



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

CESAM-PD-EI
PUBLIC NOTICE NO. FP17-TT01-17

JOINT PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS
AND
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
RIPRAP PLACEMENT FOR SHORELINE PROTECTION
OKATIBBEE LAKE, LAUDERDALE COUNTY, MISSISSIPPI
A FEDERALLY AUTHORIZED PROJECT

Interested persons are hereby notified that the U.S. Army Corps of Engineers (USACE), Mobile District proposes a bank stabilization project at Okatibbee Lake, Mississippi. The proposed action involves grading and riprap placement at five specific locations on Okatibbee Lake, Mississippi.

This public notice is issued in accordance with rules and regulations published in the Federal Register on 26 April 1988. These regulations provide for the review of dredging programs for federally authorized projects under the Clean Water Act (33 U.S.C. 1344) whenever dredged or fill materials may enter waters of the United States.

The recipient of this notice is specifically requested to review the proposed action as it may impact water quality relative to the requirements of Section 404(b)(1) of the Clean Water Act. Comments on any other potential impacts also are requested.

WATERWAY AND LOCATION: Okatibbee Lake, Lauderdale County, Mississippi.

DESCRIPTION OF ENTIRE AUTHORIZED PROJECT: A project for flood protection on Chunky Creek and the Chickasaway and Pasgagoula Rivers, Mississippi was authorized by Section 203 of Public Law (PL) 87-874, the Flood Control Act of 1962. This act authorized a reservoir on Okatibbee Creek near Meridian, Mississippi for flood control and other purposes as outlined on House Document No. 549, 87th Congress, Second Session.

Section 4 of the Flood Control Act of 1944, as amended, (16 USC 460d) authorizes the use of water resource development project lands for public recreation by specifically

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providing authority for USACE "...to maintain and operate public parks and recreational facilities at water resource development projects under the Secretary of the Army..."

Additional authorizations for development of public recreation at power, flood control and navigation projects are included in Section 209 of the Flood Control Act of 1954, Section 207 of the Flood Control Act 1962 and by the Land and Water Conservation Fund Act of 1965.

DESCRIPTION OF THE PROPOSED ACTION: The proposed action at the Okatibbee Lake Project Office, consists of grading and riprap placement at five actively eroding prioritized lease areas occurring at Okatibbee Water Park Campground, Okatibbee Water Park Cabins, Okatibbee Water Park Land Bridge, Okatibbee Water Park Boat Ramp, and Okatibbee Water Park (Figure 1).

At Okatibbee Water Park Campground, approximately 4,200 cubic yards (cy) of fill will be placed along a bank approximately 10 to 15 feet high with approximately 1,418 cy of Class 3 riprap to build out to achieve desired slope.

At Okatibbee Water Park Cabins, approximately 2,700 cy of fill will be placed along a mostly high bank transitioning to low bank approximately 4-8 feet high with approximately 1,396 cy of Class 3 riprap with mixed excavation/build out scheme.

At Okatibbee Water Park Land Bridge, approximately 750 cy of Class 3 riprap will be placed along the low bank that is presently armored and extend from existing armor southward about 100 feet to improve roadway protection.

At Okatibbee Water Park Boat Ramp, approximately 180 cy of Class 3 riprap will be placed along the low bank and extend from the concrete top to protect the parking area.

At Okatibbee Water Park 1, approximately 360 cy of Class 3 riprap will be placed along the low bank of this day use area.

WATER QUALITY CERTIFICATION: Pursuant to Section 401 of the Clean Water Act, state water quality certification is required for the proposed activities. A decision on state water quality certification will be made by the Mississippi Department of Environmental Quality after completion of the comment period of this public notice.

USE BY OTHERS: The proposed project may have a temporary negative impact on local fishing, camping, picnicking and boating activities, but these activities will benefit long-term because the project will correct safety hazards for the recreational public.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CONSIDERATIONS: The proposed riprap placement for shoreline protection of Okatibbee Lake was addressed in the DRAFT ENVIRONMENTAL ASSESSMENT RIPRAP PLACEMENT FOR SHORELINE PROTECTION OKATIBBEE LAKE LAUDERDALE COUNTY,

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MISSISSIPPI dated May 2023. The Draft Environmental Assessment (EA) is being coordinated as part of this public notice. The EA indicates an Environmental Impact Statement (EIS) for the shoreline protection is not needed. The EA is available for review upon request at USACE, Mobile District's website: <http://www.sam.usace.army.mil/Missions/Planning-Environmental/Environmental-Assessments/>. Upon completion of the 30-day coordination period set forth in this notice, substantive comments will be incorporated into the EA and final determination of NEPA documentation requirements made. If the determination is to finalize the EA and prepare a Finding of No Significant Impact, these documents will be placed on file in the USACE, Mobile District Office for future reference.

SECTION 404(b)(1) EVALUATION REPORT: Water quality impacts associated with placing dredged/fill material into waters of the United States as a result of the proposed work has been addressed in a preliminary Section 404 (b)(1) Evaluation Report. This report was prepared in accordance with guidelines promulgated by the Environmental Protection Agency (EPA) under Section 404 (b)(1) of the Clean Water Act. The preliminary evaluation report is available for review at the Mobile District's website referenced above and will be finalized upon completion of the coordination of this notice.

CULTURAL / HISTORIC RESOURCES CONSIDERATIONS: With the exception of one site, 22LD585, recorded within the Area of Potential Effect (APE) of the Waterpark 1 repair area, none of the remaining recorded sites are within the APE of the Waterpark shoreline repair areas and will not be impacted.

While 22LD585 is not eligible for the National Register of Historic Places (NRHP), a 50-foot protective buffer will be placed around the site boundary to prevent impacts by construction. Periodic inspection by Okatibbee Lake Rangers and Mobile District archaeologists will take place at all repair sites to ensure none of the recorded sites are impacted by this action. An inadvertent discoveries protocol will be implemented in the event artifacts or human remains are discovered during construction.

The Mobile District has determined no historic properties affected for the Waterpark shoreline repairs at Okatibbee Lake. Consultation with the Mississippi State Historic Preservation Officer (SHPO) and federally recognized tribes was initiated March 17, 2023 and is ongoing until the completion of the project.

ENDANGERED / THREATENED SPECIES: Federally listed species with potential to occur in the proposed action areas include the Northern Long-eared Bat, Alligator Snapping Turtle, and Monarch Butterfly.

This public notice is being coordinated with the U.S. Fish and Wildlife Service. USACE, Mobile District determined that the proposed action would have no effect the federally protected species.

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EVALUATION: The decision whether to proceed with the proposed action will be based on evaluation of the probable impact, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which may be reasonably expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people.

Inasmuch as the proposed work would involve the discharge of materials into waters of the United States, placement of riprap material associated with this Federal project is being made through application of guidelines promulgated by the Administrator of the EPA in conjunction with the Secretary of the Army. If these guidelines alone prohibit the designation of the proposed discharge site, any potential impairment of the maintenance of navigation, including any economic impact on navigation and anchorage, which would result from the failure to use the discharge site, will also be considered.

COORDINATION: USACE, Mobile District is soliciting comments from the general public; Federal, State, and local agencies, and officials; American Indian Tribes, and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be used by USACE, Mobile District to determine whether or not to proceed with the proposed action. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest in the proposed activity and in preparing an EA and/or an EIS pursuant to the NEPA compliance.

Among the agencies receiving copies of the Public Notice are:

- Region IV, U. S. Environmental Protection Agency
- Field Supervisor, Fish and Wildlife Service
- Regional Director, National Marine Fisheries Service
- Regional Director, National Park Service
- Commander, Eighth Coast Guard District
- Federal Emergency Management Agency
- State Conservationist, Mississippi, Natural Resources Conservation Service,
- U. S. Department of Agriculture
- Mississippi Department of Environmental Quality
- Mississippi Department of Wildlife, Fisheries, and Parks
- Mississippi State Historic Preservation Officer

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We request that you communicate the information contained in this notice to any other parties who may have an interest in the proposed action.

PUBLIC HEARING: Any person who may be affected by the discharge of the riprap material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this public notice. The request must clearly set forth the interest which may be affected and the manner in which the interest may be affected by this activity.

CORRESPONDENCE: Correspondence concerning this 30-day public notice should refer to **Public Notice No. FP17-TR01-17** and should be directed to the Commander, U.S. Army Corps of Engineers, Mobile District, Post Office Box 2288, Mobile, Alabama 36628, Attention: CESAM PD-EI, Ms. Velma Diaz. Copies of comments should also be forwarded to Mississippi Department of Environmental Quality, Environmental Permits Division, Post Office Box 2261, Jackson, Mississippi 39225-2261. Ms. Velma Diaz may be contacted via telephone number at **(251)690-2025** or via email address at **velma.f.diaz@usace.army.mil** for additional information.

JEREMY M. LADART
Chief, Planning and Environmental
Division

SITE MAP

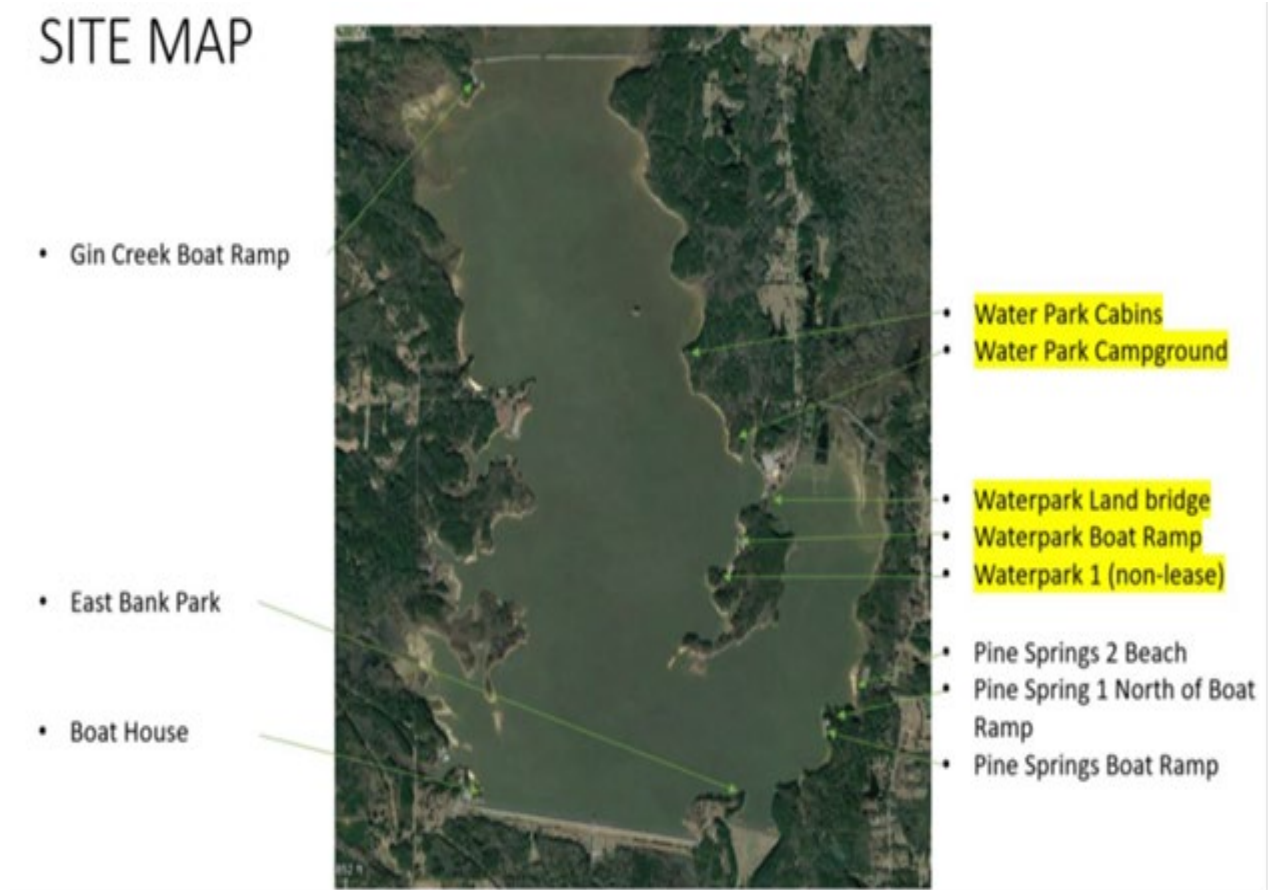


Figure 1. Okatibbee Lakeshore Erosion Sites

DRAFT ENVIRONMENTAL ASSESSMENT

RIPRAP PLACEMENT FOR SHORELINE PROTECTION OKATIBBEE LAKE LAUDERDALE COUNTY, MISSISSIPPI



Prepared By:
U.S. Army Corps of Engineers,
Mobile District
Mobile, Alabama
May 2023



US Army Corps
of Engineers
Mobile District

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Appendix

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Acronyms

ADEM Alabama Department of Environmental Management
CEQ President's Council on Environmental Quality
CFR Code of Federal Regulations
EA Environmental Assessment
EC Engineer Circular
EO Executive Order
ER Engineer Regulation
NEPA National Environmental Policy Act
NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places
SHPO Alabama State Historic Preservation Officer
USACE U.S. Army Corps of Engineers
USFWS U.S. Fish and Wildlife Service

1. INTRODUCTION:

1.1 General: This Environmental Assessment (EA) was prepared to evaluate the impacts of a proposed bank stabilization project at Okatibbee Lake, a U.S. Army Corps of Engineers (USACE) reservoir project. The project will stabilize eroding lakeshore at specific points. This EA evaluates the direct, secondary, and cumulative impacts to the natural and human environments associated with the proposed project compared to the other reasonable alternative, the “No Action” alternative.

1.2 Location: Okatibbee Lake is located on Okatibbee Creek in Lauderdale County, Mississippi, 37.7 miles above its confluence with the Chunky River and 7 miles northwest of Meridian, Mississippi. (Figure 1).



Figure 1. Location of Okatibbee Lake

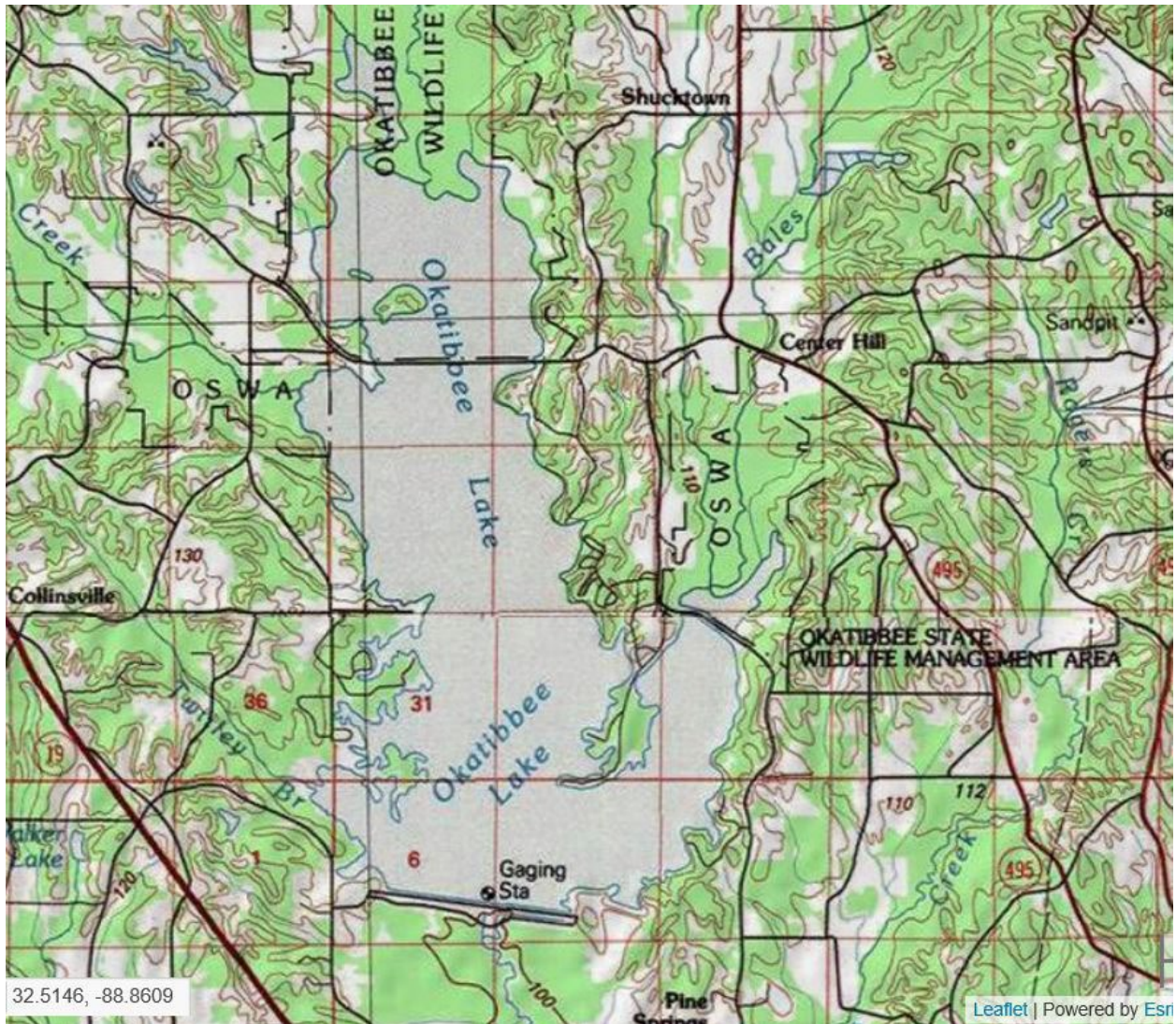


Figure 2. Okatibbee Lake

1.3 Proposed Action: The Okatibbee Lake, part of the Operations Division of the USACE, Mobile District, is proposing to protect five specific locations where lake shoreline is actively eroding with grading and riprap placement. The Proposed Action will be further described in the body of this EA.

1.4 Purpose and Need for the Proposed Action: The purpose of the proposed project is to prevent further erosion where there is an ongoing problem due to wave action. The project is needed since continued erosion will degrade existing recreation lakeshore and contribute to sediments entering the lake.

1.5 Scope: The Council on Environmental Quality (CEQ) updated the 1978 regulations for implementing NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508) in July 2020 and amended 40 CFR Parts 1502, 1507, and 1508 in April 2022. As such, this Draft EA has been prepared in accordance with NEPA and the 2020 40 CFR 1500

– 1508 regulations, as amended. The purpose of the EA is to inform decision-makers and the public of the likely environmental consequences of the proposed action and alternatives. This EA identifies, documents and evaluates the effects grading specific points around Okatibbee Lake and the placement of riprap above and below the existing water line.

NEPA requires Federal agencies to consider environmental consequences in their decision-making process. The CEQ issued regulations on implementing NEPA that include provisions for both the content and the procedural aspects of the required environmental analysis. The USACE is the lead Federal agency for this project and the regulations in 33 CFR 230 guide the USACE implementation of NEPA. This EA addresses the direct, indirect, and cumulative impacts of the project on the environment and socioeconomic resources in the project area.

This EA focuses on those resource areas where there is a potential for impacts and does not address any resource areas where there is no potential for impacts. Preliminary evaluations indicated that there would be potential for impacts to the following resource areas:

- Water Resources, including surface water quality, storm water, floodplains, wetlands and public water supply
- Biological Resources, including fish, threatened and endangered species, other aquatic organisms, and other species and habitats dependent on the aquatic environment in the area
- Land use
- Geology and Soils
- Cultural Resources
- Recreation

Initial evaluation indicated that there would be no potential impacts to several resource areas, due to the nature of the alternative actions. Several of these resource areas, which are not evaluated further in this EA, are discussed briefly below:

- Navigation. No aspect of the proposed project would affect the current navigability of the Okatibbee Lake.
- Traffic. No aspect of the proposed project would permanently change current traffic in the area. Any changes in traffic flow during project construction would be short term and minor.
- Noise. No aspect of the proposed project would permanently change current noise levels. Any changes during project construction would be short term and minor.
- Air Quality. No aspect of the proposed transfer of ownership would result in air pollution or changes to air quality.
- Prime and Unique Farmland. The proposed action would occur entirely on currently federally-owned property already managed for non-farm related purposes. No prime farmlands are located within the project area; therefore, no coordination with the Natural Resources Conservation Service (NRCS) regarding farmland is required.

- **Environmental Justice:** The primary objective of an environmental justice analysis is to ensure that vulnerable populations do not bear a disproportionately high and adverse share of human health or environmental effects from proposed federal actions. Neither the proposed action nor any of the alternatives considered would displace any portion of the people living in the area nor create any environmental hardships for any portion of the population. Therefore, the action would not disproportionately impact minority or low income populations and Environmental Justice is not further evaluated in the EA.
- **Protection of Children:** On April 12, 1991, the President issued EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. The EO seeks to protect children from disproportionately incurring environmental health or safety risks that might arise as a result of Corps policies, programs, activities, and standards. Neither the proposed action nor any of the alternatives considered would create environmental health or safety risks or hazards to any part of the population including children. Accordingly, this resource area is not further evaluated in the EA.

1.6 Coordination with other agencies and Tribal Governments: The action is being coordinated with Federal and State agencies and federally recognized Tribal Nations with interest in the project area.

1.7 Authority: A project for flood protection on Chunky Creek and the Chickasaway and Pasgagoula Rivers, Mississippi was authorized by Section 203 of Public Law (PL) 87-874, the Flood Control Act of 1962. This act authorized a reservoir on Okatibbee Creek near Meridian, Mississippi for flood control and other purposes as outlined on House Document No. 549, 87th Congress, Second Session.

Section 4 of the Flood Control Act of 1944, as amended, (16 USC 460d) authorizes the use of water resource development project lands for public recreation by specifically providing authority for USACE "...to...maintain and operate public parks and recreational facilities at water resource development projects under the Secretary of the Army..."

Additional authorizations for development of public recreation at power, flood control and navigation projects are included in Section 209 of the Flood Control Act of 1954, Section 207 of the Flood Control Act 1962 and by the Land and Water Conservation Fund Act of 1965.

2. ENVIRONMENTAL SETTING WITHOUT THE PROJECT:

General: The project site is located at Okatibbee Lake, almost entirely within Lauderdale County with only the extreme northernmost reaches of the flood pool in Kemper County. During normal summer operating level at elevation 344 (recently changed from 343) mean sea level (msl) when recreational use is at its peak, the lake's surface is about six miles long with a surface area of about 4,000 acres. Surface area of the lower seasonal water supply pool at elevation 339 msl is about 2,700 surface acres. The maximum flood control pool at elevation 359 is 8,800 surface acres.

Okatibbee Creek rises in the rolling plains area of the Southern Red Hills Region of the East Gulf Coastal Plain Province. Except where impounded to form Okatibbee Lake, it has a fall of 24 feet per mile from its uppermost portion to its confluence with Sowashee Creek, and 3 feet per mile for the remaining length of the stream to its junction with Chunky Creek. Here, these two creeks form the headwaters of the Chickasawhay River which flows into the Pascagoula River. Entrenched in a fairly deep broad valley flanked by low ridges and hills, Okatibbee Creek's channel is 60 to 100 feet wide with banks 10 to 20 feet high. Bank full channel capacity at Meridian is 2,000 cubic feet per second (cfs). The average annual flow is approximately 340 cfs. Around the lake, dominant upland overstory trees include pines (*Pinus* spp.), oaks (*Quercus* spp.), hickories (*Carya* spp.), longleaf pine, short-leaf pine, and loblolly pine. These areas exhibit a very large and diverse number of mid- and understory plant species.

The area has a temperate southern climate with distinct changes of seasons. In the east central area of Mississippi, the climate is mild in winter and hot and humid during the summer. The average daily temperature varies from 40-50 degrees Fahrenheit in December to over 90 degrees Fahrenheit in July and August.

Rainfall is usually plentiful throughout the basin. The average yearly rainfall is about 55 inches.

Existing conditions for specific resource areas at the park site are discussed in the following sections.

Specifically, the project would be located on areas of lakeshore that have been previously cleared and now maintained as grassy areas. These are in areas of the lake where open water and wave action have contributed to shoreline erosion.

2.1 Water Quality: Okatibbee Lake is used for general water-related recreation including swimming, boating and fishing. Okatibbee Creek is listed as impaired for Fish and Wildlife uses due to biological impairment, pH, total nitrogen, and total phosphorus (MSDEQ 2022). Water quality directly affects the recreational use of both the water and its adjacent land. The State of Mississippi has assigned water use classifications for Okatibbee Lake. For waters classified as "swimming and other whole body water-contact sports" the State standards for the bacterial quality of the water are as follows:

- The bacterial quality of the water is acceptable when a sanitary survey reveals no source of dangerous pollution and when the geometric mean fecal coliform organism density does not exceed 200/100 ml in waters other than coastal waters.
- When the geometric mean fecal coliform organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the water.

The USACE, Mobile District performs bacteriological testing of USACE swimming beaches during the period from Memorial Day through the Labor Day weekend. If the above fecal bacteria standards are exceeded, the affected beach may be closed for a period of time until the standard is met.

2.2 Storm water: Okatibbee Lake was built with Flood Risk Management included as one of the project purposes. The flood storage of the reservoir is indicated at a maximum 59,490 acre-feet which is used to manage flood risk to downstream populations. The watershed for Okatibbee Lake is approximately 154 square miles or about 36 percent of the total Okatibbee Creek drainage basin. Annual runoff into the lake is about one-third of the total basin's average rainfall of 55 inches.

2.3 Floodplains: The natural floodplain of Okatibbee Creek was inundated by the original construction of Okatibbee Lake. The lake is currently managed within specified guide curves; a winter pool level of 339 feet above mean sea level (msl) and a summer pool level of 344 msl. Actual water level depends on hydrologic conditions.

2.4 Wetlands and Waters: Jurisdictional wetlands are scattered throughout the lake in areas where conditions allow the establishment of emergent vegetation. These typically occur in shallow areas with relatively flat substrate and little wave action such as upper reaches of the lake. Most of the lake shore is open water without wetlands and no wetlands occur in the project areas proposed for shoreline protection.

2.5 Water Supply: There are no public water supply intakes in Okatibbee Lake at this time. However, the project is authorized for water supply. The water supply storage allocation is 13,100 acre-feet and was intended to serve the city of Meridian. To date, water withdrawals have not been made.

2.6 Fish and Fishery Resources: Okatibbee Lake is a warm-water fishery and is used by recreational fishermen. There are numerous fishes that may be found in the lake. Common sport fish are crappie (*Promoxis* spp), Striped bass (*Morone saxatilis*), Largemouth bass (*Micropterus salmoides*), and bream (*Lepomis* spp) and catfish (*Ictalurus* spp). Common non-game species are Common carp (*Cyprinus carpio*), and suckers (*Carpoides* spp) and miscellaneous fish including species of shad, shiners, minnows, bowfin and gar.

2.7 Endangered, Threatened or Protected Species: According to the USFWS, Information for Planning and Consultation there are 3 endangered, proposed threatened, and candidate species listed that may occur in the proposed project areas are the Northern Long-eared Bat, Alligator Snapping Turtle, and Monarch Butterfly is attached as Appendix A) (USFWS 2023a). Habitat descriptions were accessed at the Environmental Conservation Online System (USFWS 2023b) federally listed endangered, proposed threatened, and candidate species and their critical habitat at the site are described as follows:

Northern Long-eared Bat, *Myotis septentrionalis* (Endangered): During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in

crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. Northern long-eared bats emerge at dusk to fly through the understory of forested hillsides and ridges feeding on moths, flies, leafhoppers, caddisflies, and beetles, which they catch while in flight using echolocation. This bat also feeds by gleaning motionless insects from vegetation and water surfaces. No critical habitat has been designated for this species.

White-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, especially throughout the Northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. Although the disease has not yet spread throughout the northern long-eared bat's entire range (white-nose syndrome is currently found in at least 25 of 37 states where the northern long-eared bat occurs), it continues to spread. Experts expect that where it spreads, it will have the same impact as seen in the Northeast.

Alligator Snapping Turtle, *Macrochelys temminckii* (Proposed Threatened): Generally found in deeper water of large rivers and their major tributaries; however, they are also found in a wide variety of habitats, including small streams, bayous, canals, swamps, lakes, reservoirs, ponds, and oxbows (a lake that forms when a meander of a river is cut off). Alligator snapping turtles more often select structure (e.g., tree root masses, stumps, submerged trees, etc.) than open water and may select sites with a high percentage of canopy cover. No critical habitat has been designated for this species.

Monarch Butterfly, *Danaus plexippus* (Candidate): Whether it's field, roadside area, open area, wet area or urban garden, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migrations, but they can only lay eggs on milkweed plants.

For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing. These conditions vary between populations. For the eastern North American population, most monarchs overwinter in oyamel fir tree roosts located in mountainous regions in central Mexico at an elevation of 2,400 to 3,600 meters. Monarchs living west of the Rocky Mountain range in North America primarily overwinter in California at sites along the Pacific Coast, roosting in eucalyptus, Monterey pines and Monterey cypress trees. No critical habitat has been designated for this species.

2.8 Wildlife Resources and Habitat: The Okatibbee lakeshore is a grassy mowed earthen feature maintained with mowing. Because of the maintained nature of the shoreline in these areas, the potential for wildlife and habitat is extremely limited.

Other areas around the perimeter of the lake are a mix of upland, wooded and cleared habitat, along with access to the water's edge. This provides adequate habitat for a variety of animal species. These include large animals such as white-tailed deer and wild turkey. Numerous other mammals, birds and reptiles potentially occur in the area.

2.9 Land Use: Past and current land use is the use of the lake for recreation and for reduction of flood risk. No other uses are proposed at this time.

2.10 Geology and Soils: Soils in the Okatibbee Lake project area fall within only two general soil groups. The floodplains of Okatibbee and Tompeat Creeks contain the Quitman-Daleville-Jena soils group. These deep loamy soils range from poorly drained to well-drained and are found on broad, nearly level, terraces and flood plains. In general, their wetness and potential for flooding can present severe limitations to recreational development. Soils bordering Okatibbee Lake and the major creek floodplains are in the Sweatman-Ora-Smithdale soils group. These deep loamy soils range from moderately well drained to well drained and are found on broad, gently sloping, ridges and steep side slopes. Generally, these soils pose only moderate limitations to recreational development; but steep slopes in some areas may create severe limitations.

2.11 Historic and Archeological Resources: The Okatibbee Lake project area as defined for this EA, five prioritized lease areas at Okatibbee Water Park Campground and includes the Okatibbee Water Park Cabins, Okatibbee Water Park Land Bridge, Okatibbee Water Park Boat Ramp, and Okatibbee Water Park 1. Several cultural resources surveys have been conducted in or adjacent to Okatibbee Lake fee owned lands, revealing the presence of at least 80 archaeological or historical resources around the lake.

According to the Integrated Cultural Resources Management Plan (ICRMP) for Okatibbee Lake, the Waterpark Cabin repair area is located between two recorded archaeological sites, 22LD556 (unknown National Register of Historic Places (NRHP) eligibility) and 22LD627 (ineligible for the NRHP).

The Waterpark Land Bridge repair, which will extend the current riprap repair area by 100 feet, is located between recorded sites 22LD583 and 22LD584, which are both ineligible for the NRHP. There are no recorded sites within the Area of Potential Effect (APE) of the Waterpark Boat Ramp repair area. One site, 22LD585, is recorded within the APE of the Waterpark 1 repair area.

2.12 Recreation: Okatibbee has the following recreation area facilities:

1. Damsite located in the east bank park and tailrace area.
2. Pine Springs Park on the east bank just north of the dam site.
3. Obadiah Park on the east bank just north of the dam site
4. Gin Creek Park on the west bank of the lake's northern reach.

5. Collinsville Park above the dam on the west bank of the lake.
6. Twiltley Branch Campground
7. West Bank Park on the west abutment of the dam.
8. Okatibbee Water Park on the east bank, midway.
9. Center Hill Park, on the northern extreme of the lake on the east bank.
10. Okatibbee Wildlife Management Area, lands around the lake.
11. Cove's Nest Marina on the west bank above the dam.

The nature of these sites includes a variety of facilities giving recreational opportunity to the public. These include camping, swimming, fishing, boat access and other water related activities.

3. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

3.1 Proposed Action: The proposed action consists of shoreline erosion repair at five prioritized lease areas occurring at Okatibbee Water Park Campground, Okatibbee Water Park Cabins, Okatibbee Water Park Land Bridge, Okatibbee Water Park Boat Ramp, and Okatibbee Water Park 1 (Figure 3).

At Okatibbee Water Park Campground, approximately 4,200 cubic yards (cy) of fill will be placed along a bank approximately 10 to 15 feet high with approximately 1,418 cy of Class 3 riprap to build out to achieve desired slope.

At Okatibbee Water Park Cabins, approximately 2,700 cy of fill will be placed along a mostly high bank transitioning to low bank of approximately 4-8 feet high with approximately 1,396 cy of Class 3 riprap with mixed excavation/build out scheme.

At Okatibbee Water Park Land Bridge, approximately 750 cy of Class 3 riprap will be placed along the low bank that is presently armored and extend from existing armor southward about 100 feet to improve roadway protection.

At Okatibbee Water Park Boat Ramp, approximately 180 cy of Class 3 riprap will be placed along the low bank and extend from the concrete top to protect parking area.

At Okatibbee Water Park 1, approximately 360 cy of Class 3 riprap will be placed along the low bank west of the gate at this day use area.

SITE MAP



Figure 3. Okatibbee Lakeshore Erosion Sites

3.2 “No Action” Alternative: With the No Action Alternative, there would be no changes to the current conditions at Okatibbee Lake. Existing problems with shoreline erosion generated by wind-driven wave action and vessel wake from recreational watercraft would continue as it does now.

4. ENVIRONMENTAL IMPACTS: Environmental impacts of the proposed action are described for each of the significant resource areas and are compared with the No Action alternative. Impacts are considered to occur relative to the previously described existing condition.

4.1 Water Quality: There would be no work conducted in the lake during times when the worksite is inundated. No pollutants, trash or waste material would enter the water. Only materials graded on site and clean riprap would be placed below the summer pool level during times of low water. Although such work is defined as a “discharge” of fill material as described in Section 4.4 below, the adverse impact to water quality would be insignificant and carry positive long-term benefits by preventing the further erosion of sediments into the lake. Water that currently runs off to the lake during rainfall events would continue as for the No Action alternative. Appropriate Best Management Practices would be utilized as appropriate.

State of Mississippi Water Quality Certification. Due to the discharge described above into State-owned waters, a Section 401 State Water Quality Certification is required. State Water Quality Certification will be required and obtained from the Mississippi Department of Environmental Quality.

4.2 Storm water: Storm water that is currently entering the lake would continue unchanged by the proposed action. There would be no impact compared to the No Action alternative.

4.3 Floodplains: There would be no construction, fill or other impacts to floodplains.

4.4 Wetlands and Waters: No construction or actions related to the project would occur in wetlands. The grading and riprap placement below ordinary high water (summer pool level) constitutes a discharge of fill material to Waters of the U.S. Therefore, a Section 404(b)(1) evaluation is required for the project and is attached as Appendix B.

4.5 Water Supply: Neither the proposed action nor the No Action alternative would have an impact on local water supply.

4.6 Fish and Fishery Resources: The proposed action would not take place during fish spawning season. There would be no impacts to any fish living in the lake as a result of either the proposed action or the No Action alternative.

4.7 Endangered, Threatened or Protected Species: Based on the lack of habitat conditions required on-site for the listed species occurring along the shoreline where the work will take place; USACE, Mobile District has determined the proposed action will have no effect on endangered and threatened species or designated critical habitat. The No Effect Consistency Letter for the Northern Long-Eared Bat dated April 24, 2023 is attached in Appendix A.

4.8 Wildlife Resources and Habitat: Neither the proposed action nor the No Action alternative would reduce or diminish wildlife habitat. Although small rodents, birds, amphibians or their young could be in the vicinity during construction, these animals will likely temporarily avoid the area. The impact would be minor.

4.9 Land Use: Use of the local area would continue to be primarily for recreation and reduction of flooding. There would be no impacts to land use either from the proposed action or the No Action alternative.

4.10 Geology and Soils: Construction on the lakeshore could have minor impacts. Grading and riprap placement would disturb soils. Erosion would be controlled through appropriate use of Best Management Practices such as installation of silt screening, hay bales, etc. The No Action alternative would maintain soils and geology in their existing condition which includes active erosion and sedimentation entering the lake waters.

4.11 Historic and Archeological Resources: With the exception of one site, 22LD585, recorded within the APE of the Waterpark 1 repair area, none of the remaining recorded sites are within the APE of the Waterpark shoreline repair areas and will not be impacted.

While 22LD585 is not eligible for the NRHP, a 50- foot protective buffer will be placed around the site boundary to prevent impacts by construction. Periodic inspection by Okatibbee Lake Rangers and Mobile District archaeologists will take place at all repair sites to ensure none of the recorded sites are impacted by this action. An inadvertent discoveries protocol will be implemented in the event artifacts or human remains are discovered during construction.

The Mobile District has determined no historic properties affected for the Waterpark shoreline repairs at Okatibbee Lake. Consultation with the Mississippi State Historic Preservation Officer (SHPO) and federally recognized tribes was initiated March 17, 2023 (see Appendix A) and is ongoing until the completion of the project.

4.12 Recreation: None of the recreation sites nor recreation in general at the lake would be adversely affected. By stabilizing eroding lakeshores, there would be a long-term benefit to the public by maintaining public areas in their current condition. The No Action alternative would result in continued erosion and the permanent loss of usable area.

5. CUMULATIVE IMPACTS: 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 proposed action and no action alternatives and other Federal, State, Tribal, local agencies, or government or private actions that impact the resources affected by the proposed action.

The total of direct impacts associated with the proposed lakeshore stabilization are minor. The natural environment in the project area has long been impacted by a variety of human actions including the construction of the lake and the maintenance of the lakeshore for recreation. The geographic area around the area has experienced an evolution from pristine to farming to its current use for flood risk management and recreation. Much of the local forested habitat has been altered by agriculture, managed forests, roads and other anthropogenic factors. Those previous actions would not be changed by the current action. There are no known future actions being contemplated that would add to these cumulative impacts. There would be an improvement to the human environment because of the reduced sedimentation into the lake.

In conclusion, the proposed action, as well as the No Action alternative, would have no more than minor direct, indirect or cumulative impacts on the environment.

6. IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED SHOULD THE PROPOSED ACTION 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. None of the proposed actions are irreversible.

7. ADVERSE ENVIRONMENTAL IMPACTS WHICH CANNOT BE AVOIDED:

Disturbance to the soils at the work sites will necessarily occur as part of the project activities. Any accidental destruction of small creatures is unavoidable.

8. THE RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY:

The project would improve erosion and sedimentation problems at Okatibbee Lake. There would be short-term negative impacts associated with the work. Long-term benefits would result by the described improvements. The proposed action constitutes a short-term use of man's environment and would enhance long-term productivity.

9. COORDINATION: As required by the National Environmental Policy Act, the USACE, Mobile District coordinated this project with various local, state, and Federal agencies. During the early stages of development, the USFWS, Mississippi State Historic Preservation Officer, and Tribal Nations were solicited for their comments and/or concerns regarding the proposed disposal and conveyance.

Coordination with the general public will be accomplished by making the Draft Findings of No Significant Impact and EA available through means of a 30-day notice of availability being placed on the USACE, Mobile District website and emailing to interested parties. Comments received from the public and agencies on the proposed action will be reviewed and those of substantive incorporated into the EA.

10. REFERENCES CITED:

MDEQ (Mississippi Department of Environmental Quality). 2023. *Mississippi 2022 Section 303(d) List of Impaired Water Bodies*. Mississippi Department of Environmental Quality, Jackson, Mississippi.

<https://www.mdeq.ms.gov/wp-content/uploads/2022/03/ADOPTED-2022-303d-List-Report-02242022-Proposed.pdf>. Accessed 19 March 2023.

Mistovich, Tim S., Gloria G. Cole, and Troy O. Martin. 1990. Historic Properties Survey Okatibbee Lake, Mississippi. Report prepared by Pan-American Consultants for the U.S. Army Corps of Engineers, Mobile District.

Turner, Daniel R., Steven M. Meredith, Nathan W. Brown, J. Lynn Funkhouser, and Lisamarie Malischke. 2015. A Phase I Cultural Resources Survey for Okatibbee Lake, Lauderdale and Kemper Counties, Mississippi. Report prepared by Pan-American Consultants for SEARCH for the U.S. Army Corps of Engineers, Mobile District.

USFWS. 2023a. Information for Planning and Conservation.
<https://ecos.fws.gov/ipac/project/6GI32MIVOJBUDDTNQETKO7EMVU/resources>.
Accessed Accessed 24 April 2023.

USFWS. 2023b. ECOS Environmental Conservation Online System.
<http://ecos.fws.gov/ecp/>. Accessed 24 April 2023.

APPENDIX A

Coordination



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

March 15, 2023

Inland Environment Team
Planning and Environmental Division

Mr. Hal Bell
Review and Compliance Officer
Mississippi Department of Archives and History
Historic Preservation
100 South State Street
Jackson, Mississippi 39205

Dear Mr. Bell:

The U.S. Army Corps of Engineers (USACE), Mobile District is proposing to repair five areas along the Okatibbee Lake shoreline in Collinsville, Mississippi (Figure 1) to stabilize and prevent further erosion of the shoreline. The five shoreline repair areas include the Waterpark Cabins, the Waterpark Campground, the Waterpark Land Bridge, Waterpark Boat Ramp and another area immediately south of the boat ramp (Waterpark 1) (Figure 2).

The shoreline repairs involve placing riprap (rock boulders) along actively eroding areas from the toe of the eroded bluff to the waterline. Staging areas for the repairs will be on existing roads and parking lots. In some areas, construction equipment will access the repair areas outside of existing roads and parking areas, necessitating some tree removal by cutting and grinding at ground level. Clean fill dirt will be used to build out bluffs and the fill dirt will come from an approved contractor off site and not from the lake fee owned lands at the lake.

The Waterpark Cabin repair area measures about 750 feet along the shoreline. According to the MDAH Historic Resources Inventory Database, this area is located between two recorded archaeological sites, 22LD556 (unknown National Register of Historic Places (NRHP) eligibility) and 22LD627 (ineligible for the NRHP). The repair will be conducted from the existing roads by the cabins. The recorded archaeological sites are not within the Area of Potential Effect (APE) and will not be impacted. There are no recorded sites within the Waterpark Campground repair area.

The Waterpark Land Bridge repair, which will extend the current riprap repair area by 100 feet, is located between recorded sites 22LD583 and 22LD584, which are both ineligible for the NRHP. These sites are not within the APE and will not be impacted. There are no recorded sites within the APE of the Waterpark Boat Ramp repair area.


One site, 22LD585, is recorded within the APE of the Waterpark 1 repair area (measuring 680 feet along the shoreline). While 22LD585 is not eligible for the NRHP, a 50 foot protective buffer will be placed around the site boundary to prevent impacts by construction. Periodic inspection by Okatibbee Lake Rangers will take place at all repair sites to ensure none of the recorded sites are impacted by this action. An inadvertent discoveries protocol will be implemented in the event artifacts or human remains are discovered during construction.

USACE, Mobile District has determined no historic properties affected for the proposed Waterpark shoreline repairs at Okatibbee Lake. We request your concurrence on this determination of effects for the proposed shoreline repair and stabilization of the five Waterpark areas at Okatibbee Lake, Mississippi.

Please send any questions or comments regarding this project to U.S. Army Corps of Engineers, Mobile District, CESAM-PD-EI, Attention: Ms. Wendy Weaver, Archaeologist, Post Office Box 2288, Mobile, Alabama 36628. Ms. Weaver can also be reached via email at wendy.c.weaver@usace.army.mil.

Sincerely,

Jennifer
Jacobson
Jennifer L. Jacobson
Chief, Environment and Resources
Branch

 Digitally signed by
Jennifer Jacobson
Date: 2023.03.15
12:48:13 -05'00'

Enclosures

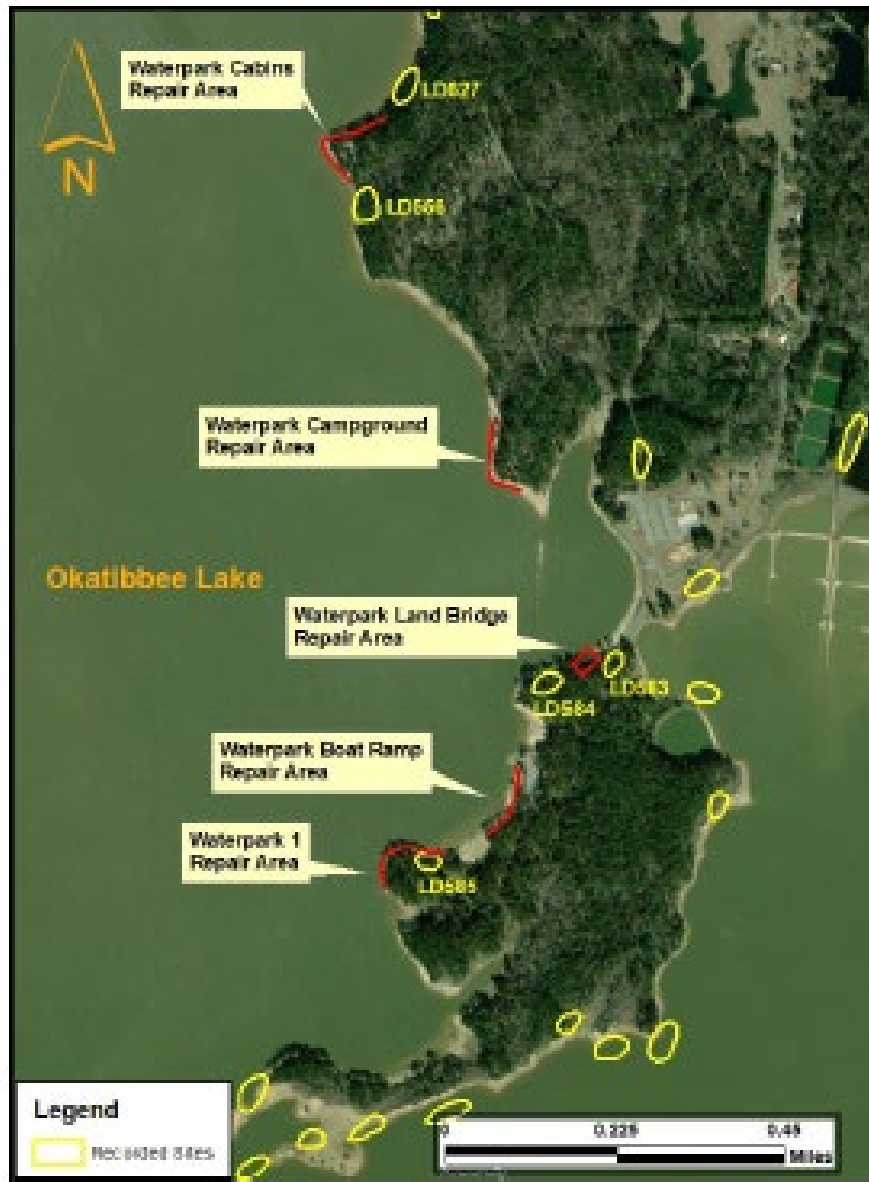


Figure 2: Waterpark shoreline repair areas (In red) and MDAH recorded archaeological sites (In yellow)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
Phone: (601) 965-4900 Fax: (601) 965-4340



In Reply Refer To:
Project Code: 2023-0073403
Project Name: Okatibbea Lake Shoreline Protection

April 24, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a *Biological Assessment* be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a *Biological Assessment* are described at 50 CFR 402.12.

If a Federal agency determines, based on the *Biological Assessment* or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/eo-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFCSection7Consultation@fws.gov.

Attachment(s):

- **Official Species List**
 - **USFWS National Wildlife Refuges and Fish Hatcheries**
 - **Migratory Birds**
-

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
(601) 965-4900

PROJECT SUMMARY

Project Code: 2023-0073403

Project Name: Okatibbee Lake Shoreline Protection

Project Type: Shoreline Stabilization

Project Description: At Okatibbee Water Park Campground, approximately 4,200 cubic yards (cy) of fill will be placed along a bank approximately 10 to 15 feet high with approximately 672 cy of Class 3 riprap at the toe section and approximately 1,240 cy of Class 2 riprap to the face armor to build out to achieve desired slope.

At Okatibbee Water Park Cabins, approximately 2,700 cy of fill will be placed along a mostly high bank transitioning to low bank of approximately 4-8 feet high with approximately 978 cy of Class 3 riprap to the toe section and approximately 1,300 cy of Class 2 riprap to the face armor.

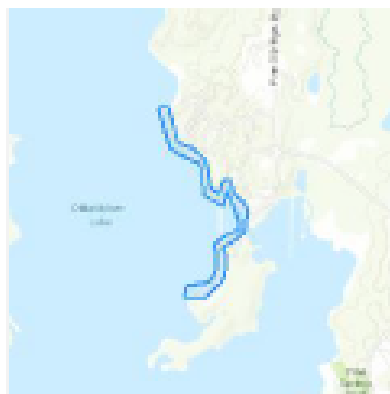
At Okatibbee Water Park Land Bridge, approximately 750 cy of Class 2 riprap will be placed along the low bank that is presently armored and extend from existing armor southward about 100 feet to improve roadway protection.

At Okatibbee Water Park Boat Ramp, approximately 180 cy of Class 2 riprap will be placed along the low bank and extend from the concrete top to protect parking area.

At Okatibbee Water Park 1, approximately 260 cy of Class 2 riprap will be placed along the low bank of this day use area.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@32.496804600000004,-88.78236328754579,14z>



Counties: Lauderdale County, Mississippi



ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://com.fws.gov/ecp/species/2645	Endangered

REPTILES

NAME	STATUS
Alligator Snapping Turtle <i>Macrochelys temminckii</i> No critical habitat has been designated for this species. Species profile: https://com.fws.gov/ecp/species/4638	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danous plexippus</i> No critical habitat has been designated for this species. Species profile: https://com.fws.gov/ecp/species/2743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
Phone: (601) 965-4900 Fax: (601) 965-4340



In Reply Refer To:
Project code: 2023-0073403
Project Name: Okatibbee Lake Shoreline Protection

April 24, 2023

Federal Nexus: yes
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Record of project representative's no effect determination for 'Okatibbee Lake Shoreline Protection'

Dear Velma Diaz:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on April 24, 2023, for 'Okatibbee Lake Shoreline Protection' (here forward, Project). This project has been assigned Project Code 2023-0073403 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may

include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of "No Effect" on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Mississippi Ecological Services Field Office and reference Project Code 2023-0073403 associated with this Project.

1. Name

Okatibbee Lake Shoreline Protection

2. Description

The following description was provided for the project 'Okatibbee Lake Shoreline Protection':

At Okatibbee Water Park Campground, approximately 4,200 cubic yards (cy) of fill will be placed along a bank approximately 10 to 15 feet high with approximately 672 cy of Class 3 riprap at the toe section and approximately 1,240 cy of Class 2 riprap to the face armor to build out to achieve desired slope.

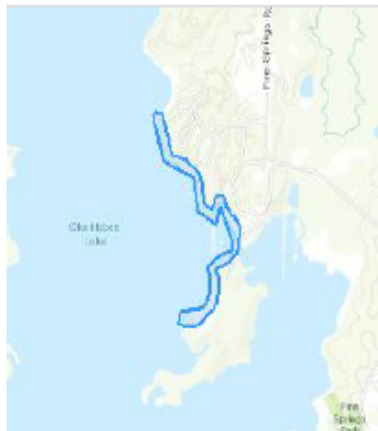
At Okatibbee Water Park Cabins, approximately 2,700 cy of fill will be placed along a mostly high bank transitioning to low bank of approximately 4-8 feet high with approximately 978 cy of Class 3 riprap to the toe section and approximately 1,300 cy of Class 2 riprap to the face armor.

At Okatibbee Water Park Land Bridge, approximately 750 cy of Class 2 riprap will be placed along the low bank that is presently armored and extend from existing armor southward about 100 feet to improve roadway protection.

At Okatibbee Water Park Boat Ramp, approximately 180 cy of Class 2 riprap will be placed along the low bank and extend from the concrete top to protect parking area.

At Okatibbee Water Park 1, approximately 260 cy of Class 2 riprap will be placed along the low bank of this day use area.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@32.496804600000004,-88.78236328754579,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Do you have post-white nose syndrome occurrence data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed acoustic detections. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

No

3. Does any component of the action involve construction or operation of wind turbines?

Note: For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

PROJECT QUESTIONNAIRE

Will all project activities be completed by April 1, 2024?

Yes

APPENDIX B

Section 404(b)(1) Evaluation

SECTION 404(b)(1) EVALUATION
FOR THE PROPOSED
RIPRAP PLACEMENT FOR SHORELINE PROTECTION, OKATIBBEE LAKE,
LAUDERDALE COUNTY, MISSISSIPPI

I. PROJECT DESCRIPTION:

- a. Location. Okatibbee Lake located on Okatibbee Creek in Lauderdale County, Mississippi, 37.7 miles above its confluence with the Chunky River and 7 miles northwest of Meridian, Mississippi.
- b. General Description. The Project Office at Okatibbee Lake, part of the Operations Division of the Mobile District, USACE has proposed to protect specific locations where lake shoreline is actively eroding with grading and riprap placement.
- c. Authority and Purpose. The purpose of the proposed project is to prevent further erosion where there is an ongoing problem due to wave action. The project is needed since continued erosion will degrade existing recreation lakeshore and contribute to sediments entering the lake. In compliance with requirements the National Environmental Policy Act (NEPA) an Environmental Assessment (EA) has been prepared to evaluate the environmental and socioeconomic effects, and this Section 404(b)(1) Analysis has been prepared in compliance with the Environmental Protection Agency's Section 404(b)(1) Guidelines and attached to the EA.
- d. General Description of Fill Material.
 1. General Characteristics of Material (grain size, soil type). Soils in the Okatibbee Lake project area fall within only two general soil groups. The floodplains of Okatibbee and Tompeat Creeks contain the Quitman-Daleville-Jena soils group. These deep loamy soils range from poorly drained to well-drained and are found on broad, nearly level, terraces and flood plains. In general, their wetness and potential for flooding can present severe limitations to recreational development. Soils bordering Okatibbee Lake and the major creek floodplains are in the Sweatman-Ora-Smithdale soils group. These deep loamy soils range from moderately well drained to well drained and are found on broad, gently sloping, ridges and steep side slopes. Generally, these soils pose only moderate limitations to recreational development; but steep slopes in some areas may create severe limitations. Soils around the perimeter of the lake at specific locations are subject to wave-caused erosion. The soils at those location would be graded on site and covered with clean riprap to prevent further erosion.
 2. Quantity of Material. Fill materials would include approximately 11,004 cubic yards of clean stone for stone toe protection.

3. Source of Material. Fill materials will be composed of riprap from commercial sources.
- e. Description of the Proposed Discharge Site.
1. Location. The proposed work sites are at several locations around the east side of Okatibbee Lake. The specific locations of each work site are shown in EA.
 2. Size. The proposed sites are approximately 763 feet.
 3. Type of Site. The proposed fill sites are unconfined sites along the lake.
 4. Type of Habitat. Existing habitat is typical of impounded reservoirs in the Southeastern United States.
 5. Timing and Duration of Discharge. Grading and discharge activities will be scheduled for summer 2023 when all environmental clearances are obtained.
- f. Description of Disposal Method. Excavated materials, resulting from slope laybacks will be graded on site. Riprap will be placed by trackhoe and similar equipment.

II. FACTUAL DETERMINATIONS:

- a. Physical Substrate Determinations.
1. Substrate Elevation and Slope. The bottom geometry of the sites is along the lakeshore in eroded areas and thus, is moderately to steeply sloped. During the summer when the pool is higher, water depth varies from a few inches to approximately three feet. Slopes will be modified to a gentler, less erodible geometry.
 2. Sediment Type. The existing soils will be overlain with riprap which is typically larger than the existing rocks at the lake. By controlling shoreline erosion, sedimentation will be reduced, resulting in less turbidity and sedimentation of adjacent habitats.
 3. Dredged/Fill Material Movement. The material used for fill should not experience any movement due to riprap being of a size sufficient to remain stable during high wave and flood events. All graded areas will be immediately stabilized with vegetative cover. All appropriate Best Management Practices (BMP) will be implemented to prevent erosion and siltation from the site.

4. Physical Effects on Benthos. In the immediate vicinity of the work, there will be zero water depth and few or no benthic organisms would be impacted. Near the water edge, the grading and riprap placement potentially could destroy any permanent vegetation or other organisms that had not died or escaped due to the drawdown. However due to the eroded nature of the sites these areas would be limited in size and full recolonization of the area after project completion is expected.
5. Actions Taken to Minimize Impacts. All appropriate BMP's will be implemented to prevent erosion and siltation into the lake.

b. Water Column Determinations.

1. Salinity. Not applicable
2. Water Chemistry (pH, etc.). Water chemistry will not be significantly affected.
3. Clarity. Water clarity will be temporarily decreased in the vicinity of the sites where grading, excavation and riprap placement occurs. Any increases in turbidity are expected to be short-lived and rapidly decline to ambient levels after construction activities cease. In the long-term clarity should be improved as an incidental benefit of stabilizing the eroding shoreline.
4. Color. Color will not be significantly affected.
5. Odor. No effect.
6. Taste. No effect.
7. Dissolved Gas Levels. Dissolved gas levels should not be significantly affected because of the coarse nature of the riprap and lack of organic materials entering the water during the work.
8. Nutrients: Nutrients will not be significantly affected and none will be discharged.
9. Eutrophication. Eutrophication will not be significantly impacted.

c. Water Circulation, Fluctuation and Salinity Gradient Determinations.

1. Current Patterns and Circulation.
 - a. Current Patterns and Flow. Because the lake has essentially no flow at the point of the proposed work no impact is expected.

- b. Velocity. Because the lake has essentially no flow at the point of the proposed work no impact is expected.
 2. Stratification. No stratification exists at the project site due the shallow depths of the project area.
 3. Hydrologic Regime. There would be no impacts on the hydrologic regime of the lake.
 4. Normal Water Level Fluctuations. High flows and flood events would remain unaffected by the project.
 5. Salinity Gradient. Not applicable.
- d. Suspended Particulate / Turbidity Determinations.
1. Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site. No permanent changes in turbidity will result. There will be some localized increases in turbidity and suspended particulates during the construction phase of the project. This will clear upon completion.
 2. Effects on Chemical and Physical Properties of the Water Column.
 - a. Light Penetration. Reductions in light penetration due to temporary increases in turbidity during construction will be short-term and localized and are not expected to be significant.
 - b. Dissolved Oxygen. Dissolved oxygen will not be significantly affected.
 - c. Toxic Metals and Organics. Toxic metals and organics are not expected to be introduced into the water column.
 - d. Pathogens. No significant effects are expected.
 - e. Aesthetics. The placement of riprap may be viewed by some observers as a negative impact. However, there will be a corresponding improvement in aesthetics by the control of the eroding shoreline.
 3. Effects on Biota.
 - a. Primary Production / Photosynthesis. The lakeshore in the proposed work areas are not areas of high primary productivity. No impact is expected.

- b. Suspension / Filter Feeders. Due to improbability of habitat and corresponding low numbers of suspension / filter feeders, along with limited work areas, any effects are expected to be temporary, minimal, and insignificant.
 - c. Sight Feeders. Sight feeders, mostly fish, are expected to leave the site during discharge operations, and return to the area as ambient conditions return.
 - 4. Actions Taken to Minimize Impacts. All appropriate BMP's will be implemented to prevent erosion and siltation into the lake in order to minimize impacts.
 - e. Contaminant Determinations. No contaminants harmful to the environment are known to exist in the proposed project area where the proposed riprap material would be placed during construction activities.
 - f. Aquatic Ecosystem and Organism Determinations.
 - 1. Effects on Plankton. No significant impact.
 - 2. Effects on Benthos. In the immediate vicinity of the work, there will be zero water depth and few or no benthic organisms would be impacted. Near the water edge, the grading and riprap placement potentially could destroy any permanent vegetation or other organisms that had not died or escaped. However, due to the eroded nature of the sites these areas would be limited in size and full recolonization of the area after project completion is expected.
 - 3. Effects of Nekton. Nektonic species in Okatibbee Lake are comprised mostly of fish and macroinvertebrates. These are expected to temporarily leave the area during work associated with the project and return to the area once physical disturbance ends and turbidity levels return to ambient conditions.
 - 4. Effects on Aquatic Food Web. No significant impact is expected.
 - 5. Effects on Special Aquatic Sites.
 - a. Sanctuaries and Refuges. Not applicable
 - b. Wetlands. No wetlands will be affected by the proposed action.
 - c. Mud Flats. No mud flats will be affected by the proposed action.
 - d. Vegetated Shallows. No vegetated shallows will be affected by the proposed action.

- e. Coral Reefs. Not applicable.
 - f. Riffle and Pool Complexes. The area does not contain riffle and pool complexes.
6. Effects on Threatened and Endangered Species. According to the USFWS, Information for Planning and Consultation there are 3 endangered, proposed threatened, and candidate species listed that may occur in the proposed project areas are the Northern Long-eared Bat, Alligator Snapping Turtle, and Monarch Butterfly. USACE, Mobile District determined the proposed action will have no effect on endangered and threatened species or designated critical habitat. The No Effect Consistency Letter for the Northern Long-Eared Bat dated April 24, 2023 is attached in Appendix A.
7. Effects on Other Wildlife. The proposed work would occur in areas currently used for human recreation. Any wildlife in the area is mostly transient and somewhat tolerant of human activities. As such, there would be no significant impacts to those populations as a result of the proposed action.
- g. Proposed Disposal Site Determinations.
- 1. Mixing Zone Determination. State water quality requirements would be utilized for this project; therefore, turbidity outside the limits of the mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units.
 - 2. Determinations of Compliance with Applicable Water Quality Standards. The fill/placement operation will be in conformance with applicable Federal and State standards Water Quality Certification, pursuant to Section 401 of the Clean Water Act, will be obtained from Mississippi Department of Environmental Quality (MDEQ).
 - 3. Potential Effects on Human Use Characteristics.
 - a. Municipal and Private Water Supply. No municipal or public water supply intakes are located in the proposed project area.
 - b. Recreational and Commercial Fisheries. No impacts are expected from the project to any recreational fish resources.
 - c. Water Related Recreation. No fishing and boating activities occur in the immediate area of the project sites. There may be temporary closures of the adjacent boat ramp.
 - d. Aesthetics. The placement of riprap may be viewed by some observers as a negative impact. However, there will be a

corresponding improvement in aesthetics by the control of the eroding shoreline.

- e. Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves. Not applicable.
- h. Determination of Cumulative Effects on the Aquatic Ecosystem. The proposed project will have a net benefit to the aquatic ecosystem from the perspective of cumulative impacts. The most important impact in the watershed occurred at the time of construction of the reservoir, converting a free-flowing stream into an impoundment. The current project will stabilize the shoreline that is being impacted by erosive wave action.
- i. Determination of Secondary Effects of the Aquatic Ecosystem. There would be temporary and minor disturbances along the banks, causing increases in turbidity that could cause some species to leave the area. This could result in some insignificant increase in mortality due to the inability of displaced individuals to compete or avoid predation in other locations. Such effects are expected to be temporary and minor.

III. FINDINGS OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

- a. No significant adaptations of the guidelines were made relative to this evaluation.
- b. The proposed discharge represents the least environmentally damaging practicable alternative.
- c. The planned disposal of excavated material would not violate any applicable State water quality standards nor will it violate the Toxic Effluent Standard of Section 307 of the Clean Water Act.
- d. Use of the proposed fill site will not jeopardize the continued existence of any Federally listed endangered or threatened species or their critical habitat.
- e. The proposed placement of riprap material will not contribute to significant degradation of waters of the United States. Nor will it result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreation and commercial fishing; life stages of organisms dependent upon the aquatic ecosystem; ecosystem diversity, productivity and stability; or recreational, aesthetic or economic values.
- f. Appropriate and practicable steps to minimize potential adverse impacts of the discharge on the aquatic ecosystem include:

1. Avoid construction during critical life stages for aquatic organisms to the maximum extent possible.
2. An interdisciplinary team has evaluated sites, and project design altered per their recommendations.
3. Appropriate construction best management practices will be implemented at each of the construction sites to minimize environmental impacts.

DATE: _____

Jeremy J. Chapman, P.E.
Colonel, U.S. Army
District Commander