ENVIRONMENTAL ASSESSMENT

Anclote River, Florida Project and Gulf Intracoastal Waterway (GIWW) Cut P-41 Pinellas & Pasco Counties

MAINTENANCE DREDGING AND DREDGED MATERIAL PLACEMENT

NEPA ID: EAXX-202-00-K3P-1765294248

APPENDIX D

CLEAN WATER ACT 404(b)1

U.S. ARMY CORPS OF ENGINEERS

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Draft Evaluation of 404(b)(1) Guidelines
Anclote River, FL
Pinellas & Pasco Counties
DRAFT ENVIRONMENTAL ASSESSMENT

Project Description:

The Anclote River, Florida Project EA evaluates various alternatives for environmental effects of the re-alignment of the federal channel, maintenance of the channel and Gulf Intracoastal Waterway (GIWW), and additional placement options Alternatives 2B ("Federal channel and GIWW O&M and Alternative re-alignment of cut 2"), 3C (In-water placement in the channel), and 3D (In-water placement at Three Rookers Island) are carried forward as the Preferred Alternative, which is summarized below and described in detail in the attached enclosure:

a. Channel re-alignments of cut 1 and 2. Cut 1 will be extended to create cut 1A which intersects with the GIWW cut P41. Cut 2A would be created to connect cut 2 with the GIWW. No dredging is required to create cuts 1A and 2A as these areas are naturally deep and meet the authorized channel depths.
b. O&M dredging of cuts 1-14 and the turning basin would occur on an as needed basis. The authorized depth of the channel is 9 ft plus 2 ft of allowable overdepth and 100 ft wide.
c. Material placement options include in-water placement, within portions of the channel and Three Rookers Island. Placement options would be selected based on project construction needs (ex. Capacity, permitting, ect) and capacity of the placement area.
    - There are three locations within the channel with capacity for placement, where up to 45 kcy of material could be placed to -10ft MLLW. The placement footprint is approximately 636,000 sq ft or 14.6 acres.
    - Three Rookers Island placement is 2,500 ft by 1,500 ft. There is capacity for 95 kcy of material that can be placed up to -8 ft MLLW.

The preferred alternative (Alternative 2B, 3C and 3D) would reduce the shoaling within the channel and will place dredged material in in-water placement areas within the channel or at Three Rookers Island and have minimal impacts to the environment. There will be temporary minor impacts from turbidity, noise, the presence of equipment may disturb T&E species, Fish and EFH. Vegetation and wetlands will be benefited by the promotion of growth from mangroves. Water quality and air quality would be temporarily impacted during construction. All temporary impacts will cease after construction is completed. While the "no action" alternative would have navigation and safety risk associated with continued shoaling and shallowing of the channel.

The Project will comply with conditions and standards established in the Water Quality Certificate issued from the State of Florida. If it is determined that project modifications require a new WQC, the Corps will obtain the necessary approvals prior to construction.

1. Technical Evaluation Factors

a. Physical and Chemical Characteristics of the Aquatic Ecosystem (230.20-230.25)(Subpart C)

	N/A	Not Significant	Significant
(1) Substrate impacts	☐	☒	☐
(2) Suspended particulates/turbidity impacts	☐	☒	☐
(3) Water Quality Control	☐	☒	☐
(4) Alteration of current patterns and water circulation	☒	☐	☐
(5) Alteration of normal water fluctuations/hydroperiod	☒	☐	☐
(6) Alteration of salinity gradients	☒	☐	☐

Dredging will temporarily cause increased turbidity. But after construction, conditions are expected to quickly return to pre-construction levels Turbidity and sedimentation will temporarily increase in the vicinity of the in-water placement site.

Temporary impacts to the water column are expected during construction. Monitoring will be implemented to ensure compliance with certified limits. Suspension of operations would occur should Surface Water Standard be exceeded.

Substrate and turbidity impacts are discussed in Sections 4.1 T&E Species, 4.2 Essential Fish Habitat, and 4.10 Sediment Characteristics of the EA. Turbidity impacts, and water quality are analyzed in Section 4.8 Water Quality. Water quality is discussed in Sections 4.8 Water Quality.

b. Biological Characteristics of the Aquatic Ecosystem (230.30-230.32) (Subpart D)

	N/A	Not Significant	Significant
(1) Effect on threatened/endangered species and their habitat	☐	☒	☐
(2) Effect on the aquatic food web	☐	☒	☐

(3) Effect on other wildlife (mammals, birds, reptiles, and amphibians)	☐	☒	☐

Effect determinations for threatened and endangered (T&E) species under NMFS and USFWS jurisdiction:

May Affect, Not Likely to Adversely Affect (MANLAA):

Piping plover, Rufa red knot, Swimming sea turtles (green sea turtle, hawksbill sea turtle, leatherback sea turtle, loggerhead sea turtle, Kemp's ridley sea turtle), smalltooth sawfish, Gulf sturgeon, giant manta ray, and Florida manatee.

Designated Critical Habitat:

Not Likely to Adversely Affect (NLAA):

West Indian (Florida) manatee

c. Special Aquatic Site (230.40-230.45) (Subpart E)

	N/A	Not Significant	Significant
(1) Sanctuaries and refuges	☐	☒	☐
(2) Wetlands	☒	☐	☐
(3) Mud flats	☒	☐	☐
(4) Vegetated shallows	☒	☐	☐
(5) Coral reefs	☒	☐	☐
(6) Riffle and pool complexes	☒	☐	☐

The project is within the boundaries of Anclote Key State Park, Nature Coast Aquatic Preserve and Pinellas Coast Aquatic Preserve.

d. Human Use Characteristics (230.50-230.54) (Subpart F)

	N/A	Not Significant	Significant
(1) Effects on municipal and private water supplies	☒	☐	☐
(2) Recreational and Commercial fisheries impacts	☐	☒	☐
(3) Effects on water-related recreation	☐	☒	☐
(4) Aesthetic impacts	☐	☒	☐
(5) Effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves	☐	☒	☐

Implementation of the preferred alternative may result in temporary increases in turbidity and sedimentation as well as potential smothering and burial of non-mobile benthic species (i.e., worms, clams, etc.) within the construction footprint. Construction activities may also temporarily cause avoidance and/or displacement of fish in and around the construction area. While managed recreational and commercial fish species may be impacted (i.e., coastal migratory pelagics) the majority of the effects would be on associated prey species for managed species. Benthic infaunal organisms and sessile organisms that serve as prey to managed species are expected to be affected by dredging activities. These effects however should be temporary in nature as these organisms should re-colonize the borrow area from adjacent similar habitat. Best management practices (BMP) to minimize impacts to the benthos will be implemented. Potential effects on fisheries can be found in Sections 4.3 Fish and Wildlife Resources (Other Than Threatened and Endangered Species) and 4.2 Essential Fish Habitat of the EA.

Placement and dredge vessels and associated offloading activities may cause temporary inconveniences for recreating, such as temporary impediments for those enjoying swimming, kayaking, motorboat operation, and water-based activities in the nearshore region. Potential effects on recreation can be found in Sections 4.14 Socioeconomic Resources and 4.4 Recreational Resources of the EA.

2. Evaluation of Dredged or Fill Material (230.60) (Subpart G)

a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material. (**Check only those appropriate**)

- ☒ **(1) Physical characteristics**
- ☒ **(2) Hydrography in relation to known or anticipated sources of contaminants**
- ☐ (3) Results from previous testing of the material in the vicinity of the project
- ☐ (4) Known, significant, sources of persistent pesticides from land runoff or percolation
- ☐ (5) Spill records for petroleum products or designated (Section 311 of CWA) hazardous substances
- ☐ (6) Other public records of significant introduction of contaminants from industries, municipalities or other sources
- ☐ (7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge/fill
- ☐ (8) Other sources (specify)

b. An evaluation of the appropriate information in 2a above indicated that there is reason to believe the proposed dredged or fill material is not a carrier of contaminants, of that levels of contaminants are substantively similar at extraction and disposal sites and not likely to exceed constraints. The material meets the testing exclusion criteria.

YES ☒ NO ☐

3. Disposal Site Delineation (Section 230.11(f))

a. The following factors, as appropriate, have been considered in evaluating the disposal site.

- ☒ **(1) Depth of water at disposal site**
- ☒ **(2) Current velocity, direction, and variability at disposal site**
- ☒ **(3) Degree of turbulence**
- ☒ **(4) Water volume stratification**
- ☒ **(5) Discharge vessel or fill speed and direction**
- ☒ **(6) Rate of discharge/fill**
- ☒ **(7) Dredged material characteristics (constituents, amount, and type of material, settling velocities)**
- ☒ **(8) Number of discharges/fill per unit of time**
- ☒ **(9) Other factors affecting rates and patterns of mixing (specify)**

Implementation of preferred alternative may result in short-term increases in turbidity and/or sedimentation during placement operations and dredging. Elevated turbidity levels will be temporary and are not expected to be significant. No long-term adverse effects to water quality are expected.

Temporary increases in turbidity in placement operations would be expected since the source of the material is mud and silt. Dredging of borrow areas will likely result in localized, temporary increases to water column turbidity. Conditions would quickly revert to background levels following completion of dredging operations.

A Clean Water Act Section 401 water quality certification (WQC) is required. The Corps will obtain the WQC from the State of Florida during the project's PED phase. Any applicable authorizations for dredged material placement will be coordinated and obtained prior to the start of construction.

b. An evaluation of the appropriate factors in 4a above indicates that the disposal site and/or size of mixing zone are acceptable.

YES ☒ NO ☐

4. Actions to Minimize Adverse Effects (Section 230.70-230.77) (Subpart H)

All appropriate and practicable steps have been taken, through application of recommendation of Section 230.70-230.77 to ensure minimal adverse effects of the proposed discharge/fill.

YES ☒ NO ☐

5. Factual Determination (Section 230.11)

A review of appropriate information as identified in items 2-5 above indicates that there is minimal potential for short or long-term environmental effects of the proposed discharge/fill as related to:

☒ a. Physical substrate at the disposal site (review sections 2a, 3, 4, & 5)
☒ b. Water circulation, fluctuation & salinity (review sections 2a 3, 4, & 5)
☒ c. Suspended particulates/turbidity (review sections 2a, 3, 4, & 5)
☒ d. Contaminant availability (review sections 2a, 3, & 4)
☒ e. Aquatic ecosystem structure and function (review sections 2b, 2c, 3, & 5)
☒ f. Disposal site (review sections 2, 4, & 5)
☒ g. Cumulative impact on the aquatic ecosystem
☒ h. Secondary impacts on the aquatic ecosystem

6. Review of Compliance (230.10(a)-(d) (Subpart B)

A review of the permit application indicates that:

a. The discharge/fill represents the least environmentally damaging practicable alternative and if in a special aquatic site, the activity associated with the discharge/fill must have direct access or proximity to, or be located in the aquatic ecosystem to fulfill its basic purpose (if no, see section 2 and information gathered for EA alternative);
YES ☒ NO ☐

b. The activity does not appear to 1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of the CWA; 2) jeopardize the existence of Federally designated marine sanctuary (if no, see section 2b and check responses from resource and water quality certifying agencies; **YES** ☒ NO ☐

c. The activity will not cause or contribute to significant degradation of waters of the U.S. including adverse effects on human health, life stages of organisms' dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values (if no, see section 2); **YES** ☒ NO ☐

d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge/fill on the aquatic ecosystem (if no, see section 5);
YES ☒ NO ☐

7. Findings

☒ **a. The proposed disposal site for discharge of dredged or fill material complies with the Section 404 (b)(1) guidelines**

☐ b. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines with the inclusion of the following conditions:

c. The proposed disposal site for discharge of dredged or fill material does not comply with the Section 404(b)(1) guidelines for the following reason(s):

☐ (1) There is a less damaging practicable alternative

☐ (2) The proposed discharge/fill will result in significant degradation of the aquatic ecosystem

☐ (3) The proposed discharge/fill does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem