard bottom resource impacts within the borrow areas are summarized in Table 7.2 of the referenced SCNTB EIS. Nothing in this EA affects those commitments, and this proposed action will have a negligible effect on those resources.

<u>Comment 5</u>: Dredging activities should be done in a manner that does not cause or contribute to exceedances in State WQ standards. EPA recommends providing details on proposed BMPs to minimize impacts to WQ.

Response 5: As discussed in the referenced EIS's for both projects, proposed dredging and beach placement activities would not cause or contribute to exceedances in State WQ standards. Table 7.2 of the SCNTB EIS states the following environmental commitments (i.e. BMP's) to minimize impacts to water quality:

- Before construction, the Corps would obtain a Section 401 Water Quality Certification from the NCDWQ for the proposed project. The Corps would comply with the requirements of the Section 401 Water Quality Certification. A copy of the certification would be forwarded to NCDCM (NCDCM consistency condition).
- Temporary dikes would be used to retain and direct flow of material parallel to the shoreline
 to minimize surf zone turbidities. The temporary dikes would be removed and the beach
 graded in accordance with approved profiles on completion of pumping activities in that
 section of beach (NCDCM consistency condition).

4. US Fish and Wildlife Service

Letter dated 13 August 2013

Comment 1: Page 3, Service Concerns and Recommendations: "The Biological Assessment (Appendix I of the EIS) for Surf City and North Topsail Beach project states on Page I-18: "this assessment assumes the sediment being placed on the beach meets the new state Sediment Criteria Rule Language... for borrow material and subsequent beach placement. ... Therefore, sediment characteristics will be compatible with native beaches." The Service relied on this commitment in our review of the project for effects to federally-listed species. Changes in the compatibility of sediment proposed for nourishment will require re-initiation of Section 7 consultation."

Page 5, Summary: "The Service believes that the proposed changes to the project will result in the placement of sand that is not consistent with sand currently on the project area beaches. The proposed change in composition of beach fill material constitutes a modification of the project in a manner and extent that causes an effect to listed species and proposed critical habitat that was not previously considered. Therefore, the Service recommends that the Corps reinitiate Section 7 consultation."

Response 1: Though the referenced reports document the Corps' previous commitment to implement the State's sediment criteria rule language, the reports do not suggest that the previous methodologies for evaluating sediment compatibility (i.e. "Wilmington District practice") would result in material being placed on the beach that is not compatible with the native beach. The "Wilmington District practice" and the NC sediment compatibility standards are two different sediment compatibility methodologies with the same goal of identifying "compatible" sediment for beach placement that is consistent with the native sand on the project area beaches. The purpose of the EA was to evaluate environmental resources within the project area for potential incremental impacts from implementing a different compatibility methodology (i.e. Wilmington District practice). The EA concludes that the proposed action would not result in significant incremental adverse impacts that had not been previously evaluated in the EISs. Therefore, both sediment compatibility methodologies would result in sediment being placed on the beach that is "compatible" with the native sediment. Furthermore, based on this conclusion, implementation of the proposed action would not affect listed species or critical habitat in a manner or to an extent not considered in the previous consultation; therefore, re-initiation of consultation is not required. The District did clarify its compatibility practices with the FWS and received FWS concurrence that the potential effect on T&E species remains unchanged.

<u>Comment 2</u>: Page 3, Service Concerns and Recommendations: "Section 1.04 (Page 6) of the Final EIS for the Surf City and North Topsail Beach CSDR project (and Section 1.03 of the Final EIS for the Topsail Beach CSDR project) does not mention a requirement to identify 50-yearsworth of compatible borrow material in order to meet the purpose and need of the project."

Page 4, Service Concerns and Recommendations: "Instead of relaxing the sediment criteria for this project, the Service recommends that the Corps continue to investigate other borrow areas for more compatible sediments, or shorten the life of the project to match availability of compatible sediment....Because this is a 50 year project, a specific borrow areas is not needed right away, and it is likely that other sources of more compatible material could be indentified in the future."

Page 6, Summary: "If there is not enough sand to support a 50-year project, the Corps should reduce the life of the project to one that the sand will support, or redesign the project so that the available compatible sand can support a 50-year project life. Alternatively, the Corps could seek additional sand sources. Therefore, we recommend that the Final EA include a third alternative. This alternative would include removing all or part of borrow areas A, O, P, and L from consideration and commitment to pursue investigations of other project designs, project lengths, or potential borrow areas."

Response 2: Section 1.03 of the Topsail Beach report and Section 1.04 of the SCNTB report do not mention a requirement to identify 50-years worth of compatible borrow material to meet the purpose and need of the project. However, in accordance with USACE regulations for how Corps of Engineers Civil Works projects are formulated, evaluated and selected for implementation (ER 1105-2-100), the planning objectives for both studies consider a 50 year period of analysis. Specifically, section 4.01, "Goals and Objectives" of the SCNTB report states that the study objective is: "Over a 50-year period of analysis, provide coastal storm damage reduction (as measured by increases in NED benefits) to the shoreline in Surf City and North Topsail Beach, while minimizing or avoiding impacts to natural resources." The opening sentence of the Executive Summary of the SCNTB report states: "The purpose of this study is to evaluate coastal storm damage reduction for the towns of Surf City and North Topsail Beach, North Carolina, and develop the most suitable plan of damage reduction for the present and future conditions for a 50-year period of analysis." Therefore, the 50 year period served as the basis for evaluation, comparison, and selection of alternatives for both projects.

As discussed in response to Comment 1 above, the proposed action does not suggest a "relaxing" of sediment criteria for this project, but rather an alternative method for conducting sediment compatibility analyses (i.e. Wilmington District practice). The EA concludes that the proposed action would not result in significant incremental adverse impacts that had not been previously evaluated in the EIS under the State's recommended compatibility criteria. Considering that no additional environmental impacts would occur based on the proposed change in the methodology used to place compatible sediment on the beach, the Corps does not agree with the Service's suggestion to continue to investigate other borrow areas for "more compatible sediments, or shorten the life of the project to match availability of compatible sediment." The Corps contends that the material that has been identified within the current borrow areas is "compatible" and that the investigation and potential use of sediment that meets the State compatibility criteria would likely result in incremental direct and indirect impacts associated with the increased surface area

dredged and the additional time required to construct the project using borrow areas further offshore.

<u>Comment 3</u>: Page 4, Service Concerns and Recommendations: Finally, the Service is concerned with a lack of consistency in the applicability of the State sediment criteria. It is unclear how the Corps will hold itself to one standard of sediment compatibility, and expect private permittees to meet a higher standard. The Service is aware of several privately-funded beach nourishment projects currently being conducted or proposed along the coast of North Carolina, some of them in the same project area. It is difficult to afford the Corps Civil Works program one level of compliance for sediment compatibility, when we expect a greater level of compliance from private applicants. The Service is concerned that allowing the Corps to utilize a different level of compliance will make it more difficult to uphold the State sediment criteria for private permittees. Therefore, we recommend that the Corps honor its previous commitment to meet the above-stated sediment criteria."

Response 3: As discussed in the EA, though the new State sediment compatibility standards have since been passed by the NCCRC (15A NCAC 07H .0312, Technical Standards for Beach Fill Projects), to date they have not been submitted to the National Oceanic and Atmospheric Administration's (NOAA's) OCRM for consideration as a federally approved component of the State's coastal management program. In the absence of this OCRM approval, the State sediment compatibility standards are not required as a component of the Federal consistency determination on Civil Works projects in accordance with the Coastal Zone Management Act (CZMA) of 1972. However, the criteria have been passed by the NCCRC and are integrated into the CAMA rules and policies governing coastal development. Considering that privately funded beach projects are required to get a CAMA permit in addition to a Corps Section 404 permit, the rules must be adhered to. Based on a review of the existing literature, as documented in this EA and referenced EIS's, no incremental environmental impacts would occur through implementation of the Wilmington District compatibility practice. Based the existing science and the associated analysis in this EA, the NCDCM may consider re-evaluation of the existing rule language to assure consistency between private and federal projects and better assess the tradeoffs with respect to environmental impacts and project costs.

<u>Comment 4:</u> Page 5, Summary: We recommend that the proposed critical habitat for the loggerhead sea turtle and the candidate species red knot (Calidris canutus rufa) be added to the list of considerations under Section 7 of the Endangered Species Act."

Response 4: See response to Comment 1 above. The Corps does not concur that reinitiation of consultation is warranted at this point in time based on review of the available science and the conclusions of the referenced EIS' and this EA. Therefore, the Corps would not initiate consultation on the proposed critical habitat for loggerhead sea turtle and/or conference on the candidate species red knot. However, the Corps concurs that re-initiation of consultation will be required at which point in time the critical habitat designation for loggerhead sea turtles becomes final and/or the red knot becomes listed.

4a. US Fish and Wildlife Service

Letter dated 14 March 2014

<u>Comment</u>: With the commitments made by the Corps in the BA, the Service can concur with the Corps determination of May Affect, Not Likely to Adversely Affect (MA-NLTAA) for the piping plover, seabeach amaranth, and loggerhead, leatherback, and green sea turtle. We also concur that the project is Not Likely to Aversely Modify critical habitat for piping plovers. At this time, the Corps has made no determination of potential impacts to red knots or proposed critical habitat for nesting loggerhead sea turtles.

Response: Noted.

5. North Carolina Department of Administration

Letter dated 26 August 2013

(A summary of comments from State Agencies are provided below)

Comment: Attached to this letter for your consideration are the comments made by agencies in the course of this review*. If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.

Response: Noted.

5a. North Carolina Department of Environment and Natural Resources

Letter dated 23 August 2013

Comment: Based on the information provided, our agencies have identified permits that may be required and provided some guidance. These comments are attached for the applicant's consideration.

Response: Noted. As identified in the State of North Carolina Department of Environment and Natural Resources Project Review Form (Project Number: 14-0029) and associated "Intergovernmental Review – Project Comments" form dated 19 August 2013, a sedimentation control plan will be required at least 30 days prior to beginning activity. In compliance with this requirement, before initiating any land-disturbing activities, the Corps will obtain the approval of the North Carolina Division of Land Resources of an erosion and sedimentation control plan. The Corps would comply with the requirements of the approved erosion and sedimentation control plan and a copy of the plan approval will be forwarded to NCDCM.

5b. North Carolina Department of Environment and Natural Resources – Division of Coastal Management

Letter dated 12 August 2013 (comments provided by NCDCM via memorandum to Stephan Rynas, DCM federal consistency coordinator, dated 26 July 2013)

<u>Comment 1</u>: The NC Division of Coastal Management (DCM) is in the process of reviewing the existing sediment compatibility standards (15A NCAC 07H.0312). At the last Coastal Resources Commission (CRC) meeting on July 11, 2013, a series of proposed changes were approved for public hearing. One proposed change is to allow the percent by weight of granular material (Grain size ≥ 2 mm and <4.76 mm) to exceed the native beach by 10% instead of 5%. The allowable percent by weight of fine material and gravel material would each remain at 5% above the native beach percentage.

Response 1: Noted. The Corps appreciates the update on the existing sediment compatibility standards and the current proposed change to allow the percent by weight of granular material to exceed the native beach by 10% instead of 5%. The Corps requests that the NCDCM continue to keep the Corps updated of any approved changes to the State's sediment compatibility standards. However, as discussed in the EA, to date the state compatibility standards have not been submitted to the National Oceanic and Atmospheric Administration's (NOAA's) OCRM for consideration as a federally approved component of the State's coastal management program. In the continued absence of this OCRM approval, the State sediment compatibility standards are not required as a component of the Federal consistency determination in accordance with the Coastal Zone Management Act (CZMA) of 1972. The proposed action identified in the EA is to follow the Wilmington District compatibility practice, which has successfully been implemented on multiple CSDR and navigation disposal projects prior to the adoption of the State's sediment compatibility standards, without significant environmental impacts. The EA concludes that Borrow Area L contains 5.2% more granular material for the Wilmington District compatibility practice borrow composite than the current State standard. Assuming that the proposed change for granular material is made final, the percentage of granular material within Borrow Area L would only exceed the state standard by 0.2%. Nonetheless, the contingency plans referenced in the EA will be in place to monitor for and avoid and/or remove areas of unacceptable granular material that are believed to be a persistent problem.

<u>Comment 2</u>: The USACE should strive to meet the state sediment compatibility standards to the maximum extent practicable. Particularly when dredging Borrow A, Borrow Area P, or Borrow Area L, the dredge operator should be cognizant that, based on sampling data, these areas contain sediment that may be too fine or too coarse to be considered beach compatible. Should the dredging operations encounter sand deemed

non-compatible with native grain size or sorting characteristics of the native beach, the dredge operator shall immediately cease operation and contact DCM. Dredge operations will resume only after resolution of the issue of sand compatibility.

Response 2: The optimization of borrow areas based on extensive geotechnical investigation and analyses conducted from feasibility through PED (Pre-Construction Engineering and Design) phases of both projects supports the Corps' efforts of placing sediment on the beach that is "compatible" with the native sediments. When evaluating compatibility for all borrow areas for both projects, there are many instances where the material meets the compatibility criteria established by the State.

However, as discussed in the EA, the proposed action is to utilize PED geotechnical data from the offshore borrow area for the Topsail Beach and SCNTB CSDR projects and implement a borrow area utilization plan which relies upon the application of the Wilmington District's compatibility practice for beach placement of sediment. This practice would consider sediment with an average weighted fine-grained sediment content of less than 10% passing the #200 sieve as beach compatible (less than 5% above the native percent passing the #230 sieve is the State criteria). Measures would be implemented to screen incompatible granular material. Based on a review of the existing literature as documented in this EA and referenced EIS's, implementation of the Wilmington District practice would place sediment that is "compatible" with the native sediments of the recipient beaches with no incremental environmental impacts relative to implementation of the State criteria. Therefore, the Corps does not concur that sediment within borrow areas A, P, and L would be too fine or too coarse to be considered compatible with the native beach. To minimize the risk of sediments being placed on the beach that are considered incompatible relative to the Wilmington District practice, contingency plans referenced in the EA will be in place to monitor for and avoid and/or remove areas of unacceptable granular material that are believed to be a persistent problem. Additionally, as discussed in the EIS's for both projects, if the dredging operations encounter sand deemed non-compatible with native grain size or sorting characteristics of the native beach, the Wilmington District would make the decision on a suitable contingency measure that may include moving the dredge to another site in the borrow area or to another borrow area and would notify the NCDCM and other resource agencies of such a contingency measure.

As the NC DCM has chosen not to submit the state compatibility standards to the National Oceanic and Atmospheric Administration's (NOAA's) OCRM for consideration as a federally approved component of the State's coastal management program, it is inappropriate to request Federal agencies to comply with them "to the maximum extent practicable" as if they were part of the State's approved plan.

5c. North Carolina Department of Agriculture

Letter dated 9 August 2013

Comment: No comment

Response: Noted

5d. North Carolina Division of Emergency Management Floodplain Management Program

Letter dated 2 August 2013

Comment: No comment

Response: Noted

5e. North Carolina Department of Transportation

Letter dated 31 July 2013

Comment: No comment

Response: Noted

5f. North Carolina Department of Cultural Resources – State Historic Preservation Office

Letter dated 26 July 2013

Comment: No comment

Response: Noted