
APPENDIX L

CONTINUING AUTHORITIES PROGRAM, SECTION 204, BENEFICIAL USES OF DREDGED MATERIAL, CEDAR ISLAND VIRGINIA

Appendix L – Finding of No Significant Impact



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FINDING OF NO SIGNIFICANT IMPACT
CONTINUING AUTHORITIES PROGRAM, SECTION 204,
BENEFICIAL USES OF DREDGED MATERIAL
CEDAR ISLAND, VIRGINIA

The U.S. Army Corps of Engineers (USACE), Norfolk District (NAO) has conducted an environmental analysis in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended. The Final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated 31 July 2019, for the Continuing Authorities Program, Section 204, Beneficial Use of Dredged Material, Cedar Island, Virginia addresses wetland enhancement and restoration opportunities and feasibility in the Cedar Island Back-barrier located in the Delmarva Peninsula, Virginia. The primary purpose of the project is to beneficially use the dredged material from Finney Creek Channel and the Bradford Bay Channel for enhancement and/or restoration of tidal wetlands located in the Cedar Island Back-barrier.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would beneficially use dredged material from the Bradford Bay and Finney Creek Channels to enhance and/or restore tidal wetlands in the Cedar Island Back-barrier.

The Final IFR/EA addresses the purpose and need of this project to beneficially use dredged material that would enhance and/or restore the Cedar Island Back-barrier tidal wetlands, a fragile ecosystem at risk of loss via a sustainable approach that will also protect tidal shoreline wetlands and marsh islands subjected to the continuing threats of erosion, climate change, and sea level rise.

The Recommended Plan (or Preferred Alternative) is the National Ecosystem Restoration, Best Buy Plan as determined by the Cost Effectiveness/Incremental Cost Analysis (CE/ICA). This plan serves to maximize environmental benefits for the best value.

The Recommended Plan is Alternative 1A which consists of thin-layer spraying of dredged material over a portion of the Fools Gut Marsh Island located in the Cedar Island Back-barrier, Virginia. Alternative 1A is located at Site 1 which is 194 acres and is located at the southern portion of the Fools Gut Marsh Island that is located across the navigation channel from the Wachapreague Marina. The thin-layer spraying would be done via a hydraulic cutterhead dredge equipped with a pipeline that would spray the dredged material from the Finney Creek Channel and the Bradford Bay Channel to the southern portion of the Fools Gut Marsh Island at Site 1.

The quantity of dredged material sprayed during each treatment of the wetland site would be approximately 77,435 cubic yards. For planning purposes this allows for an approximately six-inch thin-layer spraying across the project site; however, actual thin-layer placement target application elevations would be determined by the topographic survey to be conducted prior to each thin-layer spraying application.

The assumed project lifecycle is approximately 50 years. The project construction is anticipated to begin in year 2027 with the initial thin-layer spraying to occur over the 194 acres in Site 1. Topographic surveys followed by thin-layer spraying would then occur over the site as needed in years 2041 and 2055. The rehabilitations are assumed to use approximately the same dredging

volume as the initial dredged material placement. This schedule was chosen to coincide with the dredging maintenance cycle that supports the Bradford Bay and Finney Creek Channels and anticipated sea level rise effects to ensure we spray at appropriate timeframes to ensure the marsh island is properly maintained.

In addition to the No Action/Future Without Project Alternative and Alternative 1A, the following alternatives were evaluated¹:

- Alternative 1A: Thin-layer spraying existing wetlands at Site #1
- Alternative 2A: Thin-layer spraying existing wetlands at Site #2
- Alternative 2B: Thin-layer spraying existing wetlands and reef creation at Site #2
- Alternative 2C: Thin-layer spraying existing wetlands and wetland creation at Site #2
- Alternative 2D: Thin-layer spraying existing wetlands, reef creation, and wetland creation at Site #2
- Alternative 3A: Thin-layer spraying existing wetlands at Site #3
- Alternative 3B: Thin-layer spraying and reef creation at Site #3
- Alternative 3C: Thin-layer spraying existing wetlands and wetland creation at Site #3
- Alternative 3D: Thin-layer spraying existing wetlands, reef creation, and wetland creation at Site #3
- Alternative 4: Thin-layer spraying, reef creation, and wetland creation at Site #4

We also evaluated the following combinations of the following alternatives:

- Alternative 1A and Alternative 2A
- Alternative 1A and 2B
- Alternative 1A and 2C
- Alternative 1A and 2D

¹ 40 CFR 1505.2(b) requires a summary of the alternatives considered.

For the alternatives evaluated in detail, the potential effects to the following resources were evaluated:

	In-depth evaluation conducted	Brief evaluation due to minor effects	Resource unaffected by action
Aesthetics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bathymetry, Hydrology, and Tidal Processes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Benthic Fauna	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Climate Change, Greenhouse Gas Emissions, Relative Sea-Level Rise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cultural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fishery Resources and Essential Fish Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Geology, Physiography, and Topography	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noise and Vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Occupational Health and Safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Recreation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Special Status Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vegetation, Wetlands, and Submerged Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wildlife	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

All practical means to avoid or minimize adverse environmental effects were analyzed and incorporated into the Recommended Plan. Best management practices (BMPs) as detailed in the IFR/EA would be implemented to minimize potential impacts.² No natural resource compensatory mitigation would be required. The following avoidance and minimization practices would be implemented with the Recommended Plan:

- To minimize air emissions associated with dredge-related equipment, vessels and equipment would not be allowed to run idle and will be shut off to the extent practical when not in use.
- Prior to dredged material placement activities a vegetation and topographic survey would be conducted to determine target dredged material placement locations and elevations. Reference cordgrass-dominated marsh topographic survey points would be taken in and in areas around the dredged material placement site prior to help determine target elevations during dredged material placement activities.
- Stakes with elevation targets would be deployed out at the dredged material placement site to help guide dredge pipeline operators to the proper locations and so that they have a reference elevation target in the field during dredged material placement activities.
- A Type III Turbidity Curtain would be deployed surrounding the dredged material

² 40 CFR 1505.2(C) all practicable means to avoid and minimize environmental harm are adopted.

placement to minimize any potential turbidity to the surrounding water column during dredged material placement activities.

- Prior to dredged material placement activities soil testing for sulfates and anaerobic conditions would be conducted to determine suitability of sediments for marsh beneficial dredged material placement.
- Exposure to occupational health and safety hazards would be mitigated to the extent practical through adherence to an approved Work Safety Plan that incorporates standard work practices for handling sediments, avoidance of slip and fall hazards, and wearing Personal Protective Equipment.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the USACE determined that the Recommended Plan may affect but is not likely to adversely affect the following Federally listed species: the northern long-eared bat, piping plover, red knot, and roseate tern. There would be no affect to critical habitat or candidate species as these do not occur in the Action Area. Consultation with the U.S. Fish and Wildlife Service (USFWS) has concluded and the self-certification letter of concurrence dated March 18, 2019 from the USFWS is provided in Appendix D of the IFR/EA.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the USACE determined that the Recommended Plan would not adversely affect historic properties. On March 19, 2018 the Department of Historic Resources provided an opinion that the historic properties within the Area of Potential Effects will not be adversely affected by the undertaking. This correspondence is provided in Appendix D of the Final IFR/EA.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the Recommended Plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix B of the Final IFR/EA.

In a letter dated, June 18, 2019 the Virginia Department of Environmental Quality (VDEQ) indicated that the Recommended Plan appears to meet the requirements of the water quality certification and will determine the need for a water quality certification following submittal of the Joint Permit Application. Comments to the Draft IFR/EA from Commonwealth of Virginia regulatory agencies were provided on June 18, 2019 and no issues were raised regarding obtaining water quality certification and the VDEQ stated there does not appear to be discharges that would necessitate the need for a Virginia Pollutant Discharge Elimination System Permit. The Recommended Plan appears to meet the requirements of the water quality certification, pending confirmation based on information to be developed during the pre-construction engineering and design phase. All conditions of the water quality certification (if required) will be implemented in order to minimize adverse impacts to water quality.

The VDEQ provided correspondence on June 18, 2019 stating that the project is consistent to the maximum extent with the Coastal Zone Management Program provided all required approvals and permits are obtained.

Public review of the Draft IFR/EA was completed on 29 April 2019. All comments submitted during the public comment period were addressed in the Final IFR/EA. Comments from state and Federal agency review did not result in any substantive changes to the Final IFR/EA.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives.³ Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the Recommended Plan would not significantly affect the human environment; therefore, preparation of an Environmental Impact Statement is not required.⁴

Date

Patrick V. Kinsman, P.E.
Colonel, Corps of Engineers
District Commander

³ 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

⁴ 40 CFR 1508.13 stated the FONSI shall include an EA or a summary of it and shall note any other environmental documents related to it. If an assessment is included, the FONSI need not repeat any of the discussion in the assessment but may incorporate by reference.