DRAFT ENVIRONMENTAL ASSESSMENT
FOR PROPOSED
WITHIN-BANKS DISPOSAL AREAS AND SMALL BOAT ACCESS CHANNELS
ALABAMA-COOSA RIVER, ALABAMA

1.0 INTRODUCTION

This environmental assessment was prepared utilizing a systematic, interdisciplinary approach integrating the natural and social sciences and the design arts with planning and decision making. The proposed action and its alternatives are evaluated in multiple contexts for short-term and long-term effects and for adverse and beneficial effects. This assessment indicates the effects on the human environment are well known and do not involve unique or unknown risk. It is not anticipated that this is a precedent-setting action, nor does it represent a decision in principle about any future consideration.

1.1 LOCATION

Alabama-Coosa River (ACR) system, Baldwin, Clarke, Dallas, Monroe, Wilcox, Autauga, Lowndes, and Montgomery Counties, Alabama (reference Figure 1).

1.2 PROPOSED ACTION

The ACR system navigation channel begins at the confluence of the Alabama and Tombigbee Rivers, and extends approximately 300 miles upstream near Montgomery, Alabama. It includes four river channel improvements: a) The mouth of the Alabama River to Claiborne Lock and Dam; b) Claiborne Lock and Dam to Millers Ferry Lock and Dam; c) Millers Ferry Lock and Dam to Robert F. Henry Lock and Dam; and d) Robert F. Henry Lock and Dam to Montgomery, Alabama. The existing operation and maintenance project on the ACR and its tributaries provides for development of navigation, flood control, power and recreation. The existing project provides for maintenance activities and maintenance dredging of the federally authorized navigation channel. Existing within-bank disposal practices call for dredging to be performed at a depth of 9 feet plus 2-4 feet of advanced maintenance depending upon the location, with an additional 2 feet of allowable overdepth and 3 feet of disturbance below low water through use of hydraulic pipeline or mechanical dredge typically executed between May and December.

Existing small boat access channel practices consist of maintenance dredging the mouths of the small boat access channels on an as-needed basis to a channel depth of approximately 3-5 feet at mean low water typically executed between May and December by either a clamshell dredge, bucket dragline, floating trackhoe (swamp buggy), or small hydraulic pipeline dredge into open-water or within-bank disposal sites.

The proposed action consists of designation and construction of seven new within-banks disposal areas and eleven new small boat access channels along the ACR system. The proposed within-banks disposal areas and the initial dredging and disposal activities of the small boat access channels are identified in Tables 1 and 2 respectively. Figures 2-19 illustrate the proposed locations of the proposed within-bank disposal areas and the proposed small boat

access channels. The proposed within-banks disposal areas will include the placement of dredged material on the descending river banks through the use of hydraulic pipeline or mechanical dredge at irregular intervals after the initial placement. Each site requires 1-10 days for completion of dredging and is typically executed by hydraulic dredge between May and December.

The mouths of the proposed small boat access channels would be dredged on an as-needed basis to a channel depth of approximately 3-5 feet at mean low water. Each proposed site would require 3-21 days during May through December for completion of maintenance and dredging. A clamshell dredge, bucket dragline, floating trackhoe (swamp buggy), or small hydraulic pipeline dredge is used to maintain these channels. Disposal would be in approved open-water or within-bank disposal sites immediately downstream of the dredge location.

Table 1: Proposed Within-Banks Disposal Areas

River Mile	Length (feet)	Bank	Dredged Material (est. cubic yards)	Frequency (approx. years)
17.2-17.4	1,056	Left	15,000	3
51.3-52.2	4,752	Right	25,000	annually
55.5-56.5	5,280	Right	45,000	15
70.8-71.7	4,752	Left	30,000	annually
91.6-92.3	3,696	Left	15,000	30
100.2-100.7	2,640	Left	15,000	30
232.0-232.9	4,752	Left	12,000	10

Table 2: Proposed Small Boat Access Channels

River Mile	Bank	Dredged Material (est. cubic yards)	Frequency (approx. years)
71.7	Left	500	3-10
162.9	Right	1,000	3-10
162.9	Left	500	3-10
166.0	Left	500	3-10
168.4	Right	500	3-10
169.6	Right	500	3-10
175.8	Left	500	3-10
251.0	Left	500	3-10
276.0	Right	500	3-10
278.7	Left	500	3-10
298.3	Right	500	3-10

1.3 PURPOSE AND NEED

Operation and maintenance on the Alabama-Coosa River system (ACR) and its tributaries provides for development of navigation, flood control, power, and recreation. The proposed action will provide for the expansion of existing within-banks disposal areas located directly next to the proposed within-banks disposal areas. The proposed within-banks disposal areas are necessary to maintain adequate capacity based on dredging amounts and frequency requirements for the respective bars. The material that would be placed at the proposed disposal areas could also help stabilize the bank at those locations. In addition, the proposed action will provide small boat access to hundreds of acres of open water for boater recreation use and will provide continued access to various developed public use areas, boat ramps and swimming beaches.

1.4 AUTHORITY

The existing ACR system and tributaries was authorized for development of navigation, flood control, power, and recreation by Public Law 14, 79th Congress, in accordance with the River and Harbor Act of 1899, on 2 March 1945.

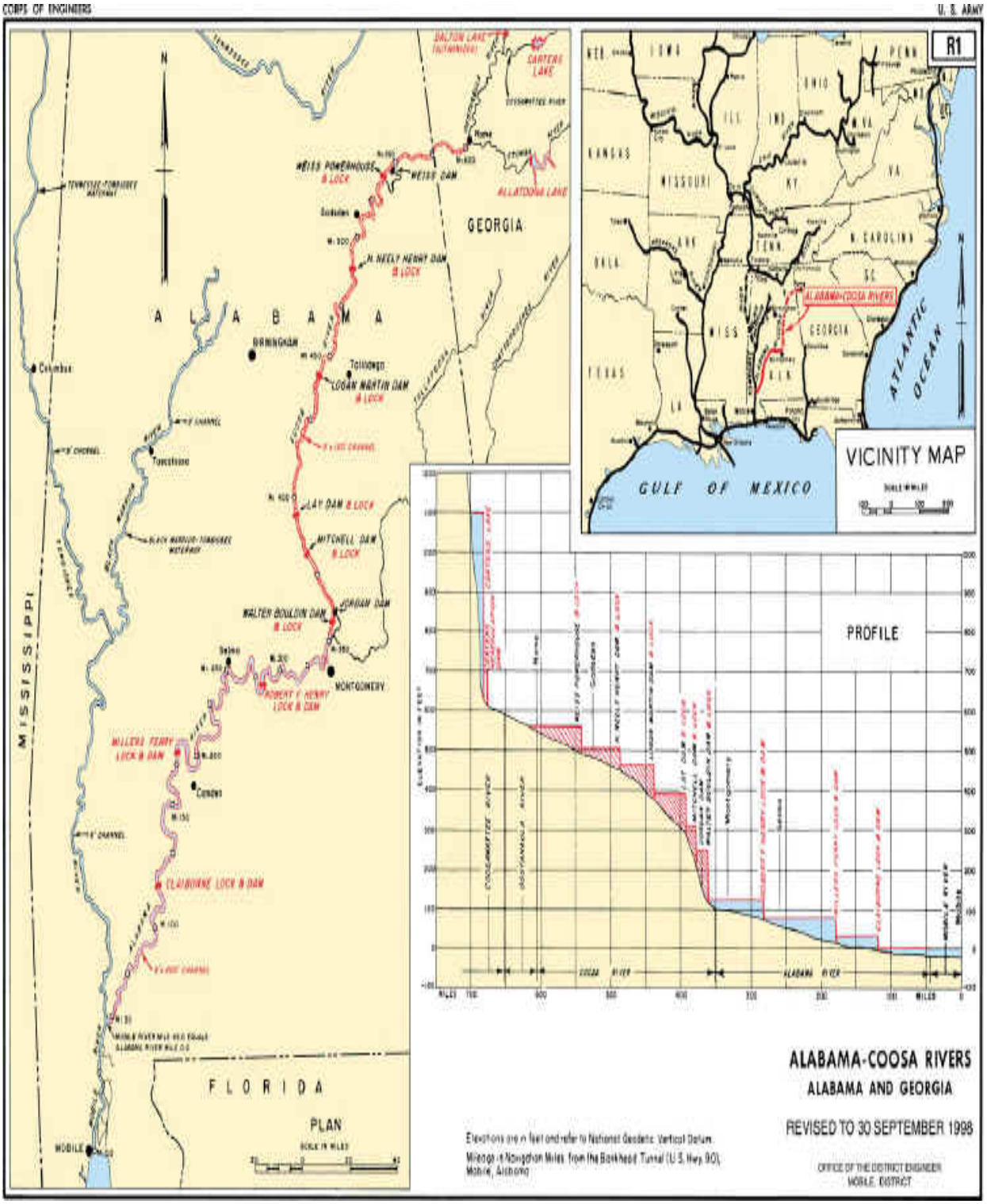

Figure 1: Vicinity Map

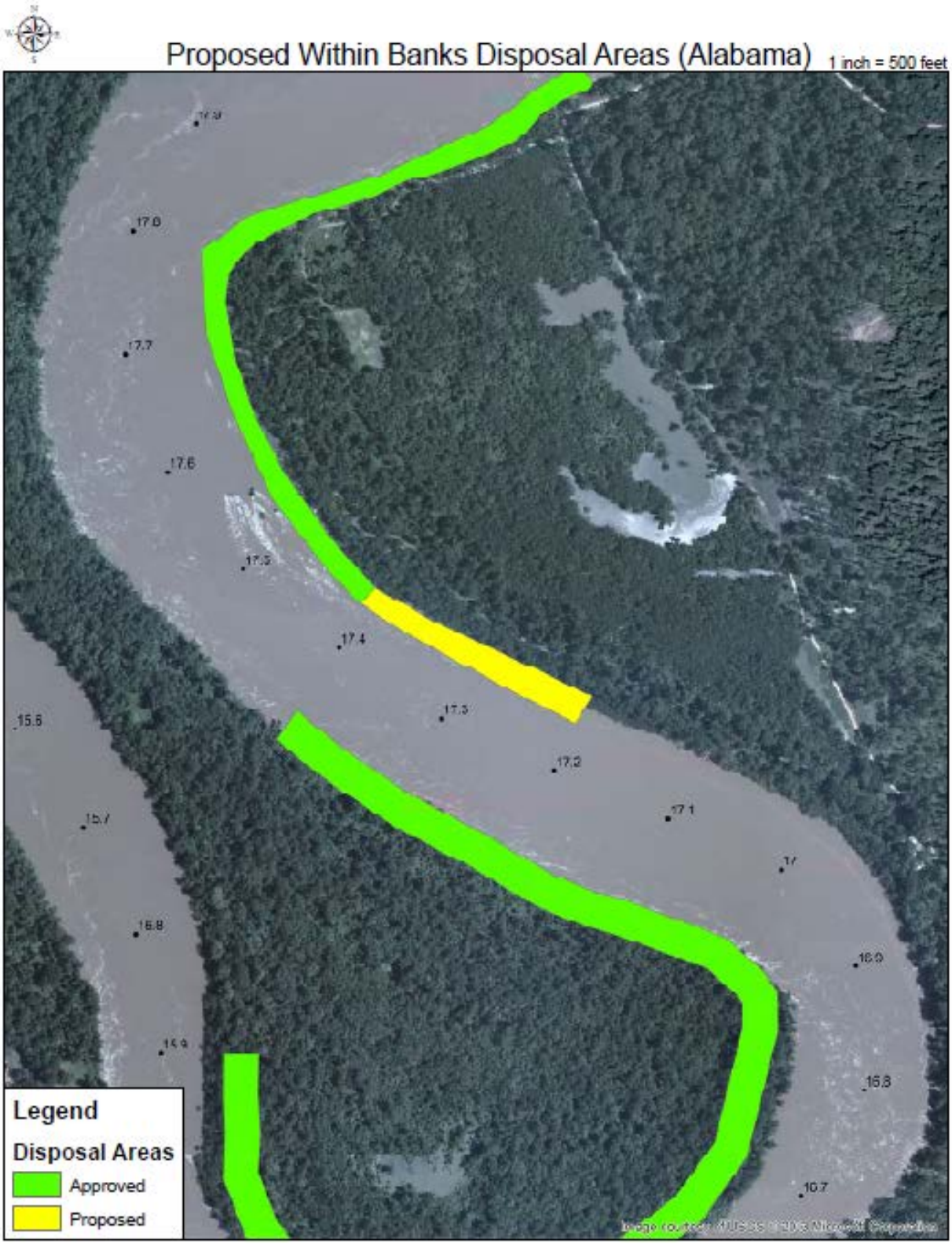

Figure 2: Proposed Within-Banks Disposal Area River Miles 17.2 – 17.4

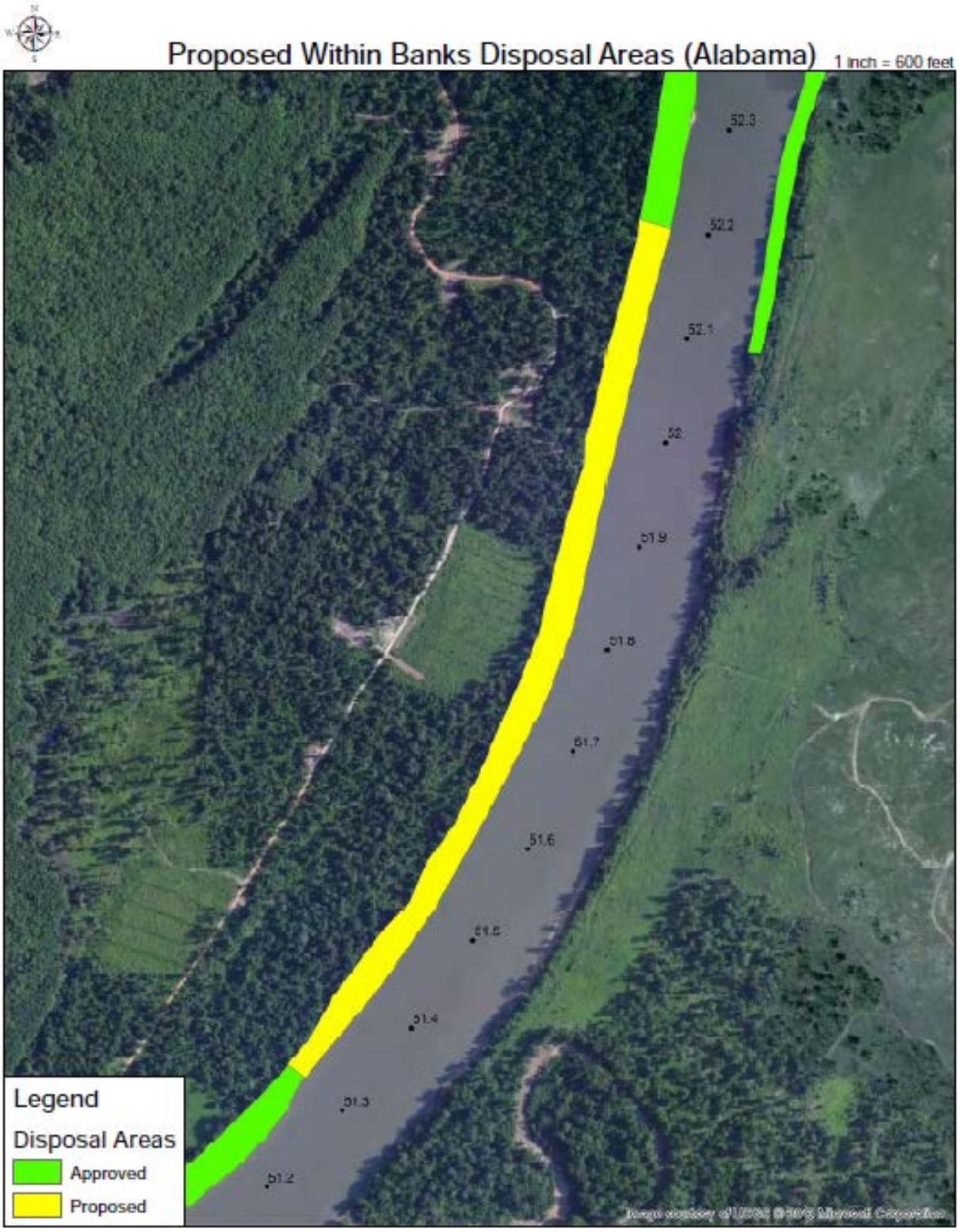

Figure 3: Proposed Within-Banks Disposal Area River Miles 51.3 – 52.2

Figure 4: Proposed Within-Banks Disposal Area River Miles 55.5 – 56.5

Figure 5: Proposed Within-Banks Disposal Area River Miles 70.8 – 71.7

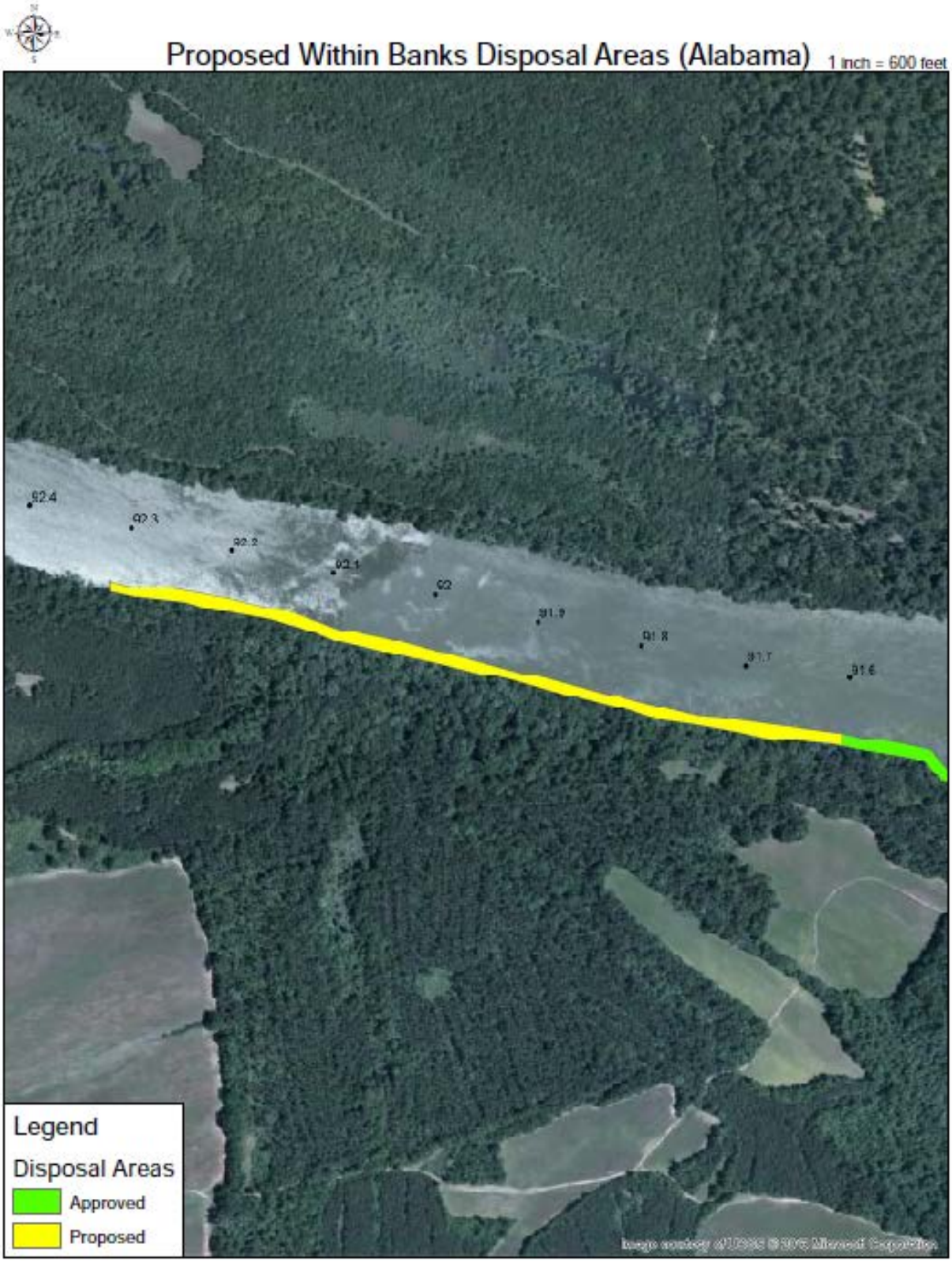

Figure 6: Proposed Within-Banks Disposal Area River Miles 91.6 – 92.3

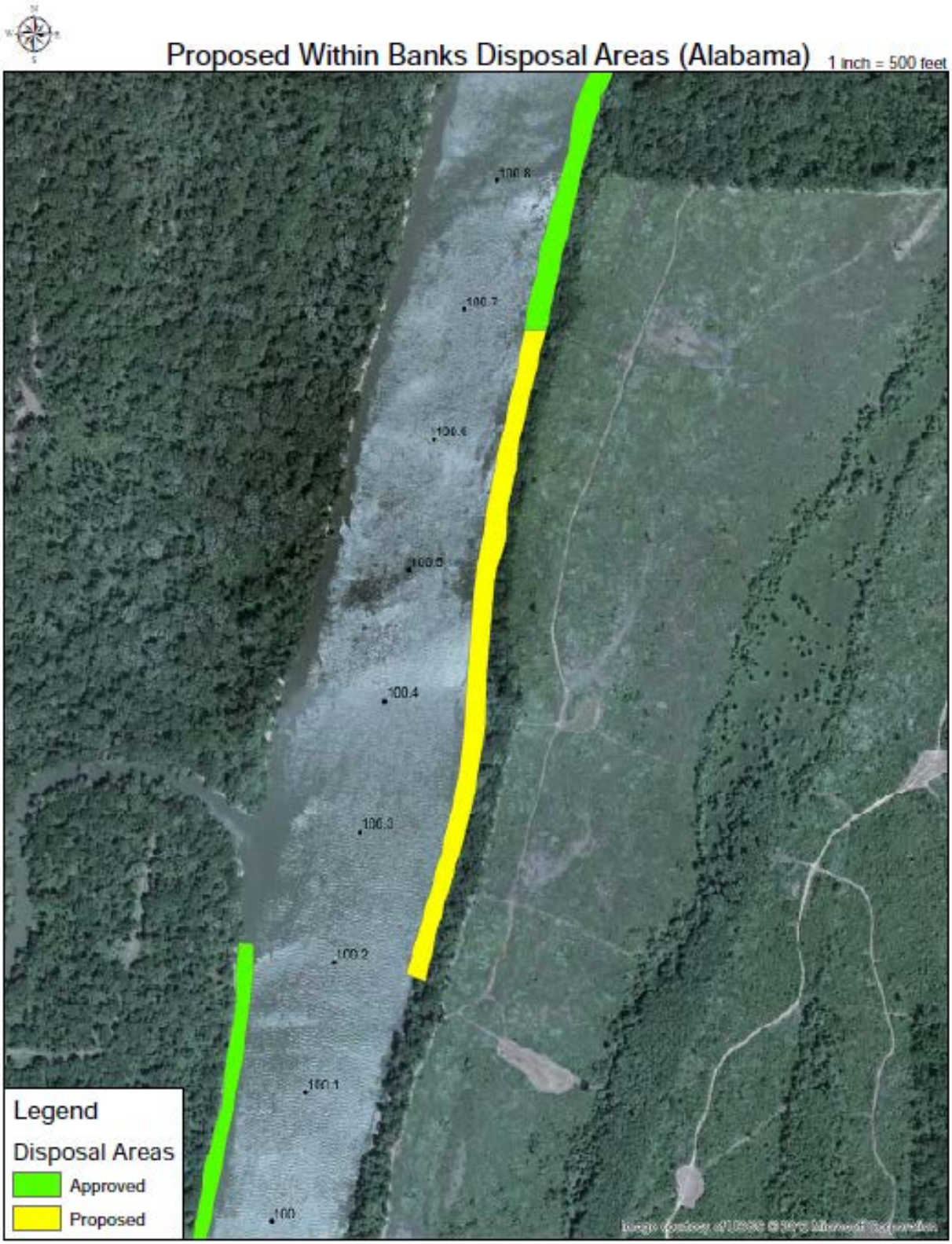

Figure 7: Proposed Within-Banks Disposal Area River Miles 100.2 – 100.7

Figure 8: Proposed Within-Banks Disposal Area River Miles 232.0 – 232.9

Figure 9: Proposed Small Boat Access Channel River Mile 71.7

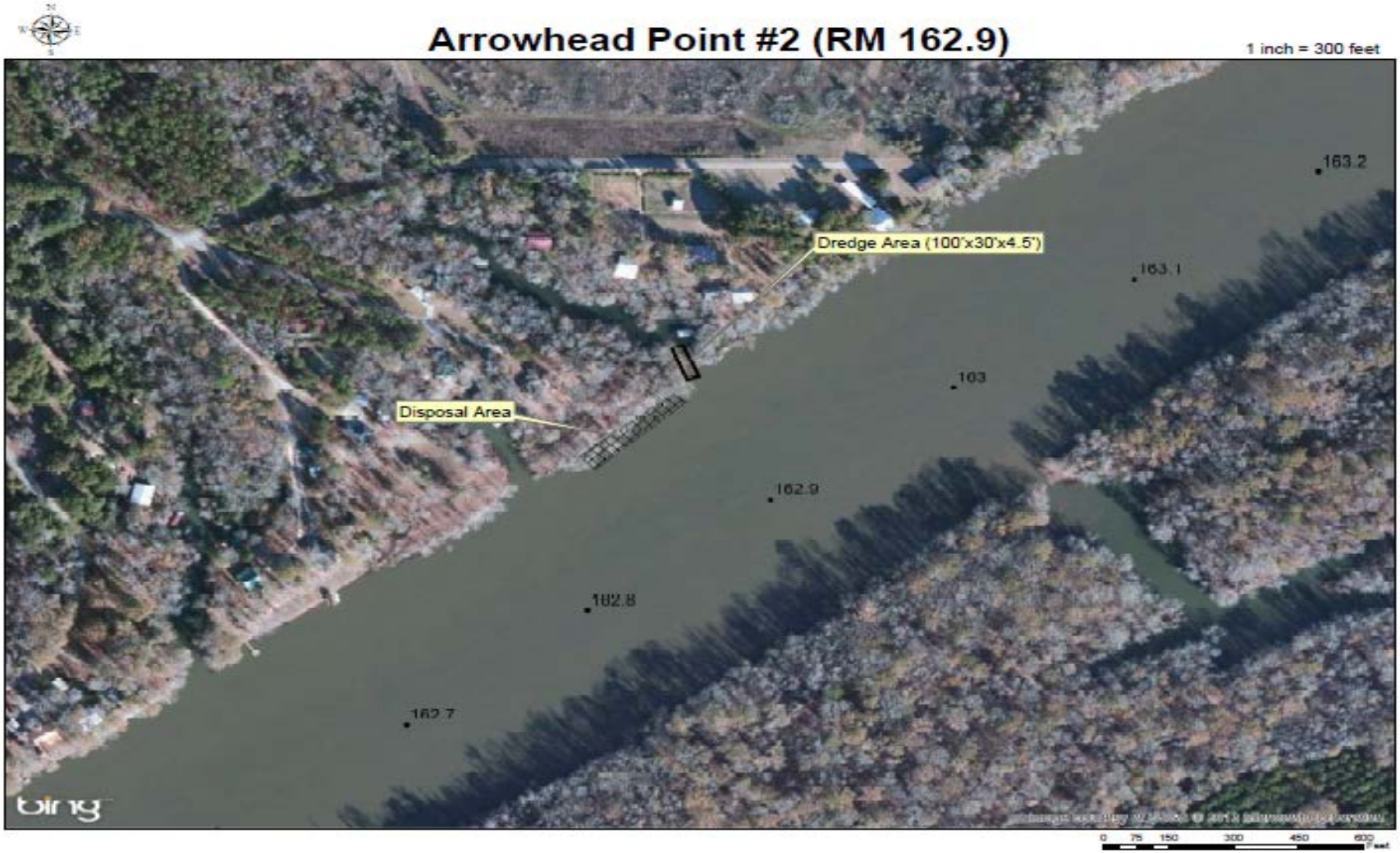

Figure 10: Proposed Small Boat Access Channel River Mile 162.9

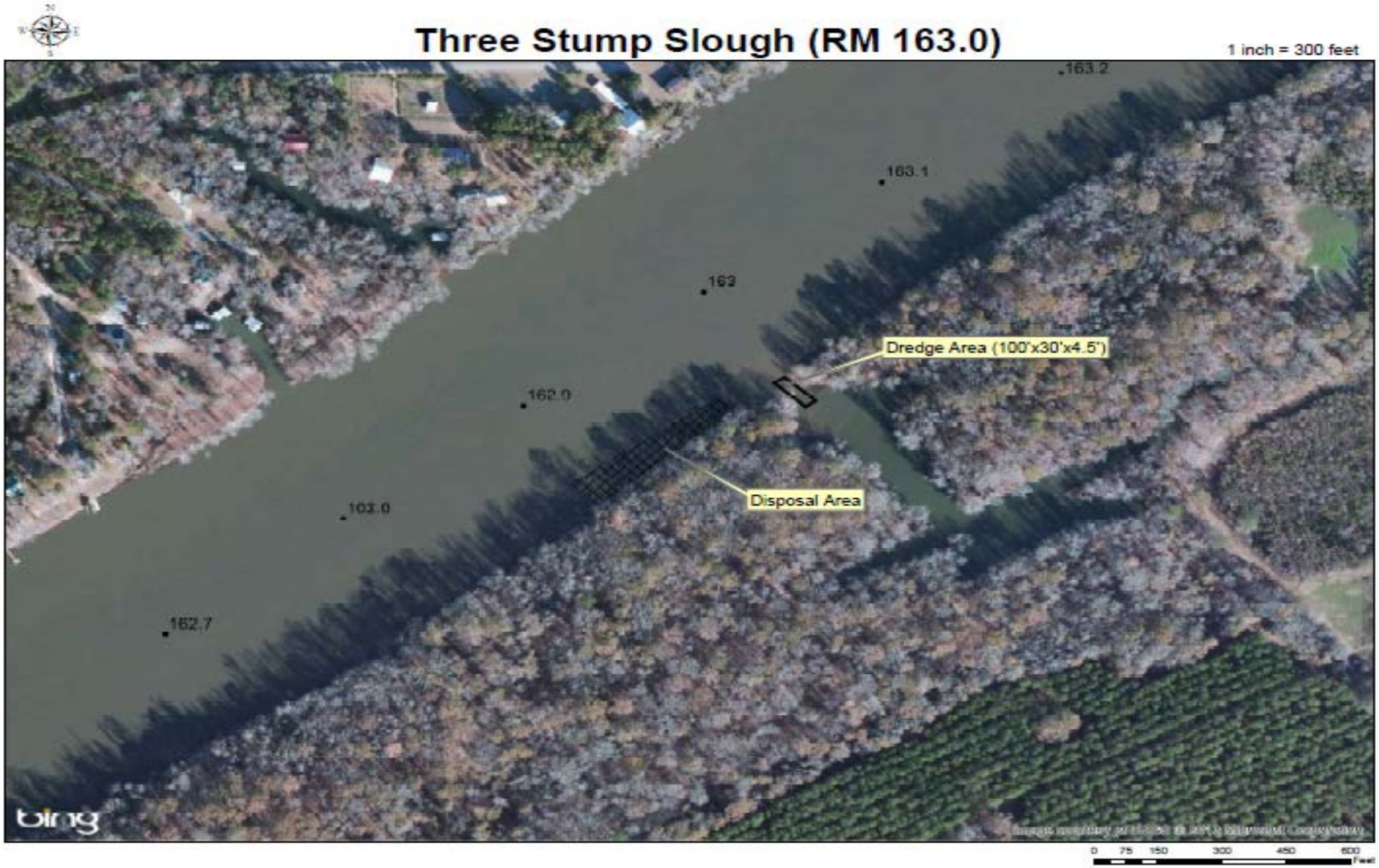

Figure 11: Proposed Small Boat Access Channel River Mile 162.9 (163.0)

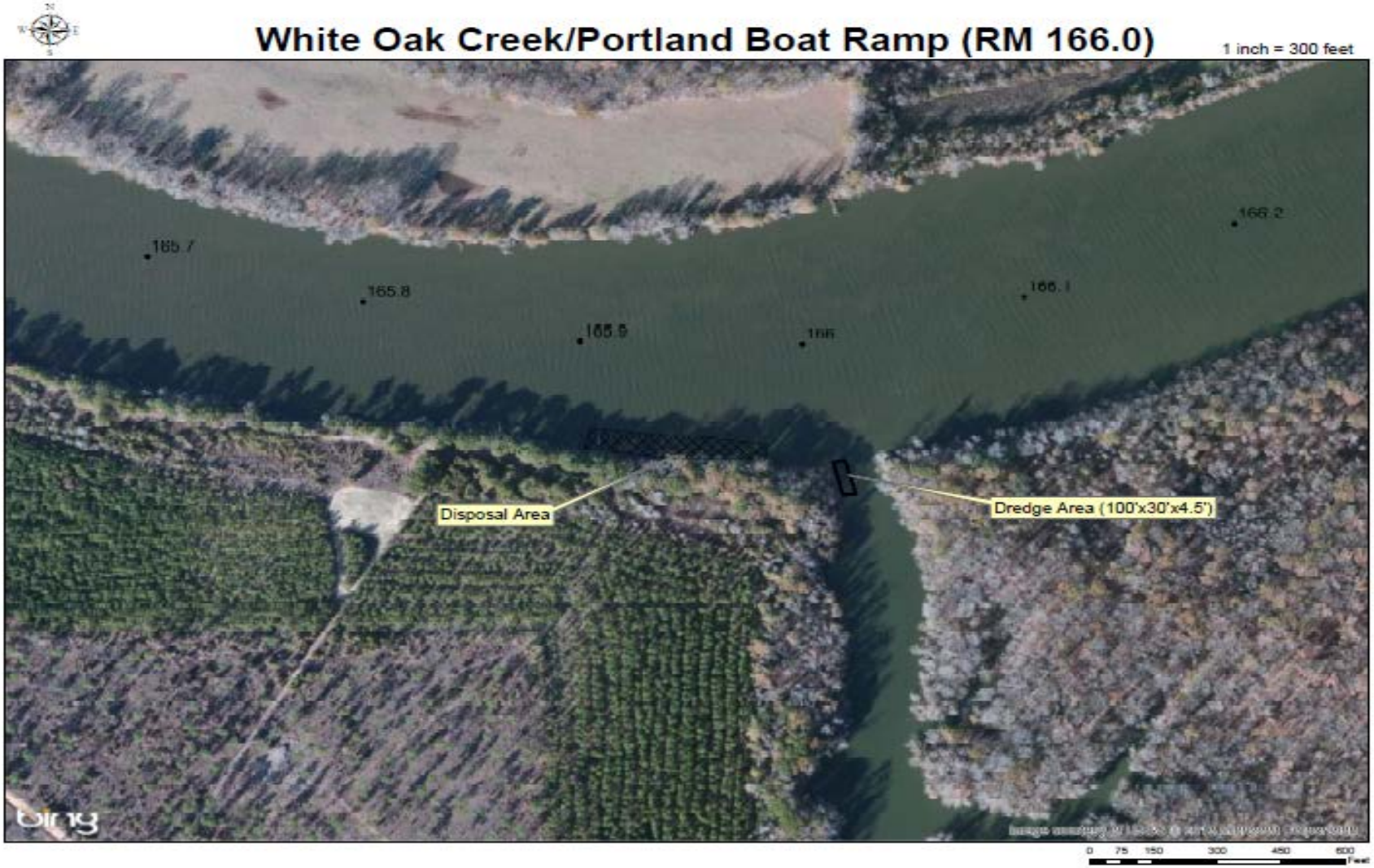

Figure 12: Proposed Small Boat Access Channel River Mile 166.0

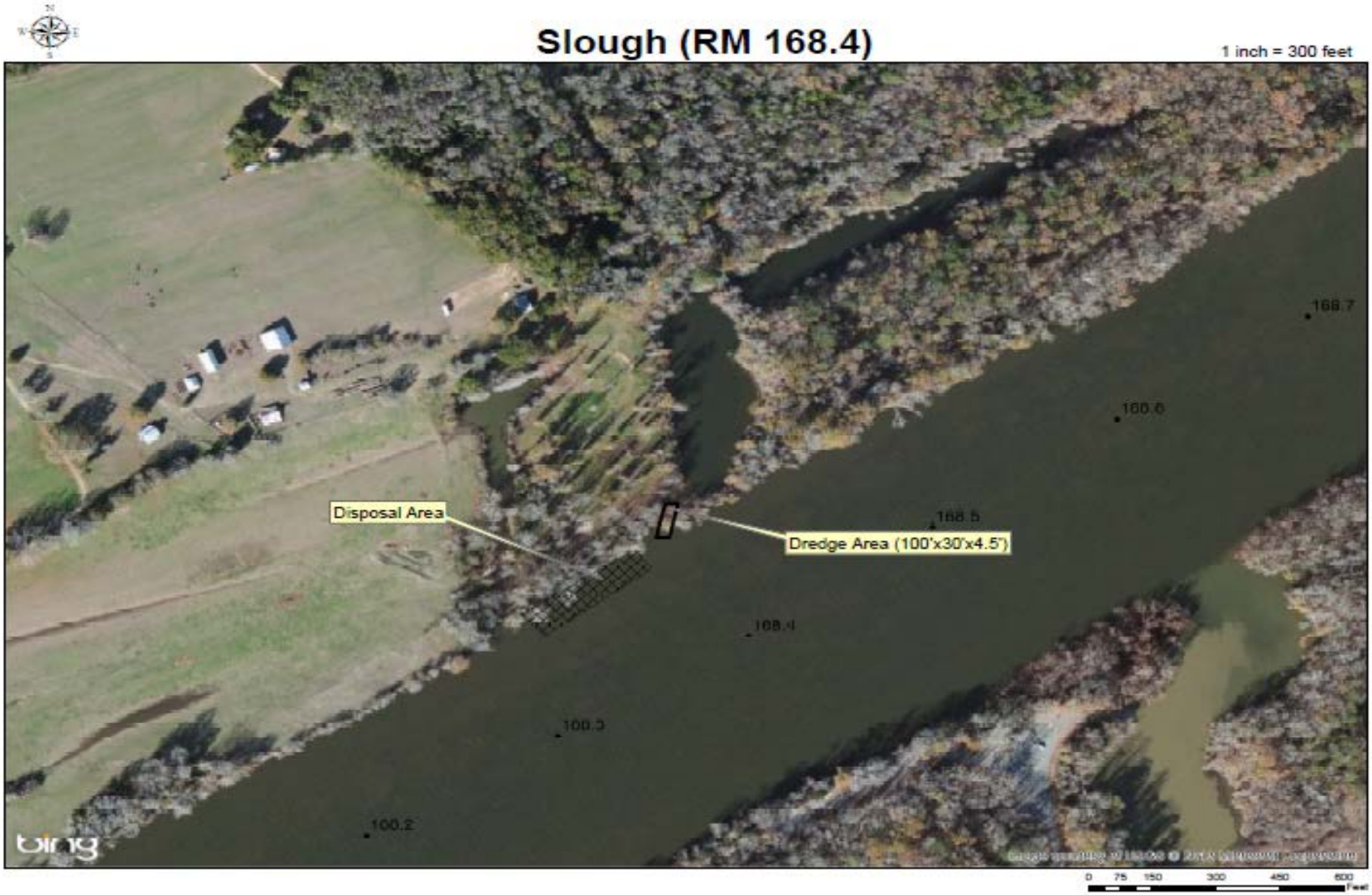

Figure 13: Proposed Small Boat Access Channel 168.4

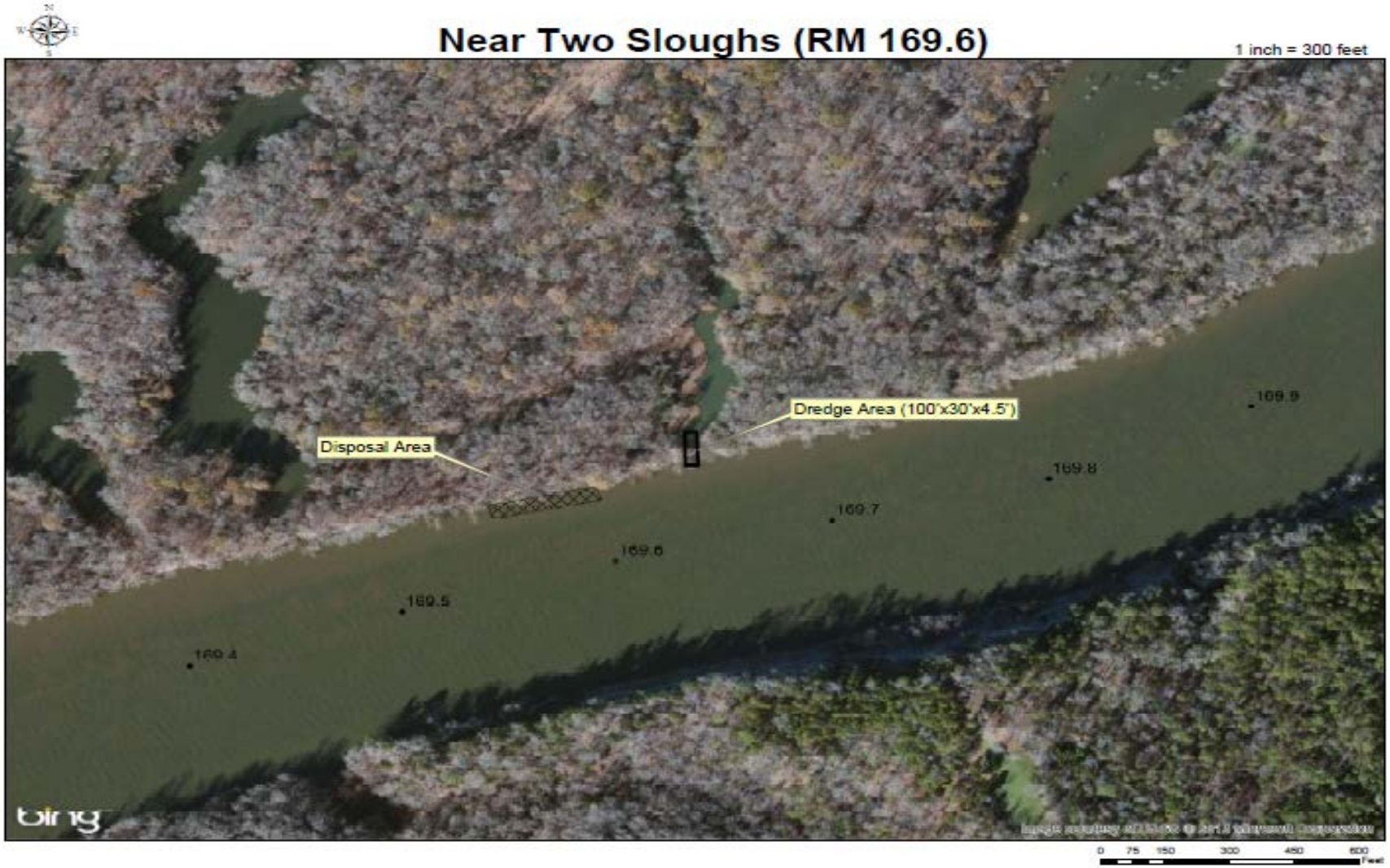

Figure15: Proposed Small Boat Access Channel River Mile 169.6

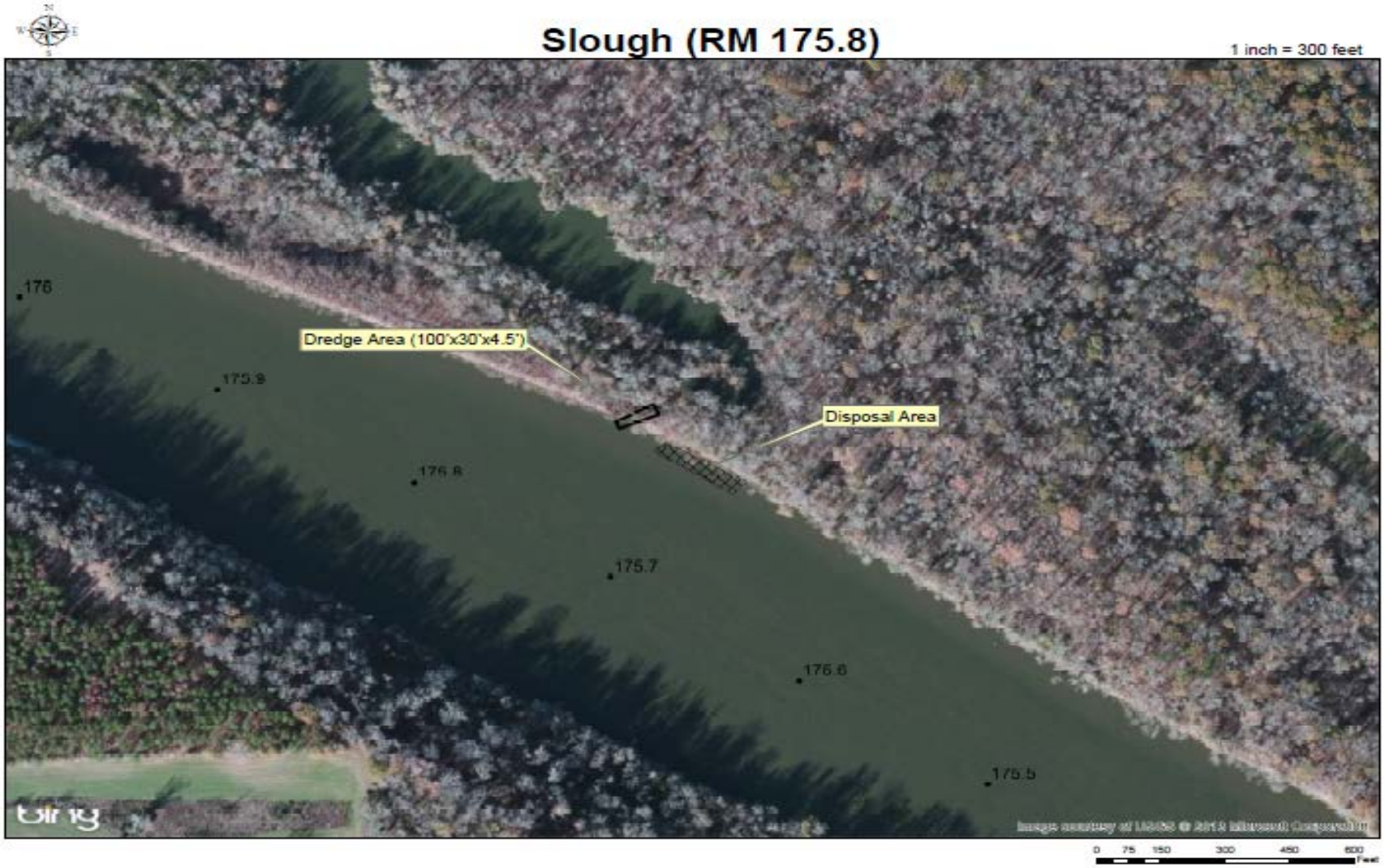

Figure 16: Proposed Small Boat Access Channel River Mile 175.8

Figure 17: Proposed Small Boat Access Channel River Mile 251.0

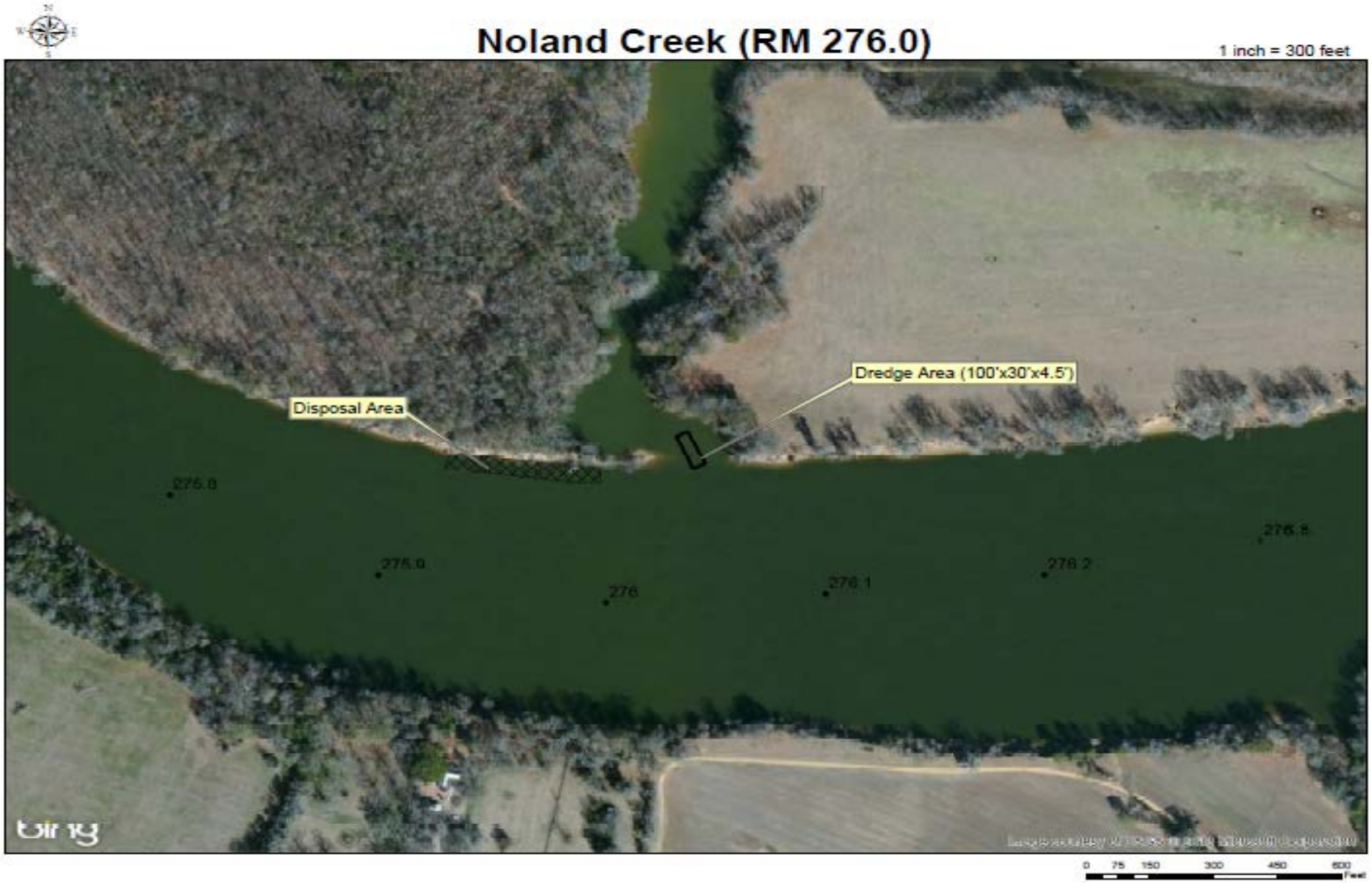

Figure 18: Proposed Small Boat Access Channel River Mile 276.0

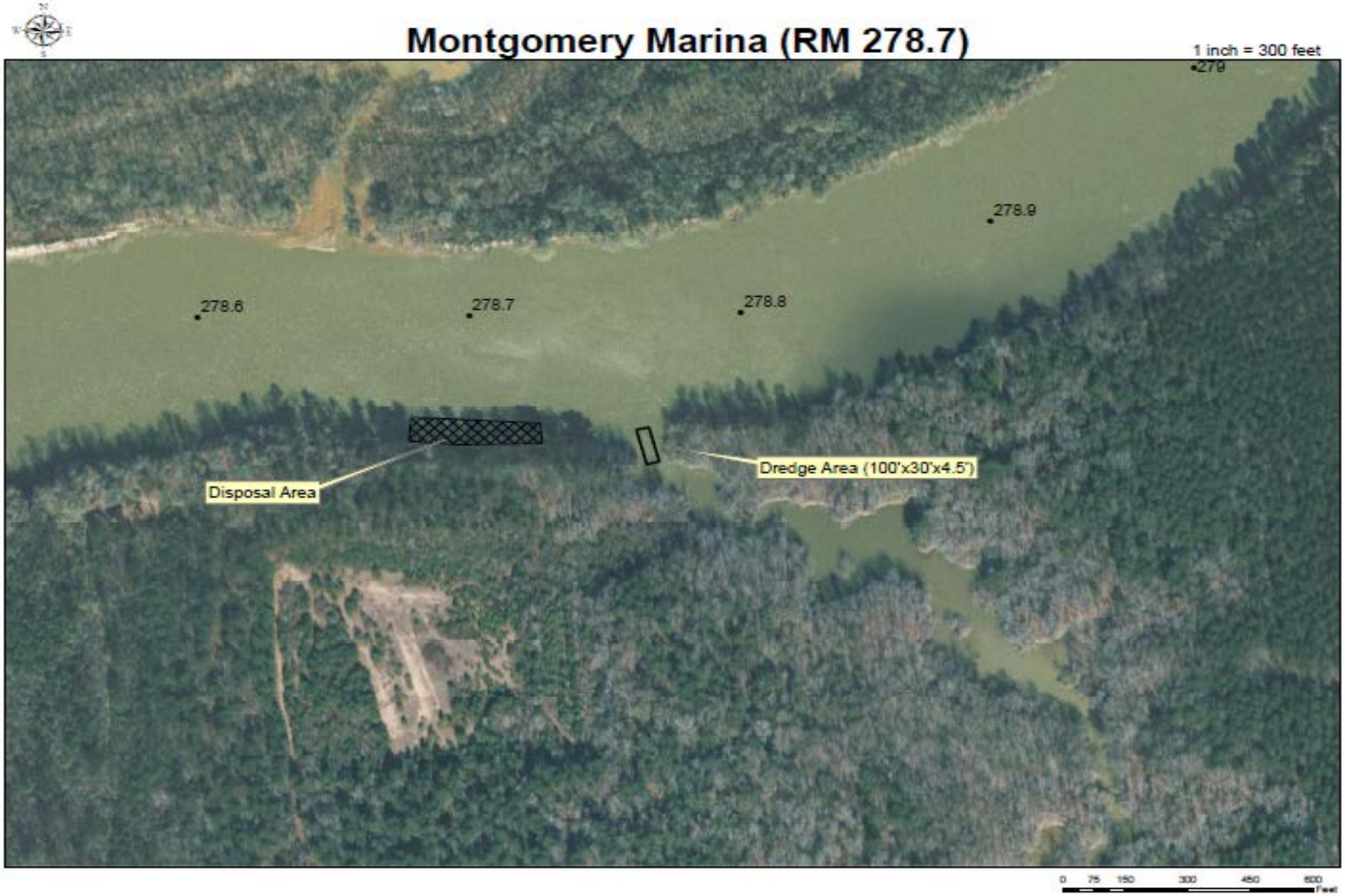

Figure 19: Proposed Small Boat Access Channel River Mile 278.7

Figure 20: Proposed Small Boat Access Channel River Mile 298.3

2.0 ENVIRONMENTAL SETTING WITHOUT THE PROJECT

2.1 GENERAL ENVIRONMENTAL SETTING

The ACR system drains a small portion of Tennessee, northwestern Georgia, and northeastern and east-central Alabama. The Alabama River basin has its source in the Blue Ridge Mountains of northwest Georgia. The main headwaters tributaries are the Oostanaula and Etowah Rivers, which join near Rome, Georgia, to form the Coosa River. The Coosa River in turn joins the Tallapoosa River near Wetumpka, Alabama, approximately 14 miles above Montgomery, Alabama, to form the Alabama River. The drainage basin is approximately 330 miles in length, and averages 70 miles wide with a maximum width of about 125 miles. The basin has a total drainage area of 22,500 square miles. The Alabama River is formed 18 miles above Montgomery by the junction of the Coosa and Tallapoosa Rivers. It flows southwesterly through Alabama 318 miles and unites with the Tombigbee River about 45 miles north of Mobile in southwestern Alabama to form the Mobile River. The Coosa River is formed at Rome, Georgia, in northwest Georgia by the junction of Oostanaula and Etowah Rivers, which have their sources in southeastern Tennessee and northern Georgia. From Rome, the Coosa River flows 286 miles southwesterly through Georgia and Alabama and unites with the Tallapoosa River near Montgomery, Alabama, to form the Alabama River.

2.2 SIGNIFICANT RESOURCES DESCRIPTION

2.2.1 FISHERY RESOURCES

Sport fishes in the Alabama River basin include largemouth bass (*Micropterus salmoides*), smallmouth bass (*Micropterus dolomieu*), striped bass (*Morone saxatilis*), spotted bass (*Micropterus punctulatus*), crappie (*Pomoxis* spp.), catfish (*Ictalurus* spp.), bluegill (*Lepomis macrochirus*), and sunfish (*Lepomis* spp.). Other species are drum (*Aplodinotus grunniens*), buffalo (*Ictiobus bubalus*), carp (*Cyprinus carpio*), striped mullet (*Mugil cephalus*), Gulf sturgeon (*Acipenser oxyrinchus desotoi*), and the Atlantic needlefish (*Strongylura marina*). It is estimated that at least 144 species of fish have been documented from the Alabama River subbasin.

Sport fishery is popular among anglers of all ages within the river basin. There are several fishing tournaments and rodeos hosted by various organizations annually.

2.2.2 WILDLIFE RESOURCES

The proposed project area is generally classified as open water adjacent to bottomland hardwood forests and cypress-tupelo-gum swamps. The adjacent areas are excellent habitat for game species such as white-tailed deer (*Odocoileus virginianus*), squirrels (*Sciurus* spp.), and turkey (*Meleagris gallopavo*). Upland game species in the vicinity are quail (*Colinus virginianus*), Eastern cottontail rabbit (*Sylvilagus floridanus*), and dove (*Columbigallina passerine*). Other species common to the proposed project areas are raccoon (*Procyon lotor*), opossum (*Didelphis*

virginiana), fox (*Vulpes vulpes*), bobcat (Felis rufus*)*, snipe *(Capella gallinago)*, and woodcock (*Scolopax minor*).

2.2.3 LAND USE

Land use patterns of the project areas generally include unforested land along the riverbanks and open water.

2.2.4 WETLANDS

Palustrine marshes, swamps, and bottomland hardwoods are common adjacent wetlands to the Alabama River and its tributaries. Generally, the habitat quality of these areas is high.

2.2.5 FLOODPLAIN

The proposed project is located within the elevation of the 100-year floodplain.

2.2.6 VEGETATION

Lowlands adjacent to the Alabama River are timbered with oak (*Quercus* spp.), sweet gum (*Liquidambar styracilua*), beech (*Fagus grandifolia*), hickory (*Carya* spp.), and elm (*Ulmus* spp.). As elevation increases, dominant species are yellow poplar (*Liriodendron tulipifera*), hackberry (*Celtis occidentalis*), magnolia (*Magnolis virginiana*), mulberry (*Morus* spp.), and red bay (*Persea borbonia*). Note that the dredging and disposal areas are located in open water and therefore the proposed project areas are unvegetated.

2.2.7 ENDANGERED AND THREATENED SPECIES

Threatened and endangered species known to occur in the Counties comprising the proposed project areas are the Gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Florida panther (*Felis concolor coryi*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinus anatum*), Bachman's warbler (*Vermivora bachmanii*), wood stork *(Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), American alligator (*Alligator mississippiensis*), eastern indigo snake (*Drymarchon coralis couperi*), gopher tortoise (*Gopherus polyphemus*), Alabama red-belly turtle (*Pseudemys alabamensis*), Red Hills salamander (*Phaeognatus hubrichti*), blue shiner (*Cyprinella caerulea*), Gulf sturgeon (*Acipenser oxyrimchus desotoi*), Alabama sturgeon (*Scaphirhynchus suttkusi*), southern acornshell (*Epioblasma othcaloogensis*), fine-lined pocketbook (*Lampsilis altilis*), southern combshell (*Epioblasma othcaloogensis*), Coosa moccasinshell (*Medionidus parvulus*), southern pigtoe (*Pleurobema georgianum*), tulotoma snail *(Tulotoma magnifica)*, orange-nacre mucket *(Lampsilis perovalis)*, heavy pigtoe (*Pleurobema taitianum*), Alabama pearlshell (*Margaritifera marrianae*), Alabama moccasinshell *(Medionidus acutissimus)*, Georgia rockcress (*Arabis georgiana*), Prices potato bean (*Apios priceana*), Alabama canebrake pitcher-plant (*Sarracenia rubra ssp. alabamensis*), piping plover (*Charadrius melodus*), inflated heelsplitter (*Potamilus inflatus*), American chaffseed (*Schwalbea americana*), West Indiana manatee (*Trichechus manatus*), Alabama beach mouse (*Peromyscus polionotus ammobates*), Perdido Key beach

mouse (*Peromyscus polionotus trissyllepsis*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), Kemp's ridley sea turtles (*Lepidochelys kempii*), green sea turtle (*Chelonia mydas*), upland combshell (*Epioblasma metastriata*), ovate clubshell (*Pleurobema perovatum*), southern clubshell (*Pleurobema decisum*), triangular kidneyshell (*Ptychobranchus greenii*), rough hornsnail (*Pleurocera foremani*), Georgia rocksnail (*Leptoxis foremani*), black pine snake (*Pituophis melanoleucus lodingi*), Choctaw bean (*Villosa choctawensis*), narrow pigtoe (*Fusconaia escambia*), and Louisiana quillwort (*Isoetes louisianensis*).

2.2.8 CULTURAL RESOURCES AND HISTORIC PROPERTIES

The Alabama River has been the subject of multiple cultural resources assessments. Several remote sensing surveys have been conducted for identifying submerged cultural resources, as well as, many terrestrial surveys to locate prehistoric and historic sites.

In the early 1800s, plantations and farms were located up and down the Alabama River. Numerous landings were established and keelboats and flatboats brought the products of the land to markets in Mobile. With the introduction of the steamboat, transportation of cotton became a thriving industry. There were almost 200 landings between Montgomery and Mobile before the Civil War and hundreds of steamboats provided dependable means of transportation. Historic research conducted in archeological surveys have identified at least 50 reported shipwrecks and submerged cultural resources in reaches from River Mile (RM) 0 to RM 236.1 of the Alabama-Coosa Rivers. Review of lists of historic vessel losses and other pertinent documents has revealed the potential for ship wrecks in proximity to some of the proposed dredging and/or within-bank disposal areas.

Mobile District Archaeologists conducted background research for each of the seven (7) within banks disposal areas and eleven (11) small boat access channels. This background research included a review of the Alabama Archaeological Site File, the Alabama Phase I Surveyed Space website, the National Register of Historic Places, and Mobile District submerged cultural resources files. As a result of this review cultural resources potentially eligible for listing on the National Register of Historic Places were identified within the area of potential effect for four (4) of the seven (7) within bank disposal sites and four (4) of the eleven (11) small boat access channels. The cultural resources identified include prehistoric and historic archaeological sites spanning thousands of years of human occupation along the Alabama River as well as several historic submerged ship wrecks. A report documenting the background research conducted by the Mobile District will be provided to the Alabama State Historic Preservation Officer for review and comment. The Mobile District will also consult with federally recognized Tribes with ancestral ties to the Alabama River.

2.2.9 NAVIGATION

The ACR system is a federally maintained navigation channel. The small boat access channels and disposal areas are not within the main navigation channel while the within-banks disposal areas are within the main navigation channel.

2.2.10 RECREATION

Recreation at the dredging and disposal sites is water dependent. Boating, fishing, hunting, water skiing, camping, etc. are recreational opportunities common to the proposed project sites. Recreational opportunities are afforded through the maintenance of the small boat access channels by providing access to hundreds of miles of boating, fishing and hunting.

2.2.11 WATER QUALITY

Water in the Alabama River is generally of good chemical quality. The river is classified for fish and wildlife purposes for its entire length, except at Millers Ferry Lock and Dam. The water upstream and downstream of Millers Ferry Lock and Dam is classified as a public water supply. In 1987, analysis for dissolved oxygen, temperature, pH, conductivity, alkalinity, turbidity, Kjeldahl nitrogen, nitrate-nitrite nitrogen, total ammonia nitrogen, total phosphorus, ortho phosphorus, calcium, magnesium, hardness, iron manganese, zinc, lead, chromium, cadmium, barium, nickel, copper, arsenic, mercury, total organic carbon pesticides, and polychlorinated biphenyls (PCB's) indicated no significant water quality issues. In recent years the Alabama Department of Environmental Management has performed dissolved oxygen, temperature and conductivity monitoring along the Alabama River Basin at various locations including Alabama River at Highway 31 during eight months of 2007 as well as R.E. Woodruff Lake forebay, Dannelly Reservoir forebay, and Claiborne Lake forebay in August 2004, 2005, and 2007. The year 2007 included the drought of record for this river system. This resulted in some measurements of low dissolved oxygen in these project's forebay areas during the August stratification period.

2.2.12 AIR QUALITY

The Air Quality Index (AQI) is an index for reporting daily air quality. According to the 2013 AQI report for Baldwin and Montgomery Counties, the median AQI for each county was good with reported readings at or below 50 (EPA, 2014). Reports for Clarke, Monroe, Wilcox, Dallas, Autauga, and Lowndes Counties were not available for generation.

2.2.13 NOISE

The proposed project areas are located along the river banks and open water areas. Noise levels are low to moderate depending on recreational activities that may be occurring within the project areas.

2.2.14 AESTHETICS

The scenery of the within-banks disposal areas is located along unforested riverbanks while the small boat access channels are open water ares. There are also forested lands located adjacent to proposed project areas.

2.2.15 HAZARDOUS, TOXIC AND RADIOLOGICAL WASTE

The proposed project sites are water bottoms of the State of Alabama. None of the locations proposed for dredging or as dredged material disposal sites are known to have supported, generated or to have received hazardous wastes, hazardous materials, solid wastes, or petroleum products. The project locations are rural and there are no industries sited nearby.

There is no electricity at the sites and therefore no threats from PCB are at the sites. There are no underground storage tanks located in the proposed project areas.

2.2.16 SOCIOECONOMICS

According to the US Census Bureau website, the 2013 population estimates as well as percentage of change from 2010 for the ACR system counties are as follows: Autauga County 55,246 an increase of 1.2%; Baldwin County 195,500 an increase of 7.3%; Clarke County 25,207 a decrease of 2.4%; Dallas County 41,996 a decrease of 4.2%; Lowndes County 10,703 a decrease of 5.3%; Monroe County 22,236 a decrease of 3.6%; Montgomery County 226,659 a decrease of 1.2% and Wilcox County 11,307 a decrease of 3.1% .

The median household incomes for these counties (listed in the order above) in 2010 were $53,773; $50,706; $30,954; $26,178; $28,023; $30,996; $44,401 and $24,212 respectively. However, these counties had approximately 11.6%; 13.3%; 26.4%; 36.5%; 23.6%; 26.0%; 20.4%; and 39.4% of individuals living below the poverty level respectively (US Census Bureau, 2014).

Employers in these counties include manufacturer shipment, merchant wholesalers, retail sales, accommodations and food service sales, minority-owned firms, women-owned firms, and private nonfarm establishments (US Census Bureau, 2014).

2.2.17 PRIME AND UNIQUE FARMLAND

There are no prime or unique farmlands located within or near the proposed project area.

3.0 ALTERNATIVES TO THE PROPOSED ACTION

3.1 NO ACTION

With the No Action Alternative, there would be no new within-bank disposal areas and dredging of the new small boat access channels would not occur. The new within-banks disposal areas are needed to maintain adequate capacity based on dredging amount and frequency requirements for the respective bars. Without dredging the small boat access channels, there would not be any access to tributaries, channels, or boat ramps. Therefore this alternative was not further considered.

4.0 POTENTIAL ENVIRONMENT IMPACTS

4.1 FISHERY RESOURCES

Fishery resources would not be impacted by the proposed dredging and disposal operations for the within-bank disposal areas and small boat access channels.

4.2 WILDLIFE RESOURCES

Wildlife resources would not be impacted by the dredging and disposal operations of the within-banks disposal areas and small boat access channels due to these areas being unforested riverbanks and open water areas.

4.3 LAND USE

The proposed project does not change land use of the area and is consistent with State, area wide and local plans and programs for land use in the area. The use of land subsequent to the proposed project would be in accordance with their present use.

4.4 WETLANDS

The proposed project areas include open water disposal areas or within banks sites adjacent to existing disposal areas. The proposed disposal areas are located outside of wetland habitats by design and their use will not result in the placement of fill material in wetlands.

4.5 FLOODPLAIN IMPACTS

The proposed project areas occur in open water disposal or within banks sites along the Alabama River. The proposed dredging and disposal activities would not result in impacts to the floodplain.

4.6 VEGETATION

There would be no impacts to vegetation by the proposed project areas.

4.7 ENDANGERED AND THREATENED SPECIES

Federally listed species with potential to occur in the proposed action areas include the Gulf sturgeon, Alabama sturgeon, tulotoma snail, southern acornshell, southern combshell, Coosa moccasinshell, southern pigtoe, orange-nacre mucket and Alabama moccasinshell.

The US Army Corps of Engineers, Mobile District coordinated with the U.S. Fish and Wildlife Service (FWS) regarding the species potentially affected by the continued and new dredging disposal efforts of the newly proposed within-banks disposal areas and small boat access channels as well as existing previously approved dredging locations, within-bank disposal areas, upland disposal areas and small boat access channels along the Alabama River. By letter dated

September 25, 2013, the FWS continues to concur with our determination that removal of unconsolidated material from the Alabama River navigation channel subject to our 300-ft buffer variance request in specific areas will have no adverse effect on listed species. However, if it is determined that stable and/or hard bottom substrates, mussel beds or Gulf sturgeon spawning habitat will be affected by dredging or disposal due to unconsolidated material then Section 7 consultation will be initiated under the Endangered Species Act. Dredging will be minimized between 15 March and 30 May whenever possible to minimize impacts to Gulf sturgeon.

4.8 CULTURAL RESOURCES AND HISTORIC PROPERTIES

The Mobile District has determined that for four (4) of the seven (7) within bank disposal sites and four (4) of the eleven (11) small boat access channels will require avoidance and or monitoring plans to ensure that there are no significant impacts to cultural resources. Avoidance plans will be developed for all terrestrial and submerged cultural resources that are indentified within or in close proximity of the proposed within banks disposal areas and small boat access channels. Monitoring plans will be developed and the sites will be monitored to ensure that adverse effects associated with the proposed action are not occurring. These effects may be due to increased access, erosion, or deposition. These plans will be coordinated with the Alabama SHPO and interested federally recognized Tribes.

4.9 NAVIGATION

Navigation would be temporarily impacted during the operation and maintenance activities at each site. However, normal navigation would resume upon completion of the proposed project.

4.10 RECREATION

The proposed project would not adversely affect any components of the National Wild and Scenic River System; the National Trails System; and does not impact any parks, parklands, ecologically critical areas, or other areas of ecological, recreational scenic, or aesthetic importance.

There will be beneficial recreation opportunities for the recreational facilities (boat ramps and camping areas) because they would have increased availability upon completion of the proposed project.

4.11 WATER QUALITY

Impacts to water quality that result from the project would be short-term, minor and reversible. Increased suspended sediments and turbidity would occur during the execution of the dredging efforts. These conditions would subside upon completion of the work. A positive impact to water quality in the project area is free exchange between waters of the Alabama River and some of its tributaries.

No transportation facilities with potential to release oil into waters of the United States are part of the proposed effort. The project is unaffected by water quality effluent guidelines or

standards. Current water quality certification exists for previously approved dredging locations, within-bank disposal areas, upland disposal areas and small boat access channels along the Alabama River. Coordination has begun to obtain water quality certification of these newly proposed within-bank disposal areas and small boat access channels to be included in the recertification of the current water quality certification.

4.12 AIR QUALITY

There may be short-term and minimal impacts to air quality in the immediate vicinity of the proposed project. These impacts would be temporary increases in particulates and emissions from the dredging equipment. These impacts would subside upon completion of the work.

4.13 NOISE IMPACTS

There would be no permanent noise impacts associated with the proposed dredging and disposal action. Noise impacts would be temporary, associated with the dredging process, and cease upon completion of the action.

4.14 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.

4.15 HAZARDOUS, TOXIC AND RADIOLOGICAL WASTE

The proposed project would not result in the generation, transport, treatment, storage or disposal of hazardous or toxic wastes

4.16 SOCIOECONOMICS

The proposed project would provide some economic benefits to the area. Economic benefits can be realized through temporary employment of laborers and support of local businesses for the purchase/rental of equipment and supplies.

4.17 PRIME AND UNIQUE FARMLAND

All activities proposed as part this project would occur within ordinary high water of the Alabama River or its identified tributaries. No prime or unique farmland would be impacted by the proposed project.

4.18 PUBLIC SAFETYAND HEALTH

There would be no impacts to public safety and health associated with this action.

4.19 PROTECTION OF CHILDREN

The EO 13045, Protection of Children from Environmental Health Risks and Safety Risks (21 April 1997), recognizes a growing body of scientific knowledge that demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because children's bodily systems are not fully developed; because children eat, drink, and breathe more in proportion to their body weight; because their behavior patterns may make them more susceptible to accidents. Based on these factors, the President directed each Federal agency to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The President also directed each Federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. The recommended plan does not pose any disproportionate environmental health risk or safety risk to children.

4.20 ENVIRONMENTAL JUSTICE

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (11 February 1994) requires that Federal agencies conduct their programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin. The recommended plan will not create disproportionately high or adverse human health or environmental impacts on any low-income populations of the surrounding area.

4.21 CUMULATIVE EFFECTS

The CEQ regulations define cumulative impacts as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other action" 40 C.F.R. § 1508.7. Actions considered in the cumulative impacts analysis include implementation of the recommended plan and other Federal, State, Tribal, local or private actions that impact the resources affected by the recommended plan.

Within the project area, various past Federal, State, and private actions have impacted the Alabama River system habitat and natural flow regime including construction of the USACE dams, urban development, agricultural activities, navigation channel maintenance dredging and disposal, and small impoundments.

There would be no significant cumulative effects posed by the proposed action.

5.0 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.

6.0 ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Any adverse environmental effects which cannot be avoided should the recommended project be implemented are expected to be minor individually and cumulatively.

7.0 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE 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 not anticipated to affect long-term productivity.

8.0 COORDINATION

As required by the National Environmental Policy Act, the Corps coordinated this project with various local, state and Federal agencies. During the early stages of development, the U.S. Fish and Wildlife Service, Alabama Department of Conservation and Natural Resources, Alabama Department of Environmental Management (ADEM) and Alabama State Historic Preservation Officer, were solicited (Appendix A, Coordination Letters) for their comments and/or concerns regarding this proposed project. Appendix B contains the public notice while Appendix C contains agency and general public responses. Additionally, water quality certification is being obtained from ADEM. Final coordination is on-going.

Coordination with the general public was accomplished by making the Draft EA and 404(b)(1) Evaluation Report available through means of a joint public notice being placed on the Corps website and mailing to interested parties and publication of legal notices in newspapers in the vicinity of the work. The notice was published XXXX and informed the interested parties that a 30-day comment period would begin on the date of publication. The legal notice described the proposed project and solicited comments on it were published in The Selma Times-Journal, The Greenville Advocate, The Montgomery Advertiser and The Wilcox Progressive Era. The legal notices were published on or around XXXX and also had a 30-day comment period. Interested parties were further advised that they could obtain a copy of the draft documents by calling or e-mailing the request to the Corps contact person identified in the public notice as well as downloading from the Corps, Mobile District web site: http://www.sam.usace.army.mil/Missions/PlanningEnvironmental/EnvironmentalAssessments.aspx.

REFERENCES

U.S. Army Corps of Engineers. 1976. Final Environmental Statement, Alabama-Coosa Rivers, Alabama and Georgia (Operation and Maintenance). Mobile District.

U.S. Army Corps of Engineers. 1987. Final Supplement to Environmental Impact Statement, Alabama-Coosa Rivers, Alabama and Georgia (Operations and Maintenance). Mobile District.

U.S. Army Corps of Engineers. 2009. Environmental Assessment for Small Boat Access Channels in the Alabama River, Alabama. Mobile District.

U.S. Census Bureau. 2000. State and County Quick Facts (http://quickfacts.census.gov/qfd/states/01000.html) Accessed August, 2014.

U.S. Fish and Wildlife Service, 25 September 2013. Letter to Mr. Brian A. Zettle, U.S. Army Corps of Engineers, Mobile District.

APPENDIX A: COORDINATION

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

August 22, 2013

REPLY TO ATTENTION OF:

Inland Environment Team
Planning and Environmental Division

Mr. N. Gunter Guy, Jr.
Commissioner of Conservation
Alabama Department of Conservation and Natural Resources
64 North Union Street
Montgomery, Alabama 36130

Dear Mr. Guy:

The U.S. Army Corps of Engineers (USACE), Mobile District is coordinating water quality recertification of the operation and maintenance of the Federal navigation project and small boat access channels on the Alabama-Coosa River (ACR) system. Tables identifying historic and proposed changes to dredging locations, within-banks disposal areas, above bank disposal areas, and small boat access channels and dredged material disposal sites are enclosed (Enclosures 1-4). No changes from the historic Federal navigation channel dredging dimensions are proposed. However, navigational miles were updated to match current GIS data, river bank locations were corrected and some small boat access channel names were updated or changed to match slough names on the Alabama River navigation charts or match colloquial names used by boaters and river users.

Federally-listed threatened and endangered species with ranges within the ACR system are:

Gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Florida panther (*Felis concolor coryi*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinus anatum*), Bachman's warbler (*Vermivora bachmanii*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), American alligator (*Alligator mississippiensis*), eastern indigo snake (*Drymarchon coralis couperi*), gopher tortoise (*Gopherus polyphemus*), Alabama red-belly turtle (*Pseudemys alabamensis*), Red Hills salamander (*Phaeognatus hubrichti*), blue shiner (*Cyprinella caerulea*), Gulf sturgeon (*Acipenser oxyrimchus desotoi*), Alabama sturgeon (*Scaphirhynchus suttkusi*), southern acornshell (*Epioblasma othcaloogensis*), fine-lined pocketbook (*Lampsilis*

altilis), southern combshell (*Epioblasma othcaloogensis*), Coosa moccasinshell (*Medionidus parvulus*), southern pigtoe (*Pleurobema georgianum*), tulotoma snail *(Tulotoma magnifica)*, orange-nacre mucket *(Lampsilis perovalis)*, heavy pigtoe (*Pleurobema taitianum*), Alabama pearlshell (*Margaritifera marrianae*), Alabama moccasinshell *(Medionidus acutissimus)*, Georgia rockcress (*Arabis georgiana*), Prices potato bean (*Apios priceana*), Alabama canebrake pitcher-plant (*Sarracenia rubra ssp. alabamensis*), piping plover (*Charadrius melodus*), inflated heelsplitter (*Potamilus inflatus*), American chaffseed (*Schwalbea americana*), West Indiana manatee (*Trichechus manatus*), Alabama beach mouse (*Peromyscus polionotus ammobates*), Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), Kemp's ridley sea turtles (*Lepidochelys kempii*), green sea turtle (*Chelonia mydas*), upland combshell (*Epioblasma metastriata*), ovate clubshell (*Pleurobema perovatum*), southern clubshell (*Pleurobema decisum*), triangular kidneyshell (*Ptychobranchus greenii*), rough hornsnail (*Pleurocera foremani*), Georgia rocksnail (*Leptoxis foremani*), black pine snake (*Pituophis melanoleucus lodingi*), Choctaw bean (*Villosa choctawensis*), narrow pigtoe (*Fusconaia escambia*), and Louisiana quillwort (*Isoetes louisianensis*).

Species potentially affected by the continued or new dredging and disposal efforts include the Gulf sturgeon, Alabama sturgeon, tulotoma snail, southern acornshell, southern combshell, Coosa moccasinshell, southern pigtoe, orange-nacre mucket and Alabama moccasinshell. Consistent with previous coordination with the US Fish and Wildlife Service, we propose to avoid dredging in the Federal navigation channel and small boat access channels March-May to minimize potential impacts on the Alabama sturgeon and the Gulf sturgeon. We solicit your recommendations for locations of vulnerable mussel beds and additional actions that would prevent impacts to these species.

We would appreciate the Alabama Department of Conservation and Natural Resources comments on any other aspect of this proposal. If you have any questions, please contact Ms. Velma Diaz at 251-690-2025 or by email at velma.f.diaz@usace.army.mil.

Sincerely,

Brian A. Zettle
Acting Chief, Environment and Resources Branch

Enclosures

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

August 22, 2013

REPLY TO
ATTENTION OF:

Inland Environment Team
Planning and Environmental Division

Mr. Bill Pearson
Field Supervisor
U.S. Fish and wildlife Service
1208-B Main Street
Daphne, Alabama 36526

Dear Mr. Pearson:

The U.S. Army Corps of Engineers (USACE), Mobile District is coordinating water quality recertification of the operation and maintenance of the Federal navigation project and small boat access channels on the Alabama-Coosa River (ACR) system. Tables identifying historic and proposed changes to dredging locations, within-banks disposal areas, above bank disposal areas, and small boat access channels and dredged material disposal sites are enclosed (Enclosures 1-4). No changes from the historic Federal navigation channel dredging dimensions are proposed. However, navigational miles were updated to match current GIS data, river bank locations were corrected and some small boat access channel names were updated or changed to match slough names on the Alabama River navigation charts or match colloquial names used by boaters and river users.

We have utilized your office web site (http://www.fws.gov/daphne/es/specieslst.html) to update the following list of threatened and endangered species potentially occurring in the ACR since the previous consultation for this action in 2008. Federally-listed threatened and endangered species with ranges within the ACR system are:

Gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Florida panther (*Felis concolor coryi*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinus anatum*), Bachman's warbler (*Vermivora bachmanii*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), American alligator (*Alligator mississippiensis*), eastern indigo snake (*Drymarchon coralis couperi*), gopher tortoise (*Gopherus polyphemus*), Alabama red-belly turtle (*Pseudemys alabamensis*),

Red Hills salamander (*Phaeognatus hubrichti*), blue shiner (*Cyprinella caerulea*), Gulf sturgeon (*Acipenser oxyrimchus desotoi*), Alabama sturgeon (*Scaphirhynchus suttkusi*), southern acornshell (*Epioblasma othcaloogensis*), fine-lined pocketbook (*Lampsilis altilis*), southern combshell (*Epioblasma othcaloogensis*), Coosa moccasinshell (*Medionidus parvulus*), southern pigtoe (*Pleurobema georgianum*), tulotoma snail *(Tulotoma magnifica)*, orange-nacre mucket *(Lampsilis perovalis)*, heavy pigtoe (*Pleurobema taitianum*), Alabama pearlshell (*Margaritifera marrianae*), Alabama moccasinshell *(Medionidus acutissimus)* and Georgia rockcress (*Arabis georgiana*), Prices potato bean (*Apios priceana*), Alabama canebrake pitcher-plant (*Sarracenia rubra ssp. alabamensis*), piping plover (*Charadrius melodus*), inflated heelsplitter (*Potamilus inflatus*), American chaffseed (*Schwalbea Americana*), West Indiana manatee (*Trichechus manatus*), Alabama beach mouse (*Peromyscus polionotus ammobates*), Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*), hawksbill sea turtle (*Eretmochelys imbricate*), leatherback sea turtle (*Dermochelys coriacea*), Kemp's ridley sea turtles (*Lepidochelys kempii*), green sea turtle (*Chelonia mydas*), upland combshell (*Epioblasma metastriata*), ovate clubshell (*Pleurobema perovatum*), southern clubshell (*Pleurobema decisum*), triangular kidneyshell (*ptychobranchus greenii*), rough hornsnail *Pleurocera foremani*), Georgia rocksnail (*Leptoxis foremani*), black pine snake (*Pituophis melanoleucus lodingi*), Choctaw bean (*Villosa choctawensis*), narrow pigtoe (*Fusconaia escambia*), and Louisiana quillwort (*Isoetes louisianensis*).

This species list has changed from our last public notice and we request confirmation on threatened and endangered species that have developed over the past five years that might be affected by the continued operation and maintenance of the ACR system.

Species potentially affected by the continued or new dredging and disposal efforts include the Gulf sturgeon, Alabama sturgeon, tulotoma snail, southern acornshell, southern combshell, Coosa moccasinshell, southern pigtoe, orange-nacre mucket and Alabama moccasinshell. Consistent with previous coordination with your agency, we propose to avoid dredging in the Federal navigation channel and small boat access channels March-May to minimize potential impacts on the Alabama sturgeon and the Gulf sturgeon. We solicit your recommendations for locations of vulnerable mussel beds and additional actions that would prevent impacts to these species.

We would appreciate the U.S. Fish and Wildlife Service comments on any other aspect of this proposal. If you have any questions, please contact Ms. Velma Diaz at 251-690-2025 or by email at velma.f.diaz@usace.army.mil.

Sincerely,

Brian A. Zettle
Acting Chief, Environment and Resources

Branch

Enclosures

ALABAMA-COOSA RIVERS
HISTORIC DREDGING REACH LOCATIONS

Table 1

Bar Name	Navigation Mile	Quantity Removed Avg. Per Assignment (Cu. Yds.)	Range (Cu. Yds.)	Dredging Frequency (Every X Yrs.)	Dredging Duration (In Days)
Wilken Bend	7.8 - 8.6	56,794	0 - 56,794	32	5
Mile 9 Bar	8.6 - 9.3	36,680	10,586 - 82,748	4	5
Mile 10.5 Bar	9.9 - 11.2	36,521	9,839 - 88,768	2	5
Wolf Gut Bar	11.9 - 12.6	32,610	9,742 - 68,190	8	3
Mile 13 Bar	12.6 - 13.3	32,065	3,299 - 87,481	3	5
Singleton Landing Bar	13.3 - 14.4	28,324	7,830 - 76,788	6	3
Mile 16 Bar	15.9 - 16.6	9,360	0 - 9,360	32	3
Mile 17 Bar	16.6 - 17.9	15,035	4,161 - 25,909	3	3
Mile 19 Bar	18.8 - 19.8	19,988	4,525 - 35,451	16	3
Aberdeen Wreck	19.8 - 21.1	29,510	1,745 - 146,614	1	4
Mile 21.5 Bar	21.1 - 21.6	19,468	6,833 - 32,103	16	4
Earles Bar	21.6 - 23.6	46,773	4,531 - 195,371	1	10
Mile 24.8 Bar	23.6 - 25.0	20,535	0 - 20,535	32	4
Dead River Bar	25.0 - 26.1	40,489	2,970 - 198,884	4	6
Lower Madison Bar	28.0 - 29.7	24,891	5,941 - 81,666	1	7
Upper Madison Bar	29.7 - 30.6	67,479	4,862 - 115,262	6	6
Matthewson Bar	30.6 - 31.6	39,063	4,871 - 132,004	1	6
Red Eagle Landing	33.1 - 34.9	45,759	14,089 - 132,978	1	6
Mile 35.6 Bar	34.9 - 35.8	41,174	18,519 - 68,382	8	6
Potts Bar	35.8 - 36.6	26,370	46 - 81,367	2	5
Mt. Pleasant Landing	37.6 - 37.9	21,748	12,833 - 26,571	6	3
Kellum Landing	38.3 - 39.3	10,753	2,420 - 34,913	3	3
Irvin Creek	39.3 - 40.2	37,338	3,912 - 171,378	1	6
Carters Bar	40.2 - 41.3	43,330	728 - 162,973	1	6
Eureka Landing	41.8 - 42.9	16,780	2,211 - 47,608	1	3
California Bar	42.9 - 44.3	35,624	4,465 - 160,805	1	6
Mile 45 Bar	44.3 - 45.4	4,478	0 - 4,478	6	2
Lombard Landing Bar	45.4 - 46.0	52,739	2,946 - 198,319	1	6
Shackleford Bar	46.0 - 47.7	31,592	1,870 - 140,167	1	9
Bills Bar	47.7 - 49.2	40,204	812 - 121,428	6	9
Bailey Creek	49.2 - 51.0	55,982	2,144 - 332,628	1	9
Lovetts Creek	51.0 - 52.1	27,011	264 - 254,519	1	5
Howard Landing	52.1 - 52.6	24,916	1,686 - 96,334	2	4
Marshall Gin Landing	55.3 - 56.6	43,365	42,553 - 44,176	16	7
Mrs. Gray’s Bar	57.5 - 58.9	62,695	355 - 287,468	1	7
Pigeon Creek Bar	58.9 - 60.1	56,807	5,264 - 175,107	1	7
Mile 61 Bar	60.7 - 61.2	3,876	0 - 3,876	32	6
Mile 62 Bar	61.2 - 62.5	86,084	0 - 86,084	32	4

Bar Name	Navigation Mile	Quantity Removed Avg. Per Assignment (Cu. Yds.)	Range (Cu. Yds.)	Dredging Frequency (Every X Yrs.)	Dredging Duration (In Days)
Gosport Landing	62.5 - 63.5	22,708	3,816 - 48,088	2	5
Gaillard Creek Bar	64.7 - 65.2	37,232	0 - 37,232	32	3
Claiborne Bridge Bar	66.4 - 67.6	27,971	2,738 - 221,023	1	6
Limestone Creek Bar	67.6 - 68.6	40,528	3,364 - 166,618	2	8
Big Flat Creek	68.6 - 69.9	19,783	8,002 - 45,757	4	6
Claiborne Lock LA	71.3 - 72.5	25,496	179 - 129,058	1	6
Claiborne Lock UA	72.5 - 72.6	9,410	8,120 - 12,044	6	2
Wilcox Bar	106.9 - 108.0	18,938	4,237 - 28,263	6	4
Holley Ferry Upper	117.3 - 118.5	15,977	0 - 15,977	32	3
Walnut Bluff	121.7 - 122.8	31,803	25,076 - 38,529	6	8
Millers Ferry LA	131.8 - 133.0	22,172	735 - 74,487	6	8
Gardner’s Island	220.2 - 221.7	22,218	8,981 - 35,455	16	8
Upper Brothers	225.7 - 227.0	15,831	0 - 15,831	32	2
Mile 228 Bar	228.0 - 229.0	18,914	14,082 - 23,746	16	4
Mile 229 Bar	229.0 - 230.0	49,963	0 - 49,963	32	8
Benton Bar	232.5 - 234.9	11,961	1,591 - 26,291	10	7
Robert F. Henry LA	235.5 - 236.2	21,290	8,422 - 34,157	16	6

Alabama-Coosa Rivers
Approved and Proposed Within-Bank Disposal Areas
Table 2

Site	Navigation Mile	Bank (Descending)	Size (A)[1]
Mile 0	0.0 - 0.3	Left	2.7
Mile 0.5	0.5 - 1.1	Right	5.5
Mile 2.5	2.5 - 3.4	Left	8.2
Mile 3.5	3.5 - 3.8	Right	2.7
Mile 3.8	3.8 - 4.0	Left	1.8
Mile 5.0	4.7 - 5.2	Right	4.6
Fort Mims Cutoff	6.4 - 6.5	Right	0.9
Fort Mims Cutoff	6.9 - 7.0	Right	0.9
Fort Mims Cutoff	7.0 - 7.1	Right	0.9
Fort Mims Cutoff	7.1 - 7.2	Right	0.9
Fort Mims Cutoff	7.2 - 7.4	Right	1.8
Wilkin Bend	7.8 - 7.9	Left	0.9
Fort Mims Cutoff	7.9 - 8.0	Left	0.9
Wilkin Bend	7.3 - 8.8	Right	4.6
Alabama River Cutoff	8.8 - 9.1	Right	2.7
Alabama River Cutoff	9.1 - 9.3	Right	1.8
Alabama River Cutoff Entrance	9.3 - 9.7	Right	3.6
Mile 10.5	9.5 - 11.0	Left	13.6
Wolf Gut	12.0 - 12.6	Right	5.5
Mile 13	12.6 - 14.0	Left	12.7
Mile 14	14.0 - 14.1	Left	0.9
Mile 14	14.1 - 14.8	Left	6.4
Mile 16	15.9 - 17.4	Right	13.6
* Mile 18	17.2 - 17.4	Left	1.8
Mile 18	17.4 - 17.9	Left	4.6
Mile 18	17.9 - 18.2	Left	2.7
Mile 19	18.1 - 18.9	Right	7.3
Aberdeen Wreck	19.4 - 19.9	Right	4.6
Aberdeen Wreck	19.8 - 20.0	Left	1.8
Aberdeen Wreck	20.0 - 20.2	Left	1.8
Aberdeen Wreck	20.2 - 20.5	Left	2.7
Aberdeen Wreck	20.5 - 20.6	Left	0.9
Aberdeen Wreck	20.3 - 20.8	Right	4.6
Aberdeen Wreck	21.1 - 21.4	Left	2.7
Aberdeen Wreck	21.4 - 21.5	Left	0.9
Earle’s Bar	21.5 - 22.4	Left	8.2
Earle’s Bar	22.2 - 22.6	Right	3.6
Earle’s Bar	22.6 - 23.3	Right	6.4
Earle’s Bar	22.9 - 23.2	Center	2.7
Earle’s Bar	23.3 - 23.4	Right	0.9
Earle’s Bar	23.4 - 24.0	Right	5.5
Dead River	24.9 - 25.4	Left	4.6

Site	Navigation Mile	Bank (Descending)	Size (A)[1]
Dead River	54.4 - 26.0	Left	5.5
Dead River	26.0 - 26.5	Left	4.6
Lower Madison	28.0 - 29.9	Left	17.3
Lower Madison(New)	29.2 - 29.7	Right	4.6
Upper Madison	29.9 - 30.6	Left	6.4
Upper Madison	30.4 - 30.6	Right	1.8
Upper Madison	30.6 - 30.9	Right	2.7
Upper Madison	30.9 - 31.0	Right	0.9
Matthewson	31.0 - 32.0	Right	9.1
Red Eagle	33.2 - 34.0	Left	7.3
Red Eagle	34.0 - 34.7	Left	6.4
Red Eagle	35.0 - 35.6	Right	5.5
Potts	35.6 - 37.2	Right	14.6
Mt. Pleasant	37.7 - 38.0	Right	2.7
Irvin Creek	38.9 - 39.5	Left	5.5
Irvin Creek	39.9 - 40.2	Right	2.7
Irvin Creek	40.2 - 40.8	Right	5.5
Carters	40.8 - 41.0	Right	1.8
Carters	40.8 - 41.9	Left	10.0
Gainestown	41.9 - 42.4	Left	4.6
Gainestown	42.2 - 42.4	Right	1.8
Gainestown	42.4 - 42.6	Right	1.8
California	42.6 - 42.9	Right	2.7
California	42.9 - 43.9	Right	9.1
California	44.0 - 45.0	Left	9.1
Lombard	45.3 - 46.2	Left	8.2
Shackleford	46.2 - 46.4	Left	1.8
Shackleford	46.4 - 46.5	Left	0.9
Shackleford	46.5 - 46.6	Left	0.9
Lombard	45.7 - 45.9	Right	1.8
Shackleford	46.6 - 47.3	Right	6.4
Shackleford	47.3 - 47.6	Right	2.7
Shackleford	47.6 - 47.7	Right	0.9
Bailey Creek	48.4 - 49.5	Right	10.0
Bailey Creek	49.2 - 50.4	Left	10.9
Lovetts Creek	50.7 - 51.3	Right	5.5
* Howards Landing	51.3 – 52.2	Right	8.1
Howards Landing	52.2 – 53.2	Right	9.1
Howards Landing	52.1 - 52.6	Left	4.5
Dales Ferry	54.5 - 55.5	Right	9.1
* Dales Ferry	55.5 - 56.5	Right	9.1
Mrs. Grays	56.5 - 58.5	Left	18.2
Mrs. Grays	58.5 - 58.8	Left	2.7
Mrs. Grays	57.8 - 58.7	Right	8.2
Pigeon Creek	58.8 - 60.2	Left	12.7
Pigeon Creek	60.2 - 60.7	Right	4.6
Mile 61	60.8 - 61.9	Right	10.0
Mile 62	61.8 - 62.3	Left	4.6
Gosport Landing	62.3 - 62.7	Right	3.6

Site	Navigation Mile	Bank (Descending)	Size (A)[1]
Mile 63.5	63.0 - 64.0	Left	9.1
Gaillard Creek	64.4 - 65.2	Left	7.3
Claiborne	66.4 - 68.4	Right	18.2
Limestone Creek	68.4 - 68.9	Right	4.6
Flat Creek	68.9 - 69.7	Right	7.3
Limestone Creek	68.0 - 68.4	Left	3.6
Claiborne LA	71.5 - 72.5	Right	9.1
* Claiborne LA	70.8 – 71.7	Left	8.1
Mile 75	74.8 - 75.7	Right	8.2
Cane Creek	81.7 - 81.9	Left	1.8
Cane Creek	82.2 - 82.5	Right	2.7
Haines Island	82.5 - 82.8	Left	2.7
Bates Bar	86.1 - 86.6	Right	4.6
Bates Bar	86.6 - 86.8	Center	1.8
Bates Bar	86.9 - 87.0	Left	0.9
McCalls Creek	90.8 - 91.6	Right	7.3
* McCalls Creek	91.6 – 92.3	Left	6.4
Steins Island	94.3 - 94.6	Left	2.7
Steins Island	94.5 - 94.9	Right	3.6
Steins Island	95.0 - 95.5	Right	4.6
Webb Landing	98.6 - 98.9	Left	2.7
Webb Landing	99.1 - 99.4	Right	2.7
Bear Creek	99.9 - 100.2	Right	2.7
* Bear Creek	100.2 - 100.7	Left	4.5
Black Creek	100.7 - 101.0	Left	2.7
Yellow Bluff	103.4 - 103.6	Left	1.8
Mile 107	107.0 - 108.0	Left	9.1
Tait	109.5 - 109.6	Left	0.9
Tait	109.8 - 110.0	Right	1.8
Black’s Bluff	11.3 - 111.6	Right	2.7
Black’s Bluff	111.6 - 112.0	Left	3.6
Pursley Creek	112.3 - 113.2	Right	8.2
Mile 115	115.4 - 116.0	Left	5.5
Hobbs	116.1 - 116.9	Right	7.3
Hobbs	116.9 - 117.6	Right	6.4
Yellow Jacket	117.6 - 118.1	Right	4.6
Yellow Jacket	118.1 - 118.3	Right	1.8
Mile 120.5	120.3 - 120.5	Right	1.8
Evans	120.5 - 120.8	Right	2.7
Mile 120.5	120.5 - 120.8	Left	2.7
Walnut Bluff	121.4 - 121.9	Left	4.6
Walnut Bluff	122.0 - 122.8	Right	7.3
Beaver Creek	123.0 - 125.0	Left	18.2
Midway	131.7 - 132.9	Right	10.9
Upper Approach	133.0 - 133.4	East of Approach	3.6
Cades	199.9 - 201.3	Left	12.7
Cades	200.2 - 200.6	Right	3.6
Mile 210	209.2 - 210.1	Left	8.2
Mile 215	215.0 - 215.9	Left	8.2

Site	Navigation Mile	Bank (Descending)	Size (A)[1]
Mile 217	216.6 - 217.9	Right	11.8
Gardners Island	220.2 - 221.2	Right	9.1
Gardners Island	220.8 - 221.8	Left/Center	9.1
Gardners Island	221.6 - 222.0	Right/Center	3.6
Gardners Island	222.0 - 222.1	Right	0.9
Mile 223.5	222.7 - 223.5	Right	7.3
Mile 223.5	223.6 - 224.1	Left	4.6
Mile 225	224.6 - 226.2	Right	14.6
Upper Brothers Bar	226.2 - 226.7	Right	4.6
Upper Brothers Bar	226.7 - 226.9	Left	1.8
Upper Brothers	226.9 - 227.0	Right	0.9
Mile 228	227.5 - 227.7	Left	1.8
Mile 228	227.8- 228.7	Right	8.2
Mile 229	228.8 - 229.6	Left	7.3
Benton's Bar	232.9 - 234.2	Right	11.8
* Benton's Bar	232.0 - 232.9	Left	8.2
Lower Approach	235.1 - 236.1	Right	9.1
Grand Total			847.6

[1] Acreage estimates are based on an average 75-foot width encompassing the area along the riverbank. The disposal is confined to the area along the riverbank below the ordinary high waterline extending riverward into the aquatic environment, and is generally unforested, however may contain some young (less than 15 years old) early successional tree species (willow, cottonwood, and sycamore) which have developed on previously disposed dredged material and/or natural bars and berms.

[2] The asterisk indicates the proposed within-banks disposal areas.

ALABAMA-COOSA RIVERS
APPROVED ABOVE-BANK DISPOSAL AREAS
Table 3

Site	Navigation Mile	Bank (Descending)	Size (Acres)	Previously Used	Habitat
1-A[2]	6.8	Left	20.2	Yes	Disturbed
A-1[2]	7.8	Left	63.2	Yes	Disturbed
1-B[2]	9.1	Left	6.9	Yes	Disturbed
B[4]	9.1	Left	15.0	No	Hardwoods
D-1	20.2	Right	8.5	Cleared in 1968/Unused	Hardwoods
D	20.4	Right	10.4	Yes	Disturbed
15-F[4]	22.8	Right	35.0	No	Cutover Hardwoods
1-G[3,4]	30.4	Right	32.0	No	27A Pasture
G	30.7	Right	15.3	Yes	5A Hardwoods
H	31.0	Left	9.5	Yes	Disturbed
I	31.3	Right	7.7	Yes	Disturbed
J	34.1	Right	7.4	Yes	Disturbed
L-1[2]	39.9	Left	9.8	Yes	Disturbed
M[2]	41.0	Right	11.4	Yes	Disturbed
M-3[3,4]	41.5	Left	23.0	No	Cropland
N-1	43.0	Right	10.7	Yes	Disturbed
N-2	43.2	Right	10.5	Yes	Disturbed
N-3	43.6	Right	9.8	Yes	Disturbed
N-4	43.7	Right	12.1	Yes	Disturbed
N-6[4]	43.3	Right	33.0	No	Hardwoods
O[4]	46.6	Right	9.8	Yes	Disturbed
P-1[4]	46.9	Left	8.9	Yes	Disturbed
P-2[4]	47.5	Left	8.5	Yes	Disturbed
Q[4]	47.1	Right	9.6	Yes	Disturbed
1-R[2,3]	49.4	Right	8.2	Yes	Disturbed
2-R[2,3]	49.6	Right	8.5	Yes	Disturbed
6-R[4]	50.0	Left	27.0	No	Clearcut
S-1	57.8	Left	7.1	Cleared/ Diked/Unused	Hardwoods
S-2[2]	58.1	Left	6.2	Yes	Disturbed
S-3[2,3]	58.4	Left	8.7	Yes	Disturbed
S-4[4]	57.9	Left	20.0	No	Hardwoods
T-4[4]	60.0	Right	26.0	No	9A Cropland 17A Hardwoods
U-1	67.2	Right	15.0	Yes	Disturbed
U-2	67.4	Right	3.8	No	Pasture
U-3[4]	67.3	Right	3.5	No	Mixed Pine/Hardwoods
V	686.2	Right	6.4	Yes	Disturbed

Site	Navigation Mile	Bank (Descending)	Size (Acres)	Previously Used	Habitat
W	68.4	Right	6.8	Yes	Disturbed
W-1[4]	68.9	Left	21.0	No	Pine Plantation
X[3]	69.1	Right	9.8	Yes	Disturbed
Y	72.0	Left	5.0	No	Disturbed
Z	221.8	Left	15.0	No	Hardwoods
	Grand Totals		586.2		

[1] Does not include buffer zone or pipeline corridor.
[2] Currently approved sites.
[3] Further cultural resource coordination required prior to use.
[4] Disposal area size contingent on construction of training dikes.

ALABAMA-COOSA RIVERS
APPROVED AND PROPOSED SMALL BOAT ACCESS CHANNELS
Table 4

RM.	BANK	AREA	LAKE	EST.CY	Existing WQC
71.7	Left	Claiborne Lower Pool Boat Ramp*	AL River	500	No
73.3	Left	Isaac Creek - Mouth & Ramp*	Claiborne	1500	Yes
76.1	Right	Silver Creek*	Claiborne	8000	Yes
76.9	Left	Maiben Creek	Claiborne	5000	Yes
82.0	Right	Cane & Camp Creeks	Claiborne	4500	Yes
84.5	Left	Haines Island Boat Ramp*	Claiborne	2000	Yes
86.6	Left	Bailey Creek & McDuffie Landing*	Claiborne	8000	Yes
90.6	Left	Bell's Landing*	Claiborne	4500	Yes
90.6	Left	Tallahatchee Creek	Claiborne	8000	Yes
91.1	Left	McCall's Creek	Claiborne	2000	Yes
101.1	Left	Black Creek**	Claiborne	850	Yes
124.8	Right	Clifton Ferry Boat Ramp*	Claiborne	100	Yes
133.5	Left	Millers Ferry Dam site*	Dannelly	8000	Yes
134.0	Right	Shell Creek #1 & Boat Ramp*	Dannelly	10000	Yes
134.2	Right	Shell Creek #2	Dannelly	10000	Yes
134.5	Left	Millers Ferry Campground* (Sand Island)	Dannelly	4350	Yes
136.3	Left	North Access of Sand Island Slough	Dannelly	2500	Yes
143.0	Left	Alligator Slough	Dannelly	1000	Yes
146.9	Right	Gee's Bend*	Dannelly	1000	Yes
147.0	Right	Gee's Bend Ferry Access	Dannelly	2500	Yes
147.4	Left	Ellis Landing Boat Ramp*	Dannelly	6000	Yes
147.9	Left	Gee's Bend Ferry Access	Dannelly	2500	Yes
150.4	Left	Bridgeport Park** - Mouth & Ramp	Dannelly	4000	Yes
150.7	Left	Roland Cooper Ramp Slough	Dannelly	5000	Yes
150.8	Right	Gold Mine Slough	Dannelly	2500	Yes
151.3	Left	Roland Cooper State Park**	Dannelly	5000	Yes
158.4	Right	Chilatchee Creek* - 3 areas	Dannelly	6000	Yes
160.6	Right	Bogue Chitto Creek & Ramp*	Dannelly	1000	Yes
160.9	Right	River Oaks Subdivision Slough	Dannelly	1000	Yes
161.1	Right	River Oaks Subdivision Slough	Dannelly	1000	Yes
161.6	Right	River Oaks Subdivision Slough	Dannelly	1000	Yes
161.9	Right	River Oaks Landing & Lodge	Dannelly	2000	Yes
162.3	Right	Choctaw Canal	Dannelly	1000	Yes
162.5	Left	Rum Creek	Dannelly	1500	Yes
162,6	Right	Jones Slough	Dannelly	1000	Yes
162.8	Right	Arrowhead Point #1	Dannelly	1000	Yes
162.9	Right	Arrowhead Point #2	Dannelly	1000	No
162.9	Left	Three Stump Slough	Dannelly	500	No
164.4	Right	Gee's Creek	Dannelly	2500	Yes
166.0	Left	White Oak Creek & Portland Ramp**	Dannelly	500	No
168.4	Right	Slough	Dannelly	500	No
168.6	Left	Elm Bluff Park & Boat Ramp*	Dannelly	3900	Yes

RM.	BANK	AREA	LAKE	EST.CY	Existing WQC
169.6	Right	Near Two Sloughs	Dannelly	500	No
175.8	Left	Slough	Dannelly	500	No
188.4	Right	Old Cahaba Boat Ramp**	Dannelly	6000	Yes
190.4	Right	McDowell Landing	Dannelly	900	Yes
194.2	Left	Six Mile Creek Park & Ramp*	Dannelly	6000	Yes
197.0	Left	Bethel Branch	Dannelly	800	Yes
203.7	Right	Selma City Marina	Dannelly	1000	Yes
206.2	Right	Beech Creek Marina	Dannelly	9000	Yes
223.1	Right	Steeles Landing Boat Ramp*	Dannelly	1500	Yes
233.6	Left	Benton Access Area*	Dannelly	2000	Yes
237.9	Left	Prairie Creek PUA* - 2 areas	Woodruff	2000	Yes
241.2	Right	Jones Bluff Park (Ivy Creek)*	Woodruff	3900	Yes
242.9	Left	Henderson's Landing	Woodruff	1500	Yes
246.2	Right	Cooper Howard Creek	Woodruff	400	Yes
250.8	Left	Holy Ground Battlefield Park & Ramp*	Woodruff	1000	Yes
251.0	Left	Cypress Creek & Holy Ground Beach	Woodruff	500	No
251.7	Right	Molly Branch	Woodruff	750	Yes
255.3	Right	Strickland Landing - 2 areas	Woodruff	6200	Yes
255.6	Right	Swift Creek* - 2 areas	Woodruff	4000	Yes
259.8	Left	New Port Landing & Tenesaw Creek	Woodruff	3600	Yes
266.3	Left	Tallawassee Creek*	Woodruff	1050	Yes
268.9	Left	Pintlalla Creek	Woodruff	4500	Yes
272.8	Left	Catoma Creek & Gunter Hill Park*	Woodruff	4000	Yes
275.2	Right	Autauga Creek	Woodruff	200	Yes
276.0	Right	Noland Creek	Woodruff	500	No
278.7	Left	Montgomery Marina	Woodruff	500	No
279.9	Right	Cooters Pond Subdivision	Woodruff	500	Yes
280.1	Right	Cooters Pond Park** - 2 areas	Woodruff	10500	Yes
280.9	Left	Slough	Woodruff	2000	Yes
285.3	Left	Maxwell AFB	Woodruff	500	Yes
286.0	Left	Powder Magazine**	Woodruff	2000	Yes
298.3	Right	Jackson Lake* #1	Woodruff	500	No
298.5	Right	Jackson Lake* #2	Woodruff	1000	Yes
COOSA RIVER					
6.0	Left	Tallapoosa and Dead River	Woodruff	1000	Yes
TALLAPOSA RIVER					
6.4	Left	Fort Toulouse Natl. Historic Park**	Woodruff	16000	Yes

* Public Use Areas (PUA) and/or boat ramps owned and operated by COE.
** Public Use Areas (PUA) owned by COE but leased to other city, county, or state agencies.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:
2008-FA-0006

SEP 25 2013

Mr. Brian A. Zettle
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, AL 36628

SEP 27 2013

ATTN: Ms. Velma Diaz, CESAM PD-EI

Dear Mr. Zettle:

This correspondence is provided in reference to your request for water quality recertification of the operation and maintenance of the Federal navigation project and small boat access channels on the Alabama-Coosa River system. Our report is prepared under authority of the Fish and Wildlife Coordination Act (48 Stat. 401 as amended; 16 U.S.C. et seq.) and the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 Cr.S.C. 1531 et seq.)(ESA).

We understand that navigational miles were updated to match current GIS data, river bank locations were corrected and some small boat access channel names were updated. Otherwise, no changes to the historic Federal navigation channel dredging dimensions are proposed since our last coordination in 2007.

Under the Fish and Wildlife Coordination Act and the National Environmental Policy Act of 1969 the U.S. Fish and Wildlife Service (Service) prepared a report in June 1987 on the maintenance dredging proposal. This document assessed the potential impacts of dredged material disposal on fish and wildlife resources, identified modifications which would reduce resource losses, and outlined compensation requirements necessary to offset unavoidable project-induced losses to fish and wildlife resources. Compensation requirements for the project-caused loss of bottomland hardwoods were provided in our 1987 report and included by the Mobile District, Corps of Engineers (Corps) within the 1987 Final Supplement to the Final Environmental Impact Statement (FSFEIS) as a mitigation measure. During previous recertification coordination, the Corps informed us that there had been no use of upland disposal sites on the Alabama River since completion of the FSFEIS and, therefore, no compensation had been required. If upland disposal sites are to be used in the future, though, detailed mitigation planning should be immediately initiated with the Service.

Biological field surveys in 1997 on the Alabama River rediscovered two federally endangered mussels, southern clubshell (*Pleurobema decisum*) and heavy pigtoe (*P. taitianum*), at River Mile (RM) 207. At this site, a fairly dense mussel bed runs in a relatively narrow band about 30 feet out from the left descending bank at a depth of 24 feet. This is a very significant discovery, particularly in the case of the heavy pigtoe, because the mussel bed represents the only known

population of this rare mussel in the Mobile River Basin. Dive surveys conducted in 1998 in the lower portion of the Alabama River (downstream from Miller's Ferry Lock and Dam) identified a large number of significant mussel beds (Hartfield and Garner, 1998), including fifteen previously unknown sites. Included in that survey was the discovery of the threatened inflated heelsplitter mussel (*Potamilus inflatus*) at RM 20.2, which had not been collected from the river in many decades. Another noteworthy collection was that of tulotoma snails (*Tulotoma magnifica*) found recently, for the first time in many years, below Claiborne dam (Garner, 2006). Dredging and/or placement of dredged material should avoid mussel beds, particularly upstream of any bed (at least 300 feet). Mussel beds may provide commercial resources and/or habitats for federally listed species. If mussel beds may be affected by either dredge or disposal activities, directly or indirectly, then we recommend prior coordination with the Alabama Department of Conservation and Natural Resources (ADCNR) and the Service.

During previous recertifications, the Corps has requested a variance of the 300-foot buffer in specific areas during channel maintenance activities. In addition, the Corps requested that they not be required to consult with the Service in the event that the buffer limit could not be met at those locations. The specific areas were: Navigation Mile (NM) 19.4-20.8, Left Descending Bank (LDB) and Right Descending Bank (RDB), Aberdeen Wreck; NM 57.8-58.7, RDB, Mrs. Gray's Bar; and NM 71.9-72.5, RDB, Claiborne Lock Lower Pool. The Service agreed to accept this variance if the Corps would notify us no less than 10 days prior to commencing work in those areas, so that we might arrange to be onsite to observe and verify that the action did not adversely affect mussels. Should a "may affect" situation be determined during those observations, the Corps would be prepared to stop dredging operations at the affected site, and initiate formal section 7 ESA consultation with the Service. We continue to believe that this is a viable consideration.

Water quality recertification of this project includes the maintenance dredging and disposal of material for the main navigation channel and small boat access channels, creeks, and sloughs. Also identified are new locations for dredging and disposal of material from small boat access channels.

Navigation Channel, Small Boat Access Channels, Creeks, and Sloughs - Alabama sturgeon, tulotoma snail, and various mussels. We continue to concur with the Corps determination that removal of unconsolidated material from the Alabama River navigation channel (subject to the 300 ft. buffer, as conditioned, above) will have no adverse effect on listed species. The potential impact of dredging unconsolidated substrates was previously addressed in the White Paper "Federal Activities That May Affect the Alabama Sturgeon and Anticipated Section 7 Consultations on These Activities" dated November 28, 1994, and reaffirmed in our agencies Memorandum of Agreement, dated May 2000. However, the disposal of unconsolidated material onto stable and/or hard bottom substrates (bedrock, armored gravel, consolidated clays, large rocks, etc.) or mussel beds (e.g., habitats which include stable sand or gravel river bottom) in the Alabama River may affect federally listed species, such as mussels, tulotoma snails, and/or Alabama sturgeon (*Scaphirhynchus suttkusi*). Consultation for the Alabama sturgeon is included due to the species potential use of hard bottom substrates for spawning (Mayden and Kuhajda, 1996; Service, 2000). Captures of this species in the lower Alabama River have been made as recently as 2009 and the Service has verified that captures have been made in areas that contained stable and/or hard bottom substrate (Hartfield and Garner, 1998;

Rider, 2007). Therefore, we recommend initiation of section 7 consultation if it is determined that stable and/or hard bottom substrates or mussel beds will be affected by dredging or disposal. Per our previous coordination, mussel and snail surveys will be conducted in any channel and within-bank disposal area if no dredging or disposal has previously occurred in that location. Impacts to small, perennial tributaries of the Alabama River should also be identified and avoided. These streams may be utilized by Alabama sturgeon and other fish species, particularly in the warmer months as cold-water refugia.

Navigation Channel/Small Boat Access Channels - Gulf Sturgeon. Gulf sturgeon may spawn in the Alabama River (downstream of Miller's Ferry Lock and Dam) from approximately March 15 to May 30. Although the Corps prefers to dredge during low-water events, you have proposed to avoid dredging March-May. We previously asked that the Corps investigate the feasibility of dredging river stretches that may be potential Gulf sturgeon spawning habitat (e.g., rock ledges or outcrops) prior to the spawning season in order to minimize impacts to the species. Results of that investigation are requested. Although maintenance dredging of unconsolidated material, predominantly sand and silt, in the navigation channel, should have no effect on the Gulf sturgeon, dredging or disposal could affect previously unimpacted spawning habitat anywhere in the river. Therefore, we recommend that section 7 consultation be initiated if any potential spawning habitat is proposed to be impacted.

Section 7(a)(1) of the ESA directs all Federal agencies to utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of species listed pursuant to the ESA. This section of the ESA makes it clear that all Federal agencies should participate in the conservation and recovery of threatened and endangered species. In this effort to develop a pro-active approach to listed species management we propose, due to limited information concerning Gulf sturgeon utilization of, or spawning in, the Alabama River, that the Corps perform, sponsor, or assist the Service in surveys of the lower portion of the river in order to demonstrate sturgeon utilization, or lack thereof, for both this and future river projects subject to availability of funding. For further discussion, please contact Mr. Josh Rowell of my staff at (251) 441-5836.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

LITERATURE CITED

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DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, AL 36628-0001

August 5, 2014

REPLY TO
ATTENTION OF

Inland Environment Team
Planning and Environmental Division

Mr. Frank White
State Historic Preservation Officer
State of Alabama
Alabama Historical Commission
468 South Perry Street
Montgomery, Alabama 36130-0900

Dear Mr. White:

The U.S. Army Corps of Engineers, Mobile District (USACE) is proposing eleven new Small Boat Access Channels (SBAC) and seven new within-banks disposal areas along the Alabama River in Alabama. The SBAC program has been a long-standing program with 415 currently approved sites, but this letter and enclosed report is intended to address eleven newly proposed sites (Table 2). These channels would be dredged on an as needed basis for maintaining access to recreational and public use areas. There are numerous previously approved within-banks disposal areas along the Alabama River, but this letter and enclosed report is intended to only address the seven newly proposed locations (Table 1). The proposed within-banks disposal areas are necessary to maintain adequate capacity based on dredging amounts and frequency requirements for the respective bars.

As per requirements outlined in Section 106 of the National Historic Preservation Act, the USACE must consider the effects of the proposed action on historic properties. USACE Archaeologist Mr. Matt Grunewald, RPA, conducted background research on each of the new SBAC and within-banks disposal areas which included searches of the Alabama Archaeological Site File, the Alabama Phase I Surveyed space website, the National Register of Historic Places (NRHP) and USACE cultural resources files. The area of potential effect (APE) for each SBAC is shown on the provided aerial photography and USGS 7.5 minute topographic maps.

As a result of this report, cultural resources were identified within close proximity of four within-banks disposal areas and four of the SBAC (Table 3 and 4). The USACE has determined that management considerations including avoidance plans and/ or erosion monitoring will be necessary to avoid potential impacts to cultural resources at these locations. A discussion of the cultural resources to be avoided and/ or monitored at each of the locations is presented in Section III of this letter and the enclosed report. All avoidance plans and erosion monitoring plans will be coordinated with the State Historic Preservation Officer (SHPO) and Tribes.

Based on the background study, no historic properties are located within the project APE at seven of the proposed SBAC and three of the within-banks disposal areas (Tables 3 and 4). Therefore, the USACE has determined **no historic properties affected** at these locations by the proposed undertaking as per 36 CFR 800.4(d)(1).

I. Description of the Undertaking – The proposed action consists of seven new within-banks disposal areas and eleven new SBAC along the Alabama River system. The proposed within-banks disposal areas and the initial dredging and disposal activities of the SBAC are identified in Tables 1 and 2 respectively.

The proposed within-banks disposal areas will include the placement of cubic yards of dredged material on the identified descending river banks through the use of hydraulic pipeline or mechanical dredge every two to four years as needed. Each site requires 1-10 days for completion of dredging and is typically executed by hydraulic dredge between May and December. Current dredging practices call for dredging to be performed at a depth of 9 feet plus 2 - 4 feet of advanced maintenance, 2 feet of allowable overdepth and 3 feet of disturbance.

The mouths of the proposed SBAC would be dredged on an as-needed basis to a channel depth of approximately 3-5 feet at mean low water. Each site would require 3-21 days during May through December for completion of maintenance and dredging. A clamshell dredge, bucket dragline, floating trackhoe (swamp buggy), or small hydraulic pipeline dredge is used to maintain these channels. Disposal would be in approved open-water disposal sites immediately downstream of the dredge location.

Location Name	River Mile	Bank	Dredged Material (est. cubic yards)
Mile 18	17.2-17.4	Left	15,000
Howards Landing	51.3-52.2	Right	25,000
Dales Ferry	55.5-56.5	Right	45,000
Claiborne LA	70.8-71.7	Left	30,000
McCalls Creek	91.6-92.3	Left	15,000
Bear Creek	100.2-100.7	Left	15,000
Benton's Point	232.0-232.9	Left	12,000

Table 1: Within banks disposal on the Alabama River.

Location Name	River Mile	Bank	Dredged Material (est. cubic yards)
Claiborne Boat Ramp	71.7	Left	500
Arrowhead Point #2	162.9	Right	1,000
Three Stump Slough	162.9	Left	500
White Oak Creek/ Portland Boat Ramp	166.0	Left	500
Slough	168.4	Right	500
Near Two Sloughs	169.6	Right	500
Slough	175.8	Left	500
Cypress Creek/ Holy Ground Battlefield	251.0	Left	500
Noland Creek	276.0	Right	500
Montgomery Marina	278.7	Left	500
Jackson Lake #1	298.3	Right	500

Table 2: SBAC locations on the Alabama River.

II. Methodology and Reporting – A search of the Alabama Archaeological Site File, the Alabama Phase I Surveyed Space website, the National Register of Historic Places and USACE cultural resources files were reviewed for the APE of each individual within-banks and SBAC location. All relevant and available archaeological site file forms and phase I survey reports within the vicinity of the APE's were reviewed. The results of the reviews and effects determination for each individual APE are provided in the enclosed report. Aerial photography for each location was also reviewed and compared to the USGS 7.5 minute topographical maps to ensure all work is confined within the banks of the Alabama River.

III. Resources Identified and Evaluated (Significance Criteria Considered) – The background research located cultural resources potentially eligible for listing on the NRHP within or in close proximity of the APE of four within-banks disposal areas and four SBAC which will require avoidance plans and/ or monitoring. Each of these locations, the associated potential cultural resources, and necessary management practices are described below.

Within-banks disposal area Mile 18 (RM 17.2-17.4): Archaeological site 1Ba306 is mapped within 0.2 miles of the APE within-banks disposal area Mile 18. The accuracy of the site location data provided in the Alabama Archaeological Site File is poor and the exact location of the site is unknown.

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there is no adverse impact to archaeological site 1Ba306.

Within-banks disposal area Howards Landing (RM 51.3-52.2): Prehistoric archaeological site 1Mn185 is located on the opposite bank of the river as the proposed within banks disposal area. At this time there is not enough information to determine if erosion of archaeological site 1Mn185 will increase as a result of this within banks disposal site.

The USACE has determined that archaeological site 1Mn185 will need to be monitored to determine if the proposed action accelerates erosion. The monitoring plan will be coordinated with the SHPO prior to any work at this location. If it is found that erosion of archaeological site 1Mn185 is increasing as a result of this action further consultation with the SHPO would be required.

Within-banks disposal area Dales Ferry (RM 55.6-56.5): USACE in-house cultural resources files indicate the wreck of an unidentified steam boat has been reported between river miles (RM) 55.6 and 56.5. No information is available for the wreck. Prehistoric archaeological site 1Ck159 is located downriver of the proposed within banks disposal area. At this time there is not enough information to determine if erosion of archaeological site 1Ck159 will increase as a result of this within banks disposal site.

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there is no adverse impact to the unidentified steam boat.

The USACE has determined that archaeological site 1Ck159 will need to be monitored to determine if the proposed action accelerates erosion. The monitoring plan will be coordinated with the SHPO prior to any work at this location. If it is found that erosion of archaeological site 1Ck159 is increasing as a result of this action further consultation with the SHPO would be required.

Within-banks disposal area McCalls Creek (RM 91.6-92.3): The Confederate boat Commodore Ferrand is reported in the USACE Files as sinking at Packers Bend near the bank. The Alabama Scenic River Trail Association reports the location of the Commodore Ferrand as RM 92.5. The USACE has not been able to find the primary source for this location information.

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there is no adverse impact to the *Commodore Ferrand*.

SBAC White Oak Creek/Portland Boat Ramp (RM 166.0): Archaeological site 1Ds53 is partially located on USACE property and private property on the uplands adjacent to the proposed White Oak Creek/ Portland Boat Ramp SBAC. 1Ds53 is identified as one of the "eleven significant historic properties" within the William "Bill" Dannelly Reservoir Project (USACE 1994b:8). This multi-component prehistoric site was originally assessed in 1983 and revisited in 1992. Evidence of looting was identified at each of these site visits. Portions of the site off Federal property are in danger of continued paper company activities. The USACE management recommendation for this site is monthly monitoring for signs of vandalism (USACE 1994b:10).

Due to the close proximity of the proposed SBAC future management practices of 1Ds53 will include erosion monitoring. This monitoring plan will be coordinated with SHPO.

SBAC Slough (RM 175.8): The vessel *Riflemen* caught fire on November 19, 1824 approximately 1 mile below Cahawba and floated to a sand bar which was later called Riflemen Bar. USACE records outline a magnetometer hit indicated the shipwreck is about 80 to 90 feet from the east bank. At the time it sank, the *Riflemen* was carrying $50,000 worth of cargo headed to Cahawba. The *Riflemen* is noted as resting in a good position for study as it is located in 30 to 35 feet of water and out of channel turbulence (USACE 1976).

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there is no adverse impact to the *Riflemen*.

SBAC Cypress Creek/ Holy Ground Battlefield (RM 251.0): The vessel *Autauga* snagged, turned over, and floated down river to Carters Plantation near Gainstown, approximately 4 miles below Autauga Landing. The *Autauga* was transporting the bodies of multiple Union Civil War casualties when it sank. The exact location of the wreck is unknown, but it is thought to be between RM 253.6 and RM 249.5. USACE records state that it would be possible to relocate the vessel (USACE 1976).

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there is no adverse impact to the *Autauga*.

This SBAC is also in close proximity to Holy Ground Battlefield which is the location of a major battle between Red Stick Creek Indians and federal/militia forces on December 23, 1813. At this time, no adverse impacts to the battlefield have been identified by the USACE. This determination should be considered preliminary until Tribal consultation is completed.

SBAC Noland Creek (RM 276.0): An unknown sunken vessel is located on the upper end of Washington Bar, and was discovered when cut by a dredge decades ago. The exact location of the wreck is unknown, but it is thought to between RM 276.0 and RM 277.0. Additionally, archaeological site 1Au240 is located on a sandy ridge approximately four meters above the Alabama River. The Alabama archaeological site file states that intact portions of midden from site 1Au240 have slumped down the bank to the level of the river. Portions of this midden may be located along the bank adjacent to the proposed disposal area.

The USACE will develop an avoidance plan in consultation with the SHPO to ensure that there are no impacts to the unknown sunken vessel and archaeological site 1Au240.

Location Name	River Mile	Bank	Effects Determination
Mile 18	17.2-17.4	Left	Avoidance Plan
Howards Landing	51.3-52.2	Right	Monitoring Plan
Dales Ferry	55.5-56.5	Right	Monitoring Plan Avoidance Plan
Claiborne LA	70.8-71.7	Left	No Historic Properties
McCalls Creek	91.6-92.3	Left	Avoidance Plan
Bear Creek	100.2-100.7	Left	No Historic Properties
Benton's Point	232.0-232.9	Left	No Historic Properties

Table 3: Within-banks disposal on the Alabama River effects determination.

Location Name	River Mile	Bank	Effects Determination
Claiborne Boat Ramp	71.7	Left	No Historic Properties
Arrowhead Point #2	162.9	Right	No Historic Properties
Three Stump Slough	162.9	Left	No Historic Properties
White Oak Creek/ Portland Boat Ramp	166.0	Left	Monitoring Plan Update Management Practices
Slough	168.4	Right	No Historic Properties
Near Two Sloughs	169.6	Right	No Historic Properties
Slough	175.8	Left	Avoidance Plan
Cypress Creek/ Holy Ground Battlefield	251.0	Left	Avoidance Plan
Noland Creek	276.0	Right	Avoidance Plan
Montgomery Marina	278.7	Left	No Historic Properties
Jackson Lake #1	298.3	Right	No Historic Properties

Table 4: SBAC locations on the Alabama River effects determination.

IV. Effects Determination and Compliance Decision – Effects determinations are the responsibility of the lead Federal agency. The USACE has considered the nature of the undertaking and the presence of properties that may possess the qualities of integrity and meet at least one of the criteria necessary to be considered eligible for inclusion in the National Register of Historic Places. Based on the background study, no historic properties are located within the project APE at seven of the proposed SBAC and three of the within-banks disposal areas (Tables 3 and 4). Therefore, the USACE has determined **no historic properties affected** at these locations by the proposed undertaking as per 36 CFR 800.4(d)(1).

The USACE asks that you concur with our finding of **no historic properties affected** by the proposed action at these locations as per 36 CFR 800.4(d)(1), and/or provide comments within 30 days.

As a result of this report, cultural resources potentially eligible for listing on the NRHP were identified within close proximity of four within-banks disposal areas and four of the SBAC (Table 3 and 4). Since large portions of these cultural resources are located on private or state property further NRHP evaluation of them may not be possible. The USACE has determined that management considerations including avoidance plans and/ or erosion monitoring will be necessary to avoid potential impacts to the portions of these cultural resources that could be impacted by the undertaking. All avoidance plans and erosion monitoring plans will be coordinated with the SHPO. The USACE asks that you concur with these management strategies.

If you have questions or require further information, please contact Mr. Matt Grunewald at (251) 694-4107 or via email at matthew.m.grunewald@usace.army.mil.

Sincerely,

Lewis C. Lemon

for Brian A. Zettle
Chief, Inland Environment Team

Enclosures

STATE OF ALABAMA
ALABAMA HISTORICAL COMMISSION
468 SOUTH PERRY STREET
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EXECUTIVE DIRECTOR

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September 25, 2014

USACE
Mobile District
Post Office Box 2288
Mobile, Alabama 36628-0001
Brian A. Zettle
Chief, Inland Environmental Team

Re: AHC 2014-1396
Eleven New Small Boat Access Channels and
Seven New Within-Banks Disposal Areas
Alabama River
Multiple Counties

Dear Mr. Zettle:

Upon review of the above referenced project, we have determined that we agree with ALL recommendations of the USACE archaeologist, including:

1) avoidance and a site maintenance plan is necessary for archaeological site 1BA306, the steamboat wreck near Dale's Ferry and the Commodore Ferrand Wreck.

2) archaeological sites 1Mn185 and 1Ck159 should be monitored for accelerated erosion.

3) avoidance and a site maintenance plan plus a monitoring and protection is necessary for archaeological site 1Ds53.

We appreciate your commitment to helping us preserve Alabama's historic archaeological and architectural resources. Should you have any questions, please contact Stacye Hathorn at 334.230.2649 or Stacye.Hathorn@preserveala.org. Have the AHC tracking number referenced above available and include it with any future correspondence.

Sincerely,

Lee Anne Wofford

Lee Anne Wofford
Deputy State Historic Preservation Officer

LAW/AMH/amh