

**DRAFT ENVIRONMENTAL ASSESSMENT
FOR
OPHELIA WITHIN-BANKS DISPOSAL AREA
AT RIVER MILE 329 OF THE BLACK WARRIOR RIVER
IN TUSCALOOSA COUNTY, ALABAMA**

A FEDERALLY AUTHORIZED NAVIGATION PROJECT

This Environmental Assessment (EA) was prepared utilizing a systematic, interdisciplinary approach integrating the natural and social sciences and the environmental design arts with planning and decision-making.

1. INTRODUCTION:

a. Proposed Action: The proposed project consists of placing sandy dredged material in a within-banks disposal area. This dredged material would be from the Black Warrior-Tombigbee (BWT) Waterway, which has been the subject of prior environmental documentation. This proposed disposal area is approximately 1,400 feet long, 75 feet wide and located on the right descending bank of the Black Warrior River at River Mile 329. The proposed within-banks disposal area will have approximately 9,000 cubic yards (CY) of dredge material placed every 4 years. The dredged material will be placed through the use of hydraulic pipeline or mechanical dredge. This proposed site is located between and contiguous with two previously approved within-banks disposal areas. This action will connect the two previously approved sites. The addition of this within-banks disposal area will also serve to assist stabilization of the riverbank through this reach of the Black Warrior River. This site was the site of a large upland dredged material dike failure (Ophelia Disposal Area) and river bank failure on 30 September and 1 October 2009. A no action alternative would result in both inadequate disposal capacities along this reach of the river and would create the potential for future bank failures at this location. These failures not only impede navigation but also create moderate to severe environmental impacts from the massive amounts of sediment introduced to the river during each event.

b. Location: Black Warrior River portion of the BWT Waterway, Tuscaloosa County, Alabama. The proposed site is located on the right descending bank of the Black Warrior River at River Mile 329(See Figures 1 and 2).

c. Purpose and Need for the Proposed Action: The current reach of the river at river mile 329 has two within-banks disposal areas and one upland disposal area. However, these two sites are inadequate to handle all of the dredge material produced. Currently, there is a need to create a new within-banks disposal area at this location for additional disposal capacity. This proposed site will connect the two existing within-banks disposal sites. In addition to the increased disposal capacity this within-banks site will also aid in stabilizing the bank. The bank on this stretch of the Black Warrior River has been prone to failure. These recent failures on 30 September and 1 October 2009 have impeded navigation and the structures that comprise Ophelia Upland Disposal area.

d. Authority: The navigation project on the BWT Waterway was authorized by various Rivers and Harbors Acts, 1884-1960. The BWT Waterway provides for a channel 9 feet deep and 200 feet wide extending from the mouth of the Tombigbee River 45 miles above Mobile to the vicinity of Birmingham. The operation and maintenance of the BWT Waterway has been addressed in prior environmental documentation such as the Final Supplement to the Final Environmental Impact Statement for the Black Warrior and Tombigbee Rivers, Alabama (Maintenance), April 1987. The Black Warrior River portion of the BWT Waterway flows south from the confluence of the Mulberry and Locust Forks to the Tennessee-Tombigbee Waterway in Demopolis, Alabama. The proposed within-banks disposal site is located at river mile 329, connecting two contiguous existing within-banks disposal areas.

e. Alternatives: Due to dredging needs, the only alternative to this project would be to not create this proposed within-banks disposal area. This bank is better suited for disposal of dredge material and is closest to the area being dredged. This would essentially be a no action alternative. As a result, there would be limitations to the site office's ability to maintain navigation on this reach of the BWT waterway. In addition to the navigation concerns, there would also be a continued risk of sedimentation of the channel through the erosion and collapse on the adjacent bank.

2. ENVIRONMENTAL SETTING WITHOUT THE PROJECT:

a. General Environmental Setting.

The proposed project site is located on the right descending bank of the Black Warrior River at river mile 329. The project site is located between two previously approved within-banks disposal sites and adjacent to an existing upland disposal site. The new proposed site is also the location of two bank failures on 30 September and 01 October 2009 that altered the site from its natural and undisturbed condition. The sediment type on this reach of the river is a sand gravel mix and due to the altered site conditions in 2009 very little aquatic or bank vegetation is present.

b. Significant Resource Description.

(1) Water Quality. The project is located within the Black Warrior River Basin. The 303(d) list of impaired waters does not list any impaired waters in the vicinity of the project location.

(2) Fisheries Resources. The Black Warrior River is primarily a recreational fishery. The primary recreational species targeted are bass (*Micropterus salmoides*), crappie (*Pomoxis sp.*) various species of bluegill (*Lepomis sp.*) and catfish (*Ictalurus sp.*).

(3) Wildlife Resources.

(a) Aquatic Fauna: The aquatic fauna most common in the project vicinity are the numerous species of freshwater fish and benthic invertebrates common to this reach of the Black Warrior River. In addition, some common species reptiles and amphibians may also be

found in the project area. The limited vegetation and sandy substrate type at the project location does not offer adequate habitat for a variety of species.

(b) Terrestrial Fauna: This project site does not have adequate habitat for a diversity of terrestrial wildlife.

(4) Floodplain. The proposed project location is within the elevation of the 100 year floodplain.

(5) Endangered Species. Federally-listed species with potential to exist in the county of the proposed project are the red-cockaded woodpecker (*Picoides borealis*), wood stork (*Mycteria americana*), bald eagle (*Haliaeetus leucocephalus*) [although this species is no longer included on the Federal list of endangered and threatened species, the bald eagle is still protected by other Federal laws], flattened musk turtle (*Sternotherus depressus*), southern clubshell mussel (*Pleurobema decisum*), dark pigtoe mussel (*Pleurobema furvum*), ovate clubshell mussel (*Pleurobema perovatum*), Alabama moccasinshell mussel (*Medionidus acutissimus*), inflated heelsplitter mussel (*Potamilus inflatus*), fine-lined pocketbook mussel (*Lampsilis altilis*), orange-nacre mucket mussel (*Lampsilis perovalis*), Mitchell's satyr butterfly (*Neonympha mitchellii mitchellii*), Black Warrior waterdog (*Necturus alabamensis*), and white fringeless orchid (*Platanthera integrilabia*). Due to the relatively small size of the project site and the highly disturbed nature due to bank erosion processes and contiguous navigation channel dredging and disposal activities, the only species with any potential for habitat would be the mussels. However, none of the species listed have been documented along this reach of the Black Warrior River. Email correspondence regarding the project has been sent to USFWS to initiate coordination for potential impacts. A copy of this email is attached (Fig. 4).

(6) Historic and Archeological Resources.

Background research of previously recorded cultural resource sites and surveys was made of the project Area of Potential Effect (APE). No cultural resource sites or areas considered to have potential for historic properties have been identified within the project APE. Therefore, the Mobile District has determined no historic properties would be affected by the proposed new within-banks disposal site at mile 329 on the Black Warrior River as per 36 CFR 800.4(d)(1). Results of the effects determination have been sent to the Alabama State Historic Preservation Officer (SHPO) and Native American Indian Tribes (Fig. 4). Should any cultural or historical resources be encountered during construction, proper coordination with the SHPO should be undertaken as required under 36 CFR 800 part 13.

(7) Navigation. The Black Warrior River is a Federally Approved Navigation Channel. The navigation channel is maintained at 9 feet deep and 200 feet wide from the confluence of the Tennessee-Tombigbee waterway in Demopolis to the head of navigation near the city of Birmingham. The waterway provides a link from the upper Black Warrior basin to the port of Mobile as well as connecting to other crucial inland waterways on the Ohio and Mississippi Rivers thru the Tennessee-Tombigbee Waterway.

(8) Recreation. There are numerous recreation opportunities on the Black Warrior River. These include boating fishing and camping in the numerous campgrounds and recreational areas owned by the U.S. Army Corps of Engineers along the Black Warrior River.

(9) Hazardous and Toxic Materials/Wastes. No known hazardous materials are present at the project site or in the vicinity.

(10) Environmental Justice: Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" requires federal agencies to examine proposed actions to determine whether they will have disproportionately high and adverse human health or environmental effects on minority or low income populations. The project area is bordered by the urban areas of Columbus, Georgia and Phenix City, Alabama, with a number of low income and minority neighborhoods in both states.

(11) n. Protection of Children: Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" seeks to protect children from disproportionately incurring environmental health risks or safety risks that arise as a result of Army policies, programs, activities and standards. Environmental health risks and safety risks include risks to health and safety attributable to products or substances that a child is likely to come in contact with or ingest.

3. ENVIRONMENTAL IMPACT OF THE RECOMMENDED PLANS:

(1) Water Quality. The proposed action would generate increased turbidity and suspended sediments at the within-banks disposal area; however, these effects are short-term and localized, quickly returning to ambient conditions upon completion of the dredged material disposal operation. In stabilizing the bank, the proposed project would improve water quality locally. The no action alternative would result in increased sediment loads as a result of bank erosion and failures.

(2) Fisheries Resources. Due to the current site conditions, no adverse impacts to fisheries resources will result from the proposed project. Placement of the dredged material would stabilize the bank and have the potential to create habitat between dredge events. The no action alternative would not stabilize the bank for habitat benefits.

(3) Wildlife Resources.

(a) Aquatic Fauna: Due to both the substrate and constant shifting of the bank, and the failures of the bank, there is not a significant resident population in the proposed project area. The proposed project has potential to stabilize the bank along this reach through the placement of dredged material. The no action alternative would result in sustaining existing conditions.

(b) Terrestrial Fauna: There is no habitat for terrestrial fauna at this site.

(4) Floodplain: There will be no adverse impacts to the floodplain as a result of this project.

(5) Endangered Species. The Corps has determined that the proposed action would have no effect on the federally listed species or critical habitat. The U.S. Fish and Wildlife Service (USFWS) is being consulted about the Corps determination and have preliminarily

agreed with the Corps finding of “no affect”. The results of the FWCA coordination will be included in the final EA.

(6) Historic and Archeological Resources. As discussed in Section 2 of this document the Mobile District has determined no historic properties would be affected by the proposed new within-banks disposal site at mile 329 on the Black Warrior River. The proposed action does not access religious sites or ceremonial rites of Native Americans; does not affect any property listed or eligible for listing on the National Register of Historic Places; does not affect a property listed on the National Registry of Natural Landmarks; does not affect a property listed as a National Historic Landmark and does not affect a property listed on the World Heritage List.

(7) Navigation. The proposed project would result in a small window where navigation is disrupted during construction of the project. Upon completion of the project there will be no permanent impacts to navigation. The no action alternative has the potential to impede navigation in the event of future bank collapses.

(8) Recreation. The proposed project would not affect any component of the National Wild and Scenic Rivers System; is compatible with the National Trails System; and does not impact any park, parklands, ecologically critical areas or other areas of ecological, recreational, scenic or aesthetic importance.

(9) Hazardous and Toxic Materials/Wastes. The proposed project would not result in the generation, transport, treatment, storage or disposal of hazardous or toxic wastes.

(10) Noise Impacts: Due to the location of the project area, the machinery used during construction and the activities to be performed on the site after construction will not have significant adverse noise impacts.

(11) Aesthetics. Project area aesthetics will be permanently altered. However this alteration will be insignificant and similar to aesthetic impacts already in the area. Property adjacent to the project location is primarily agricultural. The aesthetics would be permanently altered, but are in keeping with the existing use of the area.

(12) Prime and Unique Farmland. No prime or unique farmland would be impacted by the proposed project.

(13) Solid Waste. Solid waste generation associated with the project would be limited to small quantities generated by operation of heavy machinery. This waste is subject to the Alabama Department of Environmental Management’s solid waste regulations and should be

4. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS WHICH WOULD BE INVOLVED SHOULD THE RECOMMENDED PLAN BE IMPLEMENTED. Any irreversible or irretrievable commitments of resources involved in the proposed action have been considered and are either unanticipated at this time, or have been considered and determined to present minor impacts.

5. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED. Any adverse environmental effects for the project which cannot be avoided should the recommended project be implemented are expected to be minor individually and cumulatively.

6. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY. The proposed project constitutes a short-term use of man's environment and is anticipated to positively affect long-term productivity.

7. COORDINATION.

A 15-day public notice (FP10-BT01-13) has been published to notify interested individuals and agencies of the proposed action and that notice and supporting environmental documents have been posted on the USACE, Mobile District webpage. The agencies notified include the following:

- a. U. S. Fish and Wildlife Service (USFWS).
- b. U.S. Environmental Protection Agency (USEPA)
- c. Alabama State Historic Preservation Officer (SHPO).
- d. Alabama Department of Environmental Management (ADEM)
- e. Alabama Department of Conservation and Natural Resources (ADCNR).

Following this public interest review, the Corps will address comments received on this Draft EA and make a determination of whether a Finding of No Significant Impact (FONSI) is appropriate or whether more detailed environmental analysis is required. If the determination that a FONSI is appropriate, the EA will be finalized and those final documents will be posted on the USACE, Mobile District webpage.

8. Comments

a. U.S. Fish and Wildlife Service (USFWS): Via email (Fig. 4) and telephone communications with Patric Harper on 06 MAY 2010 USFWS submitted the following comment: The U. S. Fish and Wildlife Service has reviewed the Corps' proposal to perform open-water disposal in the Black Warrior River near the site of the breached upland disposal area. No significant adverse effects on fish and wildlife resources are expected to result from this project. Therefore, we have no objections to this project. Our comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

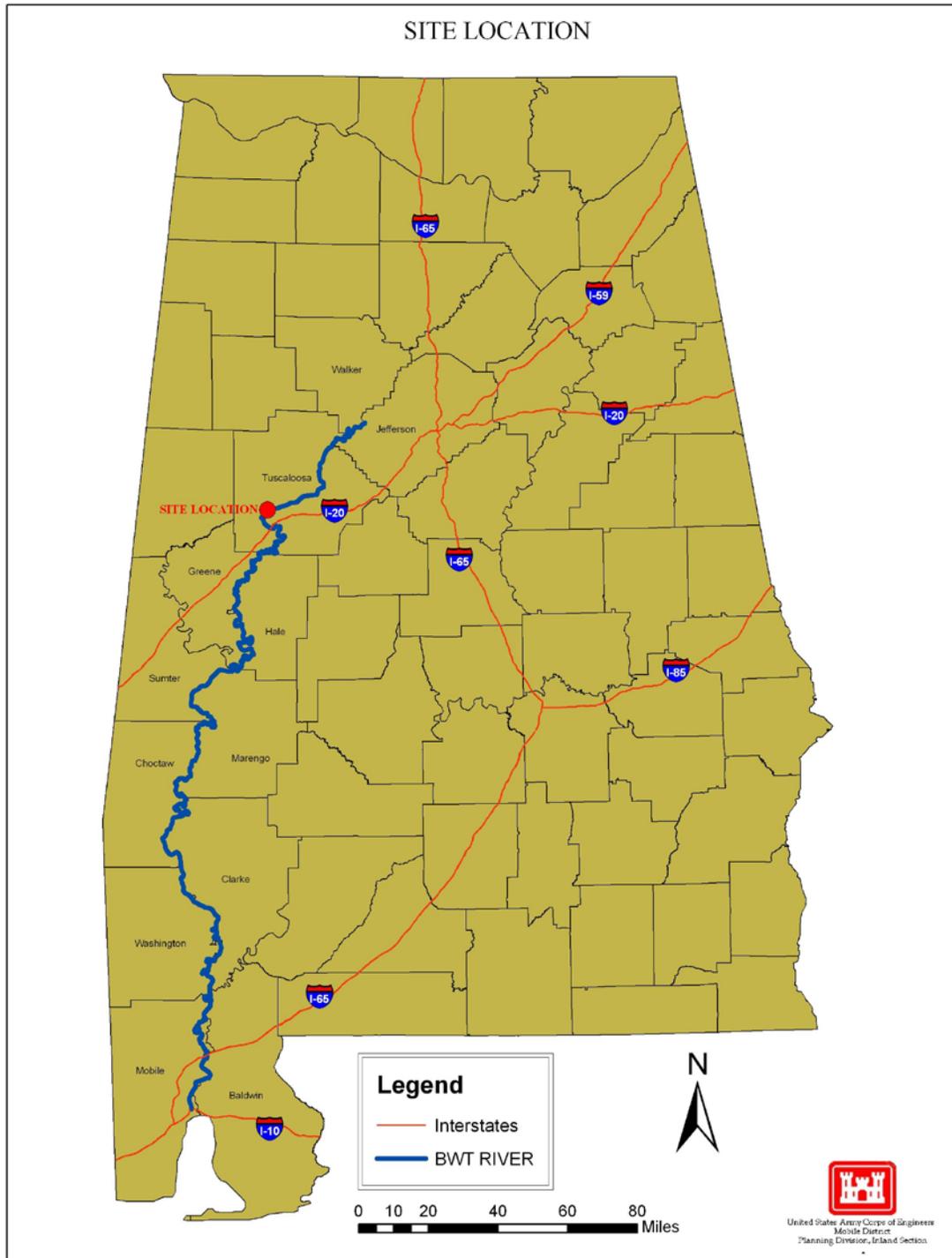


Figure 1: Vicinity Map



Ophelia Upland Disposal Area

1 inch = 400 feet



Figure 2: Site Map

Figure 3: Tribal Consultation Response Letters

(NONE RECEIVED AS OF 14 MAY 2010)

DRAFT

CESAM-PD-EI
Horton

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14 May 2010

Thanks,
Matt