APPENDIX A

SCOPING COMMENTS AND RESPONSES

MANTEO, OLD HOUSE CHANNEL NC SECTION 204 BENEFICIAL USE OF DREDGED MATERIAL FOR OYSTER REEF RESTORATION PROJECT

A scoping letter describing the proposed project, dated May 27, 2009, was circulated to stakeholder organizations, resource agencies and the public for review and comment. There were no comments received from the general public. Following is a summary of comments received from stakeholder organizations and resource agencies, along with USACE responses referenced to appropriate sections of this document.

A. NC Division of Marine Fisheries (NCDMF) Contact: Resources Enhancement Section [CONTACT NAMES OMITTED FROM THIS SECTION – AVAILABLE IN DRAFT] (June 24, 2009)

1. The Division feels the idea is certainly worth looking into and formulating a plan.

Response: Agreed and in progress.

2. Ensure material is suitable to provide a base.

Response: The submerged oyster reefs would be encircled by armor stone sills, stabilizing the dredged materials placed inside and allowing consolidation to a consistency similar to the existing project area sediments. As stated in 7.2.1 "Soft Bottom", "Dredged materials placed in the project area are expected to be of similar type and quality to that of the project area sediments." The sediments are described in 4.6 as "...fine sand (SP) and fine sand with silt (SP-SM) with composite percent silt content at less than 10%." The contained sand sediments would be expected to adequately support the oyster cultch layer, a mix of stone and oyster shell placed over the sediments. Placement sites would be located where existing substrate material is suitable (5.3.3 "Step 3", "4."). No HTRW issues with sediments are expected, as explained in 7.11, "Hazardous, Toxic, and Radioactive Wastes", and any risk of sand quality inappropriate for beneficial use is being minimized through geotechnical sampling (5.2.3 "d.").

3. A suitable location will need to be permitted by DCM and USACOE, with Public Hearings.

Response: Compliance with environmental protection statutes, including NEPA, will require applicable permitting and public review prior to construction, as indicated in 8.0 "Compliance with Environmental Protection Statutes and Executive Orders".

4. Material will need to be contained (retainer wall or riprap).

Response: As described in 6.0 "Recommended Plan", armor stone sills would initially be constructed around the perimeters of the three 5.07-acre oyster reef sites, for containment of dredged material to be placed inside. Once filled to design elevation, the dredged material would be covered by a layer of oyster cultch material, a mix of stone and oyster shell.

5. Appropriate location must be chosen.

Response: As stated in 2.2 "Study Area Location", the Study Area Location "...was chosen based on its vicinity to State oyster restoration efforts, and identified dredged material disposal needs from Old House Channel (Range 2)." Impacts to existing oyster reefs, shell banks or bottom, SAV, seagrass areas, hard bottom, archaeological sites, fisheries, navigation, and EFH habitat/HAPC within or near the study area would be avoided and minimized by placement of new construction outside such known areas, as described in 7.5, "Essential Fish Habitat and Fisheries" and 5.2.3 "Planning Constraints".

6. Overall scope should be considered (start small and document success).

Response: Size of the Recommended Plan was determined within the planning objectives as follows:

1. Increase oyster reef areas in the estuary by 5-20 acres (5.2.2 "Planning Objectives" and 5.1 "Public Concern");

2. alleviate dredge material disposal strain on bird islands which are becoming oversized, for up to one dredging cycle (5.2.1 "3");

3. meet economic limitations of CAP Section 204, \$5m Federal share (section 1.0 "Study Authority and Background").

The combined size (15.21 acres) of the 3 proposed reefs of the Recommended Plan provides the largest allowable capacity approaching one dredging cycle, and the most cost-effective alternative, within economic limitations.

B. North Carolina Department of Administration Contact: Director, State Environmental Review Clearinghouse (July 13, 2009)

1. Attached to this letter for your consideration are the comments made by agencies in the course of this review.

Response: Attachments noted and responses made to individual comments herein.

C. North Carolina Wildlife Resources Commission (NCWRC) Contact: Northeast Coastal Region Coordinator, Habitat Conservation Program (June 22, 2009) 1. The NCWRC has considered the proposed project and believes the project will have significant benefits to aquatic resources.

Response: Comment noted, and concur.

2. We understand an environmental assessment will be circulated that will better identify alternatives, placement of reefs, and construction methods.

Response: This document, which includes an environmental assessment of potential effects of the Recommended Plan, clarifies alternatives (5.3), placement of reefs (5.3.3 "Site Selection Screening"), and construction methods (5.3.3, shown for individual alternatives).

3. We request the applicant consider impacts to submerged aquatic vegetation and navigation when compiling this document.

Response: As described in 5.3.3 "Site Selection Screening" and 7.2.1 "Aquatic Habitats", the Recommended Plan would not be located on or in the vicinity of any known SAV beds, and far enough away from beds to significantly reduce or eliminate negative impacts. 5.3.3 "Site Selection Screening" "Step 3" gives requirement for navigation: "Water depth must be sufficient enough to allow 7 ft. navigation clearance above reef top (based on State of NC Policy)."

4. Once details are known and the project progresses, comments including moratorium dates may be provided.

Response: Comment noted; awaiting further comments following review of this document.

5. Our office supports the comments and recommendations of the NC Division of Marine Fisheries.

Response: Comment noted; NCDMF comments addressed individually.

D. North Carolina Division of Environmental Health Contact: PWSS (June 3, 2009)

1. For Regional and Central Office comments, see the reverse side of this form.

Response: Comment noted; referenced comments addressed individually.

Contact: Washington RO, Regional Supervisor for Public Water Supply Section (June 3, 2009)

(No comments furnished.)

Contact: Regional Program Person (June 12, 2009)

1. Program within Division of Environmental Health: Public Water Supply Response: No objection to project as proposed. See comments below:

This project will not likely affect any Public Water Supply system; therefore this office has no objections.

Response: Comment noted.

E. United States Environmental Protection Agency (USEPA) Contact: Chief, NEPA Program Office, Office of Policy and Management (June 3, 2009)

1. EPA recommends that the past performance of Parnell and Wells Islands as a habitat should be assessed to help better define whether or not the proposal for additional islands would be successful. This project appears to be a proposal to expand the disposal since they are within the "Survey Limits."

Response: Although the existing bird islands in the project vicinity "...maintain a large portion of the colonial shorebird species as primary nesting habitat" (4.2.2 "Bird Islands"), the study of potentially adding bird islands in this area (5.3.1 "Additional Bird Island Creation") falls outside the scope of this study, which was initiated at the request of the State of North Carolina for improvement of oyster habitat in the Pamlico system (see Executive Summary). Construction of bird islands would not address the identified problem, the historic loss of oyster reef habitat in Pamlico Sound. Bird island creation would also require mitigation for the loss of aquatic habitat. Under the study authority, the primary purpose cannot be expansion/creation of disposal areas: the Section 204 CAP authority(1.0 "Study Authority and Background") requires the project's purpose to be to benefit aquatic and related habitats in connection with an authorized navigation project (Range 2 of Old House Channel of the AIWW).

2. Is this dredged material suitable for beach restoration? If so, EPA recommends that this alternative use of the spoil should be considered in the assessment.

Response: There is potential that the dredged material would be suitable for beach restoration. Beach placement was included in 5.3.1 "Description of Measures" "2." and in Table 5.10 "Initial Preliminary Screening of Measures/Alternatives "as a potential measure to address the planning objectives. It was screened out from further consideration since it would not address the identified problem, loss of oyster habitat. Other drawbacks would include the 5-mile pumping distance and national

seashore restrictions to placement of disposal materials on Cape Hatteras National Seashore.

3. EPA recommends that there be future efforts in establishing submerged rooted aquatic grassbeds along with the oyster reef.

Response: Comment noted. As outlined in 7.5 "Essential Fish Habitat and Fisheries" "SAV and Seagrasses", known SAV beds would be avoided in siting the oyster reefs, and the sites would be kept far enough away from beds to avoid and minimize adverse impacts to SAV. Once constructed, the reefs would possibly facilitate SAV growth in nearby areas.

4. If the goal is to eventually have a commercial oyster harvest area, there could be a joint government/private oysterman partnership venture. Also, EPA recommends a partnership with the Albemarle-Pamlico NEP be considered. EPA is unsure if the high-relief oysterbeds can be commercially harvested.

Response: Comments noted. Potential commercial harvest is not an objective of this study, but rather, the restoration of oyster reef habitat, and attendant ecological benefits, that have been in decline in Pamlico Sound. It is intended that any constructed reef alternatives would be protected in the North Carolina Oyster Sanctuary Program.

5. The figure shows two rectangular areas which do not mimic natural island configurations. EPA recommends a careful design to approximate something that will survive the natural sand movement and hydrological processes within the inlet area.

Response: Reef layouts would be positioned and shaped for positive structural stability within the estuarine environment. Armor stone sills would form a continuous hard edge to each reef, to define and anchor their perimeters. Once the reefs are filled, they would be topped with a mixed stone/oyster shell cultch layer, which would help ensure retention of the disposal material.

6. What are the current conditions in this area? Could a viable oysterbed be established this close to Oregon Inlet?

Response: Although this is a dynamic estuarine environment, there are successful constructed oyster sanctuaries already in existence within 0.6 mile SW (Crab Hole Oyster Sanctuary, 30.5 acres) and 2.3 miles (Croatan Sound Sanctuary, 7.7 acres) of the study area. See 3.2 "Existing Projects". Given effective siting and configuration of the new reefs within the study area, indications are good that they can be successful.

7. The NMFS' Beaufort Lab has documented submerged grassbeds and is continuing with that monitoring.

Response:

8. EPA's NEPA Program Office recommends that the Wilmington District coordinate this project with the North Carolina Department of Environmental and Natural Resources, Division of Environmental Health, Shellfish Sanitation Section, which is currently monitoring and classifying these coastal waters as to their suitability for shellfish harvesting for human consumption.

Response:

9. The Corps should coordinate this work with the North Carolina Recreational Water Quality Program (RWQ), which is also monitoring these coastal waters in order to protect the public health by monitoring and notifying the public when bacteriological standards for safe bodily contact are exceeded.

Response:

10. The Wilmington District should also coordinate the project with the National Marine Fisheries Service (NMFS) and ensure that they have no objections to decreasing the depth of water (which could potentially impact the fish community structure as the bathymetry is decreased).

Response:

11. Before work commences, the NEPA Program Office recommends that you contact Gary Collins, EPA Region 4's Ocean Disposal Coordinator for North Carolina waters.

Response: Comment noted, and Mr. Collins will be contacted.

F. North Carolina Division of Water Quality (NCDWQ) Contact: SEPA Coordinator, Basinwide Planning Unit and SEPA Program (June 29, 2009)

 The Division of Water Quality (DWQ) has reviewed the subject project and is concerned about the possible contaminated sediments that will be dredged and relocated to establish oyster reefs. We encourage project proponents not to harvest the established oyster beds for human consumption until it can be determined that the oysters are not contaminated from the dredge material.

Response:

G. North Carolina Natural Heritage Program Contact: Program Representative (June 25, 2009) 1. The Natural Heritage Program supports this project proposal, with the understanding that both Wells and Parnell islands will continue to receive dredged material, as needed, for the benefit of the colonial nesting bird colonies that are present on both islands. The scoping letter does indeed state this, and thus it is our anticipation and assumption that the U.S. Army Corps of Engineers will continue to coordinate the timing and amount of dredge material deposited on the islands with the N.C. Wildlife Resources Commission.

Response: Comment noted. USACE will continue to coordinate disposal of dredged material on Wells and Parnell Islands with the NCWRC.

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

Contact: SHPO

1. (June 18, 2009) There are no known recorded archaeological sites within the project boundaries. However, the project area has never been systematically surveyed to determine the location or significance of archaeological resources. Our underwater research files have references to extensive maritime activities and shipwreck losses in the general project vicinity; therefore, much of the project area holds a high potential for containing submerged cultural resources. We recommend that your office maintain close consultation with our Underwater Archaeology Branch during the initial acoustic survey of the overall sixteen square mile project area. Based on the results of that survey and the final selection of specific reef sites, we may recommend additional remote sensing surveys. Those additional surveys should include the use of a marine magnetometer in order to determine if the reef sites contain submerged cultural resources that may be impacted by project construction.

Response: Comments noted. See comment 2 following.

2. (September 8, 2011) We have received the survey report for the above project conducted by the USACE Field Research Facility in Duck, NC, and believe it adequately addresses our concerns for historic resources. Based on the information provided, we believe the project is unlikely to affect any significant submerged resources. We therefore recommend no further remote sensing or archaeological work be conducted for this project as proposed.

Response: Comment noted.

I. United States Department of Agriculture, Natural Resources Conservation Service

Contact: Planning Specialist (May 29, 2009)

1. The Natural Resources Conservation Service does not have any comments at this time.

Response: Comment noted.

J. United States Department of the Interior, Fish and Wildlife Service (USFWS) Contact: Regional Office Representative (June 17, 2009)

1. The Service recommends that project planning consider the proposed oyster reef creation as an "experiment" in habitat creation. While your letter notes that a successful oyster sanctuary has been created at the nearby Crab Hole, there is no certainty that efforts along Old House Channel will have similar success. The dredged material placed on estuarine bottoms may be moved by currents. In order to determine the success of this effort, a significant part of the project should be an applied research monitoring program. Monitoring should be done by an objective third party, such as a university, and findings should be published, preferably in the peer reviewed literature.

Response: The Manteo 204 study would lead to a one time project, and does not necessarily establish a new policy for dredged material use. Monitoring of the project post-construction will be undertaken (Section 6.3).

2. Sediment placement should not occur in or near areas with submerged aquatic vegetation (SAV). Area *[sic]* with a high probably *[sic]* of being colonized by SAV should also not be used as disposal sites.

Response: A side-scan sonar survey was conducted of the study area, in part to identify and avoid SAV habitat.