



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183-3435

SUBJECT: Mississippi River and Tributaries Project, Mississippi River Levee 600 Series (611-L, 614-L, 615-L, 616-L), Seepage Berm Construction and Enlargement EA #120

PUBLIC NOTICE

To Whom It May Concern:

A draft Finding of No Significant Impact (FONSI), along with the draft Environmental Assessment (EA) for the Mississippi River Levee 600 Series (611-L, 614-L, 615-L, 616-L), Seepage Berm Construction and Enlargement, Bolivar County, Mississippi project is enclosed for your review and comment. This project proposes to improve and strengthen a segment of the MRL to better handle the project design flood of the Mississippi River by constructing 14 seepage and maintenance berms. Please provide all comments by 26 August 2025, to the above address, ATTN: CEMVN-PDN-UDP.

If you have any questions or comments concerning the draft FONSI or EA, please contact Mr. Taylor Piefke of this office by telephone 601-631-5087 or email Taylor.Piefke@usace.army.mil.

Sincerely,

Mark Smith
Chief, Environmental Compliance Branch
Regional Planning and Environment Division South

Enclosure

DRAFT FINDING OF NO SIGNIFICANT IMPACT

MRL 600 Series (611-L, 614-L, 615-L, 616-L), Berm Construction and Enlargement, F/C MR&T Bolivar County, MS

As required by the Procedures for Implementing the National Environmental Policy Act (33 CFR Part 230), the attached Environmental Assessment (EA) of a proposal to perform seepage remediation project for the MRL 600 Series (611-L, 614-L, 615-L, 616-L), Berm Construction and Enlargement, F/C MR&T, Bolivar County, MS project has been completed by the U.S. Army Corps of Engineers, Regional Planning and Environment Division South, Vicksburg District. The EA addressed reasonably foreseeable impacts associated with addressing seepage concerns along the west bank of the Mississippi River, between river miles 611 and 616.

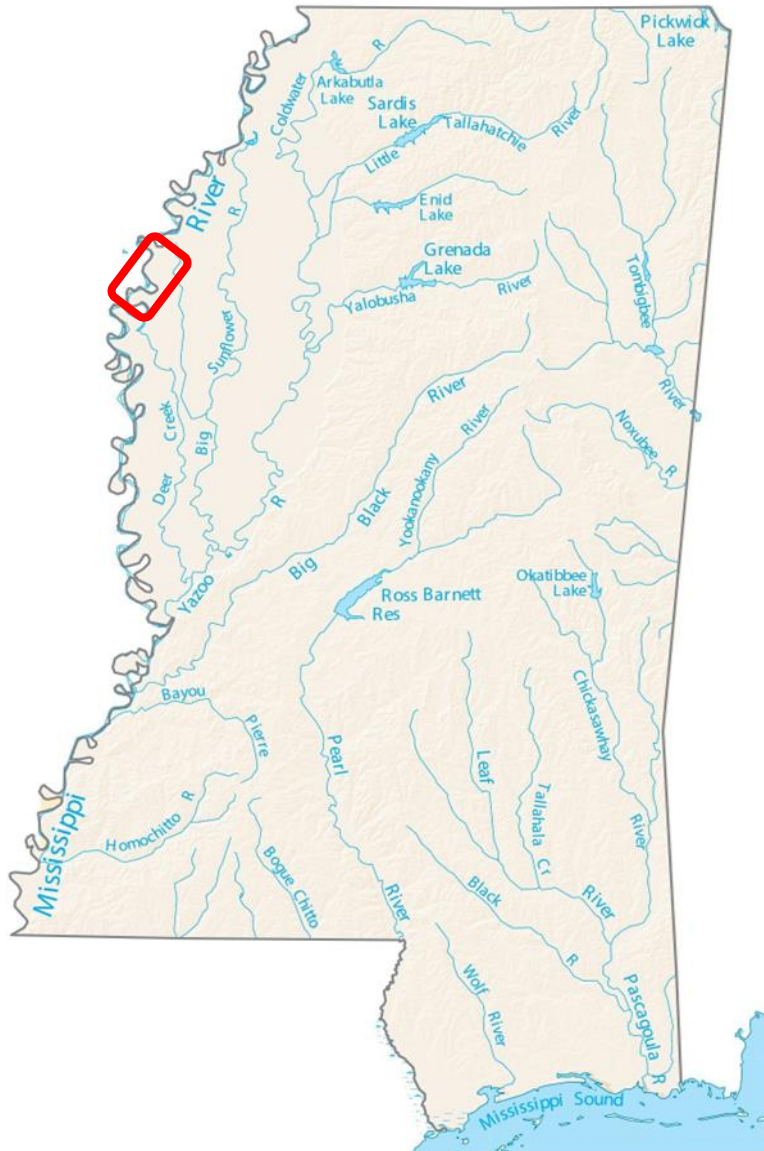
Based on the information provided in the EA, the proposed action would result in insignificant adverse effects on the environment. In addition, no historic properties listed in or determined eligible for inclusion in the National Register of Historic Places would be affected by the project. Therefore, an Environmental Impact Statement is not warranted, and a Finding of No Significant Impact is appropriate.

(Date)

Jeremiah A. Gipson
Colonel, Corps of Engineers
District Commander

Attachment

DRAFT ENVIRONMENTAL ASSESSMENT
Mississippi River and Tributaries Project,
Mississippi River Levee 600 Series (611-L, 614-L, 615-L, 616-L),
Seepage Berm Construction and Enlargement
EA #120



U.S. Army Corps of Engineers
Mississippi Valley Division
Regional Planning and Environment Division South

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DRAFT ENVIRONMENTAL ASSESSMENT
Mississippi River and Tributaries Project,
Mississippi River Levee 600 Series (611-L, 614-L, 615-L, 616-L),
Seepage Berm Construction and Enlargement
EA #120

1 INTRODUCTION

This environmental assessment (EA) analyzes the reasonably foreseeable effects on the human environment of a proposal by the U.S. Army Corps of Engineers (USACE), Vicksburg District (MVK), to construct improvements to portions of the Mississippi River and Tributaries (MR&T) Project, mainline Mississippi River levee (MRL), in Deeson, MS, Round Lake, MS, Cessions, MS, and Francis, MS. The work, under the project name “MRL 600 Series (611-L, 614-L, 615-L, 616-L), Berm Construction and Enlargement, F/C MR&T,” involves constructing or enlarging seepage and stability berms at multiple locations (Figure 1).

As reported in the Supplement No. 1 to the Final Environmental Impact Statement, “Mississippi River and Tributaries Project, Mississippi River Mainline Levees Enlargement and Seepage Control” (July 1998) (SEIS I), the mainline Mississippi River levee system is one of four elements of the MR&T for flood risk management in the Lower Mississippi River Valley. The purpose of the MRL 600 series project is to improve the protective capacity of levee segments (on the left-descending bank of the Mississippi River, at River Miles 611, 614, 615, and 616) to effectively pass the “Project Design Flood,” as more fully described in “Refined Mississippi River & Tributaries Project Flood Flowline Study” (1978).

Constructing the proposed remediation measures would benefit the MR&T levee system. These features would increase the integrity of the levee system and reduce the chance of levee failure, thus meeting the congressionally mandated need for flood risk management on the Mississippi River. This EA tiers from SEIS I and SEIS II and focuses on site-specific impacts of the proposed action involving the previously described portion of the Mississippi River levee. Impacts of the proposed action were analyzed, and the results are presented in this EA and previously in SEIS I and SEIS II. Unavoidable impacts resulting from the proposed project are accounted for under the mitigation plan for the entire MRL.

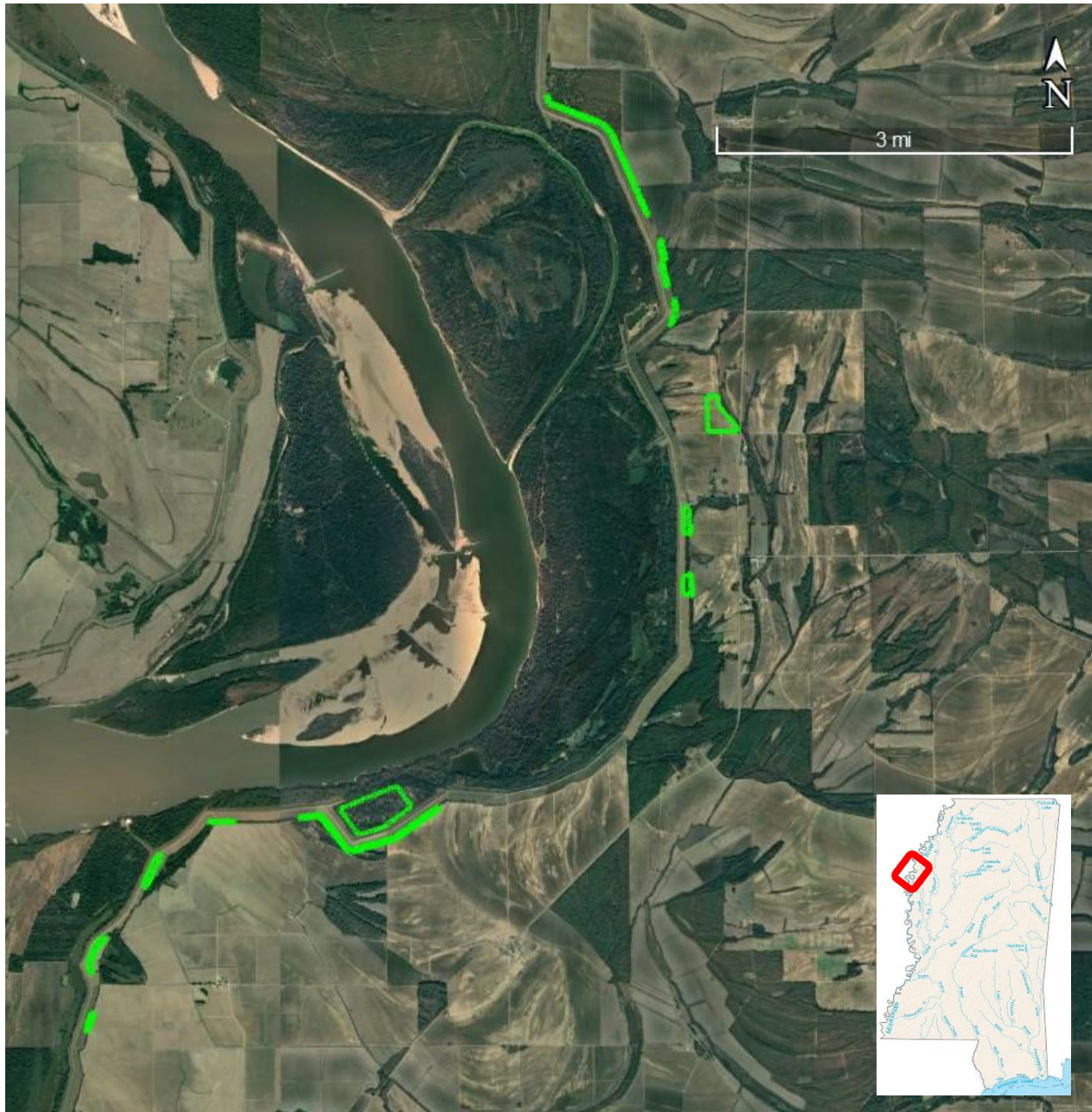


Figure 1: MRL 600 series project location adjacent to Mississippi River miles 611 and 616 in Mississippi.

1.1 Proposed Action

The proposed action is to improve and strengthen a segment of the MRL to better handle the project design flood of the Mississippi River. The item of work, originally described in the MRL SEIS I and SEIS II, consists of controlling under seepage through constructing seepage and maintenance berms to reinforce the levee. These berms would be constructed through the placement of earthen fill in any areas found to be deficient in terms of seepage and/or stability.

1.2 Purpose and Need for the Proposed Action

The purpose of the proposed action is to ensure that the MRL provides the level of protection and flood risk reduction for which it was designed. Consistent with its statutory authority and duties under the Flood Control Act of 1928, as amended, USACE needs to design, build, maintain, alter, operate, and repair the MR&T, of which the mainline MRL is a primary feature. This level of protection and flood risk reduction, known as the Project Design Flood (PDF), is the greatest flood having a reasonable probability of occurrence. A catastrophic failure of the MRL, at any point, would likely cause grievous loss of life and personal injury, extensive damage to property and natural resources, serious harm to river navigation, and significant and long-lasting economic and social upheaval.

Seepage problems in a levee can lead to sediment under the levee being carried away through sand boils, resulting in internal erosion. When enough sediment is transported from under the base of the levee, the levee will collapse. A breach of the levee could inundate hundreds of thousands of acres of land, thousands of structures, and displace or result in catastrophic consequences to humans and a variety of fauna. Earthen berms are vital to strengthening the integrity of the levee system because they apply counter pressure to areas that are experiencing seepage problems or areas likely to exhibit seepage problems during a PDF and are designed to minimize the risk of levee failure by reducing or stopping the movement of sediment from underneath the levee.

The construction of the proposed berm and seepage remediation features to the levee, described as the proposed action, would reduce the likelihood of the mainline levee breaching. As the Nation's principal public engineering enterprise, USACE must accomplish its flood protection and risk reduction mission as and when resources are appropriated by Congress.

1.3 Authority

The Flood Control Act of 1928, as amended, authorizes the MR&T, as well as the proposed action.

Following the devastating flood of the Mississippi River Basin in 1927, Congress authorized the MR&T Project in 1928, which featured a system of levees and floodwalls, floodways, channel improvement and stabilization measures, and tributary basin improvements that direct floodwaters through the Mississippi River Valley to the Gulf of Mexico¹. (See 1928 Flood Control Act, Pub. L. No. 70-391, 45 Stat. 534; 33 U.S.C. §702a.) The MR&T Project was set forth in the Chief of Engineers Report to Congress, House Document 90, 70th Congress, 1st Session (also known as the “Jadwin” report). The MRL feature was also authorized by the Flood Control Act of 1928, 33 U.S.C. §§ 702c, as amended.

¹ Hereinafter, where reference is made to the Congressionally authorized Project, the use of “Gulf of Mexico” is cited per language of the statute authorizing the project. For any non-statutory references to the “Gulf of Mexico”, in compliance with E.O. 14172 “Restoring Names That Honor American Greatness”, “Gulf of America” is cited as the official geographical title throughout the document.

2 ALTERNATIVES

Two alternatives were considered: No Action (Alternative 1), and Berm Construction and Seepage Control (Alternative 2).

2.1 Alternative 1- No Action – Future without Project Condition

Under the No-Action alternative, the MVK would not construct the proposed action. In this scenario, the current seepage concerns would remain unaddressed at the proposed project area and would continue to be vulnerabilities to the MRL system in future flood events. If additional earthen material is not placed on the proposed levee reaches, it is likely that temporary flood risk reduction would be required during high water on the Mississippi River. Temporary flood risk reduction measures could include temporary placement of earthen fill, a cofferdam, Hesco® baskets, sheet pile, or other engineering methods. It is likely that during the periods that temporary flood risk reduction measures are enacted, these portions of the existing Mississippi River levee would be subject to restricted access.

2.2 Alternative 2- Berm Construction and Seepage Control

Alternative 2 proposes to improve and strengthen a segment of the MRL to better handle the project design flood of the Mississippi River by constructing 14 seepage and maintenance berms. The seepage berms would be constructed through the placement of earthen fill in any areas found to be deficient in terms of seepage and/or stability.

All work would occur on the left descending bank of the Mississippi River near river miles 611, 614, 615 and 616 (Figure 2 & Figure 3). Any utilities in the project area would be relocated and no roadways or homes are expected to be impacted by the proposed project.

Construction occurring near river mile 611-L would involve constructing a total of 7 new berms on the landside of the levee. The seepage berms would be constructed using an onsite borrow source with uncompacted clay material. Approximately 238,840 cubic yards of fill would be required for the construction of these seepage berms.

Construction occurring near river mile 615-L would involve constructing 7 new berms and modifying two existing berms on the landside of the levee. Since the first two berms were previously designed with thicker embankment than needed, they would now be modified to become a wider berm by using the existing berm as a source. Approximately 80,800 cubic yards would be excavated from the existing berms and approximately 66,000 cubic yards would be required for the widening of the berms. The remaining seepage berms would be constructed using an onsite borrow source with uncompacted clay material. Approximately 163,800 cubic yards of fill from the borrow pit would be required for the construction of the remaining seepage berms.

The first borrow area is located on the riverside of the levee and is comprised of approximately 80 acres of wetland bottomland hardwood (BLH) forest and scrub/shrub habitat, while the second borrow area is located on the landside of the levee and comprised of approximately 30 acres of agricultural land.



Figure 2: Proposed project features near Mississippi River Mile 611.



Figure 3: Proposed project features near Mississippi River Mile 615.

3 AFFECTED ENVIRONMENT

3.1 General Description

The 600 Series is located approximately 25 miles southwest of Clarksdale, Mississippi, in Bolivar County, Mississippi (Figure 1). The project area falls within the Mississippi River alluvial plain. Historically, this area was comprised of BLH forest. However, over the past 150-200 years, the alluvial valley and floodplain have been altered. Forests have been cleared and drained for agricultural, municipal, residential, and industrial purposes with the bulk of the land being used for agricultural production. Areas on the riverside of the levee are largely forested and subjected to annual flooding. The primary use of this area is for recreational hunting.

The proposed project area lays on the protected and unprotected sides of the Mississippi River mainline levees. Within the project area, habitat types include BLH, agricultural row crops, tree plantations, and existing levee. Area soils are alluvial and generally level. There is little to no topographic relief in the project area. In the immediate vicinity to the existing levee, in areas unaltered by modern agricultural production, flora is dominated by deciduous hardwood trees, including species of oak (*Quercus sp.*), elm (*Ulmus sp.*), green ash (*Fraxinus pennsylvanica*), cottonwood (*Populus deltoides*), and sugarberry (*Celtis laevigata*). The rights-of-way (ROW) requirements and impacts for the combined 600 Series are depicted in Table 1.

Table 1: 600 Series right-of-way requirements (green font notes reduced actual impacts when compared to planned impacts and red font notes increased actual impacts compared to planned impacts).

Ecosystem	Land Use	SEIS I & SEIS II vs. Actual Acreage Impacts		
		Planned	Actual	Difference
Non-Wetland	Cropland	192	83	109
	Water	0	0	0
	Scrub Shrub	0	0	0
	Forest/ BLH	82	14	68
Wetland	Cropland	2	19	-17
	Water	0	8	-8
	Scrub Shrub	0	0	0
	Forest/ BLH	8	58	-50

3.2 Climate

The climate in the area is characterized by humid subtropical conditions with temperate winters and long, hot summers and is wet and partly cloudy year-round. Over the course of the year, the temperature typically varies from 35°F to 91° F and is rarely below 22°F or above 98°F. The precipitation in the project area averages 53.48 inches annually, with the wettest month being May and the driest month being September.

The National Oceanic and Atmospheric Administration (NOAA) Historical Hurricane Tracks tool was used to analyze historical storm data in the project area. The tracking tool showed that a total of 26 hurricanes, tropical storms, tropical depressions, or extratropical events have passed within 50 miles of the project area since 1842. All of these storms were either tropical storms or tropical depressions. No hurricanes have occurred in the project area.

3.3 Geology

The project area occurs in the Mississippi River alluvial plain. Soils in the project area are mostly comprised of borrow pit and levee soils from the original construction of the levee system. Other soils in the area include Bosket and Dubbs very fine sandy loams, Dowling clay and soils, Commerce silt loam, and Dundee silty clay loam. These soils range from being very poorly drained to well drained and having moderately low to high permeability. Soils in the project area are on nearly level to gently sloping natural levee with slopes ranging from 0 to 3 percent.

3.4 Relevant Resources

This section contains a description of relevant resources that could be impacted by the project. The important resources described in this section are those recognized by laws, executive orders, regulations, and other standards of national, state, or regional agencies and organizations; technical or scientific agencies, groups, or individuals; and the general public. Table 2 provides summary information of the institutional, technical, and public importance of these resources.

The following resources have also been considered and determined not be affected by any alternative under consideration: Navigation; Public Use of Lands; Unique or Rare Wildlife Habitat; Indian Trust Resources; Soundscapes/Noise; Recreation; and Aesthetics.

Table 2: Relevant Resources

Resource	Institutionally Important	Technically Important	Publicly Important
Wetlands	Clean Water Act of 1977, as amended; Executive Order 11990 of 1977, Protection of Wetlands; Coastal Zone Management Act of 1972, as amended; and the Estuary Protection Act of 1968., EO 11988, and Fish and Wildlife Coordination Act.	Wetlands provide necessary habitat for various species of plants, fish, and wildlife; they serve as ground water recharge areas; they provide storage areas for storm and flood waters; they serve as natural water filtration areas; they provide protection from wave action, erosion, and storm damage; and they provide various consumptive and non-consumptive recreational opportunities.	The high value the public places on the functions and values that wetlands provide. Environmental organizations and the public support the preservation of marshes.
Aquatic Resources/ Fisheries	Fish and Wildlife Coordination Act of 1958, as amended; Clean Water Act of 1977, as amended; Coastal Zone Management Act of 1972, as amended; and the Estuary Protection Act of 1968.	Aquatic resources/Fisheries are a critical element of many valuable freshwater and marine habitats; they are an indicator of the health of the various freshwater and marine habitats; and many species are important commercial resources.	The high priority that the public places on their esthetic, recreational, and commercial value.
Wildlife	Fish and Wildlife Coordination Act of 1958, as amended and the Migratory Bird Treaty Act of 1918	Wildlife is a critical element of many valuable aquatic and terrestrial habitats; they are an indicator of the health of various aquatic and terrestrial habitats; and many species are important commercial resources.	The high priority that the public places on the esthetic, recreational, and commercial value of wildlife.
Terrestrial Resources	The Food Security Act of 1985, as amended; the Farmland Protection Policy Act of 1981; the Fish and Wildlife Coordination act of 1958, as amended.	The habitat provided for both open and forest-dwelling wildlife, and the provision or potential provision of forest products and human and livestock food products.	The present economic value or potential for future economic value.
Threatened and Endangered Species	The Endangered Species Act of 1973, as amended; the Marine Mammal Protection Act of 1972; and the Bald Eagle Protection Act of 1940.	USACE, USFWS, NMFS, NRCS, EPA, LDWF, and LDNR cooperate to protect these species. The status of such species provides an indication of the overall health of an ecosystem.	The public supports the preservation of rare or declining species and their habitats.

Resource	Institutionally Important	Technically Important	Publicly Important
Cultural Resources	National Historic Preservation Act of 1966, as amended; the Native American Graves Protection and Repatriation Act of 1990; and the Archeological Resources Protection Act of 1979	State and Federal agencies document and protect sites. Their association or linkage to past events, to historically important persons, and to design and construction values; and for their ability to yield important information about prehistory and history.	Preservation groups and private individuals support protection and enhancement of historical resources.
Air Quality	Clean Air Act of 1963.	State and Federal agencies recognize the status of ambient air quality in relation to the NAAQS.	Virtually all citizens express a desire for clean air.
Water Quality	Clean Water Act of 1977, Fish and Wildlife Coordination Act, Coastal Zone Mgt Act of 1972.	USACE, USFWS, NMFS, NRCS, EPA, and State DNR and wildlife/fishery offices recognize value of fisheries and good water quality and the national and state standards established to assess water quality.	Environmental organizations and the public support the preservation of water quality and fishery resources and the desire for clean drinking water.

4 EXISTING CONDITIONS

This section describes the relevant existing biological, physical, economic, and social conditions in the proposed project areas.

4.1 Wetlands

The upland and wetland bottomland hardwood forest habitat that has potential to be affected by the proposed actions consists of a mixture of canopy species such as oaks (*Quercus spp.*), green ash (*Fraxinus pennsylvanica*), sugarberry (*Celtis laevigata*), American elm (*Ulmus americana*), water hickory (*Carya aquatica*), and eastern cottonwood (*Populus deltoids*). Other species typically present are sub-canopy species such as deciduous holly (*Ilex decidua*), and vines and herbaceous species, grapes (*Vitis spp.*), greenbriers (*Smilax spp.*), southern dewberry (*Rubus trivialis*), switchgrass (*Panicum virgatum*), and smartweed (*Polygonum pensylvanicum*) in the understory.

The construction areas for the 600 Series would impact approximately 77 acres of wetlands, which are comprised of a mixture of bottomland hardwood forest and agricultural wetlands but excludes open water values (Table 1).

4.2 Aquatic Resources/ Fisheries

Aquatic habitats present within the proposed project area include forested/non-forested wetlands. The Mississippi River is adjacent to but not located within the project area and is not likely to be impacted by the proposed actions. Wetlands present within the project area are discussed in the previous section.

4.3 Wildlife

Wildlife habitat resources in typical MRL project areas consist of wetlands, forested areas, agricultural fields, and scrub/shrub areas. Species commonly found within these forested areas are those typical for the southern United States and includes white-tailed deer (*Odocoileus virginianus*), gray and fox squirrels (*Sciuridae spp.*), rabbits (*Sylvilagus spp.*), raccoons (*Procyon lotor*), opossums (*Didelphis virginiana*), rats (*Rattus spp.*) and mice (*Mus spp.*). Various species of birds including the Northern Bobwhite, wild turkeys, owls, and woodpeckers may also occur in the forested project areas.

While agricultural land is generally inhabited by fewer species than the forested areas, it still provides important edge habitat and foraging areas for various species including deer, mice, rabbits, ducks, raccoons, coyotes (*Canis latrans*), snakes, and opossums.

Species that could occur in the project area that use the wetlands as habitat include waterfowl, herons, egrets, wood ducks, muskrats (*Ondatra zibethicus*), invasive nutria (*Myocastor coypus*), swamp rabbits (*Sylvilagus aquaticus*), minks (*Neogale vison*), river otters (*Lontra canadensis*), and beavers (*Castor canadensis*). Additionally, multiple species of reptiles and amphibians including the American Box Turtle (*Terrapene carolina*), Ring-necked snake (*Diadophis punctatus*), Watersnakes (*Nerodia spp.*), Timber Rattlesnakes (*Crotalus horridus*), American toads (*Anaxyrus americanus*), spring peepers (*Pseudacris crucifer*), green frogs (*Lithobates clamitans*), and Bullfrogs (*Lithobates catesbeianus*), use the wetlands and edges of ponds and the river for foraging, reproduction, and shelter.

No individual species of significant commercial value occur within the project area. Game and rough-fish species are abundant in the lakes and rivers near the project area.

The Habitat Evaluation Procedures (HEP), developed by the U.S. Fish and Wildlife Service (USFWS), were used to evaluate impacts to wildlife resources for MRL projects. The evaluation species that could be present in the project site and their Habitat Suitability Index (HSI) values are depicted in Table 3.

Table 3: Species that could be present in the project area and their associated habitat suitability index values.

Species	HSI Value
Wood Duck	0.40
Mink	0.74
Pileated Woodpecker	0.28
Carolina Chickadee	0.64
Fox Squirrel	0.52
Barred Owl	0.54

HSI is a scoring model used to evaluate water management operations on plant and animal habitats. The model analyzes a species habitat with the new project relative to their baseline conditions. The scores range from 0 to 1, with 0 denoting undesirable impacts and 1 indicating more desirable impacts. Habitat units (HU) reported in this EA are calculated by $HSI \times \text{acres} = \text{HUs}$. The HUs are then annualized over the life of the project (approximately 100 years) and become average annual habitat units (AAHU).

4.4 Terrestrial Resources

Terrestrial habitat types within the project area include non-wetland cropland, wetland cropland, wetland BLH, non-wetland BLH, and non-wetland tree plantations. Agricultural lands provide limited habitat for few species. Dominant species of the riverfront BLH communities include cottonwood (*Populus deltoides*), sycamore (*Platanus occidentalis*), and black willow (*Salix nigra*), pecan (*Carya* spp.), green ash (*Fraxinus pennsylvanica*), sugarberry (*Celtis laevigata*), hackberry (*Celtis occidentalis*), oaks (*Quercus* spp.), and elm (*Ulmus* spp.). Acreage for each terrestrial habitat type can be found in Table 4.

Table 4: Terrestrial Resources

Terrestrial Habitat Type	Wetland (Acres)	Non-wetland (Acres)	Total Impacts (Acres)
Forest, Bottomland Hardwoods	58	14	72
Scrub/Shrub	0	0	0
Agricultural, Row Crop	19	83	102
Pasture/Old Field	0	0	0
Tree Plantation	0	10	10

4.5 Threatened and Endangered Species

According to results obtained on May 19, 2025 from the USFWS Information, Planning, and Conservation (IPaC) tool there are a total of 6 threatened, endangered, or candidate species listed in Mississippi that could inhabit the immediate project area (Attachment 1). The federally listed species that could occur in the project area are as follows:

Tricolored Bat (<i>Perimyotis septentrionalis</i>)	Proposed Endangered
Alligator Snapping Turtle (<i>Macrochelys temminckii</i>)	Proposed Threatened
Pallid Sturgeon (<i>Scaphirhynchus albus</i>)	Endangered
Fat Pocketbook (<i>Potamilus capax</i>)	Endangered
Monarch Butterfly (<i>Danaus plexippus</i>)	Proposed Threatened
Pondberry (<i>Lindera melissifolia</i>)	Endangered

4.5.1 *Tricolored Bat*

Legal Status:

The tricolored bat is federally listed as “Proposed Endangered” and additional information regarding its legal status can be found on the [ECOS Species Profile](#).

Life History Information:

The tricolored bat is a small insectivorous bat that is distinguished by its unique tricolored fur and often appears yellowish to nearly orange. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico, and Central America. During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. Tricolored bats mate during spring, fall, and sometimes in the winter. Maternity colonies begin forming in mid-April and females bear 1 to 2 pups by late May to mid-July. Tricolored bats face extinction due primarily to the range wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent. White-nose syndrome has caused estimated declines of more than 90 percent in affected tricolored bat colonies across the majority of the species range.

4.5.2 *Alligator Snapping Turtle*

Legal Status:

The alligator snapping turtle is federally listed as “Proposed Threatened” and additional information regarding its legal status can be found on the [ECOS species profile](#).

Life History Information:

The alligator snapping turtle is proposed to be listed as endangered and is one of the largest freshwater turtles in the world, with adults sometimes exceeding two feet in shell length and a weight that can reach nearly 250 pounds. Its size and appearance give this creature a prehistoric likeness. The back of the shell is distinctly jagged, and the top of the shell (carapace) has three rows of "spikes" or knobs running lengthwise along entire length of the shell. These turtles inhabit large rivers, sloughs, and oxbow lakes where they spend almost their entire lives in water, normally venturing onto land only to lay eggs. While beneath the water's surface, these turtles are able to use their unique worm-like appendage located on the bottom of their mouth to lure in potential prey.

4.5.3 Pallid Sturgeon

Legal Status:

The pallid sturgeon is federally listed as "Endangered" and additional information regarding its legal status can be found on the [ECOS species profile](#).

Life History Information:

The pallid sturgeon is an endangered species of ray-finned fish, endemic to the waters of the Missouri and lower Mississippi river basins of the United States. It may have even reached the St. Croix River before colonization. Named for its pale coloration, it is closely related to the relatively common shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), but is much larger, averaging between 30 and 60 inches (76 and 152 cm) in length and 85 pounds (39 kg) in weight at maturity.[3][4] This species takes 15 years to mature and spawns infrequently, but can live up to a century.

4.5.4 Fat Pocketbook

Legal Status:

The fat pocketbook is federally listed as "Endangered" and additional information regarding its legal status can be found on the [ECOS species profile](#).

Life History Information:

The fat pocketbook mussel is an endangered mussel species which prefers sand, mud and fine gravel bottoms of large rivers. Reproduction requires a stable, undisturbed habitat and a sufficient population of fish hosts to complete the mussel's larval development; freshwater drum is a primary host for larva. Since the late 1990s USFWS and the USACE have collected adult fat pocketbook mussels at multiple sites between river mile 346 (south of Natchez, Mississippi) and river mile 670 (north of Helena, Arkansas), and reproduction has been documented at some sites. The Fat Pocketbook appears to be expanding its range because of the current practice of notching rock dikes along the river to restore more consistent water flows to side channels.

4.5.5 Monarch Butterfly

Legal Status:

The Monarch Butterfly is federally listed as “Proposed Threatened” and additional information regarding its legal status can be found on the [ECOS species profile](#).

Life History Information:

Adult monarch butterflies are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant and larvae emerge after two to five days. The main monarch host plant is Common Milkweed (*Asclepias syriaca*), but other common hosts include Swamp Milkweed (*Asclepias incarnata*), Butterflyweed (*Asclepias tuberosa*), Whorled Milkweed (*Asclepias verticillata*), and Poke Milkweed (*Asclepias exaltata*). Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration, and live for an extended period of time. In the fall, in both eastern and western North America, monarchs begin migrating to their respective overwintering sites.

4.5.6 Pondberry

Legal Status:

The pondberry plant is federally listed as “Endangered” and additional information regarding its legal status can be found on the [ECOS species profile](#).

Life History Information:

Pondberry is a deciduous shrub, growing from less than 1 ft. (30 cm) to, infrequently, more than 6 ft. (2 m) in height. Leaves are aromatic, alternate, elliptical, somewhat thin, and membranaceous, with entire margins. Shrubs usually are sparsely branched, with fewer branches on smaller plants. Plants are rhizomatous, frequently propagating by vegetative sprouts and forming clonal colonies. Plants are dioecious (each plant is either a male or a female) and produce clusters of small, yellow flowers in early spring prior to leaf development from buds on branches produced from the growth during the preceding year. Fruits are drupes that green when immature and ripen to red by fall.

4.6 Cultural Resources

A background search and literature review were conducted in July 2024. This included a review of National Register of Historic Places (NRHP) situated within 1.6 km (1.0 mi) of the proposed project’s Area-of-Potential Effect (APE). This research involved an examination of available archaeological site forms, cultural resources survey reports, and historic maps currently on file with the Mississippi Department of Archives and History (MDAH). In addition, a search of the online MDAH Historic Resources Inventory (HRI) and NRHP databases, as well as Bureau of Land Management’s General Land Office (GLO) records, was completed for those properties listed in Bolivar County, Mississippi. Cemeteries situated within 1.6 km (1.0 mi) of the project APE were identified by reviewing USGS quadrangle maps for marked cemeteries, as well as by utilizing

online sources such as Find-a-grave. The literature review revealed no previously recorded archaeological sites nor cultural resources surveys within the APE, though there are two previously recorded structures (Round Lake [Friendship] School [Colored] [No. 011-DUN-4006] and Knowlton School [Colored] [No.011-GNN-4503-X]), three previously recorded archaeological sites (22Bo505, 22Bo509, and 22Bo962 – all mound groupings), and five previous investigations (one borrow pit in 1985, two Farmers Home Administration tracts in 1990 and 1991, and two Natural Resources Conservation [NRCS] land leveling tracts in 2013 and 2016) within a 2 km (1.24-mile) search radius.

Commonwealth Heritage Group, LLC d/b/a Chronicle Heritage (Chronicle) conducted a cultural resources investigation of the proposed APE on behalf of USACE, which included visual examination, pedestrian survey, and systematic shovel testing efforts, resulting in the identification of five newly recorded late 19th/early 20th-century historic tenant archaeological sites (Sites 22Bo1106-22Bo1110). These sites all produced historic cultural materials including but not limited to glass, historic ceramics, and metal. No intact deposits or features were identified during these investigations. According to survey results, Sites 22Bo1106-22Bo1110 are recommended as ineligible for listing on the NRHP. Furthermore, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. As such, the proposed undertaking is not anticipated to alter the existing views from identified historic properties. No further investigations are recommended.

4.7 Agricultural Lands

The Natural Resources Conservation Service (NRCS) soil surveys were utilized to view the extent of prime farmland in the immediate project area. There is approximately 21.8 acres in the immediate project area classified as either Prime Farmland or can be classified as Prime Farmland when specific conditions are present. A completed Farmland Conversion Impact Rating Form (CPA-106) was returned from the NRCS on June 20, 2025. Analysis confirmed that the overall index score was less than 160 (Attachment 2).

4.8 Air Quality

The Clean Air Act of 1963 requires the Environmental Protection Agency (EPA) to designate National Ambient Air Quality Standards (NAAQS) and secondary standards of public welfare to protect ecosystems, including plants and animals, from harm, as well as protecting visibility and damage to crops, vegetation, and buildings. Ambient air quality is determined by the type and concentration of pollutants emitted into the atmosphere, the size and topography of the air basin in question, and the prevailing meteorological conditions in that air basin. The EPA has set national ambient NAAQS for six principal air pollutants: Ground-Level Ozone (O3), Particulate Matter (PM10 = less than 10 microns; and PM2.5 = less than 2.5 microns in diameter), Nitrogen Dioxide (NO2), Sulfur Dioxide (SO2), Carbon Monoxide (CO), and Lead (Pb).

The EPA Air Now data mapping website (<https://gispub.epa.gov/airnow/>) Air Quality Index (AQI) tool was used to determine whether the project area is in compliance with the NAAQS. The AQI provides reporting for public information, with collected background data and spatial considerations. Parameters on the EPA Air Now website include an hourly O₃, PM, NO₂, SO₂, and CO data. The AQI composite score of O₃ and PM_{2.5} in the project area was found to be good (0-50) with a score of 49 (USEPA AirNow data acquired May 2025).

4.9 Water Quality

The Clean Water Act (CWA) is a piece of environmental legislation in the United States, enacted in 1972 to address the widespread degradation of the nation's water bodies. Its primary aim is to restore and maintain the integrity of the nation's waters by regulating pollutant discharges, setting water quality standards, and ensuring the protection of aquatic ecosystems. The CWA empowers the Environmental Protection Agency (EPA) and state agencies to enforce stringent controls over industrial, municipal, and agricultural waste, thereby safeguarding public health and preserving natural habitats.

Water Quality Standards (WQS) are the foundation of the CWA and water pollution control programs are designed to protect the beneficial uses of the water resources. Each state has the responsibility to set water quality standards that protect these beneficial uses, also called “designated uses.” The Mississippi Department of Environmental Quality (MDEQ) is responsible for setting water quality standards to protect designated uses and for issuing state environmental permits.

The proposed project footprint is located within the Mississippi River Basin. Aquatic resources within the proposed project footprint are directly related to storm water and surface water as a result of Mississippi River high water events from prolonged and significant rain events. The Mississippi River is not within the foreseeable impact area for the 600 series and is considered in compliance with applicable water quality standards.

Section 303(d) of the CWA requires states to identify water bodies that are considered impaired due to not meeting one or more applicable water quality standards. According to the EPA's Waterway website, there are no impaired bodies of water within the project area (Figure 4). There are no scenic and wild rivers within the project area.

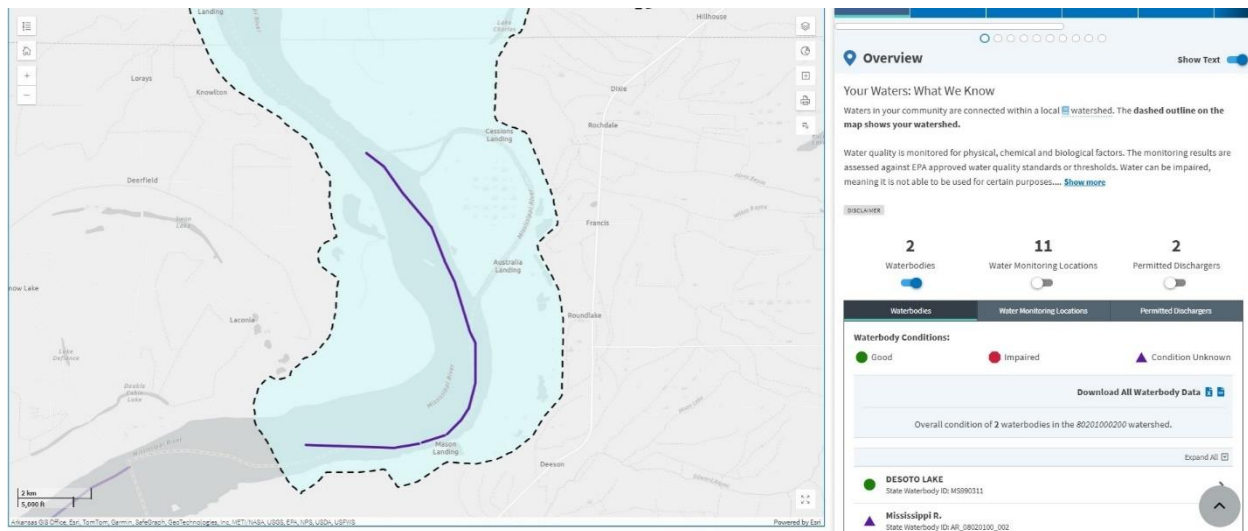


Figure 4: Impaired bodies of water within project area.

4.10 Socioeconomic Considerations

This section summarizes the socioeconomic characteristics of the geographical area surrounding the project. It is USACE's directive to identify and address any adverse human health or environmental effects caused by federal actions that have a disproportionately high effect on communities of color and/or people/households with incomes below the federal poverty line. United States Census data was used to evaluate socioeconomic conditions in Bolivar county Mississippi. The socioeconomic demographics for the project area are in Table 5.

Table 5: Socioeconomic Census Data for Bolivar County Mississippi

	Bolivar County	Mississippi
Total Population:	30,985	2,943,045
White	10,008	1,636,333
Black or African American	19,737	1,112,471
Hispanic or Latino	867	114,778
American Indian and Alaska Native	61	20,601
Asian	278	35,316
Native Hawaiian and Other Pacific Islander	31	2,943

	Bolivar County	Mississippi
Two or more races:	278	44,145
People Experiencing Poverty	11,991	529,748

5 ENVIRONMENTAL CONSEQUENCES

In evaluating the significance of a project's effects, NEPA requires a consideration of both context and intensity. Context means that the significance must be analyzed in several contexts, such as the human environment, affected region, affected interests, and the local setting. The intensity of a potential impact relates to the impact's severity and includes consideration of beneficial and adverse effects, the level of controversy associated with a project's impacts on human health, whether the action establishes a precedent for future actions with significant effects, the level of uncertainty about project impacts, and whether the action threatens to violate federal, state, or local laws established for the protection of the human and natural environment.

USACE uses quantitative and qualitative analyses, as appropriate, to determine the level of a potential impact caused by the proposed alternatives. Based on the results of the analyses, this EA identifies whether a particular potential impact would have a significant effect on a resource and whether or not the impact would be adverse or beneficial.

5.1 Wetlands

Future Conditions with No Action

Without implementation, no direct, permanent, or temporary effects to wetlands would occur within the construction ROW for the 600 Series project. In the event of levee failure, due to seepage or overtopping, the impacts to wetlands could be significant.

Future Conditions with the Proposed Action

The proposed construction areas for the 600 Series would impact approximately 77 acres of wetland habitats (398 functional capacity units (FCU)), which are comprised of a mixture of bottomland hardwood forest, and agricultural wetlands (Table 1). The compensatory mitigation requirement for the impacts to wetlands would require 80 acres (344 FCU) more than originally planned for in the 1998 SEIS I.

Cumulatively, total wetland impacts to date for the Mississippi River and Levee Program construction activities within the MVK are more than originally planned, and currently require approximately 154 additional acres of mitigation land than anticipated in the SEIS I and SEIS II (Table 6). Compensatory mitigation for the unavoidable impacts to wetland resources that would result from the implementation of the proposed action is described in more detail in Section 5.12 below.

5.2 Aquatic Resources/ Fisheries

Future Conditions with No Action

Without implementation, no impacts to aquatic resources would occur as long as the levee holds. In the event of levee failure due to seepage or overtopping, there is a high probability of impacts to aquatic resources.

Future Conditions with the Proposed Action

In the 2013 article “Fish Assemblages in Borrow-Pit Lakes of the Lower Mississippi River,” researchers at USACE determined that riverside borrow pits provide habitat for fish species that is similar to naturally occurring water bodies such as oxbow lakes (Miranda, et al., 2013). Studies have shown more fish species in borrow pits than in natural landside oxbow lakes, and a comparable amount to the number of species found in natural riverside oxbow lakes. This study verifies the information presented in the SEIS I and SEIS II regarding fish assemblages in borrow pits. For the 600 Series, implementation of Alternative 2 would result in positive impacts to aquatic resources, as the construction in the area would create a riverside borrow pit, thereby providing approximately 80 acres of additional aquatic habitat. The aquatic habitat created by the borrow pit has not been counted toward any mitigation for the project but is a noteworthy ecological benefit.

5.3 Wildlife

Future Conditions with No Action

Without implementation, no direct impacts to wildlife resources would occur within the project area. In the event of levee failure, wildlife would be displaced due to flooding.

Future Conditions with the Proposed Action

With implementation of Alternative 2 for the 600 Series, approximately 184 acres of wildlife habitat including BLH wetlands, forests, wet and dry agricultural fields, and tree plantations would be impacted due to project construction. This includes construction of the seepage berms and borrow areas but excludes open water values. Additionally, with implementation of Alternative 2, wildlife movement and activity patterns would be temporarily influenced during project construction, due to the general traffic and noise generated by equipment operation. This temporary impact is not significant, as many species would become tolerant to the

disturbance. Any species temporarily dispersed by the activity should return to the vicinity once construction is complete.

5.4 Terrestrial Resources

Future Conditions with No Action

Without implementation, no impacts to terrestrial resources would occur as long as the levee holds. In the event of levee failure, due to seepage or overtopping, the impacts to terrestrial resources could be significant.

Future Conditions with the Proposed Action

With implementation of the proposed action, approximately 184 acres of terrestrial wetland and non-wetland BLH, tree plantations, and agricultural habitats would be permanently impacted due to project construction. This includes construction of the seepage berms and borrow areas but excludes open water values. As agricultural lands provide limited benefits to wildlife species, this equates to a loss of approximately 216 Average Annual Habitat Units (AAHU), about 6% more of the AAHU originally calculated for this MRL Item. The compensatory mitigation requirement for the impacts to terrestrial resources would require 4.5 acres (13.3 AAHU) less than what was originally planned for in the 1998 SEIS I and SEIS II.

5.5 Threatened or Endangered Species

Future Conditions with No Action

Without implementation of the proposed action, no direct or indirect impacts to threatened or endangered species or their critical habitat would occur.

Future Conditions with the Proposed Action

With implementation of the proposed action, there would be little reason to expect any adverse effects to threatened, endangered, and candidate species. USACE completed Section 7 consultation through USFWS's IPaC website (Attachment 1). A determination was made that the project would have no effect on the fat pocket, pallid sturgeon, pondberry, and monarch butterfly due to a lack of suitable habitat within the construction area and May Affect but is Not Likely to Adversely Affect (NLAA) the alligator snapping turtle.

A USFWS range wide bat determination key (Attachment 3) was completed as part of the IPaC process and determined that the proposed actions May Affect the tricolored bat. After further coordination with USFWS and implementing the recommended conservation measures (Section 5.5.1), USFWS concurred with USACE's determinations and coordination concluded (Attachment 4). With implementation of the conservation measures it was determined the proposed actions would NLAA the tricolored bat.

5.5.1 Conservation Measures

- Tree clearing would NOT occur during bat pup season which runs from May 15th – July 15th.
- On-bank construction efforts in the riverside borrow area (namely for any ponds on the property) would be concentrated to mid-September through mid-April to reduce the risk of impacts to the alligator snapping turtle.
- Vegetation removal would be minimized where possible to avoid impacts to terrestrial and aquatic organisms.

5.6 Cultural Resources

Future Conditions with No Action

Without implementation of the proposed action, there would be no direct or indirect impacts to cultural resources. The conditions within the existing environment would continue as they have in the past and would be dictated by the natural land use patterns and processes that have dominated the area in the past.

Future Conditions with the Proposed Action

Based on the information presented here, USACE MVK has determined that there are five archaeological sites (22Bo1106-22Bo1110), as defined in 36 CFR 800.16 (I) within the APE. None of these resources are considered eligible for listing to the NRHP. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions.

In accordance with the National Historic Preservation Act (NHPA), USACE contacted the Alabama Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Caddo Nation of Oklahoma, Chickasaw Nation, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians (Louisiana), Mississippi Band of Choctaw Indians, Muscogee (Creek) Nation, Quapaw Nation, Tunica-Biloxi Tribe of Louisiana, and the MS SHPO regarding this undertaking on March 11, 2025 and provided these parties the opportunity to consult, should they wish to do so. Concurrence was received from the Quapaw Nation on March 24 and the MS SHPO on April 9, 2025 (Attachment 5).

5.7 Agricultural Lands

Future Conditions with No Action

Without implementation, no direct impacts to prime and unique farmland would occur within the project area.

Future Conditions with the Proposed Action

As the project would potentially result in approximately 29.7 acres of agricultural land (21.8 acres of Prime and Unique Farmland) being converted to another use, in accordance with the Farmland Protection Policy Act (FPPA), 7 U.S.C. 4202(a), Form CPA-106, the Farmland Conversion Impact Rating Form, was completed and submitted to the NRCS on May 21, 2025. Concurrence from the NRCS was received on 20 June 2025 (Attachment 2). The overall Total Point score for the borrow site on the CPA-106 was lower than 160, and therefore, according to §658.5(c)(2), sites receiving a total score of less than 160 need not be given further consideration for protection and no additional sites need to be evaluated.

5.8 Air Quality

Future Conditions with No Action

Without implementation, no impacts to air quality would occur.

Future Conditions with the Proposed Action

Construction of Alternative 2 would result minor and temporary air quality impacts during construction due to dust-related sources and the use of internal combustion engines and heavy machinery that produce emissions. Effects to air quality from construction would be localized, minor, and short term, limited to the hours and site of construction. These impacts would not be expected to violate any state or federal standards or cause the region to be classified as being in nonattainment. Furthermore, the environmental conditions of the region favor rapid dispersal of the pollutants and thus would not allow concentrations to accumulate.

5.9 Water Quality

Future Conditions with No Action

Without implementation, no indirect discharges originating from within the project area would result, as long as the levee holds. In the event of levee failure, due to seepage or overtopping, the impacts to water quality could be significant.

Future Conditions with the Proposed Action

The project would have only temporary minor impacts on the water quality of adjacent areas. Turbidity and suspended solids would be increased to minor degrees as a result of runoff from cleared areas. Each MRL project item includes a stormwater pollution prevention plan (SWPPP) to reduce these type impacts. SWPPP for the proposed construction item would be submitted to appropriate state agencies for approval prior to construction. Any temporary impacts to water quality would be anticipated to return to normal shortly after construction ceases.

5.10 Socioeconomic Considerations

Future Conditions with No Action

Without implementation of the proposed plan, the quality of life for communities of color and people experiencing poverty in the area would likely remain in their current states. No impacts to these communities would be expected.

Future Conditions with the Proposed Action

Socioeconomic concerns were considered during the project's analysis throughout this EA. Due to its relatively small footprint and lack of adverse environmental impacts, it was determined that the construction of the seepage berms and borrow areas are unlikely to have any adverse effects on communities of color or people experiencing poverty in the surrounding area. The project is not projected to raise any socioeconomic concerns involving adverse impacts.

5.11 Hazardous, Toxic, and Radioactive Waste

USACE is obligated under Engineer Regulation 1165-2-132 to assume responsibility for the reasonable identification and evaluation of all Hazardous, Toxic, and Radioactive Waste (HTRW) contamination within the vicinity of the proposed action. ER 1165-2132 identifies our HTRW policy to avoid the use of project funds for HTRW removal and remediation activities. Costs for necessary special handling or remediation of wastes (e.g., Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq. (RCRA) regulated), pollutants and other contaminants, which are not regulated under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601 et seq. (CERCLA), will be treated as project costs if the requirement is the result of a validly promulgated federal, state, or local regulation.

A review of the EPA's EnviroMapper Query System was conducted on July 2, 2025, to locate any environmental records within a one-mile buffer of the project area. No records were located within a one-mile radius of the project area.

A site reconnaissance was conducted on the subject property on June 12, 2025. Farming equipment was discovered buried in one location along the ROW. This included some concrete blocks and metal scrap. Old fencing material and burn piles were found partially buried in multiple areas within the ROW. No odors or distressed vegetation were noted around the subject property. Observations made during the site reconnaissance will not have a negative HTRW risk on the project.

Due to the results of the environmental records search and the subject property's location on area maintained by the local levee board, it is believed that no HTRW concerns will be encountered on this project. All waste material within the ROW should be removed according to local, state, and federal standards.

5.12 Section 404(b)(1) Considerations

As required by Section 404(b)(1) of the Clean Water Act, the short- and long-term impacts associated with the discharge of dredged and fill materials into the waters of the United States were assessed for the MRL Project, as set forth in Appendix 3 of the SEIS I. The borrow areas for Alternative 2 were picked in accordance with the placement prioritization criteria in the SEIS I. The assessment concluded that the avoid, minimize, and mitigate components of Plan 4 of the SEIS I, the ultimately selected plan, would produce a net gain of 4,070 acres of bottomland hardwoods and 6,727 acres of aquatic habitat over the life of the project. Revised mitigation requirements for wetland impacts are currently 154 acres more than what was originally calculated for items that have been constructed to date. However, the MRL program has a substantial amount of mitigation credits remaining and this deficit is likely to offset as more projects are constructed.

5.13 Mitigation Plan and Environmental Design Procedures

USACE evaluated alternatives to avoid and minimize impacts to terrestrial, wetlands, and aquatic resources for the proposed action.

Under Alternative 2, approximately 77 acres (398 FCU) of wetlands would be impacted by the proposed project. These impacts would require 81 acres (344 FCU) of additional compensatory mitigation when compared to the proposed action for the 600 Series in the 1998 SEIS I and SEIS II. Cumulatively, total wetland impacts to date for the Mississippi River and Levee Program construction activities within the MVK are more than originally planned, and currently require approximately 154 more acres of mitigation land than anticipated in the SEIS I and SEIS II (Table 6).

Impacts to waterfowl from the proposed project would require mitigation for 12,136 fewer DUD. Currently, DUD impacts for the entire Mississippi River and Levees Program as a whole are below the original estimate. Required mitigation for impacts to waterfowl is 2,163 acres (506,184 DUD) less than the expected amount for construction projects to date (Table 6).

Impacts to terrestrial resources for the proposed project would require 5 acres (13.3 AAHU) less of mitigation land to satisfy compensatory requirements than anticipated in the SEIS I and SEIS II Table 6. To date, MRL projects have exceeded their original estimate of terrestrial impacts by approximately 973 acres (3,730 AAHU). These additional impacts were caused by unforeseen seepage issues that required significantly more borrow material than was originally calculated. However, these additional impacts are fully accounted for under the mitigation plan for the Mississippi River and Levees Program.

The unavoidable impacts resulting from the recommended alternative have been addressed through the mitigation plan for the Mississippi River Levees and Seepage projects resulting in the reforestation of 5,863 acres of frequently flooded agricultural lands across the Memphis, Vicksburg, and New Orleans Districts (5,200 acres within the MVK).

The unavoidable adverse environmental impacts from the proposed construction on MRL projects established the need for the purchase of mitigation lands to compensate. To date, USACE has purchased 5,094 acres of land for construction items within the MVK, which represent over 90 percent of the total 5,200 acres recommended for purchase by the mitigation plan. The mainline levees provide flood protection to extensive areas of private and public property in the Mississippi Alluvial Valley. Table 6 provides a detailed cumulative account of losses/required mitigation for the modified MRL items to date.

A mixture of bottomland hardwood species comprised of 70 percent red oaks (*Quercus pagoda*) is planted on acquired tracts. This successful reestablishment of bottomland hardwoods would benefit significant resources and serve to improve the overall habitat values of lands within the overall MRL watershed. The proposed mitigation activities for Alternative 2 would fully offset unavoidable impacts for terrestrial, wetland, and aquatic resources.

5.14 Cumulative Impacts

Cumulative impacts are generally defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The cumulative impacts of the MR&T projects were discussed in the SEIS I and SEIS II referenced in paragraph 1 of this document. As there has been no change in the human environment within the project area over the past 25 years that would affect the findings in the SEIS I or SEIS II, no additional analysis of reasonably foreseeable cumulative impacts of this project would be necessary beyond the above analyzed differences in impacts between Alternatives 1 and 2.

It was determined in the SEIS II that the cumulative loss of land and resources from this and other projects is not expected have an overall effect on current land use trends. From 1990 to 2010, there has been a slight gradual increase in overall forest cover in the Mississippi Alluvial Valley (MAV) even with on-going projects (Oswalt 2013). This compensatory mitigation in addition to the on-going efforts from other mitigation activities would reduce the cumulative impacts on biological resources, but would not eliminate the impacts, especially the temporal cumulative loss of habitat fragmentation, rearing, resting, and foraging habitats. Although collectively the short-term and permanent cumulative impacts described throughout this document cannot be totally mitigated, the socio-economic benefits to the human environment that reside in the project area outweigh the cumulative adverse impacts.

Table 6: MRL Items: losses and mitigation required to date. Negative numbers denote a decrease in anticipated impacts from the 1998 SEIS I and 2020 SEIS II.

Resource Category	Terrestrial		Wetlands		Waterfowl		Aquatics	
	AAHUs Loss	Acres Require	AAFC U Loss	Acres Required	DUDs Loss	Acres Required	AAHUs Loss	Acres Required
MRL SEIS	5,694	1,930	22,206	5,200	199,440	849	-27,131	N/A
MFRs								
Item 509-L	-74.88	-25.42	-168.54	-39.47	-73,498.61	-312.76	0.00	0.00
Lake Jackson	-22.32	-7.58	-56.76	-13.29	108.56	0.46	-2.92	-0.72
Ben Lomand	-2.06	-0.70	-4.82	-1.13	-68.56	-0.29	0.00	0.00
Greenville	-0.81	-0.28	-1.14	-0.27	0.00	0.00	0.00	0.00
Lake Chicot Pumping Station	-49.50	-16.80	-18.42	-4.31	-4,342.31	-18.48	0.00	0.00
Davis Landing	-4.68	-1.59	-64.08	-15.01	-23,025.65	-97.98	-1.17	-0.29
Item 511-L	-21.06	-7.15	-66.18	-15.50	-1,471.36	-6.26	-110.96	-27.40
EAs								
Item 320-R	0	0	0	0	0	0	0	0
Item 336-R	0	0	0	0	0	0	0	0
Item 340-R	-142.8	-48.47	-279.02	-65.34	-33,971.87	-144.56	61.32	15.14
Item 365-R	-33.57	-11.4	368	86.2	17,783	75.7	34	8.35
Item 366-R	-0.08	-0.03	-98.26	-23.01	-1,440	-6.13	29.2	7.21
Item 367-R	-48.48	-16.46	31.64	7.41	1,291	5.5	-40.88	-10.09
Item 368-R	146.02	49.57	408.77	95.73	-39,013	-166.01	0	0
Item 374-R	-80.53	-27.33	-125.46	-29.38	-2194.01	-9.34	-18.8	-4.64
Item 377-R	20.18	6.85	20.74	4.86	-1714.07	-7.29	-51.68	-12.76
Item 380-R	-15.6	-5.3	-55.53	-13	-2825.42	-12.02	5.84	1.44
Item 385-R	-413.36	-140.31	-998.6	-233.86	-23784.64	-101.06	-2.92	-0.72
Item 388-R	-31.2	-10.59	-371.84	-87.08	-60982.38	-259.5	-14.6	-3.6
Item 393-R	8.24	2.8	-31.96	-7.48	-29561.87	-125.8	37.96	9.37
Item 398-R	121.06	41.09	-180.8	-42.33	-29,780	-126.72	26.46	6.53
Item 401-R	92.35	31.35	48.01	11.24	23941.30	101.88	-28.85	-7.12
Item 407-R	123.02	41.76	314	73.54	-95,932	-408.22	9.69	2.39
Item 409-R	500.72	169.97	888.14	208	54,736	232.92	52.56	12.98
Item 411-R (2018)	-154.11	-52.31	-88.66	-20.76	3,737	15.9	0	0
Item 411-R (2023)	142.24	48.28	349.02	81.74	37,220	158.38	49.64	12.26
Item 414-R	76.65	26.02	87.25	20.43	10,001	42.56	-5.75	-1.42
Item 416-R	306.94	104.19	114.58	26.83	-13281.14	-56.52	0	0

Resource Category	Terrestrial		Wetlands		Waterfowl		Aquatics	
	AAHUs Loss	Acres Require	AAFC U Loss	Acres Required	DUDs Loss	Acres Required	AAHUs Loss	Acres Required
Item 422-R	8.89	3.01	18	4.19	1,550	6.6	-235	-57.95
Item 445-R	1.85	0.63	-5	-1.17	-16334	-69.51	-75	-18.52
Item 450-R	326.5	110.83	-120	-28.1	1081	4.6	1.5	0.37
Item 452 & 458-L	-153.54	-52.12	-172.63	-36.83	11,055.27	47.04	8.76	2.16
Item 456-L	-1.5	-0.51	-132.88	-31.12	2536.88	10.8	0.35	0.09
Item 458-L	31.18	10.58	-220.38	-51.6	-2,289	-9.74	-2.92	-1
Item 460-L	387.24	131.45	588.43	137.81	7,380	31.4	2.92	0.72
Item 461-R	244	83	215	50	20,329	86	-38	-9
Item 462-L	382.34	129.78	806.04	188.77	-48,430	-206.08	0	0
Item 463-L	177.05	60.1	408.93	95.77	5805	24.7	1.46	0.39
Item 465-L	-311.12	-105.6	-551.58	-129.2	-7,830	-33.3	-2.92	-1
Item 465-L	321.62	109.17	710.28	166.34	4685.12	19.94	0	0
Items 466, 464, & 397-R	0.53	0.18	0.24	0.06	114.97	2.48	0	0
Item 474-L	141	48	-599	-140	10,475	45	3	0.8
Item 477-L & 488-R	-171	-58	-1,400	-328	-27,176	-115	-1,561	N/A
Item 485-R	100	34	192	45	-81,985	-349	-300	-74
Item 487-R	3.3	14	87.1	17	-230	-13	-2.5	-1
Item 496-L	0	0	-66.8	-15.6	974	4.14	-178	-44
Item 524-L Avon	0	0	0	0	0	0	0	0
Item 525-L	18.72	6.35	17.45	4.09	1894.07	8.06	0	0
Item 525-R	727.68	247.01	233.03	54.57	-23703.73	-100.87	2.92	0.72
Item 526-L	17.1	5.8	-30.43	-7.13	-41.46	-0.18	0	0
Item 531-R	-3.31	-1.12	-19.1	-4.47	-3314.4	-14.1	0	0
Item 536-R	11.43	3.88	-92.98	-21.77	-32567.29	-138.58	0	0
Item 536-R Leland Chute Berm	-24.65	-8.37	-46.91	-10.99	-446.46	-1.9	0	0
Item 543-L	-4.3	-1.46	-8.21	-1.92	-1373.21	-5.84	0	0
Item 546-R	-101.19	-34.35	16.2	3.79	-47953.91	-204.06	0	0
600 Series (611-L, 614-L, 615-L, 616-L)	-13.3	-4.51	344.03	80.57	12139.05	51.66	23.36	5.77
Item 616-L	-0.87	-0.29	-20.55	-4.81	-6619.23	-28.17	0	0

Resource Category	Terrestrial		Wetlands		Waterfowl		Aquatics	
	AAHUs Loss	Acres Require	AAFC U Loss	Acres Required	DUDs Loss	Acres Required	AAHUs Loss	Acres Required
2020 Norfolk (MVM)	999	3.4	0	0	0	0	0	0
2003 Trotters (MVM)	104.56	35.49	298.9	70	0	0	0	0
2018 Trotters (MVM)	9.76	33.12	0	0	0	0	0	0
2018 Rena Lara (MVM)	0	0	7.61	1.8	0	0	0	0
2021 Sherard	0	0	13.95	3.27	0	0	0	0
Blackhawk I	1.38	0.47	3.1	0.73	44.01	0.019	10.06	2.51
Black Hawk II	57.04	19.36	164.67	38.56	2114.1	9	0	0
Grand Lake	0	0	0	0	0	0	0	0
Leota	0	0	0	0	0	0	0	0
Willow Lake	0	0	0	0	0	0	0	0
Wilson Point	0	0	0	0	0	0	0	0
Current Total	3,729.77	973.44	658.59	154.37	-506,184.99	-2,163.53	-2,312.87	-186.03

6 COORDINATION

Preparation of this EA and associated FONSI have been coordinated with appropriate Congressional, Federal, Tribal, state, and local interests, as well as environmental groups and other interested parties. The following agencies, as well as other interested parties, are receiving copies of this EA and FONSI:

USFWS
EPA
NRCS
Advisory Council on Historic Preservation
Mississippi Department of Wildlife, Fisheries, and Parks
Mississippi Department of Environmental Quality
Mississippi State Historic Preservation

7 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Environmental compliance for the proposed action would be achieved based upon coordination of this EA and FONSI with all appropriate agencies, organizations, and individuals for their review and comments. The FONSI would not be signed until the proposed action achieves environmental compliance with applicable laws and regulations.

8 PREPARED BY

EA #120 and the associated FONSI were prepared by a MVK Biologist, with relevant sections prepared by a MVK Archeologist- Cultural Resources; and MVK Hazardous Materials Expert–HTRW. The address of the preparers is:

U.S. Army Engineer District, Vicksburg
Regional Planning and Environment Division South
ATTN: CEMVN-PDN-UDP
4155 Clay Street
Room 250
Vicksburg, Mississippi 39183-3435

9 REFERENCES

Miranda, L.E., K.J. Killgore, and J.J. Hoover. 2013. Fish Assemblages in Borrow-pit lakes of the Lower Mississippi River. *Transactions of the American Fisheries Society* 142 (3): 596-605.

10 ATTACHMENTS

1. USFWS Species List
2. NRCS Impact Farmland Conversion Form
3. USFWS Bat Determination Key
4. USFWS Concurrence Email
5. Cultural Resources



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



In Reply Refer To:
Project Code: 2025-0098567
Project Name: MRL 600 Series Project

05/19/2025 18:45:59 UTC

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 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 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:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.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/program/migratory-bird-permit/what-we-do>.

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/library/collections/threats-birds>.

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/partner/council-conservation-migratory-birds>.

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 MSFOSection7Consultation@fws.gov.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- 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: 2025-0098567
Project Name: MRL 600 Series Project
Project Type: Levee / Dike - Maintenance/Modification
Project Description: Alternative 2 proposes to improve and strengthen a segment of the MRL to better handle the project design flood of the Mississippi River by constructing 14 seepage and maintenance berms. The seepage berms would be constructed through the placement of earthen fill in any areas found to be deficient in terms of seepage and/or stability.

All work would occur on the left descending bank of the Mississippi River near river miles 611, 614, 615 and 616 (Figures 2 and 3). Any utilities in the project area would be relocated and no roadways or homes are expected to be impacted by the proposed project.

Construction occurring near river mile 611-L would involve constructing a total of 7 new berms on the landside of the levee. The seepage berms will be constructed using an onsite borrow source with uncompacted clay material. Approximately 238,840 cubic yards of fill will be required for the construction of these seepage berms.

Construction occurring near river mile 615-L would involve constructing 7 new berms and modifying 2 existing berms on the landside of the levee. Since the first two berms were previously designed with thicker embankment than needed, they will now be modified to become a wider berm by using the existing berm as a source. Approximately 80,800 cubic yard will be excavated from the existing berms and approximately 66,000 cubic yards will be required for the widening of the berms. The remaining seepage berms will be constructed using an onsite borrow source with uncompacted clay material. Approximately 163,800 cubic yards of fill from the borrow pit will be required for the construction of the remaining seepage berms.

The first borrow area is located on the riverside of the levee and is comprised of approximately 80 acres of wetland bottomland hardwood (BLH) forest and scrub/shrub habitat, while the second borrow area is located on the landside of the levee and comprised of approximately 30 acres of agricultural land.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.0164872,-90.90644173363636,14z>



Counties: Bolivar County, Mississippi

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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
<p>Tricolored Bat <i>Perimyotis subflavus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/10515</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf</p>	<p>Proposed</p> <p>Endangered</p>

REPTILES

NAME	STATUS
<p>Alligator Snapping Turtle <i>Macrochelys temminckii</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/4658</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf</p>	<p>Proposed</p> <p>Threatened</p>

FISHES

NAME	STATUS
<p>Pallid Sturgeon <i>Scaphirhynchus albus</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7162</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf</p>	<p>Endangered</p>

CLAMS

NAME	STATUS
<p>Fat Pocketbook <i>Potamilus capax</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2780</p> <p>General project design guidelines:</p> <p>https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf</p>	<p>Endangered</p>

INSECTS

NAME	STATUS
<p>Monarch Butterfly <i>Danaus plexippus</i></p> <p>There is proposed critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/9743</p> <p>General project design guidelines:</p>	<p>Proposed</p> <p>Threatened</p>

NAME	STATUS
https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf	

FLOWERING PLANTS

NAME	STATUS
Pondberry <i>Lindera melissifolia</i>	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/1279	
General project design guidelines:	
https://ipac.ecosphere.fws.gov/project/LW6A7AOY3BCUXCQ7TNS6JFE3H4/documents/generated/7127.pdf	

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

1. The [Bald and Golden Eagle Protection Act](#) of 1940.
2. The [Migratory Birds Treaty Act](#) of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

BALD & GOLDEN EAGLES INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

MIGRATORY BIRD INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED.
PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Taylor Piefke
Address: 4155 Clay St
Address Line 2: Rm 250
City: Vicksburg
State: MS
Zip: 39183
Email: taylor.piefke@usace.army.mil
Phone: 6016315087

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					
Date:					

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

Site Assessment Scoring for the Twelve Factors Used in FPPA

The Site Assessment criteria used in the Farmland Protection Policy Act (FPPA) rule are designed to assess important factors other than the agricultural value of the land when determining which alternative sites should receive the highest level of protection from conversion to non agricultural uses.

Twelve factors are used for Site Assessment and ten factors for corridor-type sites. Each factor is listed in an outline form, without detailed definitions or guidelines to follow in the rating process. The purpose of this document is to expand the definitions of use of each of the twelve Site Assessment factors so that all persons can have a clear understanding as to what each factor is intended to evaluate and how points are assigned for given conditions.

In each of the 12 factors a number rating system is used to determine which sites deserve the most protection from conversion to non-farm uses. The higher the number value given to a proposed site, the more protection it will receive. The maximum scores are 10, 15 and 20 points, depending upon the relative importance of each particular question. If a question significantly relates to why a parcel of land should not be converted, the question has a maximum possible protection value of 20, whereas a question which does not have such a significant impact upon whether a site would be converted, would have fewer maximum points possible, for example 10.

The following guidelines should be used in rating the twelve Site Assessment criteria:

1. How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent:	15 points
90-20 percent:	14 to 1 points
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the area within one mile of the proposed site is non-urban area. For purposes of this rule, "non-urban" should include:

- Agricultural land (crop-fruit trees, nuts, oilseed)
- Range land
- Forest land
- Golf Courses
- Non paved parks and recreational areas
- Mining sites
- Farm Storage
- Lakes, ponds and other water bodies
- Rural roads, and through roads without houses or buildings
- Open space
- Wetlands
- Fish production
- Pasture or hayland

Urban uses include:

- Houses (other than farm houses)
- Apartment buildings
- Commercial buildings
- Industrial buildings
- Paved recreational areas (i.e. tennis courts)
- Streets in areas with 30 structures per 40 acres
- Gas stations

- Equipment, supply stores
- Off-farm storage
- Processing plants
- Shopping malls
- Utilities/Services
- Medical buildings

In rating this factor, an area one-mile from the outer edge of the proposed site should be outlined on a current photo; the areas that are urban should be outlined. For rural houses and other buildings with unknown sizes, use 1 and 1/3 acres per structure. For roads with houses on only one side, use one half of road for urban and one half for non-urban.

The purpose of this rating process is to insure that the most valuable and viable farmlands are protected from development projects sponsored by the Federal Government. With this goal in mind, factor S1 suggests that the more agricultural lands surrounding the parcel boundary in question, the more protection from development this site should receive. Accordingly, a site with a large quantity of non-urban land surrounding it will receive a greater number of points for protection from development. Thus, where more than 90 percent of the area around the proposed site (do not include the proposed site in this assessment) is non-urban, assign 15 points. Where 20 percent or less is non-urban, assign 0 points. Where the area lies between 20 and 90 percent non-urban, assign appropriate points from 14 to 1, as noted below.

Percent Non-Urban Land within 1 mile	Points
90 percent or greater	15
85 to 89 percent	14
80 to 84 percent	13
75 to 79 percent	12
70 to 74 percent	11
65 to 69 percent	10
60 to 64 percent	9
55 to 59 percent	8
50 to 54 percent	7
45 to 49 percent	6
40 to 44 percent	5
35 to 39 percent	4
30 to 34 percent	3
25 to 29 percent	2
21 to 24 percent	1
20 percent or less	0

2. How much of the perimeter of the site borders on land in non-urban use?

More than 90 percent:	10 points
90 to 20 percent:	9 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the land adjacent to the proposed site is non-urban use. Where factor #1 evaluates the general location of the proposed site, this factor evaluates the immediate perimeter of the site. The definition of urban and non-urban uses in factor #1 should be used for this factor.

In rating the second factor, measure the perimeter of the site that is in non-urban and urban use. Where more than 90 percent of the perimeter is in non-urban use, score this factor 10 points. Where less than 20 percent, assign 0 points. If a road is next to the perimeter, class the area according to the

use on the other side of the road for that area. Use 1 and 1/3 acre per structure if not otherwise known. Where 20 to 90 percent of the perimeter is non-urban, assign points as noted below:

Percentage of Perimeter Bordering Land	Points
90 percent or greater	10
82 to 89 percent	9
74 to 81 percent	8
65 to 73 percent	7
58 to 65 percent	6
50 to 57 percent	5
42 to 49 percent	4
34 to 41 percent	3
27 to 33 percent	2
21 to 26 percent	1
20 percent or Less	0

3. How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last ten years?

More than 90 percent:	20 points
90 to 20 percent:	19 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the proposed conversion site has been used or managed for agricultural purposes in the past 10 years.

Land is being farmed when it is used or managed for food or fiber, to include timber products, fruit, nuts, grapes, grain, forage, oil seed, fish and meat, poultry and dairy products.

Land that has been left to grow up to native vegetation without management or harvest will be considered as abandoned and therefore not farmed. The proposed conversion site should be evaluated and rated according to the percent, of the site farmed.

If more than 90 percent of the site has been farmed 5 of the last 10 years score the site as follows:

Percentage of Site Farmed	Points
90 percent or greater	20
86 to 89 percent	19
82 to 85 percent	18
78 to 81 percent	17
74 to 77 percent	16
70 to 73 percent	15
66 to 69 percent	14
62 to 65 percent	13
58 to 61 percent	12
54 to 57 percent	11
50 to 53 percent	10
46 to 49 percent	9
42 to 45 percent	8
38 to 41 percent	7
35 to 37 percent	6
32 to 34 percent	5
29 to 31 percent	4
26 to 28 percent	3

23 to 25 percent	2
20 to 22 percent percent or Less	1
Less than 20 percent	0

4. Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected:	20 points
Site is not protected:	0 points

This factor is designed to evaluate the extent to which state and local government and private programs have made efforts to protect this site from conversion.

State and local policies and programs to protect farmland include:

State Policies and Programs to Protect Farmland

1. Tax Relief:

A. Differential Assessment: Agricultural lands are taxed on their agricultural use value, rather than at market value. As a result, farmers pay fewer taxes on their land, which helps keep them in business, and therefore helps to insure that the farmland will not be converted to nonagricultural uses.

1. Preferential Assessment for Property Tax: Landowners with parcels of land used for agriculture are given the privilege of differential assessment.
2. Deferred Taxation for Property Tax: Landowners are deterred from converting their land to nonfarm uses, because if they do so, they must pay back taxes at market value.
3. Restrictive Agreement for Property Tax: Landowners who want to receive Differential Assessment must agree to keep their land in - eligible use.

B. Income Tax Credits

Circuit Breaker Tax Credits: Authorize an eligible owner of farmland to apply some or all of the property taxes on his or her farmland and farm structures as a tax credit against the owner's state income tax.

C. Estate and Inheritance Tax Benefits

Farm Use Valuation for Death Tax: Exemption of state tax liability to eligible farm estates.

2. "Right to farm" laws:

Prohibits local governments from enacting laws which will place restrictions upon normally accepted farming practices, for example, the generation of noise, odor or dust.

3. Agricultural Districting:

Wherein farmers voluntarily organize districts of agricultural land to be legally recognized geographic areas. These farmers receive benefits, such as protection from annexation, in exchange for keeping land within the district for a given number of years.

4. Land Use Controls: Agricultural Zoning.

Types of Agricultural Zoning Ordinances include:

- A. Exclusive: In which the agricultural zone is restricted to only farm-related dwellings, with, for example, a minimum of 40 acres per dwelling unit.
- B. Non-Exclusive: In which non-farm dwellings are allowed, but the density remains low, such as 20 acres per dwelling unit.

Additional Zoning techniques include:

- A. Sliding Scale: This method looks at zoning according to the total size of the parcel owned. For example, the number of dwelling units per a given number of acres may change from county to county according to the existing land acreage to dwelling unit ratio of surrounding parcels of land within the specific area.
- B. Point System or Numerical Approach: Approaches land use permits on a case by case basis.

LESA: The LESA system (Land Evaluation-Site Assessment) is used as a tool to help assess options for land use on an evaluation of productivity weighed against commitment to urban development.
- C. Conditional Use: Based upon the evaluation on a case by case basis by the Board of Zoning Adjustment. Also may include the method of using special land use permits.

5. Development Rights:

- A. Purchase of Development Rights (PDR): Where development rights are purchased by Government action.

Buffer Zoning Districts: Buffer Zoning Districts are an example of land purchased by Government action. This land is included in zoning ordinances in order to preserve and protect agricultural lands from non-farm land uses encroaching upon them.

- B. Transfer of Development Rights (TDR): Development rights are transferable for use in other locations designated as receiving areas. TDR is considered a locally based action (not state), because it requires a voluntary decision on the part of the individual landowners.

6. Governor's Executive Order: Policy made by the Governor, stating the importance of agriculture, and the preservation of agricultural lands. The Governor orders the state agencies to avoid the unnecessary conversion of important farmland to nonagricultural uses.

7. Voluntary State Programs:

- A. California's Program of Restrictive Agreements and Differential Assessments: The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows cities, counties and individual landowners to form agricultural preserves and enter into contracts for 10 or more years to insure that these parcels of land remain strictly for agricultural use. Since 1972 the Act has extended eligibility to recreational and open space lands such as scenic highway corridors, salt ponds and wildlife preserves. These contractually restricted lands may be taxed differentially for their real value. One hundred-acre districts constitute the minimum land size eligible.

Suggestion: An improved version of the Act would state that if the land is converted after the contract expires, the landowner must pay the difference in the taxes between market value for the land and the agricultural tax value which he or she had been

paying under the Act. This measure would help to insure that farmland would not be converted after the 10 year period ends.

- B. Maryland Agricultural Land Preservation Program: Agricultural landowners within agricultural districts have the opportunity to sell their development rights to the Maryland Land Preservation Foundation under the agreement that these landowners will not subdivide or develop their land for an initial period of five years. After five years the landowner may terminate the agreement with one year notice.

As is stated above under the California Williamson Act, the landowner should pay the back taxes on the property if he or she decides to convert the land after the contract expires, in order to discourage such conversions.

- C. Wisconsin Income Tax Incentive Program: The Wisconsin Farmland Preservation Program of December 1977 encourages local jurisdictions in Wisconsin to adopt agricultural preservation plans or exclusive agricultural district zoning ordinances in exchange for credit against state income tax and exemption from special utility assessment. Eligible candidates include local governments and landowners with at least 35 acres of land per dwelling unit in agricultural use and gross farm profits of at least \$6,000 per year, or \$18,000 over three years.

8. Mandatory State Programs:

- A. The Environmental Control Act in the state of Vermont was adopted in 1970 by the Vermont State Legislature. The Act established an environmental board with 9 members (appointed by the Governor) to implement a planning process and a permit system to screen most subdivisions and development proposals according to specific criteria stated in the law. The planning process consists of an interim and a final Land Capability and Development Plan, the latter of which acts as a policy plan to control development. The policies are written in order to:
- prevent air and water pollution;
 - protect scenic or natural beauty, historic sites and rare and irreplaceable natural areas; and
 - consider the impacts of growth and reduction of development on areas of primary agricultural soils.
- B. The California State Coastal Commission: In 1976 the Coastal Act was passed to establish a permanent Coastal Commission with permit and planning authority. The purpose of the Coastal Commission was and is to protect the sensitive coastal zone environment and its resources, while accommodating the social and economic needs of the state. The Commission has the power to regulate development in the coastal zones by issuing permits on a case by case basis until local agencies can develop their own coastal plans, which must be certified by the Coastal Commission.
- C. Hawaii's Program of State Zoning: In 1961, the Hawaii State Legislature established Act 187, the Land Use Law, to protect the farmland and the welfare of the local people of Hawaii by planning to avoid "unnecessary urbanization". The Law made all state lands into four districts: agricultural, conservation, rural and urban. The Governor appointed members to a State Land Use Commission, whose duties were to uphold the Law and form the boundaries of the four districts. In addition to state zoning, the Land Use Law introduced a program of Differential Assessment, wherein agricultural landowners paid taxes on their land for its agricultural use value, rather than its market value.
- D. The Oregon Land Use Act of 1973: This act established the Land Conservation and Development Commission (LCDC) to provide statewide planning goals and guidelines.

Under this Act, Oregon cities and counties are each required to draw up a comprehensive plan, consistent with statewide planning goals. Agricultural land preservation is high on the list of state goals to be followed locally.

If the proposed site is subject to or has used one or more of the above farmland protection programs or policies, score the site 20 points. If none of the above policies or programs apply to this site, score 0 points.

5. How close is the site to an urban built-up area?

The site is 2 miles or more from an urban built-up area	15 points
The site is more than 1 mile but less than 2 miles from an urban built-up area	10 points
The site is less than 1 mile from, but is not adjacent to an urban built-up area	5 points
The site is adjacent to an urban built-up area	0 points

This factor is designed to evaluate the extent to which the proposed site is located next to an existing urban area. The urban built-up area must be 2500 population. The measurement from the built-up area should be made from the point at which the density is 30 structures per 40 acres and with no open or non-urban land existing between the major built-up areas and this point. Suburbs adjacent to cities or urban built-up areas should be considered as part of that urban area.

For greater accuracy, use the following chart to determine how much protection the site should receive according to its distance from an urban area. See chart below:

Distance From Perimeter of Site to Urban Area	Points
More than 10,560 feet	15
9,860 to 10,559 feet	14
9,160 to 9,859 feet	13
8,460 to 9,159 feet	12
7,760 to 8,459 feet	11
7,060 to 7,759 feet	10
6,360 to 7,059 feet	9
5,660 to 6,359 feet	8
4,960 to 5,659 feet	7
4,260 to 4,959 feet	6
3,560 to 4,259 feet	5
2,860 to 3,559 feet	4
2,160 to 2,859 feet	3
1,460 to 2,159 feet	2
760 to 1,459 feet	1
Less than 760 feet (adjacent)	0

6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?

None of the services exist nearer than 3 miles from the site	15 points
Some of the services exist more than one but less than 3 miles from the site	10 points
All of the services exist within 1/2 mile of the site	0 points

This question determines how much infrastructure (water, sewer, etc.) is in place which could facilitate nonagricultural development. The fewer facilities in place, the more difficult it is to develop an area. Thus, if a proposed site is further away from these services (more than 3 miles distance away), the site should be awarded the highest number of points (15). As the distance of the parcel of land to services decreases, the number of points awarded declines as well. So, when the site is equal to or further than 1 mile but less than 3 miles away from services, it should be given 10 points. Accordingly, if this distance is 1/2 mile to less than 1 mile, award 5 points; and if the distance from land to services is less than 1/2 mile, award 0 points.

Distance to public facilities should be measured from the perimeter of the parcel in question to the nearest site(s) where necessary facilities are located. If there is more than one distance (i.e. from site to water and from site to sewer), use the average distance (add all distances and then divide by the number of different distances to get the average).

Facilities which could promote nonagricultural use include:

- Water lines
- Sewer lines
- Power lines
- Gas lines
- Circulation (roads)
- Fire and police protection
- Schools

7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

As large or larger:	10 points
Below average: Deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more is below average	9 to 0 points

This factor is designed to determine how much protection the site should receive, according to its size in relation to the average size of farming units within the county. The larger the parcel of land, the more agricultural use value the land possesses, and vice versa. Thus, if the farm unit is as large or larger than the county average, it receives the maximum number of points (10). The smaller the parcel of land compared to the county average, the fewer number of points given. Please see below:

Parcel Size in Relation to Average County Size	Points
Same size or larger than average (100 percent)	10
95 percent of average	9
90 percent of average	8
85 percent of average	7
80 percent of average	6
75 percent of average	5
70 percent of average	4
65 percent of average	3
60 percent of average	2
55 percent of average	1
50 percent or below county average	0

State and local Natural Resources Conservation Service offices will have the average farm size information, provided by the latest available Census of Agriculture data

8. If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project	10 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project	9 to 1 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project	0 points

This factor tackles the question of how the proposed development will affect the rest of the land on the farm. The site which deserves the most protection from conversion will receive the greatest number of points, and vice versa. For example, if the project is small, such as an extension on a house, the rest of the agricultural land would remain farmable, and thus a lower number of points is given to the site. Whereas if a large-scale highway is planned, a greater portion of the land (not including the site) will become non-farmable, since access to the farmland will be blocked; and thus, the site should receive the highest number of points (10) as protection from conversion.

Conversion uses of the Site Which Would Make the Rest of the Land Non-Farmable by Interfering with Land Patterns

Conversions which make the rest of the property nonfarmable include any development which blocks accessibility to the rest of the site. Examples are highways, railroads, dams or development along the front of a site restricting access to the rest of the property.

The point scoring is as follows:

Amount of Land Not Including the Site Which Will Become Non-Farmable	Points
25 percent or greater	10
23 - 24 percent	9
21 - 22 percent	8
19 - 20 percent	7
17 - 18 percent	6
15 - 16 percent	5
13 - 14 percent	4
11 - 12 percent	3
9 - 11 percent	2
6 - 8 percent	1
5 percent or less	0

9. Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

This factor is used to assess whether there are adequate support facilities, activities and industry to keep the farming business in business. The more support facilities available to the agricultural

landowner, the more feasible it is for him or her to stay in production. In addition, agricultural support facilities are compatible with farmland. This fact is important, because some land uses are not compatible; for example, development next to farmland can be dangerous to the welfare of the agricultural land, as a result of pressure from the neighbors who often do not appreciate the noise, smells and dust intrinsic to farmland. Thus, when all required agricultural support services are available, the maximum number of points (5) are awarded. When some services are available, 4 to 1 point(s) are awarded; and consequently, when no services are available, no points are given. See below:

Percent of Services Available	Points
100 percent	5
75 to 99 percent	4
50 to 74 percent	3
25 to 49 percent	2
1 to 24 percent	1
No services	0

10. Does the site have substantial and well-maintained on farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment	20 points
Moderate amount of non-farm investment	19 to 1 point(s)
No on-farm investments	0 points

This factor assesses the quantity of agricultural facilities in place on the proposed site. If a significant agricultural infrastructure exists, the site should continue to be used for farming, and thus the parcel will receive the highest amount of points towards protection from conversion or development. If there is little on farm investment, the site will receive comparatively less protection. See-below:

Amount of On-farm Investment	Points
As much or more than necessary to maintain production (100 percent)	20
95 to 99 percent	19
90 to 94 percent	18
85 to 89 percent	17
80 to 84 percent	16
75 to 79 percent	15
70 to 74 percent	14
65 to 69 percent	13
60 to 64 percent	12
55 to 59 percent	11
50 to 54 percent	10
45 to 49 percent	9
40 to 44 percent	8
35 to 39 percent	7
30 to 34 percent	6
25 to 29 percent	5
20 to 24 percent	4
15 to 19 percent	3
10 to 14 percent	2
5 to 9 percent	1
0 to 4 percent	0

11. Would the project at this site, by converting farmland to nonagricultural use, reduce the support for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted	10 points
Some reduction in demand for support services if the site is converted	9 to 1 point(s)
No significant reduction in demand for support services if the site is converted	0 points

This factor determines whether there are other agriculturally related activities, businesses or jobs dependent upon the working of the pre-converted site in order for the others to remain in production. The more people and farming activities relying upon this land, the more protection it should receive from conversion. Thus, if a substantial reduction in demand for support services were to occur as a result of conversions, the proposed site would receive a high score of 10; some reduction in demand would receive 9 to 1 point(s), and no significant reduction in demand would receive no points.

Specific points are outlined as follows:

Amount of Reduction in Support Services if Site is Converted to Nonagricultural Use	Points
Substantial reduction (100 percent)	10
90 to 99 percent	9
80 to 89 percent	8
70 to 79 percent	7
60 to 69 percent	6
50 to 59 percent	5
40 to 49 percent	4
30 to 39 percent	3
20 to 29 percent	2
10 to 19 percent	1
No significant reduction (0 to 9 percent)	0

12. Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of the surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable of existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points

Factor 12 determines whether conversion of the proposed agricultural site will eventually cause the conversion of neighboring farmland as a result of incompatibility of use of the first with the latter. The more incompatible the proposed conversion is with agriculture, the more protection this site receives from conversion. Therefore, if the proposed conversion is incompatible with agriculture, the site receives 10 points. If the project is tolerable with agriculture, it receives 9 to 1 points; and if the proposed conversion is compatible with agriculture, it receives 0 points.

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information.

For Water and Waste Programs, corridor analyses are not applicable for distribution or collection networks. Analyses are applicable for transmission or trunk lines where placement of the lines are flexible.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

- | | |
|--------------------------|-----------------------|
| (2) More than 90 percent | (3) 15 points |
| (4) 90 to 20 percent | (5) 14 to 1 point(s). |
| (6) Less than 20 percent | (7) 0 points |

(2) How much of the perimeter of the site borders on land in nonurban use?

- | | |
|--------------------------|-------------------|
| (3) More than 90 percent | (4) 10 point(s) |
| (5) 90 to 20 percent | (6) 9 to 1 points |
| (7) less than 20 percent | (8) 0 points |

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

- | | |
|--------------------------|----------------------|
| (4) More than 90 percent | (5) 20 points |
| (6) 90 to 20 percent | (7) 19 to 1 point(s) |
| (8) Less than 20 percent | (9) 0 points |

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

- | | |
|-----------------------|-----------|
| Site is protected | 20 points |
| Site is not protected | 0 points |

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

- | | |
|---|---------------|
| As large or larger | 10 points |
| Below average deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average | 9 to 0 points |

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

- | | |
|--|------------------|
| Acreage equal to more than 25 percent of acres directly converted by the project | 25 points |
| Acreage equal to between 25 and 5 percent of the acres directly converted by the project | 1 to 24 point(s) |
| Acreage equal to less than 5 percent of the acres directly converted by the project | 0 points |

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment	20 points
Moderate amount of on-farm investment	19 to 1 point(s)
No on-farm investment	0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted	25 points
Some reduction in demand for support services if the site is converted	1 to 24 point(s)
No significant reduction in demand for support services if the site is converted	0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points



United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Phone: (601) 965-4900



In Reply Refer To:
Project code: 2025-0098567
Project Name: MRL 600 Series Project

05/19/2025 18:56:44 UTC

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

Subject: Technical assistance for 'MRL 600 Series Project'

Dear Taylor Piefke:

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 May 19, 2025, for 'MRL 600 Series Project' (here forward, Project). This project has been assigned Project Code 2025-0098567 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

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 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 and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter.**

Determination for the Northern Long-Eared Bat and Tricolored Bat

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Tricolored Bat (<i>Perimyotis subflavus</i>)	Proposed	May affect
	Endangered	

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

The IPaC-assisted determination key for the northern long-eared bat and tricolored 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
- Fat Pocketbook *Potamilus capax* Endangered
- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Pallid Sturgeon *Scaphirhynchus albus* Endangered
- Pondberry *Lindera melissifolia* Endangered

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

Conclusion

Consultation with the Service is not complete. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect.” A “May Affect” determination in this key indicates that the project, as entered, is not consistent with the questions in the key. Not all projects that reach a “May Affect” determination are anticipated to result in adverse impacts to listed species. These projects may result in a “No Effect”, “May Affect, Not Likely to Adversely Affect”, or “May Affect, Likely to Adversely Affect” determination depending on the details of the project. Please contact our Mississippi Ecological Services Field Office to discuss methods to avoid or minimize potential adverse effects to those species or designated critical habitats.

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate. Projects that receive a may affect determination for tricolored bat through the key, should contact the appropriate Ecological Services Field Office if they want to conference on this species.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

MRL 600 Series Project

2. Description

The following description was provided for the project 'MRL 600 Series Project':

Alternative 2 proposes to improve and strengthen a segment of the MRL to better handle the project design flood of the Mississippi River by constructing 14 seepage and maintenance berms. The seepage berms would be constructed through the placement of earthen fill in any areas found to be deficient in terms of seepage and/or stability.

All work would occur on the left descending bank of the Mississippi River near river miles 611, 614, 615 and 616 (Figures 2 and 3). Any utilities in the project area would be relocated and no roadways or homes are expected to be impacted by the proposed project.

Construction occurring near river mile 611-L would involve constructing a total of 7 new berms on the landside of the levee. The seepage berms will be constructed using an onsite borrow source with uncompacted clay material. Approximately 238,840 cubic yards of fill will be required for the construction of these seepage berms.

Construction occurring near river mile 615-L would involve constructing 7 new berms and modifying 2 existing berms on the landside of the levee. Since the first two berms were previously designed with thicker embankment than needed, they will now be modified to become a wider berm by using the existing berm as a source. Approximately 80,800 cubic yard will be excavated from the existing berms and approximately 66,000 cubic yards will be required for the widening of the berms. The remaining seepage berms will be constructed using an onsite borrow source with uncompacted clay material. Approximately 163,800 cubic yards of fill from the borrow pit will be required for the construction of the remaining seepage berms.

The first borrow area is located on the riverside of the levee and is comprised of approximately 80 acres of wetland bottomland hardwood (BLH) forest and scrub/shrub habitat, while the second borrow area is located on the landside of the levee and comprised of approximately 30 acres of agricultural land.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.0164872,-90.90644173363636,14z>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for a least one species covered by this determination key.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats 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. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

Automatically answered

No

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, 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

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

Yes

6. 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

7. 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

8. 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

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

10. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

12. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

13. Will the action cause effects to a bridge?

Note: Covered bridges should be considered as bridges in this question.

No

14. Will the action result in effects to a culvert or tunnel at any time of year?

No

15. Are trees present within 1000 feet of the action area?

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

16. Does the action include the intentional exclusion of bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

17. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

No

18. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

No

20. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

21. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

Note: For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

No

22. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

23. Will the action include drilling or blasting?

No

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

No

25. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

No

26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

Note: Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

No

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

Yes

29. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

No

30. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

Note: A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property.

No

31. Does the project intersect with the 0- 9.9% forest density category?

Automatically answered

No

32. Does the project intersect with the 10.0- 19.9% forest density category map?

Automatically answered

Yes

33. Does the project intersect with the 20.0- 29.9% forest density category map?

Automatically answered

Yes

34. Does the project intersect with the 30.0- 100% forest density category map?

Automatically answered

Yes

35. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 5 acres in total extent?

Yes

36. Does the action area intersect the tricolored bat species list area?

Automatically answered

Yes

37. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known tricolored bat hibernacula? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

38. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

39. Has a presence/probable absence bat survey targeting the [tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

40. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes."")

Note: If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

Yes

41. Do you have any documents that you want to include with this submission?

No

PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

80

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers
Name: Taylor Piefke
Address: 4155 Clay St
Address Line 2: Rm 250
City: Vicksburg
State: MS
Zip: 39183
Email: taylor.piefke@usace.army.mil
Phone: 6016315087

From: [MSFOSection7Consultation, FW4](#)
To: [Piefke, Taylor J CIV USARMY CEMVN \(USA\)](#)
Subject: [Non-DoD Source] RE: [EXTERNAL] MRL 600 Series Bat Coordination
Date: Thursday, May 22, 2025 8:38:04 AM

Taylor,

The proposed MRL 600 Series levee modification project is not likely to impact the pallid sturgeon and pocketbook, both of which can be found in the mainstem of the MS River. Regarding pondberry, there are no known records within the batture lands of the MS River. Sump areas with mature forests away from the river could provide potential habitat, however, the forested borrow area doesn't appear to provide this type of habitat. Therefore, impacts to pondberry are not expected. We also don't expect impacts to the monarch butterfly.

The forested borrow site may provide habitat for the alligator snapping turtle. Since the species is only proposed for listing, there are no federal protections in place. However, the Service recommends avoiding impacts to any existing ponds. Nesting occurs in the spring and summer months along the banks of perennial water bodies, with nests sometimes detected on dams and other water control structures. Concentrating on-bank construction efforts (namely for any ponds on the property) to mid-September through mid-April will reduce impacts to AST.

Regarding the tricolored bat, it's also only proposed for listing, so no federal protections are in place. We do recommend that any tree removal activities required for this project NOT take place during the pup season (May 15 – July 31, Hibernating Range), however, similar to alligator snapping turtle, this is only a recommendation.

Let me know if you have additional questions.

Thanks
David

David Felder
Supervisory Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway
Jackson, MS 39213
Office: (769) 487-6850
Cell: (601) 906-6706
Email: david_felder@fws.gov

From: Piefke, Taylor J CIV USARMY CEMVN (USA) <Taylor.Piefke@usace.army.mil>
Sent: Monday, May 19, 2025 2:47 PM
To: MSFOSection7Consultation, FW4 <msfosection7consultation@fws.gov>
Subject: [EXTERNAL] MRL 600 Series Bat Coordination

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Hi USFWS,

I am a biologist with the USACE Vicksburg district and am working on a levee modification project for the Mississippi River Levees program. The project would involve constructing 14 seepage berms along the existing levee. Material for the levees would be obtained from two onsite borrow areas. One borrow area is in an agricultural field, but the other borrow area is on the riverside of the levee and is comprised of 80 acres of bottomland hardwood that would need to be cleared.

I completed the IPaC and bat determination key (attached) for this project and received a determination of may affect for the tricolored bat. I am reaching out to complete coordination for this project. Clearing would likely occur outside of maternity season (May 15 -July 15). What are the next steps for coordination?

Thanks,
Taylor Piefke

Biologist
Mississippi Valley Division
Regional Planning and Environment Division South
New Orleans District, U.S. Army Corps of Engineers
Phone: 601-631-5087

**Levee Enlargement and Berms, Item Nos. 611-L, 614-L,
615-L, and 616-L, Bolivar County, Mississippi
NHPA SECTION 106 INITIATION LETTER AND RESPONSES**



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Mr. Delvin Johnson,
Tribal Historic Preservation Officer
Alabama-Coushatta Tribe of Texas
571 State Park Rd. 56
Livingston, TX 77351

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Mr. Johnson:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

Project Authority

The MR&T Project was authorized by the Flood Control Act of 15 May 1928, as modified and amended in subsequent Acts of 23 April 1934, 15 June 1936, 18 August 1941, 24 July 1946, and 27 October 1965. A Record of Decision was signed on March 11, 2021, finalizing the environmental review and commitments for the remaining items for the MRL features. Additionally, a Programmatic Agreement Among The U.S. Army Corps Of Engineers, Memphis, New Orleans, And Vicksburg Districts The Chickasaw Nation; The Choctaw Nation Of Oklahoma; The Osage Nation; The Quapaw Nation; The Arkansas State Historic Preservation Officer; The Illinois State Historic Preservation Officer; The Kentucky State Historic Preservation Officer; The Louisiana State Historic Preservation Officer; The Mississippi State Historic Preservation Officer; The Missouri State Historic Preservation Officer; The Tennessee State Historic Preservation Officer; And The Advisory Council On Historic Preservation Regarding The Mississippi River And Tributaries Project: Mississippi River Levee Features to guide consultation on MRL project was executed on March 4, 2021. These documents can be found here: <https://www.mvk.usace.army.mil/MRLSEIS/>. Consultation is pursuant to this PA.

Description of the Undertaking & Area of Potential Effects (APE)

The area of potential effects (APE) consists of six levee enlargement areas (areas A, B, C, D, E, and F) and two borrow pits (areas G and H) totaling 179-ac. (72.4 ha) in size. The improvements proposed for this reach of the levee include the raising of the levee grade to that authorized to safely pass the Refined 1973 Project Flood Flowline and to provide a stable levee section component to withstand seepage forces associated with the flood and gravitational forces associated with the levee grade raise. The enlargement is to be located on the protected land side of the existing levee. Material to construct levee raise and berms will come from two large borrow areas, a southern pit located on the riverside of the levee and a second, northern pit located on the landside of the levee. No access roads will be constructed as the existing network of levee and county accessways are sufficient to allow transport of earthen material from the borrow areas to the six individual construction sites; no clearing and fill is required to widen the roads as they currently are a size/width necessary to accommodate hauling equipment. The APE includes all direct, indirect, and cumulative effects from the Undertaking.

Identification and Evaluation of Historic Properties

In addition to the APE CEMVK reviewed a 1.6-km (1-mile) buffer around the proposed undertaking. A standard cultural resources literature and records review was conducted for this undertaking. Key sources that were consulted included the MDAH Historic Resources Inventory (HRI) database, GLO records, and the National Register of Historic Places (NRHP) database. Various archival maps of the project area were also retrieved. Additionally, CEMVK contracted Chronicle Heritage Group, LLC (CHG) to conduct a Phase I Cultural Resources Survey of the entire 179-ac. (72.4 ha) APE.

Their review of the MDAH electronic project files shows that no projects have been conducted within the APE. However, five previous investigations are documented within

a 2 km radius of the APE. Similarly, Importantly, this revealed that there are no previously recorded archaeological sites within the APE. Three previously recorded archaeological sites (22Bo505, 22Bo509, and 22Bo962) are within a 2 km search radius, two of which are purported mound sites. Additionally, according to the MDAH HIR Architectural database revealed no historic structures within the APE. Within a 2 km radius, there are two previously recorded structures, one an extant school, the second a non-extant school. The NRHP was reviewed regarding this undertaking, and importantly, there are no National Register listed properties within the APE. There are currently 16 listed properties in Bolivar County, Mississippi. The nearest NRHP properties are in Rosedale, 15 km to the south.

Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

List of Recipients

Alabama Coushatta Tribe of Texas
Alabama-Quassarte Tribal Town
Caddo Nation of Oklahoma
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee (Creek) Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Mississippi State Historic Preservation Office



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Ms. Brina Williams,
Tribal Historic Preservation Officer
Alabama-Quassarte Tribal Town
2122 Highway 27
Wetumka, OK 74883

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Williams:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

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Description of the Undertaking & Area of Potential Effects (APE)

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Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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Jena Band of Choctaw Indians, Louisiana
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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Mr. Jonathan M. Rohrer,
Tribal Historic Preservation Officer
Caddo Nation of Oklahoma
P.O. Box 487
Binger, OK 73009

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Mr. Rohrer:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

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Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Karen Brunso
Tribal Historic Preservation Officer
Chickasaw Nation
P.O. Box 1548
Ada, OK 74821

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Brunso:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

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In addition to the APE CEMVK reviewed a 1.6-km (1-mile) buffer around the proposed undertaking. A standard cultural resources literature and records review was conducted for this undertaking. Key sources that were consulted included the MDAH Historic Resources Inventory (HRI) database, GLO records, and the National Register of Historic Places (NRHP) database. Various archival maps of the project area were also retrieved. Additionally, CEMVK contracted Chronicle Heritage Group, LLC (CHG) to conduct a Phase I Cultural Resources Survey of the entire 179-ac. (72.4 ha) APE.

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Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Dr. Ian Thompson,
Tribal Historic Preservation Officer
Director, Historic Preservation Department
P.O. Box 1210
Durant, OK 74702-1210

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
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Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Ms. Johnna Flynn
Tribal Historic Preservation Officer
Jena Band of Choctaw Indians
P.O. Box 14
Jena, LA 71342

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
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Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Flynn:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

Project Authority

The MR&T Project was authorized by the Flood Control Act of 15 May 1928, as modified and amended in subsequent Acts of 23 April 1934, 15 June 1936, 18 August 1941, 24 July 1946, and 27 October 1965. A Record of Decision was signed on March 11, 2021, finalizing the environmental review and commitments for the remaining items for the MRL features. Additionally, a Programmatic Agreement Among The U.S. Army Corps Of Engineers, Memphis, New Orleans, And Vicksburg Districts The Chickasaw Nation; The Choctaw Nation Of Oklahoma; The Osage Nation; The Quapaw Nation; The Arkansas State Historic Preservation Officer; The Illinois State Historic Preservation Officer; The Kentucky State Historic Preservation Officer; The Louisiana State Historic Preservation Officer; The Mississippi State Historic Preservation Officer; The Missouri State Historic Preservation Officer; The Tennessee State Historic Preservation Officer; And The Advisory Council On Historic Preservation Regarding The Mississippi River And Tributaries Project: Mississippi River Levee Features to guide consultation on MRL project was executed on March 4, 2021. These documents can be found here: <https://www.mvk.usace.army.mil/MRLSEIS/>. Consultation is pursuant to this PA.

Description of the Undertaking & Area of Potential Effects (APE)

The area of potential effects (APE) consists of six levee enlargement areas (areas A, B, C, D, E, and F) and two borrow pits (areas G and H) totaling 179-ac. (72.4 ha) in size. The improvements proposed for this reach of the levee include the raising of the levee grade to that authorized to safely pass the Refined 1973 Project Flood Flowline and to provide a stable levee section component to withstand seepage forces associated with the flood and gravitational forces associated with the levee grade raise. The enlargement is to be located on the protected land side of the existing levee. Material to construct levee raise and berms will come from two large borrow areas, a southern pit located on the riverside of the levee and a second, northern pit located on the landside of the levee. No access roads will be constructed as the existing network of levee and county accessways are sufficient to allow transport of earthen material from the borrow areas to the six individual construction sites; no clearing and fill is required to widen the roads as they currently are a size/width necessary to accommodate hauling equipment. The APE includes all direct, indirect, and cumulative effects from the Undertaking.

Identification and Evaluation of Historic Properties

In addition to the APE CEMVK reviewed a 1.6-km (1-mile) buffer around the proposed undertaking. A standard cultural resources literature and records review was conducted for this undertaking. Key sources that were consulted included the MDAH Historic Resources Inventory (HRI) database, GLO records, and the National Register of Historic Places (NRHP) database. Various archival maps of the project area were also retrieved. Additionally, CEMVK contracted Chronicle Heritage Group, LLC (CHG) to conduct a Phase I Cultural Resources Survey of the entire 179-ac. (72.4 ha) APE.

Their review of the MDAH electronic project files shows that no projects have been conducted within the APE. However, five previous investigations are documented within

a 2 km radius of the APE. Similarly, Importantly, this revealed that there are no previously recorded archaeological sites within the APE. Three previously recorded archaeological sites (22Bo505, 22Bo509, and 22Bo962) are within a 2 km search radius, two of which are purported mound sites. Additionally, according to the MDAH HIR Architectural database revealed no historic structures within the APE. Within a 2 km radius, there are two previously recorded structures, one an extant school, the second a non-extant school. The NRHP was reviewed regarding this undertaking, and importantly, there are no National Register listed properties within the APE. There are currently 16 listed properties in Bolivar County, Mississippi. The nearest NRHP properties are in Rosedale, 15 km to the south.

Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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Alabama-Quassarte Tribal Town
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Jena Band of Choctaw Indians, Louisiana
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Muscogee (Creek) Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Mississippi State Historic Preservation Office



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Ms. Melanie Carson,
Tribal Historic Preservation Officer
Mississippi Band of Choctaw Indians
MBCI Planning Office
101 Industrial Rd
Choctaw, MS 39350

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Carson:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

Project Authority

The MR&T Project was authorized by the Flood Control Act of 15 May 1928, as modified and amended in subsequent Acts of 23 April 1934, 15 June 1936, 18 August 1941, 24 July 1946, and 27 October 1965. A Record of Decision was signed on March 11, 2021, finalizing the environmental review and commitments for the remaining items for the MRL features. Additionally, a Programmatic Agreement Among The U.S. Army Corps Of Engineers, Memphis, New Orleans, And Vicksburg Districts The Chickasaw Nation; The Choctaw Nation Of Oklahoma; The Osage Nation; The Quapaw Nation; The Arkansas State Historic Preservation Officer; The Illinois State Historic Preservation Officer; The Kentucky State Historic Preservation Officer; The Louisiana State Historic Preservation Officer; The Mississippi State Historic Preservation Officer; The Missouri State Historic Preservation Officer; The Tennessee State Historic Preservation Officer; And The Advisory Council On Historic Preservation Regarding The Mississippi River And Tributaries Project: Mississippi River Levee Features to guide consultation on MRL project was executed on March 4, 2021. These documents can be found here: <https://www.mvk.usace.army.mil/MRLSEIS/>. Consultation is pursuant to this PA.

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The area of potential effects (APE) consists of six levee enlargement areas (areas A, B, C, D, E, and F) and two borrow pits (areas G and H) totaling 179-ac. (72.4 ha) in size. The improvements proposed for this reach of the levee include the raising of the levee grade to that authorized to safely pass the Refined 1973 Project Flood Flowline and to provide a stable levee section component to withstand seepage forces associated with the flood and gravitational forces associated with the levee grade raise. The enlargement is to be located on the protected land side of the existing levee. Material to construct levee raise and berms will come from two large borrow areas, a southern pit located on the riverside of the levee and a second, northern pit located on the landside of the levee. No access roads will be constructed as the existing network of levee and county accessways are sufficient to allow transport of earthen material from the borrow areas to the six individual construction sites; no clearing and fill is required to widen the roads as they currently are a size/width necessary to accommodate hauling equipment. The APE includes all direct, indirect, and cumulative effects from the Undertaking.

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Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Amy D. Morgan
Review and Compliance Officer
CLG Grants Administrator
Mississippi Department of Archives and History
Historic Preservation Division
P.O. 571 Jackson, Mississippi 39205-0571

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Morgan:

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Assessment of Effects to Historic Properties

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We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

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for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Dr. Savannah J. Waters,
Tribal Historic Preservation Officer
Historic & Cultural Preservation Office
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, OK 74447

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
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Point: Latitude 34.01271671688065, Longitude
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Determination: No Historic Properties Affected

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All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

List of Recipients

Alabama Coushatta Tribe of Texas
Alabama-Quassarte Tribal Town
Caddo Nation of Oklahoma
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee (Creek) Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Mississippi State Historic Preservation Office



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Ms. Billie Burtrum
Preservation Officer/QHPP Director
Tribal Historic Preservation Officer
Quapaw Nation
P.O. Box 765
Quapaw, OK 74363

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Ms. Burtrum:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

Project Authority

The MR&T Project was authorized by the Flood Control Act of 15 May 1928, as modified and amended in subsequent Acts of 23 April 1934, 15 June 1936, 18 August 1941, 24 July 1946, and 27 October 1965. A Record of Decision was signed on March 11, 2021, finalizing the environmental review and commitments for the remaining items for the MRL features. Additionally, a Programmatic Agreement Among The U.S. Army Corps Of Engineers, Memphis, New Orleans, And Vicksburg Districts The Chickasaw Nation; The Choctaw Nation Of Oklahoma; The Osage Nation; The Quapaw Nation; The Arkansas State Historic Preservation Officer; The Illinois State Historic Preservation Officer; The Kentucky State Historic Preservation Officer; The Louisiana State Historic Preservation Officer; The Mississippi State Historic Preservation Officer; The Missouri State Historic Preservation Officer; The Tennessee State Historic Preservation Officer; And The Advisory Council On Historic Preservation Regarding The Mississippi River And Tributaries Project: Mississippi River Levee Features to guide consultation on MRL project was executed on March 4, 2021. These documents can be found here: <https://www.mvk.usace.army.mil/MRLSEIS/>. Consultation is pursuant to this PA.

Description of the Undertaking & Area of Potential Effects (APE)

The area of potential effects (APE) consists of six levee enlargement areas (areas A, B, C, D, E, and F) and two borrow pits (areas G and H) totaling 179-ac. (72.4 ha) in size. The improvements proposed for this reach of the levee include the raising of the levee grade to that authorized to safely pass the Refined 1973 Project Flood Flowline and to provide a stable levee section component to withstand seepage forces associated with the flood and gravitational forces associated with the levee grade raise. The enlargement is to be located on the protected land side of the existing levee. Material to construct levee raise and berms will come from two large borrow areas, a southern pit located on the riverside of the levee and a second, northern pit located on the landside of the levee. No access roads will be constructed as the existing network of levee and county accessways are sufficient to allow transport of earthen material from the borrow areas to the six individual construction sites; no clearing and fill is required to widen the roads as they currently are a size/width necessary to accommodate hauling equipment. The APE includes all direct, indirect, and cumulative effects from the Undertaking.

Identification and Evaluation of Historic Properties

In addition to the APE CEMVK reviewed a 1.6-km (1-mile) buffer around the proposed undertaking. A standard cultural resources literature and records review was conducted for this undertaking. Key sources that were consulted included the MDAH Historic Resources Inventory (HRI) database, GLO records, and the National Register of Historic Places (NRHP) database. Various archival maps of the project area were also retrieved. Additionally, CEMVK contracted Chronicle Heritage Group, LLC (CHG) to conduct a Phase I Cultural Resources Survey of the entire 179-ac. (72.4 ha) APE.

Their review of the MDAH electronic project files shows that no projects have been conducted within the APE. However, five previous investigations are documented within

a 2 km radius of the APE. Similarly, Importantly, this revealed that there are no previously recorded archaeological sites within the APE. Three previously recorded archaeological sites (22Bo505, 22Bo509, and 22Bo962) are within a 2 km search radius, two of which are purported mound sites. Additionally, according to the MDAH HIR Architectural database revealed no historic structures within the APE. Within a 2 km radius, there are two previously recorded structures, one an extant school, the second a non-extant school. The NRHP was reviewed regarding this undertaking, and importantly, there are no National Register listed properties within the APE. There are currently 16 listed properties in Bolivar County, Mississippi. The nearest NRHP properties are in Rosedale, 15 km to the south.

Enclosed is a copy of CHG's cultural resources report, entitled, *Phase I Cultural Resources Investigations for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, F/C MR&T, East Bank Mississippi River and Levees, Bolivar County, Mississippi*, for review and comment. In summary, the cultural resources survey for this project was conducted from August 14–31, 2024. This effort consisted of 613 shovel test locations were recorded, including four positive tests (i.e., yielded artifacts), 534 negative tests (i.e., were sterile), and 75 “no-digs” mainly due to good to excellent surface visibility. Five Tenant-period historic archaeological sites were identified from these efforts (22Bo1106-22Bo1110) (Figures 3-6).

All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additional archaeological investigations at 22Bo1106-1110 are unlikely to produce any significant information regarding the late nineteenth and twentieth-century occupation of Bolivar County and the Delta region. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

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Alabama Coushatta Tribe of Texas
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Mississippi State Historic Preservation Office



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

March 11, 2025

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: MVK-PDC, Room 250

Mr. Earl J. Barbry, Jr.,
Tribal Historic Preservation Officer
Director, Planning & Development
P.O. Box 1589
150 Melacon Road
Marksville, LA 71351

RE: Section 106 Review Consultation

Undertaking: Phase I Cultural Resources Investigations for Levee
Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and
616-L, F/C MR&T, East Bank Mississippi River and Levees,
Bolivar County, Mississippi (MRL Project Footprint Center
Point: Latitude 34.01271671688065, Longitude
-90.90993633188928)

Determination: No Historic Properties Affected

Dear Mr. Barbry:

The U.S. Army Corps of Engineers, Vicksburg District (CEMVK) is evaluating approximately 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along both the batture and protected sides of the Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T). As part of CEMVK's evaluation and in partial fulfillment of responsibilities under the National Environmental Policy Act and Section 106 of the National Historic Preservation Act, CEMVN offers you the opportunity to review and comment on the potential of the proposed action described in this letter to affect historic properties. Additionally, in accordance with the of responsibilities of Executive Order 13175, CEMVK offers Federally-recognized Tribes the opportunity to review and comment on the potential of the proposed undertaking described in this letter to significantly affect protected tribal resources, tribal rights, or tribal lands. The project area is located near the community of Round Lake in Bolivar County, Mississippi (Figures 1 and 2). The project area is located across Sections 23, 26, 27, 28, and 32 of T25N R7W and Sections 6, 7, and 18 of T25N R6W on the Gunnison, Laconia, and Round Lake MS-AR 7.5-minute topographic quadrangles.

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Assessment of Effects to Historic Properties

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. No further cultural resources identification and evaluation work is required; however, this project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c).

We look forward to your concurrence with this determination. If you have any questions or require additional information concerning these undertakings, please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison, at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil.

Sincerely,



for Dan Moore,
Environmental Compliance Chief
Regional Planning Environment Division, South

Encl.

CC: File

List of Recipients

Alabama Coushatta Tribe of Texas
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Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
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Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Mississippi State Historic Preservation Office

**Levee Enlargement and Berms, Item Nos. 611-L, 614-L,
615-L, and 616-L, Bolivar County, Mississippi**

NHPA SECTION 106 INITIATION LETTER AND RESPONSES

Initiation Letter Figures and Tables



Figure 1: 611-L, 614-L, 615-L, and 616-L Levee Enlargement and Seepage APE, Areas A, B, C, D, and H.

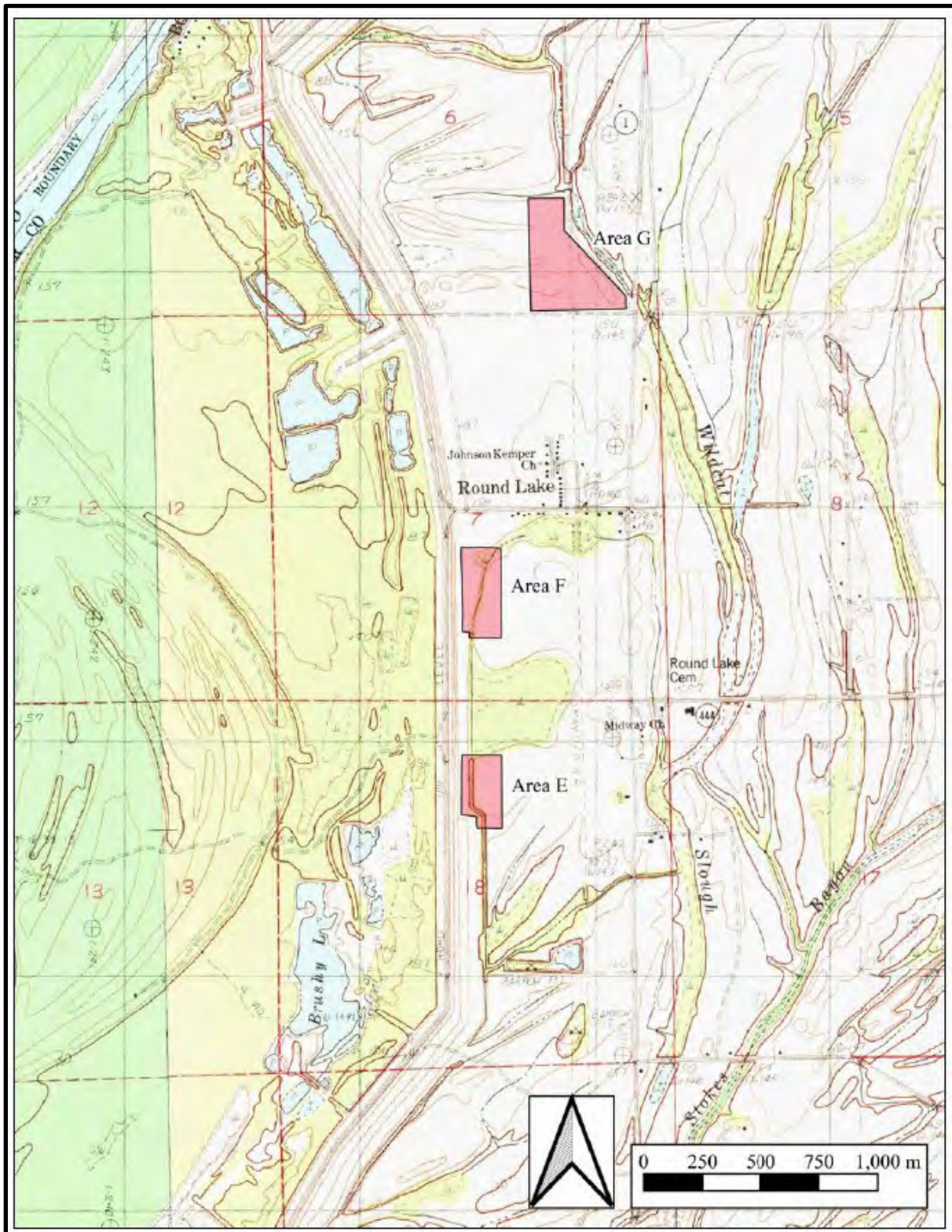


Figure 2: 611-L, 614-L, 615-L, and 616-L Levee Enlargement and Seepage APE, Areas E, F, and G.

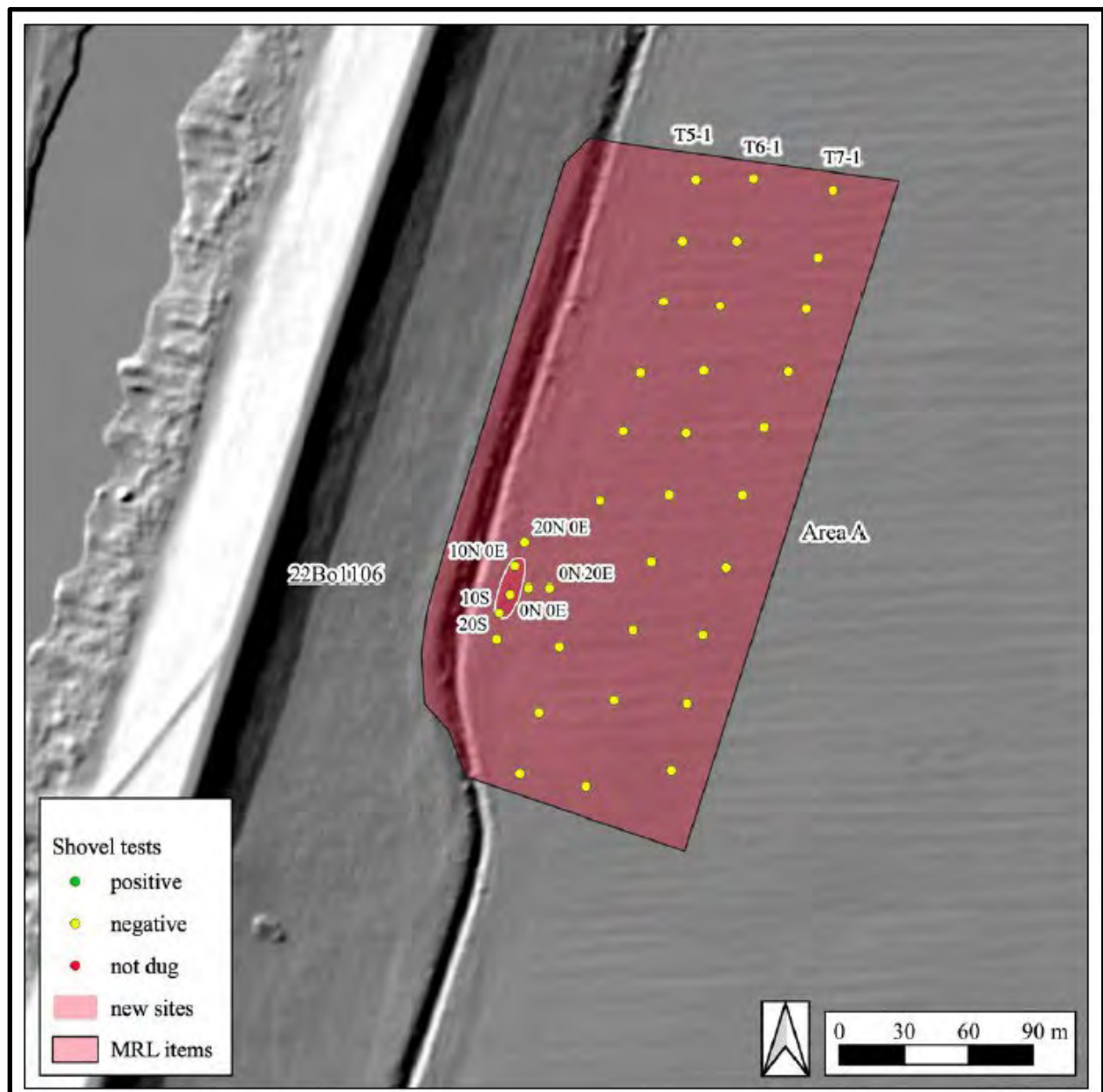


Figure 3. LiDAR image with the shovel test locations and 22Bo1106 shown.

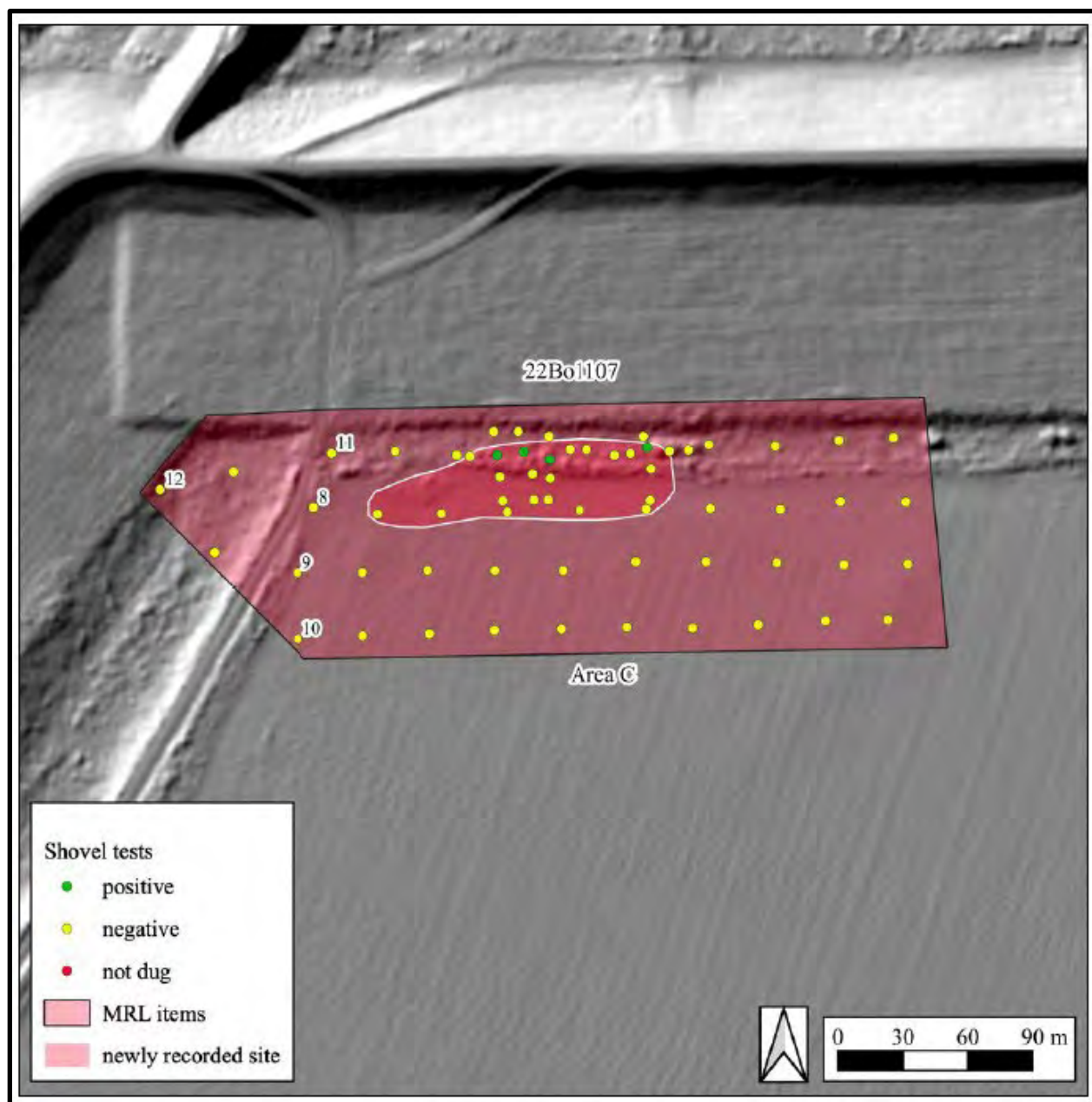


Figure 4. LiDAR image with the Area C shovel test locations and 22Bo1107 shown.

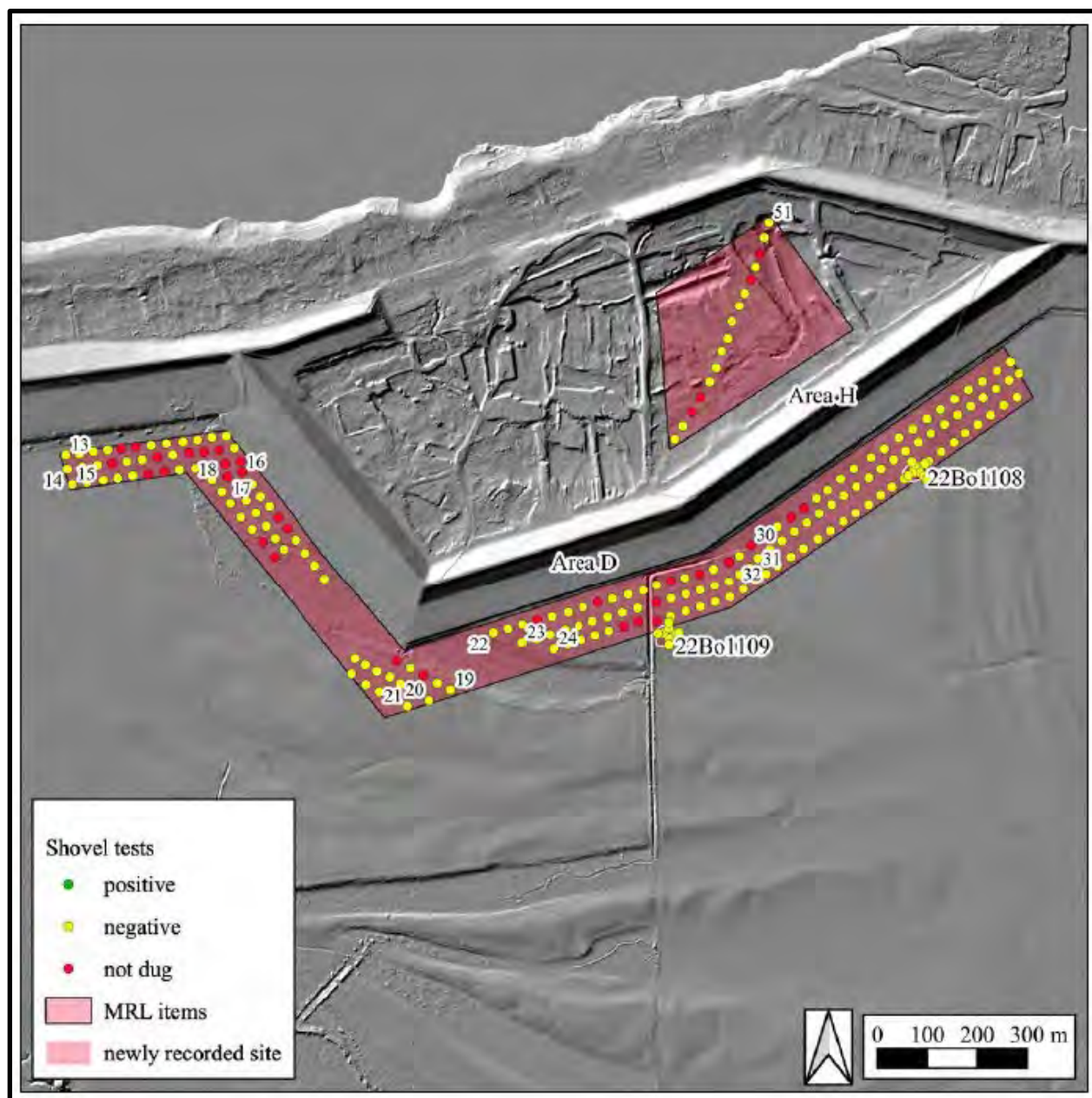


Figure 5. LiDAR image with the Area D shovel test locations and 22Bo1108 and 22Bo1109 shown.

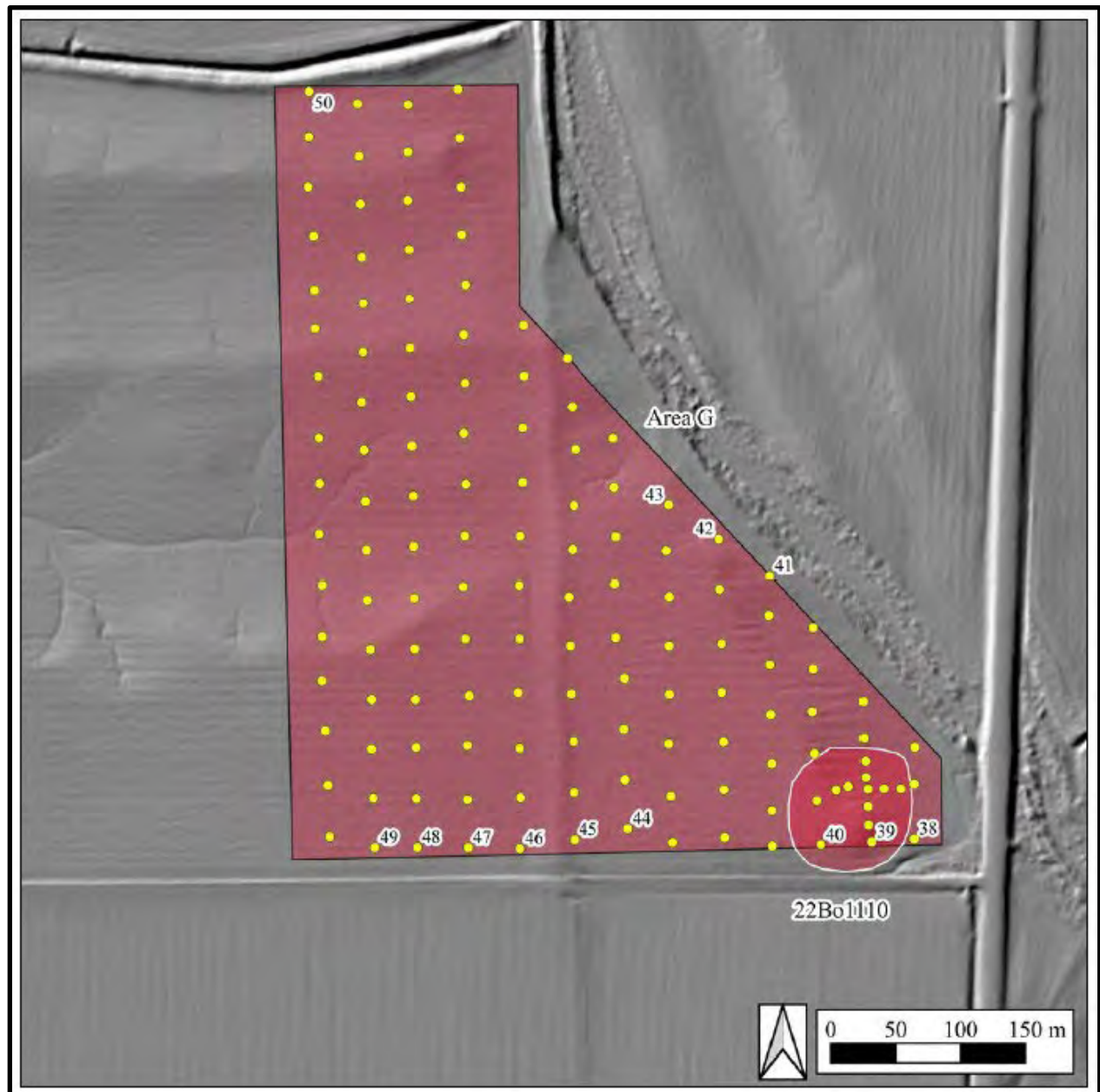


Figure 6. LiDAR image with the Area G shovel test locations and 22Bo1110 shown.

**Levee Enlargement and Berms, Item Nos. 611-L, 614-L,
615-L, and 616-L, Bolivar County, Mississippi**

NHPA SECTION 106 INITIATION LETTER AND RESPONSES

Initiation Letter Responses

From: [Julia Pebeahsy](#)
To: [Underwood, John R CIV USARMY CEMVK \(USA\)](#)
Cc: [section 106](#)
Subject: [Non-DoD Source] Response to Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L Bolivar County, Mississippi
Date: Monday, March 24, 2025 10:37:39 AM

Monday, March 24, 2025

Attn: John R. Underwood, MA, RPA
Archaeologist
Corps of Engineers, Vicksburg District
4155 Clay Street
Vicksburg, Mississippi 39183

Re: Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L Bolivar County, Mississippi

Dear Mr. John R. Underwood,

The Quapaw Nation Historic Preservation Program (QNHPP) has received and reviewed the information you have provided. Based upon the information you provided we believe that Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L Bolivar County, Mississippi will have no effect on known properties of cultural or sacred significance to the Quapaw Nation.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d) (6) (A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Quapaw Nation has vital interests in protecting its historic and ancestral cultural resources. We do not anticipate that this project will adversely impact any cultural resources, or human remains protected under the NHPA, NEPA, or the Native American Graves Protection and Repatriation Act. If, however, artifacts or human remains are discovered during project construction, we ask that work cease immediately and that you contact the Quapaw Nation Historic Preservation Office.

Should you have any questions or need any additional information, please feel free to contact Julia Pebeahsy at Julia.pebeahsy@quapawnation.com, please copy section106@quapawnation.com to ensure additional information requests are reviewed in a timely manner. Thank you for consulting with the Quapaw Nation on this matter.

Sincerely,

Julia Pebeahsy

On behalf of

-Ms. Billie Burtrum

Preservation Officer/ QNHPP Director

Quapaw Nation

P.O. Box 765

Quapaw, OK 74363

(w) 918-238-3100

(f) 918-674-2456

April 9, 2025

Mr. John Underwood
U.S. Army Corps of Engineers, Vicksburg District
4155 East Clay Street
Vicksburg, Mississippi 39183-3435

RE: Phase I Cultural Resources Investigations for Levee Enlargement and Berms Item Nos, 611-L, 614-L, 615-L, 616-L F/C MR&T, East Bank Mississippi and Levees, (USACE) MDAH Project Log #03-053-25 Report #25-0167, Bolivar County

Dear Mr. Underwood:

We have reviewed the August 2025, cultural resources survey, by C. Andrew Buchner, Principal Investigator, with Chronicle Heritage, received on March 11, 2025, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, MDAH concurs that sites 22Bo1106, 22Bo1107, 22Bo1108, 22Bo1109, and 22Bo1110 are ineligible for listing on the NRHP, and no further work is needed. Therefore, we have no reservations with the undertaking.

There remains the possibility that unrecorded cultural resources may be encountered during the project. Should this occur, we would appreciate your contacting this office immediately in order that we may offer appropriate comments under 36 CFR 800.13.

Please provide Mr. Buchner with a copy of this letter. If you need further information, please contact us at (601) 576-6940.

Sincerely,



Amy D. Morgan
Review and Compliance Officer

FOR: Katie Blount
State Historic Preservation Officer

From: [Lindsey Bilyeu](#)
To: [Underwood, John R CIV USARMY CEMVK \(USA\)](#)
Subject: [Non-DoD Source] RE: Phase I CRS for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, Bolivar County, Mississippi
Date: Wednesday, April 16, 2025 2:00:20 PM

John,

The Choctaw Nation of Oklahoma thanks the USACE, Vicksburg District, for the correspondence regarding the above referenced project. Bolivar Co., MS lies in our area of historic interest.

The Choctaw Nation does not possess affiliation with sites 22Bo1106-1110 that were recorded during the survey. Our office respectfully defers to MDAH and other consulting parties.

However, please be aware that the nearby river is a Trail of Tears Route. Therefore, there is a chance of unrecorded cultural resources and/or human remains being present in the general area. With that said, we ask that work be stopped, and our office contacted immediately, in the event that Native American artifacts or human remains are encountered.

If you have any questions, please contact me.



Yakoke (Thank you),
Lindsey D. Bilyeu
Program Lead NHPA
Historic Preservation
[580-740-9624](tel:580-740-9624) | [580-642-8377](tel:580-642-8377)
lbilyeu@choctawnation.com

From: Underwood, John R CIV USARMY CEMVK (USA) <John.R.Underwood@usace.army.mil>
Sent: Tuesday, March 11, 2025 4:30 PM
To: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Cc: Ian Thompson <ithompson@choctawnation.com>
Subject: Phase I CRS for Levee Enlargement and Berms, Item Nos. 611-L, 614-L, 615-L, and 616-L, Bolivar County, Mississippi

Halito: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

Please see the attached determination letter regarding USACE MVK's undertaking, 12.6 miles (20.3 km) of levee improvements along the left descending bank of the Mississippi River opposite River Miles 611-615 that includes enlargement of the existing levee, new seepage berms, and borrow expansion along the east bank Mississippi River mainline levee (MRL), a feature of the Mississippi River and Tributaries Project (MR&T) (see also the following: <https://www.mvk.usace.army.mil/MRLSE>). CEMVK contracted Chronicle Heritage Group, LLC (CHG) to conduct a Phase I Cultural Resources Survey of the entire 179-ac. (72.4 ha) APE. These efforts resulted in the identification of five archaeological sites (22Bo1106-22Bo1110); all five sites possess nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. All sites possessed nearly identical assemblage composition and consisted of low-density plowzone and/or simple surface scatters associated with razed tenant period houses. These sites are not known to be associated with a significant event (Criterion A) or important person (Criterion B). Criterion C is not applicable as there are no above-ground resources or elements to evaluate. These sites are not considered eligible under Criterion D (Information Potential) due to the limited subsurface recovery and extensive past disturbances from cultivation and razing. Additionally, no standing structures 50 years of age and older were found to be directly impacted by the proposed project areas and no areas considered to be traditional cultural properties were identified as well. No further investigations are recommended.

Based on the information presented in this letter and the enclosed report, CEMVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) within the APE. Therefore, CEMVK is making a finding of **No Historic Properties Affected** for this undertaking. This correspondence will contain the determination letter, draft CRS report, and the KMZ file of the project footprint. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. CEMVK requests your comments within 30 days, per 36 CFR 800.5(c). Please contact Mr. John Underwood of this office at (601) 631-5017 or via e-mail John.R.Underwood@usace.army.mil or Mr. Mike Renacker, Vicksburg District Tribal Liaison at (601) 631-5842 or via e-mail at Mike.Renacker@usace.army.mil, should have any questions concerning this project.

Respectfully,

John R. Underwood, MA, RPA

Archaeologist

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