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 from River Mile 62.4 into within-banks disposal areas. The dredged material would be from the Black Warrior-Tombigbee (BWT) Waterway, which has been the subject of prior environmental documentation. The proposed disposal areas are approximately 1,400 feet long, 75 feet wide and located on both the right and left descending bank of the Tombigbee River at River Miles 62.1-62.9 and 63.1-63.9 respectively. The proposed within-banks disposal areas will have approximately 9,000 cubic yards (CY) of dredge material placed every 10 years. The dredged material will be placed through the use of hydraulic pipeline or mechanical dredge. The proposed sites are located more than one mile downstream of previously approved within-banks disposal area. The current location of the crossover bar is too great a distance to allow for disposal on the existing within-banks area.

   b. **Location.** Tombigbee River portion of the BWT Waterway, Washington and Clarke Counties, Alabama. The proposed sites are located on both the right and left descending bank of the Tombigbee River at River Mile 62.1-62.9 and 63.1-63.9 (See Figure 1).

   c. **Purpose and Need for the Proposed Action.** The current reach of the river at river mile 62.4 has developed a crossover bar which has the potential to impede navigation at this point on the river. The area in need of dredging is too great a distance from any other existing disposal areas to provide a location for disposal. However, these existing sites are too far to be used to dredge the problem area. Currently, there is a need to create new within-banks disposal areas at these locations for disposal capacities in proximity to the new dredging site. Without this proposed action, it would result in both inadequate disposal capacities along this reach of the river and would create the potential for an impassable navigation channel.

   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 Tombigbee River portion of the BWT Waterway flows from Demopolis, Alabama to the confluence of the Alabama River at which point it turns into the Mobile River. The proposed project is needed to create new within-banks disposal areas at these locations for disposal capacities in proximity to the new dredging site.

   e. **Alternatives.** Due to dredging needs, the only alternative to this project would be to not create the proposed within-banks disposal areas, because 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. This alternative would limit the site office’s ability to maintain navigation on this reach of the BWT waterway.
2. **ENVIRONMENTAL SETTING WITHOUT THE PROJECT.**

   a. **General Environmental Setting.**

   The proposed project consist of dredging site is located on the right and left descending bank of the Tombigbee River at river mile 62.4. The project site is located more than a mile downstream of any existing approved disposal sites. The sediment type on this reach of the river is a sandy silt material. The bank is vegetated with grass commonly found along the river.

   b. **Significant Resource Description.**

   (1) **Water Quality.** The project is located within the Tombigbee 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 Tombigbee 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.** Threatened and endangered species with potential to exist in the proposed project area are Wood stork (*Mycteria americana*), Alabama inflated heelsplitter (*Potamilus inflatus*), Southern clubshell (*Pleurobema decisum*), Alabama sturgeon (*Scaphirhynchus suttkusi*), Gulf sturgeon (*Acipenser oxyrinchus desotoi*), Black pine snake (*Pituophis melanoleucus lodingi*), Eastern indigo snake (*Drymarchon corais couperi*), and Gopher tortoise (*Gopherus polyphemus*).

   (6) **Cultural Resources.** The proposed action of dredging within the previously authorized channel of the Tombigbee River and within bank disposal is clear in terms of cultural resources compliances with section 106 of the National Historic Preservation Act (NHPA) and it’s implementing regulations at 36CFR800. The clearance is based on several factors. First, both district policy as outlined in the Historic Preservation Management Plan for Navigation Projects, Mobile District (HPP), as well as the determination of the senior staff archaeologist, find that dredging within a previously dredged channel and within previously dredge dimensions, has “no potential to cause effects” on historic properties. Second, within banks disposal is also
consider to be an action which has “no potential to cause effects” on historic properties. In accordance with 36CFR800 (a)(1), no consultation is required under this determination.

Although not required, these determinations were forwarded to the Alabama State Historic Preservation Officer (SHPO) via the Alabama Historical Commission and consulted on as part of the Final Environmental Impact Statement (FEIS) development and coordination for the Black Warrior and Tombigbee (BWT) maintenance and operation (COE 1976). The SHPO concurred with these recommendations as outlined in the HPP, BWT Section 3B and 3C.

Further consultation occurred with the SHPO as the result of proposed increased dredge quantities and dimensions. The results of this consultation were also included in the Final Supplement to the FEIS for the BWT which was completed in 1987. In support of the FEIS, a number of studies focusing on cultural resources within the channel were conducted. These included Oakley 1982, U.S. Army COE 1983a, 1983c, 1983d, 1984c, 1984d and 1985b. The studies consisted of both literature searches as well as remote sensing survey. The surveys identified possible shipwrecks and other resources in the river. The nearest resources include an unidentified gun boat wreck, a historic Tohomee Indian town, and the wreck of the steamboat Dick Keys. None are located within 3 miles of the currently proposed action.

(7) Navigation. The Tombigbee River is a Federally Approved Navigation Channel. The navigation channel is maintained at 9 feet deep and 200 feet wide from the mouth of the Tombigbee River 45 miles above Mobile to the vicinity of Birmingham. The waterway provides a link from the 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 Tombigbee 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 Tombigbee 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.

(11) 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.

(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 saddle, there is not a significant resident population in the proposed project area.

(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 and Threatened Species. The U.S. Army Corps of Engineers (Corps), Mobile District has determined that the proposed action would have no effect on federally listed species and critical habitat in the proposed project area. By email correspondence dated 3 June 2011, the U.S. Fish and Wildlife Service concurred with the Corps no effect determination.

(6) Cultural Resources. The proposed action has been previously cleared in terms of section 106 of the NHPA. Based on a review of the aforementioned literature, as well as available anomaly maps and other resources, no further consultation or investigations are required. In the event of an archaeological discovery during the proposed activity, the activity must stop within 100 feet of the find and the district cultural resources specialist must be notified for further consultation.

(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.

(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. There would be no permanent aesthetic impacts associated with the proposed dredging and disposal action. Aesthetic impacts would be temporary, associated with the dredging process, and revert to pre-project conditions upon completion of the action.

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

(13) Solid Waste. No solid wastes should be generated as part of the proposed action. All solid waste would be stored, transported and disposed in accordance with Federal or state guidelines. Federal or state guidelines regarding procurement of recycled or recyclable products, source separation and recycling of recyclable products, solid waste storage, solid waste transport, or solid waste disposal do not affect the proposed project.

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 joint public notice (FP11-BT01-17) 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 http://www.sam.usace.army.mil/pd/Pd1.htm. 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)