UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 14, 2015

US Army Corps of Engineers, Wilmington District
Regulatory Field Office
69 Darlington Avenue
Wilmington, NC 28403

Attn: Mr. Mickey T. Sugg

Subject: **Draft Supplemental Environmental Impact Statement (DSEIS) for Figure Eight Island Shoreline Management Project, Figure Eight Island, NC; CEQ Number: 20150185**

Dear Mr. Sugg:

Pursuant to Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) Region 4 Office has reviewed the Draft Supplemental Environmental Impact Statement (DSEIS) for the Figure Eight Island Shoreline Management Project. This DSEIS features an evaluation of the environmental consequences of a proposed management plan which includes the installation of a terminal groin structure and to conduct supplemental beach nourishment on approximately 4,500 linear feet of oceanfront beach and 1,400 linear feet of back barrier shoreline on Figure Eight Island, N.C. EPA understands that the Figure Eight Beach Homeowners Association is seeking Federal and State permits to allow development of this management plan.

The EPA reviewed the DEIS for this proposed action and provided formal comments to the USACE on June 28, 2012, by letter to the Wilmington District Corps (USACE). Our comments on the previous EIS were related to proposed disposal areas, protection of hard bottom areas, and compliance with State water quality standards, water quality monitoring, threatened and endangered species consultation, and avoidance of the Wild Dayrell ship wreck. Since this review, two new alternatives have been added to the DSEIS by the USACE, which analyze multiple terminal going orientations and multiple sources of fill material. The alternatives considered in this DSEIS include:

- Alternative 1 – No Action
- Alternative 2 – Abandon/Retreat
- Alternative 3 – Rich Inlet Management with Beach Fill
- Alternative 4 – Beach Nourishment without Inlet Management
- Alternative 5A – Terminal Groin with Beach Fill from Nixon Channel and a New Connector Channel
- Alternative 5B – Terminal Groin with Beach Fill from Nixon Channel and Other

Sources

- Alternative 5C – Terminal Groin at a More Northerly Location with Beach Fill from Nixon Channel and a New Connector Channel
- Alternative 5D – Terminal Groin at a More Northerly Location with Beach Fill from Nixon Channel and Other Sources

Alternative 5D (Terminal Groin at a More Northerly Location with Beach Fill from Nixon Channel and Other Sources) has been identified in the DSEIS as the "Applicant's Preferred Alternative," which differs from the original "Applicant Preferred Alternative" of 5B – Terminal Groin with Beach Fill from Other Sources.

The attachment to this letter outlines our detailed comments (See Attachment). Based upon the EPA's review, a NEPA rating of EC- 2 has been assigned to this DSEIS, meaning we have environmental concerns and have requested that the FEIS include updated information (where available) on a number of areas and issues. The EPA's primary environmental concerns relate to potential impacts to water quality, wetlands, threatened and endangered species and essential fish habitat. The EPA requests that you provide specific responses to our comments in a dedicated section of the FEIS. If we can be of further assistance, please contact Mr. Dan Holliman at (404) 562-9531 or at Holliman.Daniel@epa.gov.

Sincerely,

Christopher A. Militscher
Chief, NEPA Program Office
Resource Conservation and Restoration

Attachment: Detailed Comments

Attachment: EPA Detailed Comments
Figure Eight Island Shoreline Management Plan DSEIS

1. The public notice and introduction of the EIS do not adequately describe why a supplemental EIS is needed. Section 1502.9 of NEPA states that an Agency shall prepare supplements if:

   (i) *The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or*
   (ii) *There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.*

   The reasoning for preparing a supplement should be clearly stated in the EIS. EPA recommends providing additional clarification in the FEIS as to why a supplement was prepared by the USACE.

2. The EPA notes that specific responses to EPA's comments on the DEIS were not provided in the DSEIS. It is also noted that Appendix A – did not have a copy of the EPA DEIS comment letter. Because these are formal Agency comments and part of the public record, please include these comments in the FEIS and provide a dedicated section that specifically responds to the EPA's past comments.

3. The EPA notes that the property tax total for the island (Figure Eight Island) is stated in the EIS as $907,352,900. However, this is not the value of the property that is being directly impacted by coastal erosion. The EPA notes that both figures are provided in the EIS, but to avoid confusion, it is recommended only using the relevant property value of the endangered properties.

4. Page 23 – Several examples are provided of potential impacts to road infrastructure if erosion remains unchecked on the island. Please provide citations, model results, or other evidence in the FEIS of how these potential impacts were derived.

5. Page 33 – It is stated, "*At the present time (2015), the shoreline along the north end of Figure Eight Island is responding positively to the orientation of the ocean bar channel of Rich Inlet and as long at the channel maintains this favorable orientation, immediate efforts to abandon and/or relocate structures from the ocean shoreline will not be necessary. In this regard, the position of the shoreline north of the intersection of Comber Road and Dunes Point Road (approximately baseline station 80+00) are now between 160 and 350 feet seaward of the 2006 shoreline position.*" If the shoreline is currently accreting and there is not an immediate need for relocation/abandonment, it is unclear to the EPA if the purpose and need of the project is met. Please clarify in the FEIS.

6. Alternative 2 – Abandon/Retreat – Under this alternative no additional measures would be employed to prevent coastal erosion. Certain endangered properties would either be relocated or demolished. The DSEIS states that 30 structures would be demolished and

10 would be relocated. It is not clear how the number of structures to be demolished/relocated was developed. Additional clarification is needed in the FEIS.

7. Alternatives 5C and 5D were not analyzed in the original DEIS. The terminal groin position in 5C and 5D is a more northerly position than Alternatives 5A and 5B. It is stated in the DSEIS that the decision to add 5C and 5D was due to "*potential complications in obtaining the necessary easements for constructing 5A and 5B...*" This issue is key to adding the new alternatives and most likely the reasoning for developing the supplemental EIS. The EPA is concerned that this issue is not fully developed/discussed in the DSEIS. In addition, the EPA remains unclear on why the same easement issues would not exist for the new groin alignments presented for 5C and 5D. The EPA recommends clarification in the FEIS.

8. Page 27 – It is stated that: "*Alternatives 5A and 5B were not modeled using the 2012 conditions (Table 3.1) since this position of the terminal groin was not favored by a majority of the northernmost property owners and would not likely be approved by the Figure "8" Beach HOA. Alternative 5C was also excluded from the 2012 model setup due to the Figure "8" Beach HOA designating Alternative 5D as its preferred alternative prior to the initiation of the 2012 model simulations. Although not modeled using 2012 conditions, quantities and cost estimates to construct these three alternatives, given the 2012 conditions, were computed using actual 2012 survey data*". The EPA is unclear on why these alternatives were not fully evaluated / considered but carried forward in the analysis. We understand that the applicant has a preferred alternative (5D), however, if Alternatives 5A and 5B meet the project purpose and need, they should be fully evaluated in the EIS. The EPA recommends the FEIS include updated modeling (using 2012 conditions) for all alternatives (including Alternatives 5A and 5B).

9. Figure 3.12 depicts coastal wetlands being impacted by the anchor section of Alternative 5D which includes construction of sheet pile and a 50ft construction buffer. It is unclear to the EPA if these wetlands are jurisdictional, requiring Section 404 permit coverage. In addition, Chapter 5 (environmental consequences) also does not clearly state the impacts to "jurisdictional" wetlands for Alternative 5D. The EPA recommends that the FEIS provide a clear description of potential impacts to jurisdictional wetlands (including delineations) and any proposed mitigation for those impacts, if applicable.

10. Pages 264-265 - It's not clear from the DSEIS if the Sea Level Rise (SLR) discussion in the DSEIS follows internal USACE regulations/guidance for predicting SLR and addressing coastal risk reduction/resilience. Please see the references:

    - *ETL 1100-2-1*
      Procedures to Evaluate Sea Level Change: Impacts, Responses, and Adaption (2014)
      http://www.publications.usace.army.mil/Portals/76/Publications/EngineerTechnicalLetters/ETL_1100-2-1.pdf

    - *Coastal Risk Reduction and Resilience: Using the Full Array of Measures (2013)*

http://www.corpsclimate.us/docs/USACE_Coastal_Risk_Reduction_final_CWTS_2013-3.pdf

The EPA recommends that these references be evaluated in the FEIS in the context of how SLR and other options for coastal risk reduction were considered when selecting the preferred alternative.

11. The EPA continues to recommend that all project construction and dredging operations avoid the Civil War era shipwreck, the 'Wild Dayrell', and that follow-up geophysical investigations continue to keep this cultural resource accurately mapped in order to protect it during all construction activities, as well as future maintenance operations (including dredging and periodic nourishment). The EPA further recommends coordination and consultation with the State Historic Preservation Office prior to construction activities.

12. The EPA notes that construction of the terminal groin and beach nourishment activities may impact nesting activities of shoreline birds such as the piping plover. The EPA is concerned about these potential impacts to threatened and endangered (T&E) species but defers to the US Fish and Wildlife Service. The EPA recommends that the USACE continue consultation with the USFWS regarding species listed under the Endangered Species Act (ESA). In addition, the EPA also recommends that the USACE consult with the National Marine Fisheries Service (NMFS) regarding potential impacts to essential fish habitat, if NMFS has not already been consulted. Additional information relating to consultations with USFWS and/or NMFS between the release of the DSEIS and FEIS should be included in the FEIS.

13. Because the NEPA process includes an assessment of potential water quality impacts pursuant to Section 401 of the Clean Water Act, the EPA recommends the USACE to continue to coordinate with the North Carolina Division of Water Quality (DWQ) and seek a DWQ Section 410 water quality certification. Further, the EPA recommends that the USACE to continue to coordinate with the North Carolina Division of Coastal Management (DCM) to ensure the full compliance with all State Environmental Policy Act (SEPA) requirements and to determine consistency with the Coastal Zone Management Act (CZMA). The EPA recommends that the FEIS document all of these efforts at coordination and include in the appendices all relevant and required certifications.

14. The DSEIS did not include any analysis or information pertaining to the Council on Environmental Quality's (CEQ's) final draft guidance on Greenhouse Gas (GHG) Emissions and Climate Change Impacts (See: https://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa/ghg-guidance). The USACE did not provide a discussion as to why this guidance is not applicable to the proposed project. The FEIS should provide an assessment of potential GHG emissions and what contribution to climate change may be anticipated from the proposed project, as appropriate.