APPENDIX A: ENVIRONMENTAL ASSESSMENT

PORT OF ROSEDALE EXPANSION, BOLIVAR COUNTY, MISSISSIPPI

CAP SECTION 107 NAVIGATION IMPROVEMENTS

ENVIRONMENTAL ASSESSMENT

CONTINUING AUTHORITIES PROGRAM (CAP) 107
PORT OF ROSEDALE EXPANSION
ROSEDALE HARBOR
ROSEDALE, BOLIVAR COUNTY, MISSISSIPPI

EA # 111

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

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DRAFT ENVIRONMENTAL ASSESSMENT

PORT OF ROSEDALE EXPANSION
ROSEDALE HARBOR
ROSEDALE, BOLIVAR COUNTY, MISSISSIPPI

EA # 111

1 INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division, Regional Planning and Environment Division South (RPEDS), has prepared this Draft Environmental Assessment (EA 111) to evaluate the potential impacts associated with expanding parts of the existing Port of Rosedale, located on the Mississippi River, in Bolivar County, Mississippi. The Port is approximately 2 miles south of Rosedale, Mississippi, on the left descending Mississippi Riverbank, at River Mile 585. The service area for the Port at Rosedale includes Bolivar, Coahoma, and Sunflower Counties in Mississippi.

The primary objective of the proposed project is to increase efficiency and reduce the risk to navigation within the Port of Rosedale harbor channel by realigning the existing channel and expanding the turning basin. All proposed work would be performed from within the channel using barges and excavators. Dredged material would be carried via pipeline to the mouth of the channel to be carried away by the Mississippi River. Debris that cannot be removed via pipeline would be hauled ashore to be burned.

This draft EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality's Regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation ER 200-2-2. This draft EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the District Commander to make an informed decision on the appropriateness of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.1 Project Location

Project Name: Port of Rosedale Expansion Rosedale Harbor Rosedale, Bolivar County, Mississippi Project (Project).

The project area is the Port of Rosedale, located on the east bank of the Mississippi River (river mile 585) in Bolivar County, Mississippi (Figure 1). Portions of the channel extend into Desha County, Arkansas. The Port of Rosedale provides southern port access to the Gulf of Mexico at New Orleans, and western access on the Arkansas River, all the way to Muskogee and through the Tulsa Port of Catoosa on the McClellan-Kerr Arkansas River Navigation System.

Figure 1: Port of Rosedale Project Area.

1.2 Authority

The authority for the project is the Small Navigation Project Under Continuing Authorities of the Chief of Engineers, Section 107 of the Rivers and Harbors Act of 1960, as amended. Under the Continuing Authorities Program (CAP), the U.S. Army Corps of Engineers is authorized to plan, design, and construct certain types of water resource and ecosystem restoration projects without additional and specific Congressional authorization. The purpose is to implement projects of limited scope and complexity. Section 107 provides authority for the Corps of Engineers to develop and construct small navigation projects. The Corps adopts a project for construction after detailed investigation clearly shows the engineering feasibility and economic justification of the improvement.

1.3 Non-Federal Sponsor

The Non-Federal Sponsor (NFS) is the Rosedale-Bolivar County Commission (RBCC). In a letter dated January 23, 2018, the RBCC requested assistance from the Corps under the Section 107 authority to undertake an investigation involving the risk to navigation with the Port of Rosedale harbor channel. The RBCC indicated its understanding of the provisions of the Section 107 authority and its willingness to cost share the project. On February 27, 2020, the Port of Rosedale sent and updated Letter of Intent.

1.4 Purpose and Need for the Proposed Action

The Rosedale-Bolivar County Port Commission has identified a risk to navigation within the Port of Rosedale harbor channel. In addition to the annual problem of sedimentation near the mouth of the channel, there is an area of the channel that is extremely narrow and dangerous to navigate during the low-water times of the year. This risk to navigation is more prevalent during the low-water period for the river, which also happens to be the "busy season" for the port due to the increasing business of commodities trading there. This creates extended barge traffic delays and navigation issues as the barges move through the port.

In addition, the Port of Rosedale is reaching full-capacity use of developed property and considering alternative solutions to hopefully satisfy the continuing demand of businesses to locate at the port. All these factors create an environment where barge traffic through the port will also continue to increase. In addition to the channel improvement in the narrow throat of the harbor, there should also be attention given to the north end of the harbor and turning basin. To adequately serve all the tenants at the port, it is imperative that there is sufficient fleeting area and area for movement of barges to and from docks.

1.5 Prior NEPA Documents

USACE. Rosedale Harbor, Mississippi, 1977. Construction of slack water harbor and channel, turning basin, and access road 2.5 miles south of Rosedale.

1.6 Public Concerns

The public is concerned about maintaining safe and efficient navigable channels in support of commercial activity. As the Port of Rosedale is reaching full-capacity use, there are concerns at being able to continue to satisfy the increasing demand of businesses to locate to the port. In addition to the channel improvement in the narrow throat of the harbor, there should also be attention given to the north end of the harbor and turning basin. To adequately serve all the tenants at the port, it is imperative that there is sufficient fleeting area and area for movement of barges to and from docks.

1.7 Data Gaps and Uncertainties

Because natural systems are complex and consist of an intricate web of variables that influence the existence and condition of other variables within the system, all projects contain certain inherent uncertainties. The effects of storms, increased sea level rise, and climate change on each project's performance are uncertain and are addressed through future projections based on existing information. No model can account for all relevant variables in a dynamic system. As such, how the proposed project will realistically perform and the impacts that will result from its construction are a "best guess" based on what we presently know about the existing system and the results of similarly constructed projects.

2 ALTERNATIVES INCLUDING THE PROPOSED ACTION

Alternative plans for the Port of Rosedale Expansion were developed with the level of detail necessary to select a justified, acceptable, and implementable plan that is consistent with federal law and policy and, to the extent that the project authorization, law, and policy permit, consistent with the goals of the Non-Federal Sponsor (NFS). Benefit and cost, risk and uncertainty, cost effectiveness, and incremental cost analyses are undertaken using procedures that are most appropriate for the scope and complexity of this project. Opportunities to reasonably avoid or minimize adverse environmental impacts and mitigation requirements are considered in formulating the proposed action. The Project Delivery Team (PDT) relies on existing data and existing environmental clearances for other USACE projects that are located within the project area to expedite the completion of this document.

2.1 Description of Alternatives

Through coordination between the USACE, the NFS, and natural resource agencies, several alternative plans for improvement of the Port of Rosedale were preliminarily developed by the Rosedale-Bolivar County Port Commission. This EA considered seven of these alternatives:

2.1.1 Alternative 1 - No Action – FWOP

NEPA requires that in analyzing alternatives to a proposed action, a federal agency must consider an alternative of “No Action.” This No Action Alternative is the Future without Project (FWOP) conditions which consider the impacts and predict the environmental gains/losses if the proposed action is not implemented.

Under this alternative, no action would be taken to increase the inlet channel width and turning basin areas. Port operation and regular dredging would continue to occur in the current manner. The Port would continue to experience increasing navigation challenges as port traffic increases, especially during low water periods. Navigation risks would remain high and would continue to increase. Cost and lost time to JANTRAN would continue to increase, resulting in negative impacts to the Port of Rosedale economy. This alternative would have no cost and would provide no benefits.

2.1.2 Alternative 2 - Widen Channel at JANTRAN

Alternative 2 considers widening the channel adjacent to the JANTRAN facility located on the outside of the bendway in the navigational channel (Figure 2). When this facility is in operation, barge traffic can create a navigational encroachment on the channel, thus restricting barge traffic while barges are loading or being repositioned at the JANTRAN facility. This alternative widens a 0.67-mile length of the western channel through the bendway by 50 feet to a total width of 200 feet, with tapered transitions in the upper and lower channel crossovers. This channel width was determined through coordination with the local sponsor and river pilots who utilize the port. A two wide barge width totals to 70', therefore two-lane traffic would amount to a side-by-side total of 140 feet. 200 feet would be adequate for maneuvering through the channel at JANTRAN and reducing barge traffic. Under this alternative, a dredge quantity of approximately 91,300 CY would be removed and 3.25 acres of terrestrial habitat and 0.72 acres of wetland habitat would be cleared and snagged.

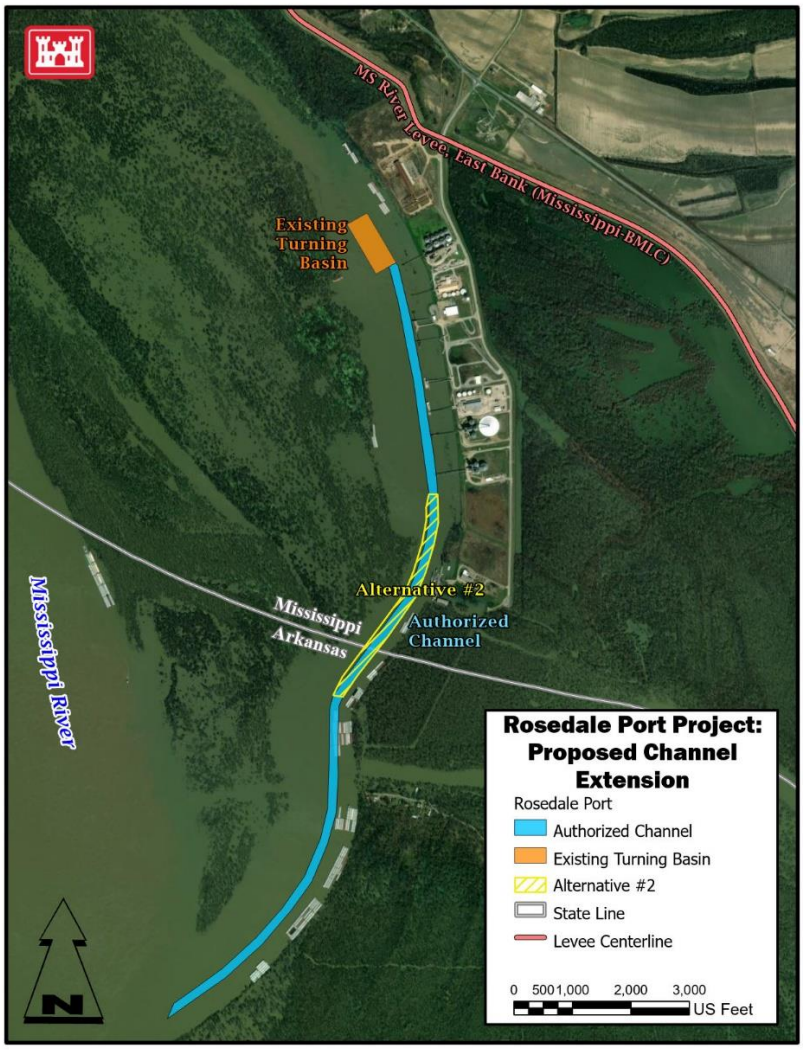

Figure 2:Alternative 2- Widen channel bend near JANTRAN.

2.1.3 Alternative 3- Widen Entire Channel

Under this alternative, a 0.68-mile length of channel near JANTRAN would be widened to the West to a total of 200 feet wide. The remainder of the channel, from the mouth of the channel to the existing turning basin, would be widened to the West to a total of 185 feet wide (Figure 3). The Eastern channel limit would remain in the same location. Under this alternative, a dredge excavation volume of 269,600 CY of material would be removed and 4 acres of terrestrial habitat and 0.72 acres of wetland habitat would be cleared and snagged.

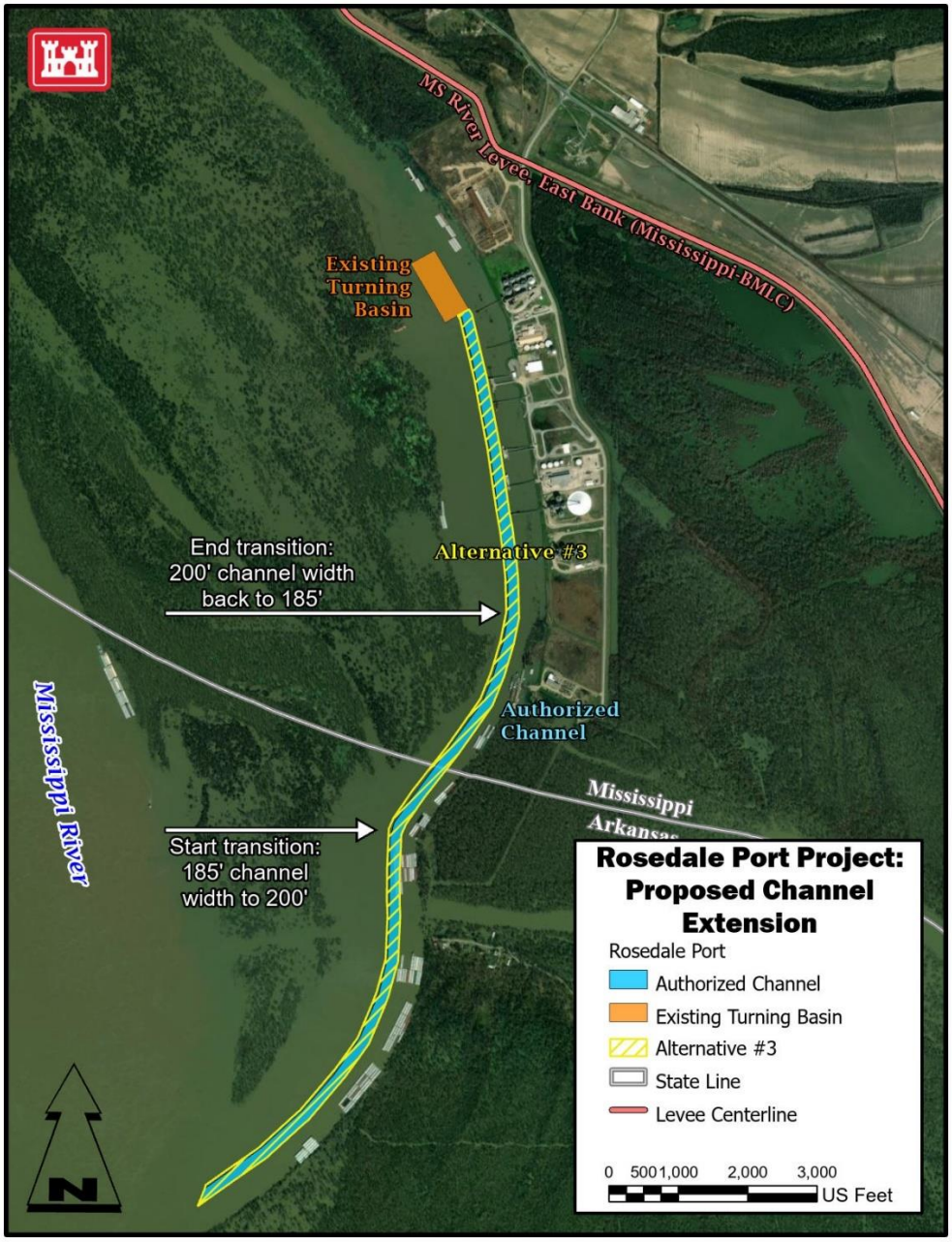

Figure 3: Alternative 3- Widen entire channel.

2.1.4 Alternative 4 – Widen Turning Basin

The existing turning basin area is 400,000 square feet (400 feet wide x 1000 feet long). Under this alternative, the width of the existing turning basin would be widened by 200 feet to the West, thus adding 200,000 square feet to the existing turning basin (Figure 4). The eastern perimeter of the turning basin and the turning basin length would remain the same. The new turning basin area would be 600,000 square feet (600 feet wide x 1000 feet long). The additional turning basin width would allow barges to turn 180 degrees more quickly and easily, even during low water conditions. Under this alternative, a dredge excavation volume of 52,300 CY of material would be removed and 1.2 acres of terrestrial habitat would need to be cleared and snagged.

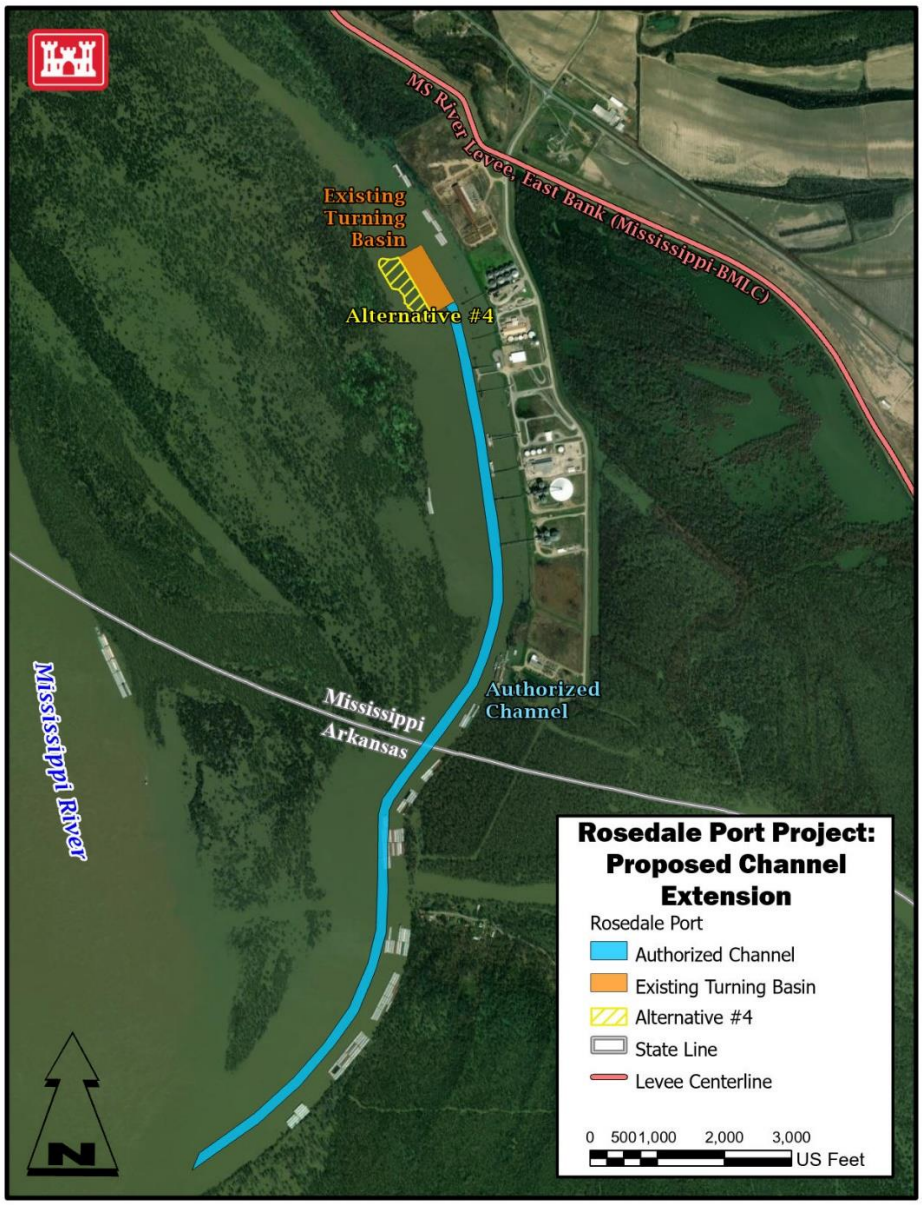

Figure 4: Alternative 4- Widen turning basin.

2.1.5 Alternative 5 – Lengthen Channel, Relocate and Widen Turning Basin

Under this alternative, the shipping channel would be extended 1000 feet in length; the channel width would be 150-feet (Figure 5). The turning basin would be relocated farther to the north of the Port and would be expanded to 6,000 square feet (600 feet wide x 1000 feet long) as described in Alternative 4. The additional channel length would facilitate access for additional port developments and the additional turning basin width would allow a greater number of barges to turn 180 degrees more easily, even during low water conditions. Under this alternative, a dredge excavation volume of 198,400 CY of material would be removed and 3.0 acres of terrestrial habitat would be cleared and snagged.

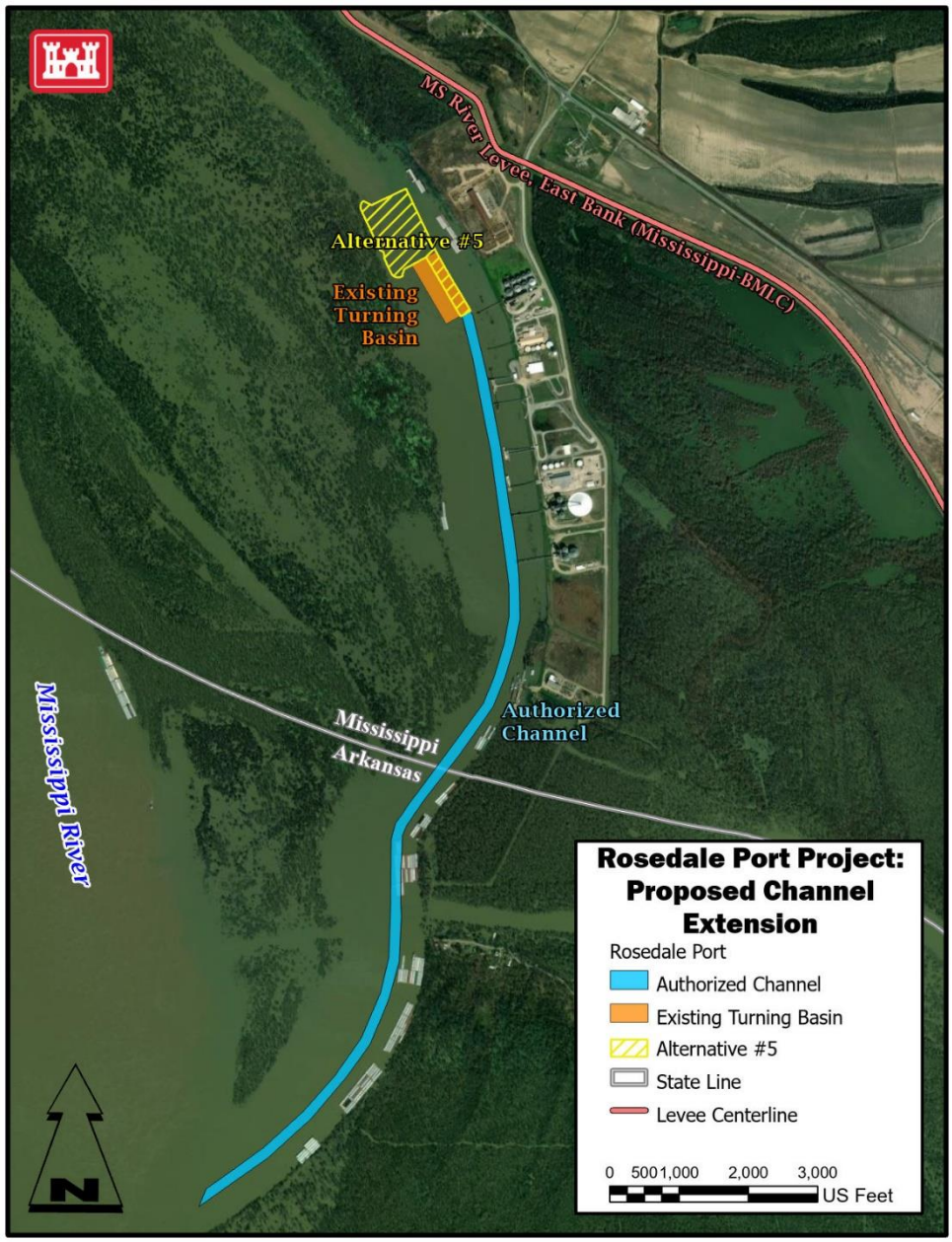

Figure 5: Alternative 5- Lengthen channel to relocate and widen turning basin.

2.1.6 Alternative 6 – Shift Channel Bend

Under this alternative, a 0.63-mile length of the channel bend near JANTRAN would be relocated (Figure 6). The new channel would be situated through shifting the entire channel to the west 100 feet, then widening the new channel to the west 50 feet for a new total channel width of 200 feet. The new channel would transition into the existing channel in the upstream and downstream crossovers. Under this alternative, a dredge excavation volume of 96,900 CY of material would be removed and 3.5 acres of terrestrial habitat and 0.57 acres of wetland habitat would need to be cleared and snagged.

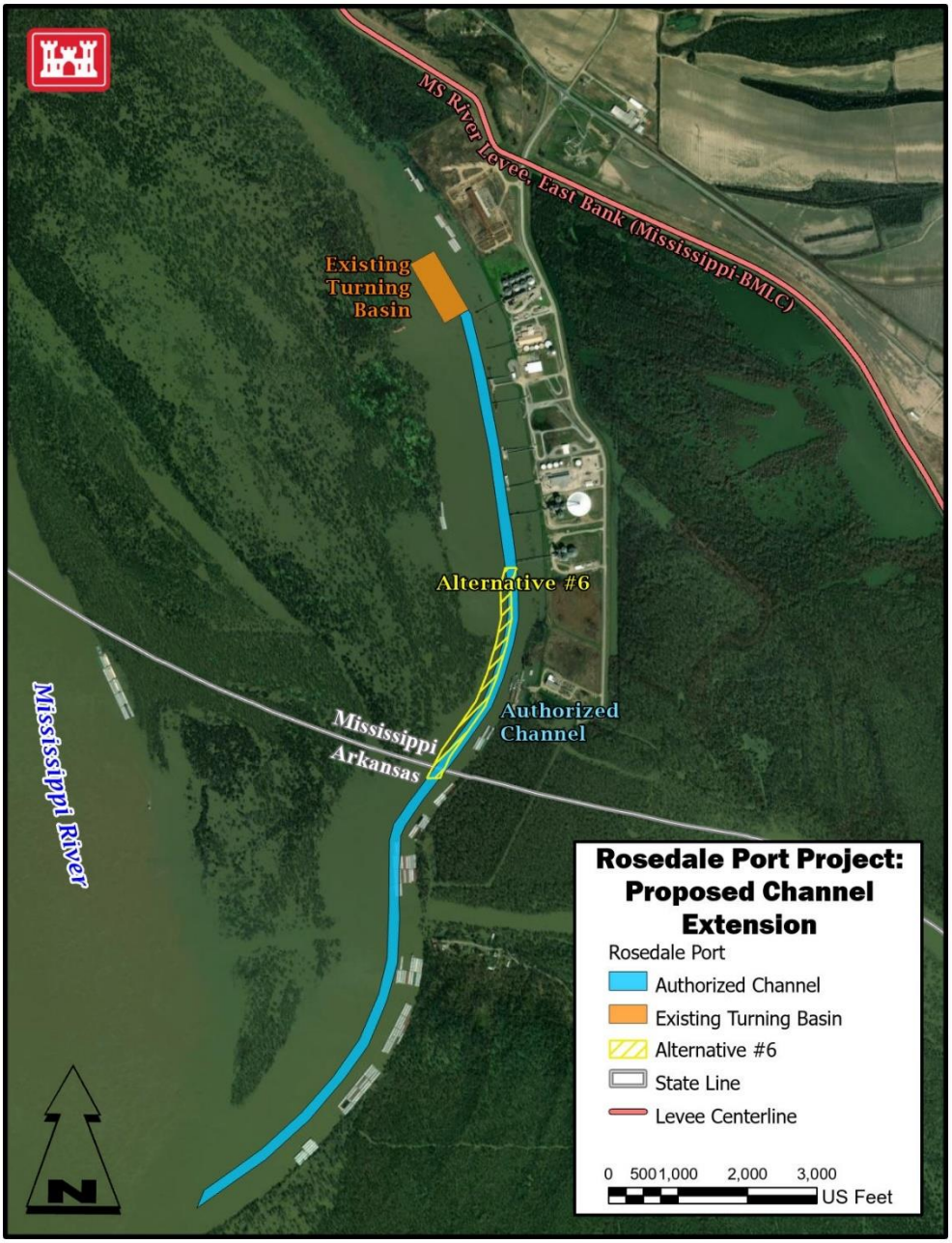

Figure 6: Alternative 6- Shift channel bend.

2.1.7 Alternative 7- TSP- Widen Entire Channel, Extend Channel, and Expand Turning Basin

This alternative was chosen as the tentatively selected plan (TSP) since it provided the highest net excess benefits compared to the other alternatives. Alternative 7 is a combination of alternatives 3 and 5. The entire channel would be widened to 185 feet except for 0.67 miles near the JANTRAN facility, where it would be widened to 200 feet (Figure 7). In addition, the channel would be extended 1000 feet in length, and the turning basin would be relocated and enlarged to 600 feet by 1,000 feet (600,000 square feet). Under this alternative, a dredge excavation volume of 468,000 CY of material would be removed and 7.0 acres of terrestrial habitat and 0.72 acres of wetland habitat would need to be cleared and snagged.

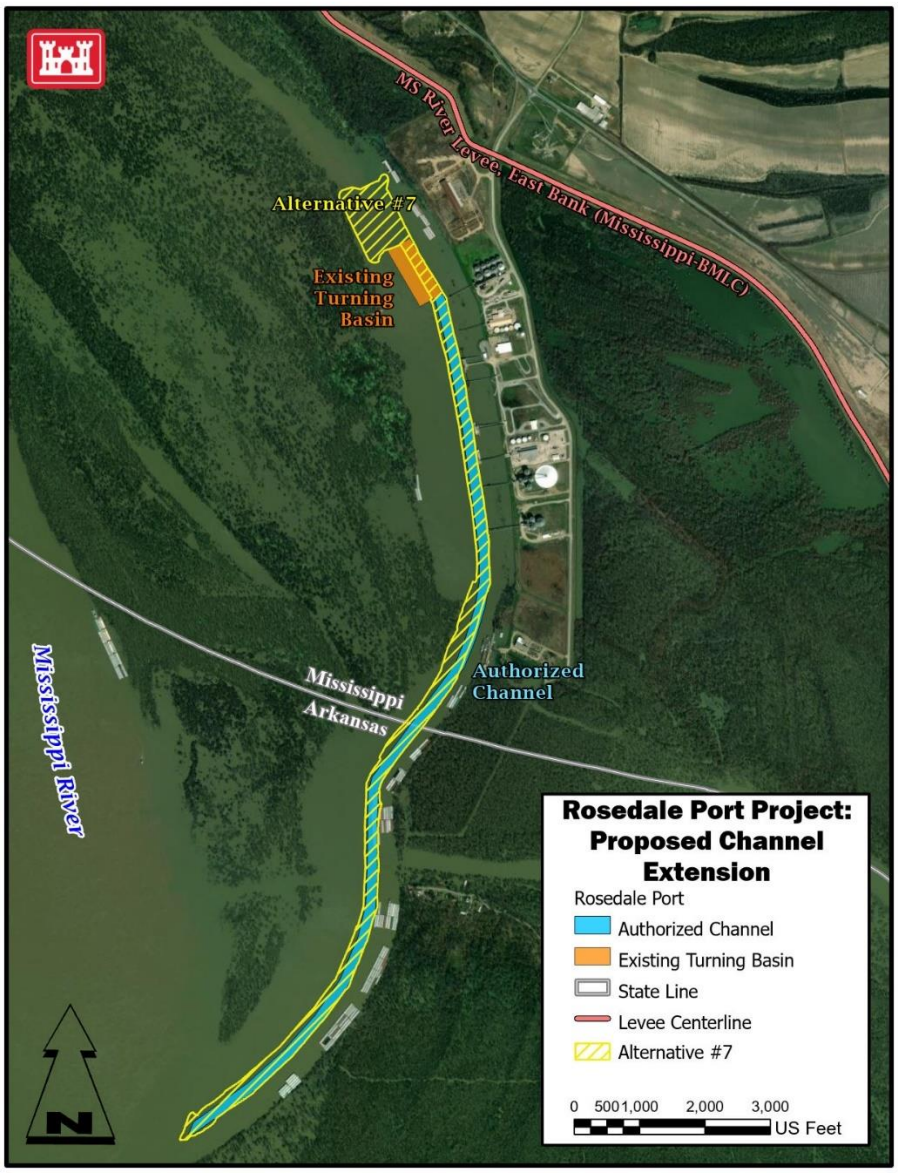

Figure 7: Alternative 7- Widen Entire Channel, Extend Channel, and Expand Turning Basin.

2.2 Proposed Actions

The tentatively selected alternative for the Port of Rosedale proposes three primary modifications to the existing port footprint:

1. Realigning and widening the authorized channel limits at the existing barge facility.
2. Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations.
3. Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is located approximately halfway up the 2.7 mile (14,256 feet) long by 150-foot-wide navigation channel, which runs between the port and the Mississippi River (Figure 8). The channel is currently authorized and maintained at an elevation of 93 feet MSL, which is 9 feet below the Low Water of Reference Plane (LWRP) of 102 feet.

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the TSP alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 feet to 200 feet to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily. The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting 3,600 feet (0.68 miles) of the navigational channel 100 feet to the west.

The remaining portion of the navigation channel between the Mississippi River and the turning basin at the upper end of the port would be expanded from 150 feet to 185 feet (except for the portion mentioned above). This additional width would allow improved facilitation of two-way traffic and provide navigational support for larger barge configurations.

The final main feature of this alternative is the reconfiguration and enlargement of the existing 400 foot by 1000 foot turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shifts the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure 600 feet by 1000 feet. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port.

All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation channel elevation of 93 feet MSL would be maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Figure 8: Location of existing barge loading facility JANTRAN.

2.2.1 Dredged Material Disposal

A cutter head dredge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 9). The currents of the river would carry and disperse the dredge material as it travels downstream of the project area. This method of dredge material disposal is currently utilized annually for maintenance dredging of the port. The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River.

All woody material encountered during dredging/construction would be relocated on to dry ground and burned in a burn pile within the project area or relocated under water outside of the project area.

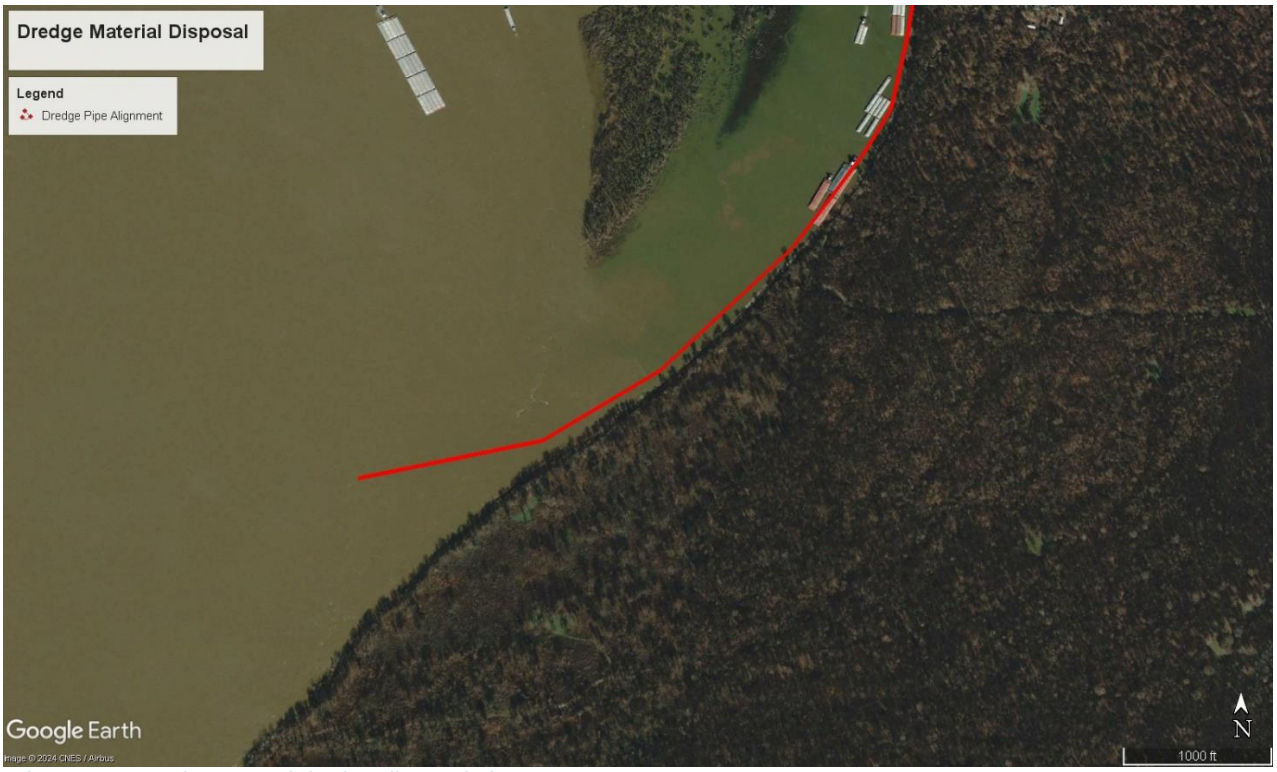

Figure 9: Map of proposed dredge disposal plan.

3 AFFECTED ENVIRONMENT

3.1 Description of the Watershed

The Mississippi River is the main stem of the world's most highly developed waterway system, and it measures approximately 2,340 miles in length. It has the third largest drainage basin in the world, exceeded in size only by the watersheds of the Amazon and Congo Rivers, and it discharges the headwater flows from about 41 percent of the contiguous 48 states. The basin covers more than 1,245,000 square miles, includes all or parts of 31 states and two Canadian provinces, and roughly resembles a funnel which has its spout at the Gulf of Mexico. Waters from as far east as New York and as far west as Montana contribute to flows in the lower river.

The lower alluvial valley of the Mississippi River is a relatively flat plain of about 35,000 square miles bordering on the river which would be overflowed during time of high water if it were not for man-made protective works. This valley begins just below Cape Girardeau, Missouri, is roughly 600 miles in length, varies in width from 25 to 125 miles, and includes parts of seven states—Missouri, Illinois, Tennessee, Kentucky, Arkansas, Mississippi, and Louisiana.

Deep-draft navigation is a major component of waterborne traffic on the Mississippi River, and it is the key waterway for moving grain by barge from farm states to domestic export markets. Low water levels impact commerce by reducing the navigable portions of the river that are deep enough for barges.

3.2 Description of the Project Area

The project area is located near the center of the Mississippi River flood plain area in Bolivar County, Mississippi. The area is characterized by flat, nearly level land. All the soils in the area have been developed from alluvial sediments deposited by the Mississippi River. Numerous streams, bayous, and rivers traverse the area. Relief ranges from level to sloping with a large part being level or nearly level. Mineral resources are insignificant in the area except for some sand, gravel, and clay deposits. Surface and ground water is abundant in the area and several freshwater bearing aquifers provide ample ground water supplies to residents.

Historically, the project area was bottomland hardwood forest. 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. Levees reduce flooding in most of the valley and the channel has been realigned and constrained. Construction of the Mississippi River mainline levee and drainage projects afforded flood protection to approximately 28,000 acres and enabled most of this area to be cleared. Currently, less than 5 percent of the protected area contains bottomland hardwood forest. The bulk of the land is still being used for agricultural production, primarily rice, soybeans, cotton, and winter wheat. The remaining 18,000 acres are located inside the Mississippi River mainline levee and are classified as batture land. This area is largely forested and subjected to annual flooding. The primary use of this area is for recreational hunting.

3.3 Climate

The climate in Mississippi has always been variable and sometimes extreme—and climate change may intensify this historical pattern. Average state temperatures have varied substantially over the past century, with a warming trend since the late 1960s. Average rainfall has changed only a little, with summers becoming slightly drier and winters slightly wetter, and extreme rainfall events have become more frequent.

Bolivar County is in the northwestern portion of Mississippi, alongside the Mississippi River, in an area referred to as the Delta Region. The Delta Region covers 35,000 square miles from southern Illinois to the Gulf of Mexico, encompassing 219 counties in seven states and approximately 8.3 million people. The climate in the area is characterized by humid subtropical conditions with temperate winters and long, hot summers. Normal precipitation values range from 50 to 65 inches, annually, with the wettest months being March and April and the driest months being August and September. High temperatures range from 50 degrees Fahrenheit in January to 92 degrees Fahrenheit in July and low temperatures range from 33 degrees Fahrenheit in January to 73 degrees Fahrenheit in July. The study area is subject to periods of both drought and flood, and the climate rarely seems to truly exhibit "average" conditions.

Tropical storms and hurricanes are unlikely to affect the area as Bolivar County, MS is in a very low risk hurricane zone. Twenty-six hurricanes have been recorded in Bolivar County, MS since 1930. The largest hurricane was Betsy in 1965. The most recent Bolivar County, MS hurricane was Humberto in 2007.

(https://www.homefacts.com/hurricanes/Mississippi/Bolivar-County.html)

3.4 Geology

The geology of the study area is heavily influenced by the Mississippi River and its delta plain. Relief, like that in other parts of the Mississippi River flood plain, ranges from level to sloping, with a large part being level or nearly level. The terrain is relatively flat, and soils are basically fine-grained with low permeability. All the soils in the area have been developed from alluvial sediments and are both soils developed from Mississippi River alluvium and those developed from silty alluvium that originated in the loess hills. Several millennia ago, the area was covered by waters of the Gulf of Mexico. As a result of this inundation and progressive depositions by the river, the alluvial sediments of which the area is formed are several hundred feet thick. There are no significant mineral resources in the study area. Some sand, gravel, and clay deposits are extractable, but these are of little economic importance. Numerous streams and bayous traverse the study area and levee construction and drainage systems have reduced the frequency of flooding in the area.

3.5 The Batture

The Batture refers to the seasonally flooded area of low water river land, inland to the levees. It is a combination of different aquatic and terrestrial habitats and includes bare soil and vegetated surfaces, varying from emergent marsh to cypress swamps to seasonally or even infrequently flooded hardwood forests. Some portions of it are seasonally farmed or used as range for grazing livestock and the forests have been harvested for timber. But for the most part, Batture lands have been left untouched as compared to the lands outside of the levee system.

The ecological value of the Batture is reflected by the high biodiversity of aquatic and terrestrial species. Biologically, the Batture has proven to be a refuge for wetland vegetation and a migration corridor for birds and terrestrial animals. The Batture lands provide significant habitat for migrating neotropical songbirds as well as wintering waterfowl.

The flow of the Mississippi River maintains a natural hydrograph, periodically connecting oxbow lakes, sloughs, forested lands, and other aquatic habitats in the Batture. Fish move from the channel into the Batture for spawning, rearing, and feeding following the flow paths that form as the river rises (Junk et al. 1989). Resident fish living in Batture waterbodies receive food and nutrients from the river water contributing to increased somatic growth and survival. The ebb and flow of floodwater in the Batture benefits many other groups of animals contributing to its high biodiversity.

3.6 Relevant Resources

This section contains a description of relevant resources that could be impacted by the project. The important resources described 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 public. Table 1 provides summary information of the institutional, technical, and public importance of these resources.

The following relevant resources are discussed in this report: navigation, wetlands, scrub-shrub, wildlife, aquatic resources/fisheries, threatened and endangered species, water quality, air quality, recreation and aesthetics, cultural resources, and environmental justice concerns.

Table 1: Relevant Resources and Their Institutional, Technical, and Public Importance

Resource	Institutionally Important	Technically Important	Publicly Important
Navigation	Rivers and Harbors Act of 1899 and River and Harbor Flood Control Act of 1970 (PL 91-611).	N/A	Navigation concerns affect area economy and are of significant interest to community.
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.
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.
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, Louisiana Environmental Quality Act of 1983.	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, and Louisiana State & Local Coastal Resources Act of 1978.	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.
Recreation and Aesthetics	Federal Water Project Recreation Act of 1965 as amended, and Land and Water Conservation Fund Act of 1965 as amended	Provide high economic value to local, state, and national economies.	Public makes high demands on recreational areas. There is a high value that the public places on fishing, hunting, and boating.
Environmental Justice	Executive Orders 12898, 13990, & 14008, Federal Actions to Address Environmental Justice in Communities of Color and People Experiencing Poverty, and the Department of Defense's Strategy on Environmental Justice of 1995, & Tackling the climate crisis at home and abroad 2021.	The social and economic welfare of communities of color and people experiencing poverty may be positively or disproportionately impacted by the preferred plan.	Public concerns about the fair and equitable treatment (fair treatment and meaningful involvement) of all people with respects to environmental and human health consequences of federal laws, regulations, policies, and actions.

The following resources have also been considered and found to not be affected by any alternative under consideration: coastal zone, essential fish habitat, beaches, floodplain management, prime or unique farmland, Gulf water bottoms, public use of lands, unique or rare wildlife habitat, Indian trust resources, and soundscapes/noise.

4 EXISTING CONDITIONS

4.1 Navigation

The Mississippi is an essential component of the nation's land-based transportation network, serving as a vital link in the nation's multi-modal transportation system and relieving congestion on roads and rail. Commercial navigation is made possible by a series of locks and dams on the Mississippi River, mostly built in the 1930s, which, along with active channel maintenance, provide a reliable navigation system.

The channel at the project location poses certain navigational challenges when in operation. There is an area at the position of the JANTRAN in the bend of the channel, that creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. This area is extremely narrow and dangerous to navigate. It has been a concern for quite some time now, but due to increasing business at the port and the resulting increasing barge traffic, it is becoming more urgent to address this concern. In addition, annual sedimentation at the entrance to the channel exacerbates the navigation risks.

The risks to navigation are heightened during the low-water period for the river, which is simultaneously the "busy season" for the port due to the increasing business of commodities trading there. When river levels are low, JANTRAN suffers significant time losses and cost to perform its services. Once the lower Mississippi River reaches 10 feet on the Arkansas City gauge, JANTRAN is forced to move its entire fleet of barges out to shorelines on the lower Mississippi River. The channel in which the facility is located in the Port of Rosedale becomes just wide enough to hold the drydock and floating work barges and enough room for a harbor boat and one barge to pass by enroute to/from other tenants in the port.

In addition, the Port of Rosedale is reaching full-capacity use of developed property and is considering alternative solutions to hopefully satisfy the continuing demand of businesses to locate at the port. All of these factors create an environment where barge traffic through the port will also continue to increase and lead to more delays and navigational safety risks. The channel is currently authorized for a width of 150 feet and an elevation of 93 feet MSL, which is 9 feet below the LWRP of 102 feet.

4.2 Wetlands

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 C.F.R. § 328.3[b]) (Regulatory Programs of the Corps of Engineers 1986).

Wetlands are dynamic systems that are subject to both human and natural alterations that may affect their abundance as well as their quality. Natural events, including subsidence, rise in sea level, and sedimentation can impact the number and type of wetlands found in any given region of the country. Human activities have mainly led to a reduction in the number of acres of wetlands due to drainage for agriculture, channelization of waterways, dredging, and placement of fill for urban or industrial development.

Inland wetlands are referred to as palustrine habitats or wetlands associated with riverine or lake systems. The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergent mosses or lichens, forest vegetation and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt. (USFWS National Inventory - https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/)

Much of the project area once consisted largely of bottomland hardwood (BLH) deciduous forest, mixed hardwood forest, and cottonwood-sycamore-willow community. Construction of the Port significantly modified the vegetative communities within and around the project area. Today, the existing habitat in the project area consists of forest and low elevation frequently flooded herbaceous/shrub zone. The forested areas are frequently flooded bottomland hardwood vegetated primarily with black willow (*Salix nigra*). These wetland forests provide habitat for white-tailed deer, raccoon, swamp rabbit, and a variety of migratory songbirds and other birds. Such forests also provide floodwater storage and water quality improvement functions.

4.2.1 Wetland Value Assessment

Scrub-shrub wetlands are covered by woody vegetation generally less than 20 feet tall that grows in saturated soil conditions. These wetland features provide storm and flood mitigation, cleaner water, economic gains, and cultural traditions as ecosystem service benefits.

Scrub-shrub habitat is utilized by most species of marsh mammals including nutria (*Myocaster coypus*), raccoon (*Procyon lotor*), muskrat (*Ondatra zibethicus*), swamp rabbit (*Sylviagus aquaticus*), and white-tailed deer (*Odocoileus virginianus*). Scrub-shrub habitats provide essential refuge for wintering waterfowl, nesting mottled ducks, wading birds, marsh birds, and shorebirds. Shrub-dominated ridges and willow-covered areas provide important stopover habitat for many Neotropical migrants. Birds such as egrets (*Ardea alba*; *Egretta thula*), herons (*Ardea herodias*; *Egretta* spp.; *Nycticorax* spp.), rails, gallinules, and mottled ducks (*Anas fulvigula*) use scrub-shrub vegetation for nesting because nests would not be affected by occasional high water. Scrub-shrub habitat provides essential refuge for marsh animals during high water events.

4.3 Aquatic Resources/ Fisheries

The most significant fishery resources within the proposed expansion area are the backwater habitats along the Mississippi River. Spawning and early life history dynamics of fishes found in this backwater floodplain system are directly associated with the height and duration of the flooding. During springtime flooding, the shallow water throughout the batture lands provides essential spawning and foraging habitat for a variety of fish species. After the eggs hatch, the floodplain also provides the slack-water, structure filled habitat needed by the young fish. Permanent habitats, such as oxbow lakes and abandoned channels (Lake Beulah, Lake Vermillon, and Lake Whittington), provide the pond-like conditions preferred by important sport fishes such as crappie, bream, and largemouth bass.

Of the 109 species of freshwater fish in the Lower Mississippi River, more than half depend on the backwater habitats provided by the floodplain. The floodplain also provides a rich food supply for not only the young fish, but for all fish in the river.

4.4 Terrestrial Resources/ Wildlife

Much of the terrestrial habitat is forested, but other areas consist of a low elevation frequently flooded herbaceous/shrub zone. The forest habitat in the project area consists of oaks, cottonwood, sycamores, elms, maples and ashes including black willow (*Salix nigra*), cottonwood (*Populus deltoides*), river birch (*Betula nigra*), green ash (*Fraxinus pennsylvanica),* American elm (*Ulmus americana*), and water hickory (Carya aquatica), in the overstory, with juvenile overstory species, deciduous holly (Ilex decidua), and vines and herbaceous species, greenbriars (*Smilax spp.),* southern dewberry (*Rubus trivialis*), switchgrass (*Panicum virgatum*), and smartweed (*Polygonum pensylvanicum*) in the understory.

Wildlife in vicinity of the proposed actions are those recreational and esthetic species typical for the southern United States and include the usual compliment of wildlife species pursued by the public such as white-tailed deer (*Odocoileus virginianus*), squirrels (*Sciuridae spp.*), rabbits (*Sylvilagus spp*.), as well as other terrestrial mammals such as raccoons (*Procyon lotor*). Various species of birds including the Northern bobwhite (*Colinus virginianus*), Painted Bunting (*Passerina ciris*), and Short-eared Owls (*Asio flammeus*) may also occur in the project area. No individual species of significant commercial value occur within the project area.

4.5 Threatened, Endangered, and Protected Species

According to results obtained from the USFWS Information, Planning, and Conservation (IPaC) tool on 5 March 2024 there are a total of 12 threatened, endangered, or candidate species listed in Mississippi and Arkansas that could inhabit the immediate project area (Attachment 1). The federally listed species that could occur in the project area are as follows:

Northern Long-eared Bat (*Myotis septentrionalis*)	Endangered
Tricolored Bat (*Perimyotis septentrionalsis*)	Proposed Endangered
Eastern Black Rail (*Laterallus jamaicensis ssp.)*	Threatened
Ivory-billed Woodpecker (*Campephilus principalis*)	Endangered
Piping Plover (*Charadrius melodus*)	Threatened
Red Knot (*Calidris canutus rufa*)	Threatened
Pondberry (*Lindera melissifolia*)	Endangered
Alligator Snapping Turtle (*Macrochelys temminckii*)	Proposed Threatened
Pallid Sturgeon (*Scaphirhynchus albus*)	Endangered
Fat Pocketbook (*Potamilus capax*)	Endangered
Pink Mucket (*Lampsilis abrupta)*	Endangered
Monarch Butterfly (*Danaus plexippus*)	Candidate

The NLEB is an endangered mammal species found throughout the continental US. During summer, NLEBs roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. The NLEB seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. NLEBs have also been found, albeit rarely, roosting in structures like barns and sheds. In winter, NLEBs hibernate in caves and mines.

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 face extinction due primarily to the range wide impacts of white-nose syndrome, a deadly disease affecting cave-dwelling bats across the continent.

The Ivory-billed Woodpecker is noted for its striking black-and-white plumage; robust white, chisel-tipped bill; lemon-yellow eye; and pointed crest. Males are red from the nape to the top of their crest with black outlining the front of the crest. Females have a solid black crest which is somewhat more pointed and slightly recurved to point forward. The bases of the male's red crest feathers are white and may allow a spot of white to be displayed on the side of the crest when the feathers are fully erect. Morphological data from live birds are lacking. The last universally accepted sighting of an American ivory-billed woodpecker occurred in Louisiana in 1944.

The piping plover is a small sand-colored, sparrow-sized shorebird that nests and feeds along coastal sand and gravel beaches in North America. The adult has yellow-orange-red legs, a black band across the forehead from eye to eye, and a black stripe running along the breast line. This chest band is usually thicker in males during the breeding season, and it is the only reliable way to tell the sexes apart. There are two subspecies of piping plovers: the eastern population is known as *Charadrius m. melodus* and the mid-west population is known as *C. m. circumcinctus.* The bird's name is derived from its plaintive bell-like whistles which are often heard before the bird is visible.

Red Knots are plump, neatly proportioned sandpipers that in summer sport brilliant terracotta-orange underparts and intricate gold, buff, rufous, and black upperparts. This cosmopolitan species occurs on all continents except Antarctica and migrates exceptionally long distances, from High Arctic nesting areas to wintering spots in southern South America, Africa, and Australia. Red Knots from eastern North America have declined sharply in recent decades owing in part to unsustainable harvest of horseshoe crab eggs, and they have become a flagship species for shorebird conservation in the twenty-first century.

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.

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. Alligator snapping turtles 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.

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 platorynchus*), 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.

The fat pocketbook mussel is a freshwater mussel that grows to about 4 to 5 inches (10 to 13 centimeters) long. It has a smooth and shiny yellow, tan, or brown outer shell that is round and inflated. In young mussels, the shell is thin, but in adults it is thick. The inside of the shell is pink at the center and bluish white toward the shell edges. The fat pocketbook lives at the bottoms of large rivers in places where the water is less than eight feet deep. It buries itself in the sand or mud at the bottom of the river with only its feeding siphons (tubular organs used to draw in fluids) exposed to the water. It then feeds by pumping water through its siphon, gathering nutrition from the tiny plant and animal life in the water.

The pink mucket is a rounded, slightly elongated mussel with a thick, inflated, and smooth shell, which is usually yellow brown in color. It can be found on the bottoms of various bodies of water, among gravel and cobble. It can be found in water one inch to five feet in depth. The mussel can live up to fifty years. The pink mucket has been a federally endangered species since the year 1976. The building of dams and reservoirs caused the flooding of the habitat, affecting both the mussel and the host fish. Deteriorating water quality and siltation also affects mussel populations. The pink mucket reproduces in a similar manner to most other freshwater mussels. It requires a stable and undisturbed habitat.

The monarch butterfly is a candidate insect species, thus there are no section 7 requirements for this species, but conservation is strongly encouraged by the USFWS and others of conservation interest. 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. 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.

4.6 Water Quality

Section 303(d) of the Clean Water Act requires states to identify water bodies that are considered impaired due to not meeting one or more applicable water quality standards. Within the same watershed as the project area there are two impaired bodies of water. The Arkansas river, which flows into the Mississippi River slightly south of the project area, and the nearby Lake Beulah are both considered impaired due to degraded aquatic life and low rates of dissolved oxygen. However, neither falls within the project area. The are no scenic and wild rivers within the project area.

4.7 Air Quality

The air quality of the proposed project location is considered “good”. Except for odor, the ambient air quality standards for Mississippi are the Primary and Secondary Air Quality Standards promulgated by the Environmental Protection Agency (EPA). The EPA has set air quality standards for six principal pollutants: nitrogen (NO2), ozone (O3), sulfur dioxide (SO2), particulate matter, carbon dioxide (CO2), and lead (PB). Currently, Mississippi meets all air quality standards. Bolivar County, specifically, has an air quality index value of 46.

4.8 Recreation and Aesthetics

There is a boat ramp in the project area that is used heavily by recreational boaters during the Port’s peak fall and spring commerce seasons. Recreational boaters are subject to navigational safety concerns caused by barges inability to safely navigate the narrow channel during low water events. There is no indication that recreational use of the ramp causes delays with current barge loading or unloading operations.

4.9 Cultural Resources

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas. In addition to the Area of Potential Effect (APE) USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History’s Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports. Review of current cultural resources maps revealed no historic properties within the APE and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 2), three cultural features (McCloud Landing, Napoleon Landing, and O’Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 3). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 2). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting mostly of early twentieth-century residences (see Table 2). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 3). There are no NRHP sites within or adjacent to the Mississippi APE.

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35). Table 3 below itemizes previously recorded cultural resources surveys within an approximately 1-mile (1.6 km) radius of the APE.

Table 2. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	Period(s)	Date Recorded	NRHP Status
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined

Table 2 Continued. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE - continued.

Resource Designation	Period(s)	Date Recorded	NRHP Status
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 3. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

4.10 Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. The Department of Defense's Strategy on Environmental Justice, specifically Executive Orders No. 12898, 59 Fed. Reg. 7629 (11 Feb. 1994), No. 13990 (20 Jan. 2021), and No. 14008, 86 Fed. Reg. 7619 (20 July 2021), directs federal agencies to identify and address any adverse human health or environmental effects, as well as climate crisis issues, 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.

The EPA's EJ Screen tool and the CEQ's Climate and Economic Justice Tool (CEJST) tool were used to locate people/households with income below the federal poverty line and racial and ethnic groups in the project area. According to the EPA's CEJST tool the area in which the project would be located has been identified as disadvantaged (Figure 10). There are no residents located directly within the project area, so a 5-mile buffer was added to the EJ Screen analysis. Within a 5-mile radius of the proposed actions approximately 74% of residents have incomes below the federal poverty line and approximately 88% are classified as people of color (Attachment 2).

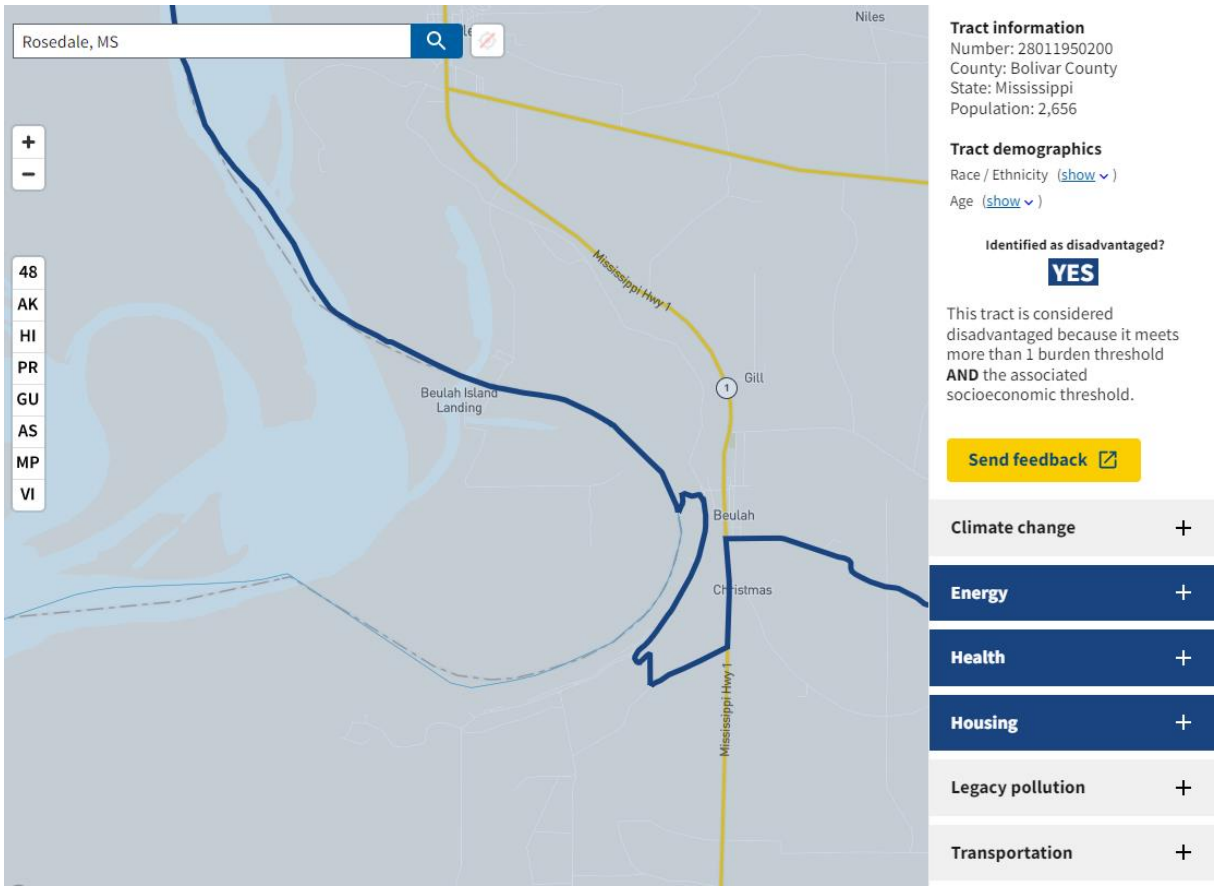

Figure 10: CEQ CEJST results. The project area is identified as disadvantaged.

4.11 Hazardous, Toxic, and Radioactive Waste

This assessment is consistent with the following guidelines and procedures referenced in regulation; "Hazardous, Toxic, and Radioactive Waste Guidance for Civil Works Projects," Engineer Regulation 1165-2-132 (U.S. Army Corps of Engineers, 1992), Lower Mississippi Valley Regulation 1165-2-132, "Water Resources and Authorities for Hazardous, Toxic and Radioactive Waste for Civil Works Projects" (14 June 1996), and the American Society for Testing and Materials, E1527-13, "Environmental Site Assessments: Phase I Environmental Site Assessment Process."

To evaluate if potential Hazardous, Toxic, and Radioactive Waste (HTRW) concerns are present within the project area, a review of EPA's environmental databases of known facilities permitted to handle, treat, store, or dispose of hazardous waste was performed. In addition, a review of reported spills, remediation projects and accidental releases of hazardous materials was also performed. The review was restricted to an area within the minimum search distances reported in the American Society for Testing and Materials, E1527-13, "Environmental Site Assessments: Phase I Environmental Site Assessment Process."

The database review was conducted utilizing EPA's EnviroMapper online query system for regulated facilities. A query of EPAs listed facilities for Superfund sites (NPL), toxic releases (TRI), hazardous waste (RCRAInfo), water dischargers (NPDES), brownfields (ACRES), and toxic substances control act (TSCA) was performed, identifying three sites within the project area that are part of an EPA program system. The northernmost site, Axel Americas, falls under TSCA; to its west, Cives Steel Company falls under TRI and RCRAInfo; and the southernmost site, Jantran Inc, falls under NPDES.

The presence of Cives Steel Company as a TRI facility within the radius of the proposed work warranted review of the TRI Explorer database. The facility monitors for chromium, manganese, and nickel; however, the 2021 National Analysis Dataset (released October 2022) did not provide evidence of any type of on-site disposal of the three listed constituents.

A site reconnaissance of the project area was conducted on October 26, 2022, by five USCAE employees. The inspection was conducted on foot and by boat at various places throughout the project area. There were several notes taken during the site reconnaissance. Buried and partially buried pipes were found at the north end of the harbor. Also, on the north end of the harbor and along the western bank, rust-colored sediment was identified in the groundwater run-off, which appeared to be likely from oxidization. Abandoned industrial debris, including metal wire ropes, were identified along the western bank of the harbor. Some debris was identified further south near the narrowing of the harbor to the width of the currently authorized channel.

A collection of samples was gathered on September 5, 2022, from each of the proposed alternative areas using a drag bucket sampler from a boat. These samples were combined proportionately and resuspended to create an elutriate from which a subsample was collected. The resulting samples were analyzed for the presence of organics, inorganics, and pesticides.

The analytic findings were compared with the Screening Quick Reference Tables (SQuiRTs) (Buchman, Michael F. United States, National Ocean Service., Office of Response and Restoration; United States, National Ocean Service; United States, National Oceanic and Atmospheric Administration; 2008. NOAA OR & R Report; 08-1. https://repository.library.noaa.gov/view/noaa/9327). These results were found to be below the criteria maximum concentration (CMC).

The preferred alternative would be subject to bioassay testing using additional sampling protocols. The samples shall meet the criteria as required by the Mississippi Department of Environmental Quality (MDEQ) prior to permitting for the project.

5 ENVIRONMENTAL CONSEQUENCES

5.1 Navigation

Future Conditions with No-Action

Under the no action alternative, the Port would remain at the existing authorized navigation footprint of a 150 feet wide navigation channel which extends from the confluence of the harbor and the Mississippi River Channel up to the existing 400' by 1,000' turning basin. The port will remain busy and dangerous to navigate, especially during yearly low water events. Siltation will also continue to build up at the mouth of the channel. As business at the Port grows and barge traffic increases, these problems will continue to worsen. Future port expansion will also be limited without improvements to navigation and safety leading to economic loss in the area.

Future Conditions with the Proposed Actions

Alternative 2

This alternative would widen the existing channel 200' through the bendway, with tapered transitions in the upper and lower channel crossovers. This would partially improve navigation during low water events by allowing wider barge configurations to pass the JANTRAN. However, this alternative does not address navigational issues with the current turning basin or allow for future economic growth.

Alternative 3

This alternative would involve widening the entire channel between its confluence with the Mississippi River and the current turning basin. Expanding the channel width to 185 feet would allow one way traffic for two-by-two barge configurations. This would improve navigation within the channel during low water events but would not correct navigational issues related to the small turning basin or allow for future expansion of the Port.

Alternative 4

Under this alternative, the width of the existing turning basin would be widened by 200 feet to the West, thus adding 200,000 square feet to the existing turning basin. This increased area would allow two-by-two barge configurations to utilize the turning basin. However, this alternative does not address the navigational dangers caused in the channel during low water events.

Alternative 5

Under this alternative, the shipping channel would be extended 1000 feet in length and have a channel width of 150-feet. The turning basin would also be relocated farther to the north of the Port and would be expanded. The additional channel length would facilitate access for additional port developments in the future and the additional turning basin width would allow a greater number of barges to turn 180 degrees more easily, even during low water conditions. However, navigation in the rest of the channel would still be dangerous, especially during low water events.

Alternative 6

Under this alternative, a 0.63-mile length of the channel bend near JANTRAN would be relocated. Relocating the channel would only slightly improve navigation during low water events. Only smaller barges would be able to utilize the navigation channel and turning basin.

Alternative 7-TSP

Under this alternative, the proposed actions include widening and extending the navigation channel and moving and expanding the current turning basin. The entire channel would be widened to 185 feet except for a 0.67 mile stretch near the JANTRAN facility, where it would be widened to 200 feet. The proposed expansion of the channel would allow two-way traffic and larger barge configurations to navigate the channel easily and safely, even during times of low water.

In addition, extending the channel 1000 feet in length and relocating and enlarging the turning basin to 600 feet by 1,000 feet (600,000 square feet) allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. This water access would help with the Ports economic growth as business and barge traffic increases.

5.2 Wetlands

Future Conditions with No-Action

Under the no action alternative, there would be no direct impacts to wetlands in the project area.

Future Conditions with the Proposed Action

Project construction impacts to forested wetlands within the project area were assessed by USFWS in the Coordination Act Report (Attachment 3) using the USACE certified 2013 Mississippi Alluvial Valley Hydrogeomorphic (HGM) Approach to Assessing Functions of Forested Wetlands Model (see ERDC/EL TR-13-14). All forested wetland impacts would occur within the central portion or "middle reach" of the Rosedale project (see Figure 11). Enlargement of the turning basin at the north end of the project area was determined to have no BLH impacts.

Alternative 2, 3, & 7 (TSP)

The HGM results (Table 4) determined the construction activities associated with the project TSP would adversely impact approximately 0.72 acres of BLH wetland with average annual functional capacity units (FCU) of 0.22 for the duration of the project. The impacts to the bottomland hardwood forest would be caused by clearing and dredging the area to increase the width of the channel and improve navigation. The compensatory mitigation requirement for the impacts to wetlands would require purchasing mitigation credits. Mitigation efforts for the proposed project are detailed in section 7.

Alternative 4-5

There would be no direct impact to wetlands in the project area.

Alternative 6

The HGM results (Table 2) determined the construction activities associated with this alternative would adversely impact approximately 0.57 acres of BLH wetland with average annual functional capacity units (FCU) of 0.18 for the duration of the project.

Table 4: Mississippi Alluvial Valley Hydrogeomorphic Wetland Results for Port of Rosedale

Summary of Rosedale Port Expansion HGM Results

Alt	BLH Impact (acres)	BLH Impact (ha)	Current HGM Impact (FCUs)	**Average Annual FCUs**
2	0.72	0.29	0.22	**0.22**
3	0.72	0.29	0.22	**0.22**
4	0	0	0	**0**
5	0	0	0	**0**
6	0.57	0.23	0.18	**0.18**
7	0.72	0.29	0.22	**0.22**

HGM Results for Alt 7

	FCI	FCU
Detain Floodwater	0.9	0.26
Detain Precipitation	0.48	0.14
Cycle Nutrients	0.9	0.26
Export Organic Carbon	0.85	0.25
Maintain Plant Communities	0.69	0.2
Provide F&W Habitat	0.77	0.22
average FCU =		**0.22**

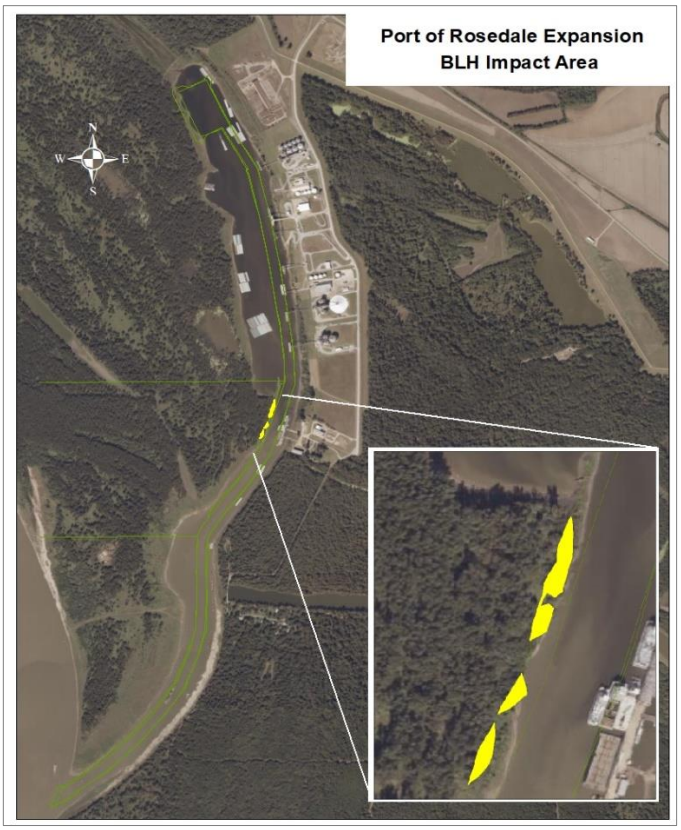

Figure 11: Map showing the Port of Rosedale project area and BLH wetland impact areas for the TSP.

5.3 Aquatic Resources/ Fisheries

Future Conditions with No-Action

The no action alternative would not have a direct impact on aquatic resources and fisheries in the short-term since the existing conditions would be maintained.

Future Conditions with the Proposed Action (Alternatives 2-7)

Construction activity is anticipated to result in some short-term negative impacts to aquatic resources in the immediate project area. Due to noise disturbances caused by dredging, fish and other mobile aquatic species are likely to avoid the project area during the proposed actions but are expected to return shortly after the project is complete. Since the project area is currently an active port that is dredged on a regular basis, benthic species are already frequently disturbed and would not experience any additional long-term adverse effects due to the proposed actions. This project would not contribute toward long-term impairments of fish and invertebrates.

5.4 Terrestrial Resources/ Wildlife

Future Conditions with No-Action

The no action alternative would not have a direct impact on wildlife in the short-term since the existing conditions would be maintained.

Future Conditions with the Proposed Action

With implementation of alternatives 2-7, wildlife movement and activity patterns around the project area would be temporarily influenced by general traffic and the noise generated from operating construction equipment. However, this temporary impact is not significant, as many species would be expected to become tolerant or return to the area upon completion of the construction.

Some alternatives would impact terrestrial habitats adjacent to the turning basin and at the constricted portion of the channel, midway between the turning basin and the Mississippi River. For all alternatives that require clearing it is recommended that clearing and construction activities take place in the fall and winter to minimize impacts to nesting migratory songbirds and colonies containing nesting wading birds such as herons, egrets, anhingas, and cormorants. Mitigation for non-wetland terrestrial forest habitat that is cleared would require acquiring and reforesting upland farmland equal to the acres of forest cleared.

Alternative 2

With implementation of the proposed actions, approximately 3.25 acres of wildlife habitat and 0.72 acres of wetlands would be cleared to widen the channel at the bendway.

Alternative 3

With implementation of the proposed actions, approximately 4 acres of wildlife habitat and 0.72 acres of wetlands would be cleared to widen the entire channel.

Alternative 4

With implementation of the proposed actions, approximately 1.2 acres of wildlife habitat would be cleared and snagged to widen the turning basin.

Alternative 5

With implementation of the proposed actions, approximately 3 acres of wildlife habitat would be cleared and snagged to extend the channel and widen the turning basin.

Alternative 6

With implementation of the proposed actions, approximately 3.5 acres of wildlife habitat and 0.57 acres of wetlands would be cleared and snagged to shift the channel at the bendway.

Alternative 7-TSP

With implementation of the proposed actions, approximately 7 acres of wildlife habitat and 0.72 acres of wetlands would be cleared and snagged to widen and extend the channel, expand the turning basin, and improve navigation.

5.5 Threatened and Endangered Species

Future Conditions with No-Action

The no action alternative would not have a direct impact on threatened and endangered species since the existing conditions would be maintained.

Future Conditions with the Proposed Action (Alternatives 2-7)

USACE completed Section 7 consultation on 6 July 2023 through emails with USFWS (Attachment 4) and USFWS's IPaC website (Attachment 1). USACE made the following determinations related to project effects on threatened and endangered species that could possibly occur in the project area:

Northern Long-eared Bat (*Myotis septentrionalis*)	May affect but unlikely to adversely affect
Tricolored Bat (*Perimyotis septentrionalsis*)	May affect but unlikely to adversely affect
Eastern Black Rail (*Laterallus jamaicensis ssp*.)	No Effect
Ivory-billed Woodpecker (*Campephilus principalis*)	No Effect
Piping Plover (*Charadrius melodus*)	No Effect
Red Knot (*Calidris canutus rufa*)	No Effect
Pondberry (*Lindera melissifolia*)	No Effect
Alligator Snapping Turtle (*Macrochelys temminckii*)	No Effect
Pallid Sturgeon (*Scaphirhynchus albus*)	No Effect
Fat Pocketbook (*Potamilus capax*)	May affect but unlikely to adversely affect
Pink Mucket (*Lampsilis abrupta*)	May affect but unlikely to adversely affect

As part of the IPaC process a NLEB range wide determination key was completed (Attachment 5) and concurred with the USFWS email that the proposed actions of this project may affect but are not likely to adversely affect the NLEB. Due to having a similar natural history and roosting behavior as the NLEB, it was determined that the proposed actions may affect but are unlikely to adversely affect the Tricolored bat.

A determination of no effect was given for the Eastern Black Rail, Piping Plover, Red Knot, and pondberry due to poor habitat conditions. The project area is a very active port with yearly dredging and barges frequently entering and exiting the channel, causing disturbances to the surrounding area. In addition to these disturbances, the area is not coastal and there are few sandy shores for the birds to utilize.

The alligator snapping turtle, pallid sturgeon, pink mucket, and fat pocket mussel are also unlikely to be present in the project area due to regular disturbances to the aquatic environment caused by barges. Annual dredging has also removed firm sand and gravel bed substrates from the area that are necessary for many aquatic species lifecycles including the pallid sturgeon, pink mucket, and fat pocketbook mussel. Dredge material would be disposed of in the same manner as regular maintenance dredging and is unlikely to affect downstream species (See Section 2.2.1). If required a biological assessment would be completed to further determine potential impacts to aquatic species in the project area including the fat pocket mussel and pink mucket. The biological assessment would be submitted to USFWS before any construction is initiated.

Best management practices such as having clearing and construction activities take place in the fall and winter to minimize possible impacts to nesting migratory songbirds, colonies containing nesting wading birds, and bats would be properly implemented in order to minimize any negative impacts. Therefore, based on the current species review and the habitat in the project area, it is USACE's determination that the proposed actions would likely have no adverse effects on any federal-listed species.

5.6 Water Quality

Future Conditions with No-Action

Without the proposed action, there would be no direct impacts to water quality in the area.

Future Conditions with the Proposed Action (Alternatives 2-7)

Two impaired bodies of water occur within the same watershed as the project area. The Arkansas river, which flows into the Mississippi River slightly south of the project area, and the nearby Lake Beulah are both considered impaired due to degraded aquatic life and low rates of dissolved oxygen. However, since neither body of water falls within the direct project area and all dredge material would be properly disposed of (see Section 2.2), these impaired bodies of water would not be affected by the proposed actions. The are no scenic and wild rivers within the project area.

The project would have only minor impacts on water quality in the project area. Turbidity and suspended solids would be increased to minor degrees as a result of runoff from cleared areas and dredging the port. Since the dredge material disposal method being utilized is the same as the yearly maintenance dredging there would only be minor increases in turbidity in downstream habitats. However, these impacts are expected to be temporary as the Mississippi River continues to carry and disperse the sediment and dredge material downstream. Turbidity is expected to return to normal shortly after construction. A water quality certification (WQC) from MDEQ would be required for the disposal of the dredged material and placement of woody debris within the waters of the Mississippi River (See Section 5.12).

5.7 Air Quality

Future Conditions with No-Action

Without implementation of the proposed action, no direct or indirect impacts to ambient air quality would occur.

Future Conditions with the Proposed Action (Alternatives 2-7)

Air quality would be slightly impacted for a short time during construction due to the use of internal combustion engines, heavy machinery, and dust-related sources. Air quality would also be minorly affected due the burning of woody material encountered during dredging/construction being burned in a burn pile within the project area. However, these short-term 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 climatic

conditions of the region favor rapid dispersal of the pollutants and thus would not allow concentrations to accumulate.

5.7.1 Greenhouse Gas Emissions

Carbon dioxide (CO2) is the primary greenhouse gas emitted from human activities, chiefly through combustion of fossil fuels. Additionally, carbon levels in soil used for agricultural purposes tend to decrease over time as carbon is oxidized and released into the atmosphere. Increasing quantities of atmospheric greenhouse gases have resulted in measurable changes to the Earth's surface and ecosystems. CO2 equivalent is a unit that represents the warming effect of any given greenhouse gas on the global climate and is calculated by multiplying the mass of the gas by its warming potential, which describes the relative potency and residence time of the gas in the atmosphere. Thus, using a CO2 equivalent provides a common scale for measuring effects of different gases. The estimated existing and with-project CO2 equivalent conditions consist of the anticipated emissions produced by project area vehicular and construction emissions as well as anticipated carbon release from agricultural land soils.

In accordance with EO 13990 Sec. 5, the social cost of greenhouse gas emissions (SC-GHG) was considered in this EA. SC-GHG is an estimate of the monetized damages associated with incremental increases in greenhouse gas emissions and is intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services. The SC-GHG is intended to be used for alternative comparison purposes and is determined as: SC-GHG = CO2 equivalent (metric tons) X social cost in dollars per metric ton of carbon dioxide or $51/metric ton.

Future Conditions with No-Action

Under Alternative 1 – No Action, the amount of CO2 equivalent that would be emitted for the No Action alternative is currently being calculated. The SC-GHG produced by the No Action alternative will be included in this EA before final FONSI signature is received.

Future Conditions with Alternative 7 (TSP)

The amount of CO2 equivalent that would be emitted via dredging and construction equipment is currently being calculated. The SC-GHG produced by the proposed actions will be included in this EA before final FONSI signature is received.

5.8 Recreation and Aesthetics

Future Conditions with No-Action

Without implementation of the proposed action, no direct or indirect impacts to recreation and aesthetics would occur.

Future Conditions with the Proposed Action

Dredging and clearing may temporarily affect access to and recreational use of the boat ramp. However, after completion of the project the recreational ramp use would return to normal. These impacts are considered minimal.

Alternatives 2, 3, & 7

Widening the entire channel or bend would improve navigation (See Section 5.1) and safety for barges and recreational boaters using the channel and boat ramp.

Alternatives 4-6

Under these alternatives recreational navigation and safety would remain the same as current conditions.

5.9 Cultural Resources

Future Conditions with No-Action

Without implementation of the proposed action, the conditions within the 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 (Alternatives 2-7)

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Given the absence of cultural material within the proposed project area, USACE has proposed No Historic Properties Affected for this undertaking/project. Consultation with this determination is ongoing, with 22 Tribes and the AR SHPO and MS SHPO offices which were contacted by USACE on August 25, 2023. Concurrence was received from the AR SHPO on 21 September 2023 and from the MS SHPO on 22 September 2023 (Attachment 6). A response was also received from the Mississippi Band of Choctaw Indians on 5 September 2023 and the Quapaw Nation on 11 September 2023. Additionally, if an inadvertent discovery is made during the project's implementation, the resource would be evaluated, assessed for effects, avoided if possible, and mitigated in accordance with Federal statutes and regulations (36 CFR, Part 800) and corresponding state guidelines and statutes (Mississippi State Antiquities Law (39-7-31) (16 Miss. Code R. § 3-11.4).

5.10 Environmental Justice

Future Conditions with No-Action

Without implementation of the proposed action, no direct or indirect environmental justice impacts would occur.

Future Conditions with the Proposed Action (Alternatives 2-7)

Executive Orders No. 14008, No. 13990, and No. 12898 were considered while the project was analyzed in this EA. The EPA's EJ Screen and the CEQ's CEJST tools were utilized to locate people/households with incomes below the federal poverty line and racial and ethnic groups that live within the project area (Attachment 2). The CEQ's CEJST tool identified the project area as being disadvantaged. However, it was determined that the construction of this project would not have any disproportionate effects on communities of color or people experiencing poverty in the surrounding area due to its relatively small footprint and lack of residents in the project area.

5.11 Hazardous, Toxic, and Radioactive Waste

The following conclusions are based on, or are reasonably ascertainable from, published information, and field observations.

The results of the record search identified three facilities within a 1-mile radius of the project area (Axel Americas, Cives Steel Company, and Jantran Inc), none of which appear to pose a significant HTRW risk to the project. A site reconnaissance performed on October 26, 2022 did not reveal any findings that would appear to pose a significant HTRW risk to the project. Sample collection and analysis was conducted on the proposed soil to be removed as part of the preferred alternatives within the project area for organics, inorganics, and pesticides, and no findings from the sample appear to pose a significant HTRW risk to the project. Follow-up supplemental water quality analysis will be conducted at the request and to the satisfaction of the governing environmental agencies of the project area. At this time, there is little reason to believe there exists a significant HTRW risk to the intended use of this proposed area.

5.12 Section 404(b)(1) Considerations

According to Section 401 of the Clean Water Act, an additional water quality certification from the Mississippi Department of Environmental Quality (MDEQ) and Arkansas Department of Environmental Quality (ADEQ) would be required for the proposed port expansion project. Currently the Rosedale Harbor undergoes annual maintenance dredge activities within the defined limits that include a 150-ft wide channel and a turning basin at the upper most reach. An additional water quality certification would be required for dredge activities associated with the proposed project which extends beyond the limits of the current defined channel for Rosedale Harbor.

Once the project completes the Feasibility phase and enters the PED phase, the Vicksburg District (MVK) will work in conjunction with both MDEQ and ADEQ to prepare a QAPP. The QAPP will direct additional testing protocols needed to provide the basis for the expanded water quality certification, which is currently permitted through General

Permit Number 16 for the Vicksburg District (REGULATED ACTIVITIES ASSOCIATED WITH MAINTENANCE DREDGING OF ACCESS CHANNELS, PORT BASINS, AND TERMINAL AREAS OF COMMERCIAL AND MUNICIPAL PORTS ALONG THE MISSISSIPPI RIVER WITHIN THE VICKSBURG DISTRICT). The QAPP and testing results will be included and will form the basis of the water quality certification request. The MVK will ensure the water quality certification is issued prior to initiation of expanded dredge activities. For more information regarding the status of the water quality certification issuance, please contact the MVK River Engineering Section.

5.13 Cumulative Impacts Analysis

The Council on Environmental Quality (CEQ) Regulations define cumulative impacts (CI) as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. CI can result from individually minor but collectively significant actions taking place over a period of time."

Beneficially, implementation of the proposed plan would increase navigational safety at the port and within the channel. Completing the project would allow larger barges to access the port and would create increased economic opportunity at the port. Barges Time required for barges to access the port would be reduced leading to increased efficiency and reduced greenhouse gas emissions produced by idle barges.

Negative effects associated with implementation of the proposed project would relate to the cumulative contribution of the proposed actions to the effects of other projects, past and present. Overall, this project is unlikely to have many incremental impacts on the larger watershed over the 50-year life of the project. Wetlands in the project area would be significantly impacted and cleared. With wetlands becoming rarer in the watershed since the late 1800's, this project could incrementally contribute to total loss of future wetlands depending on the amount of wetlands cleared in future projects. However, wetland mitigation would be completed for this project to account for the impacts and would not lead to a net loss of overall wetlands. The temporary construction-related increases in traffic, noise and vibration, and vehicle and equipment emissions would be temporally and locally unique and unlikely, combined with other similar disturbances, to significantly affect the citizens or natural environment in the city.

There would be minor temporary impacts to fish and wildlife resources and no impacts to cultural resources or the flood plain. Because the project proposes needed navigational improvements to increase safety, mitigation for wetlands, and the overall outcome of the project would be beneficial to the community, the cumulative negative impacts are considered minimal.

6 COORDINATION

Preparation of this draft EA and a draft 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, have received copies of the draft EA and draft FONSI:

U.S. Fish and Wildlife Service
U.S. National Park Service
EPA, Region IV
Natural Resources Conservation Service
Advisory Council on Historic Preservation
Mississippi Department of Wildlife and Fisheries
Mississippi Department of Environmental Quality
Mississippi State Historic Preservation Officer (SHPO)

7 MITIGATION

On January 4, 2007, the 110th Congress of the United States of America finalized the Water Resources Development Act (WRDA) of 2007 (H.R. 1495, Public Law 110-114). Under Section 2036(c), Mitigation for Fish and Wildlife and Wetlands Losses – Wetlands Mitigation, it specifically directs the USACE to consider the use of commercial mitigation banks to fulfill the mitigation responsibilities of Civil Works projects, stating:

> *In carrying out a water resources project that involved wetlands mitigation and that has impacts that occur within the service area of a mitigation bank, the Secretary, where appropriate, shall first consider the use of the mitigation bank if the bank contains sufficient available credits to offset the impact and the bank is approved in accordance with the Federal Guidance for the Establishment Use and Operation of Mitigation Banks (60 Fed. Reg. 58605) or other applicable Federal law (including regulations).*

Therefore, the following mitigation plan proposes to acquire appropriate BLH compensatory mitigation bank credits for unavoidable impacts to 0.22 Average Annual Functional Capacity Units (AAFCU) (0.72 acres) of BLH forested wetlands resulting from the proposed project. Additionally, this mitigation plan proposes to acquire and reforest 7 acres of upland farmland in order to compensate for the unavoidable clearing of 7 acres of non-wetland forest. No project specific mitigation opportunities were identified by USACE or the local sponsor, so a decision was made to purchase mitigation bank credits.

In Federal Register Vol. 73, No. 70, April 10, 2008, specifically Part 332, § 332.4 (c)(1) Compensatory Mitigation for Losses of Aquatic Resources, Planning and documentation, Mitigation Plan, Preparation and Approval, guidance was set forth requiring the preparation of a draft and final mitigation plan that would address the following 12 items: 1) preparation and approval; 2) objectives; 3) site selection; 4) site protection instrument; 5) baseline information; 6) determination of credits; 7) mitigation work plan; 8)

maintenance plan; 9) performance standards; 10) monitoring requirements; 11) long-term management plan; 12) adaptive management plan; financial assurances; and other information. However, since the proposed mitigation plan proposes to utilize a compensatory mitigation bank, the following language included in Part 332 § 332.4 (c)(1)(i)(ii) would apply, "For permittees who intend to fulfill their compensatory mitigation obligations by securing credits from approved mitigation banks…their mitigation plan need include only the items described in paragraphs (c)(5) and (c)(6) ...". Therefore, only items 5 and 6, baseline information and determination of credits, would be addressed further.

Item 5 – Baseline Information. For a complete description of "Baseline Information", please refer to the following Sections within this EA #111: 3.1 Description of the Watershed; 3.2 Description of the Project Area; 3.3 Climate; 3.4 Geology; and 4.2 Wetlands.

Item 6 – Determination of Credits. The Mississippi Alluvial Valley Hydrogeomorphic Model (HGM) was used to quantify project impacts by the U.S. Fish and Wildlife Service and the results were included in the U.S. Fish and Wildlife Coordination Act Report (Attachment 3). The proposed project resulted in 0.72 acres of bottomland hardwood forest (BLH) impacts. According to the HGM model, 0.22 Average Annual Functional Capacity Units (AAFCUs) were determined to be affecting BLH wetland functions. The cumulative 50-year impacts in AAFCUs (0.22) were divided by the number of mitigation acres required (0.72) to determine the required acreage of mitigation. Therefore, 0.22 / 0.72 = 0.31 acres of mitigation would be required for the project.

Mitigation bank credits were determined based on the original 0.72 acres of BLH impacts with the consideration that the 0.72 acres of BLH would be permanently impacted. Therefore, it was determined that 7.3 mitigation credits would be required to compensate for the 0.72 acres of permanent BLH impacts. This approach was coordinated with the U.S. Fish and Wildlife Service and received their concurrence.

The proposed mitigation bank plan is designed to comply with the requirements set forth under USACE guidance "Implementation Guidance for Section 2036(a) of the Water Resources Development Act of 2007 – Mitigation for Fish and Wildlife and Wetland Losses" dated August 31, 2009, which further highlights the need for Civil Works mitigation plans to be consistent with the regulations and policies governing the USACE Regulatory Program. To comply with these multiple laws and directives and to be consistent with the USACE Regulatory Program, the Vicksburg District investigated the use of mitigation banks within an appropriate, applicable service area, the Mississippi River watershed basin. However, in the event that the total amount of credits that would be required to fully compensate for unavoidable wetlands impacts would not be achievable, the proposed mitigation bank plan is meant to afford the CEMVK the opportunity to explore reasonable and available mitigation opportunities both within the impacted service area as well as adjacent service areas in order to compensate for unavoidable wetlands impacts. As recommended by USFWS (Attachment 3), if available

mitigation credits would be purchased from a mitigation bank that includes stream restoration and/or stream/aquatic benefits.

In summary, mitigation would require 7.3 credits to fully compensate for unavoidable wetland impacts and the acquisition and reforestation of 7 acres of upland farmland to compensate for unavoidable impacts to non-wetland forest habitat. These credits would be purchased from an appropriate compensatory mitigation bank. All mitigation would be accomplished either prior to or concurrently with construction.

8 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.

9 CONCLUSION

This project involves improving channel navigation near the Port of Rosedale in Bolivar Parish, LA. Currently the channel near the Port is narrow and dangerous to navigate during low water events. Only smaller barge configurations are able to navigate the channel. The TSP for the proposed project would involve extending the length of the current navigation channel, relocating, and expanding the turning basin, and widening the entire channel. These proposed actions would improve navigational safety, even during low water events, and allow larger barge configurations to access the channel and Port.

An environmental analysis has been conducted by MVK for the with-Project alternatives to address the impacts associated with the proposed actions. The potential impacts of the project were considered, and it was determined that the project would not result in significant impacts to air quality, water quality, aquatic resources, terrestrial resources, waterfowl resources, threatened and endangered species, coastal environments, recreation, or aesthetics. There were no significant concerns with HTRW, cultural resources, or environmental justice.

10 PREPARED BY

EA #111 and the associated FONSI were prepared by Taylor Piefke, Biologist, U.S. Army Corps of Engineers, New Orleans District, Regional Planning and Environment Division South, with relevant sections prepared by: John Underwood - Cultural Resources. 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
Vicksburg, Mississippi 39183-3435

11 ATTACHMENTS

1. USFWS IPaC Species List
2. EJ Screen Report
3. USFWS Coordination Act Report
4. USFWS Section 7 Concurrence Email
5. USFWS NLEB Determination Key
6. Cultural Coordination

12 REFERENCES

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 17-0108).

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

Junk, Wolfgang & Bayley, Peter & Sparks, Richard.
1989 The Flood Pulse Concept in River-Floodplain Systems. (1989). The Flood Pulse Concept in River-Floodplain Systems. Can. Spec. Public Fish. Aquat. Sci. 106.

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: March 05, 2024
Project Code: 2023-0084363
Project Name: Port of Rosedale CAP

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 IPaC 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 Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service (fws.gov).

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.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

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

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
(501) 513-4470

PROJECT SUMMARY

Project Code: 2023-0084363
Project Name: Port of Rosedale CAP
Project Type: Navigation Channel Improvement
Project Description: The selected alternative (alternative 7) proposes 3 primary modifications to the existing port footprint:

1. Realigning and widening the authorized channel limits at the existing barge facility;
2. Widening the channel for the entire length to facilitate two way traffic and larger barge configurations; and
3. Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is located approximately halfway up the 2.7 mile (14,256 feet) long by 150 foot wide navigation channel, which runs between the port and the Mississippi River. The current authorized depth of the channel is 93 feet, which is 9 feet below the Low Water of Reference (LWRP) of 102 feet.

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 feet to 200 feet to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily. The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting 3,600 feet (0.68 miles) of the navigational channel 100 feet to the west.

The remaining portion of the navigation channel between the Mississippi River and the turning basin at the upper end of the port would be expanded from 150 feet to 185 feet (except for the portion mentioned above). This additional width would allow improved facilitation of two-way traffic and provide navigational support for larger barge configurations.

The final main feature of this alternative is the reconfiguration and enlargement of the existing 400 foot by 1000 foot turning basin. The new proposed configuration would lengthen the navigational channel to extend

through the existing turning basin and shifts the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure 600 feet by 1000 feet. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port.

All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 feet would be maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

A cutter head dredge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 9). The currents of the river will carry and disperse the dredge material as it travels downstream of the project area. This method of dredge material disposal is currently utilized annually for maintenance dredging of the port. The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.808621599999995,-91.0223608871798,14z

Counties: Arkansas and Mississippi

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 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 Fisheries[1], 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.

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

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Threatened
Ivory-billed Woodpecker *Campephilus principalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8230 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Endangered
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Threatened
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Threatened

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658 General project design guidelines: https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf	Proposed Threatened

FISHES

NAME	STATUS
Pallid Sturgeon *Scaphirhynchus albus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7162
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf

CLAMS

NAME	STATUS
Fat Pocketbook *Potamilus capax*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2780
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/ZCC6ZPALWZAGHFCFJBZTFTEZZE/documents/generated/7127.pdf

FLOWERING PLANTS

NAME	STATUS
Pondberry *Lindera melissifolia*	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/ZCC6ZPALWZAGHFCFJBZTFTEZZE/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[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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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)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper

Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

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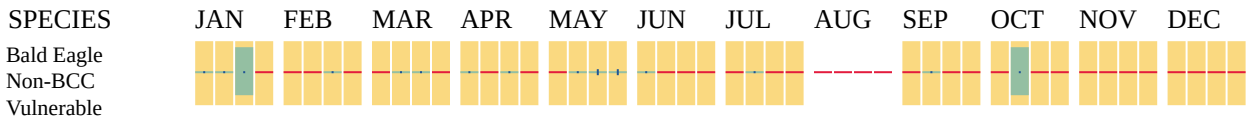
probability of presence breeding season survey effort no data



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider

implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

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)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Little Blue Heron *Egretta caerulea* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9477	Breeds Mar 10 to Oct 15
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project

activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

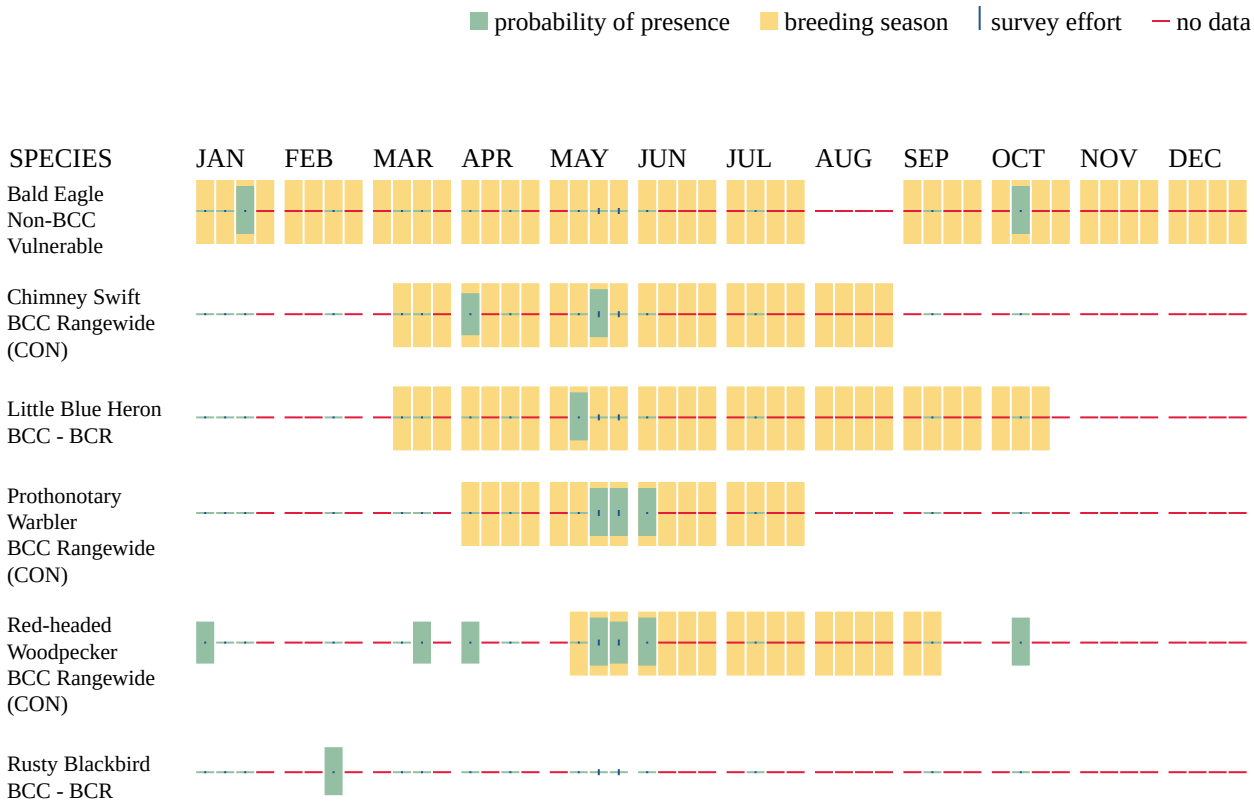
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER FORESTED/SHRUB WETLAND

- PFO2F
- PFO1F
- PFO1A

LAKE

- L1UBH

FRESHWATER EMERGENT WETLAND

- PEM1A

RIVERINE

- R2UBH

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

EJScreen Report (Version 2.11)

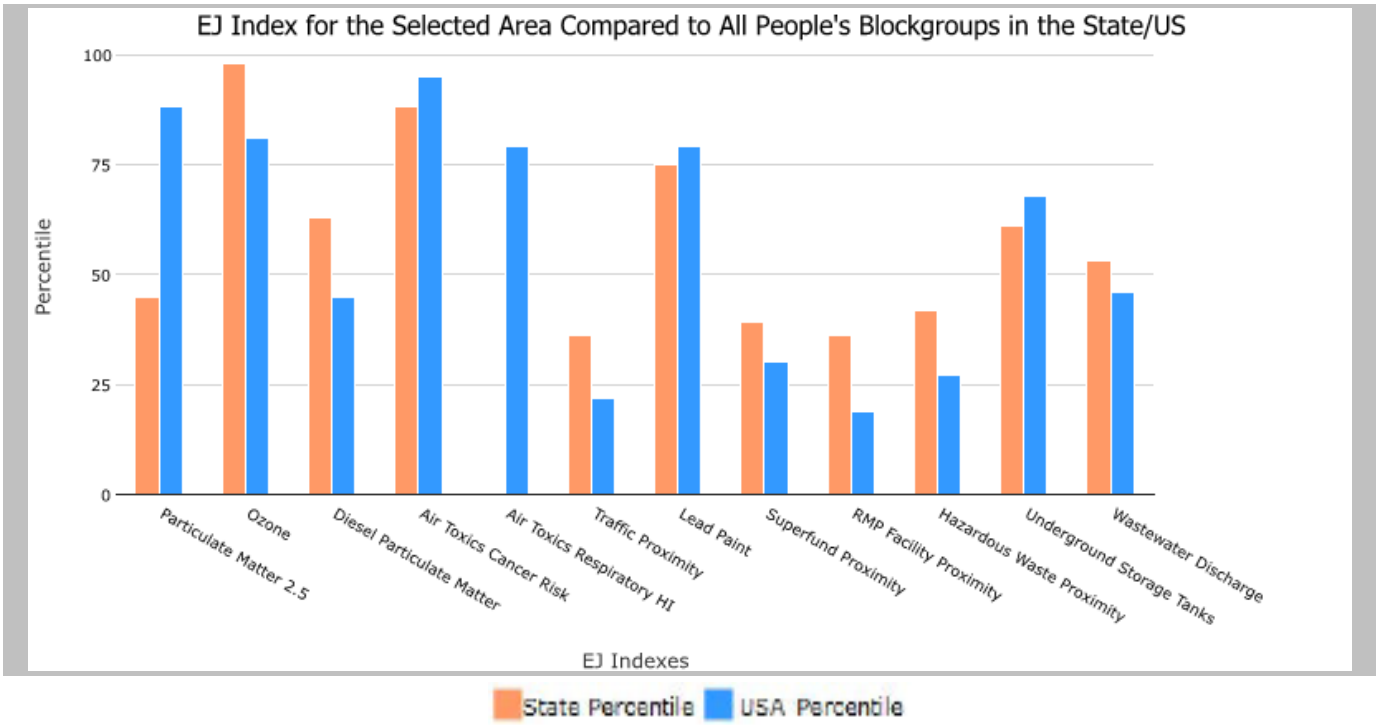
5 miles Ring around the Area, MISSISSIPPI, EPA Region 4

Approximate Population: 2,218

Input Area (sq. miles): 115.37

Selected Variables	State Percentile	USA Percentile
Environmental Justice Indexes		
Particulate Matter 2.5 EJ index	45	88
Ozone EJ index	98	81
Diesel Particulate Matter EJ index*	63	45
Air Toxics Cancer Risk EJ index*	88	95
Air Toxics Respiratory HI EJ index*	0	79
Traffic Proximity EJ index	36	22
Lead Paint EJ index	75	79
Superfund Proximity EJ index	39	30
RMP Facility Proximity EJ index	36	19
Hazardous Waste Proximity EJ index	42	27
Underground Storage Tanks EJ index	61	68
Wastewater Discharge EJ index	53	46

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

EJScreen Report (Version 2.11)

5 miles Ring around the Area, MISSISSIPPI, EPA Region 4

Approximate Population: 2,218

Input Area (sq. miles): 115.37

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.11)

5 miles Ring around the Area, MISSISSIPPI, EPA Region 4

Approximate Population: 2,218

Input Area (sq. miles): 115.37

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
Pollution and Sources					
Particulate Matter 2.5 (µg/m^3)	8.72	9.12	19	8.67	54
Ozone (ppb)	40.9	37.6	95	42.5	37
Diesel Particulate Matter* (µg/m^3)	0.0946	0.15	30	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	32	81	28	80-90th
Air Toxics Respiratory HI*	0.3	0.42	0	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	5.5	150	16	760	6
Lead Paint (% Pre-1960 Housing)	0.18	0.15	66	0.27	46
Superfund Proximity (site count/km distance)	0.012	0.069	15	0.13	7
RMP Facility Proximity (facility count/km distance)	0.042	0.6	13	0.77	4
Hazardous Waste Proximity (facility count/km distance)	0.037	0.33	16	2.2	6
Underground Storage Tanks (count/km^2)	0.16	2.9	33	3.9	30
Wastewater Discharge (toxicity-weighted concentration/m distance)	8.4E-05	0.03	52	12	30
Socioeconomic Indicators					
Demographic Index	81%	44%	91	35%	95
Supplemental Demographic Index	27%	18%	90	15%	91
People of Color	88%	44%	86	40%	88
Low Income	74%	41%	90	30%	95
Unemployment Rate	16%	7%	85	5%	93
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	29%	15%	88	12%	90
Under Age 5	8%	6%	74	6%	77
Over Age 64	17%	16%	57	16%	58
Low Life Expectancy	18%	23%	9	20%	37

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

EJScreen Report (Version 2.11)

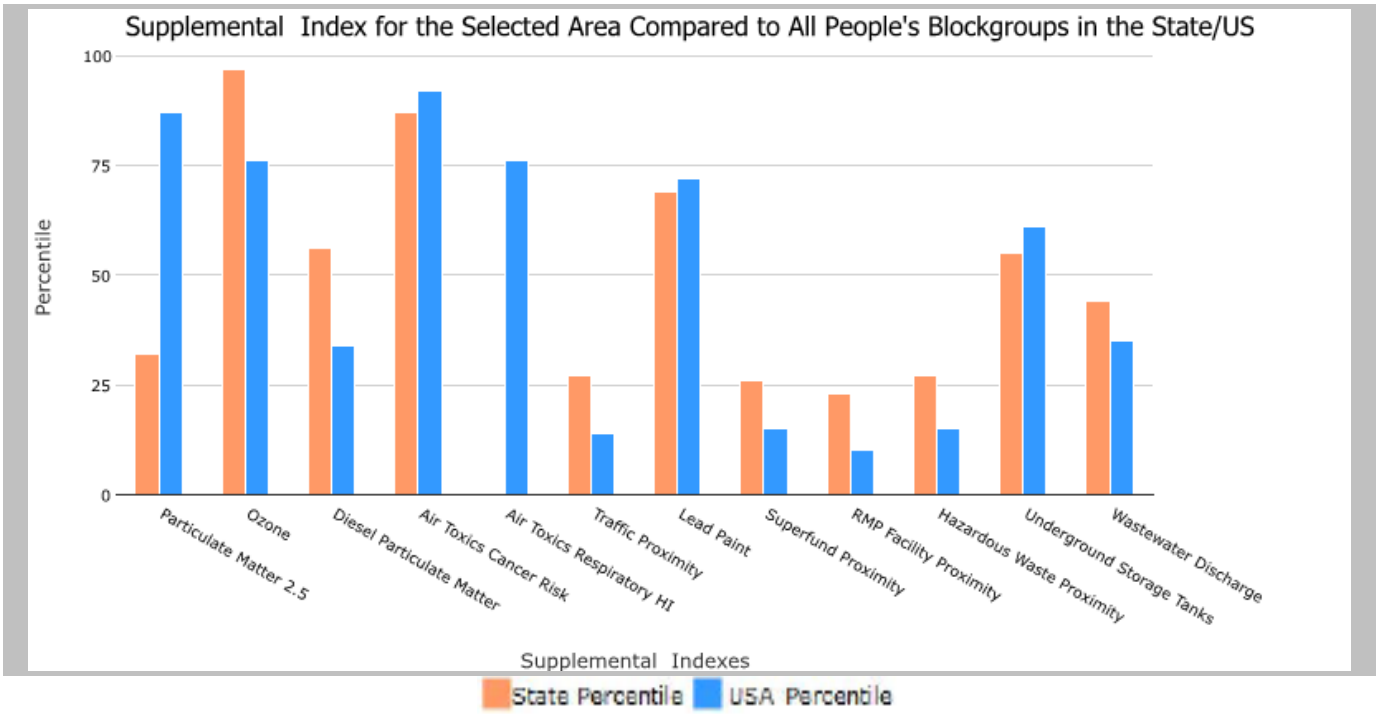
5 miles Ring around the Area, MISSISSIPPI, EPA Region 4

Approximate Population: 2,218

Input Area (sq. miles): 115.37

Selected Variables	State Percentile	USA Percentile
Supplemental Indexes		
Particulate Matter 2.5 Supplemental Index	32	87
Ozone Supplemental Index	97	76
Diesel Particulate Matter Supplemental Index*	56	34
Air Toxics Cancer Risk Supplemental Index*	87	92
Air Toxics Respiratory HI Supplemental Index*	0	76
Traffic Proximity Supplemental Index	27	14
Lead Paint Supplemental Index	69	72
Superfund Proximity Supplemental Index	26	15
RMP Facility Proximity Supplemental Index	23	10
Hazardous Waste Proximity Supplemental Index	27	15
Underground Storage Tanks Supplemental Index	55	61
Wastewater Discharge Supplemental Index	44	35

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.



This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: www.epa.gov/environmentaljustice.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
200 Dulles Drive
Lafayette, Louisiana 70506

February 8, 2023

Colonel Christopher D. Klein
District Engineer
Vicksburg District
U.S. Army Corps of Engineers
4155 Clay Street
Vicksburg, MS 39183

Dear Colonel Klien:

We are providing this draft Fish and Wildlife Coordination Act (FWCA) Report on the Port of Rosedale Expansion Project feasibility study. The port is located near Rosedale, Mississippi, in Bolivar County but the project area channel extends into Desha County, Arkansas. This feasibility study was authorized under Section 107 of the River and Harbor Act of 1960. The non-federal sponsor for the subject project is the Rosedale-Bolivar County Port Commission.

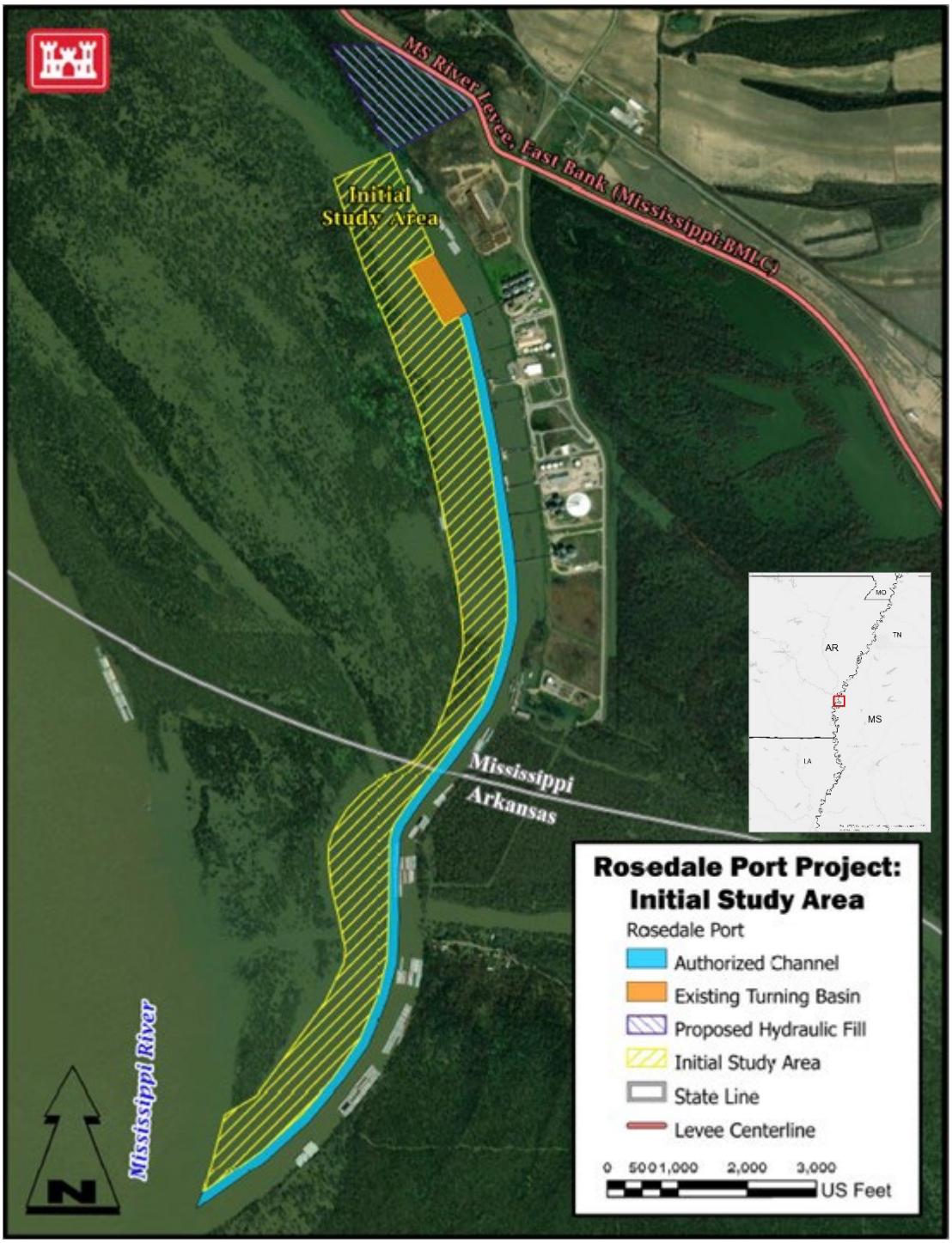
Our draft report was prepared under the authority of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This draft report does not constitute the final report required by Section 2(b) of that Act. This draft report has been provided to the Mississippi Department of Wildlife, Fisheries and Parks (MDWFP) for their review and comment.

PROJECT DESCRIPTION

The Port of Rosedale is located on a dead-end chute off the east bank of the Mississippi River (river mile 585) in Bolivar County. The harbor channel is currently 150 feet wide and 2.7 miles long with a turning basin 1,000 feet long by 400 feet wide, located at the northern terminus of the channel. A minimum operating depth of 9 feet below the lowest water of record (102.5 feet, mean sea level) was maintained in both the channel and turning basin. The primary purpose and need of the proposed alternatives are to determine if a federal interest exists to improve navigation in the Port of Rosedale (Figure 1).

At low river stages, the width of the existing channel limits navigation uses and increases time to transit the channel. To rectify this problem, six action alternatives were developed that would widen the existing channel to varying degrees and in varying locations (Alternative 1 is the No-Action Alternative).

Figure 1. Map showing the proposed Port expansion area.



The final array of project alternatives are described below. For all alternatives, a hydraulic cutterhead dredge would be used and spoil would be discharged into the Mississippi River.

- Alternative 1: No Action

- Alternative 2: Widen and shift the channel in the location of JanTran Inc. dock, deepen the channel to authorized depths for consistency.
- Alternative 3: Widen and deepen to a consistent depth throughout the channel and use the material beneficially, and shift the channel to the west in the area of JanTran Inc. dock. This alternative requires the entire main channel to be widened from 150ft to 200ft and make sure the depth is consistent from the turning basin out to the river channel. The channel will also be shifted to the west 50 ft around the location of JanTran dock to give traffic full use of the channel even at low water levels and not be impacted by the floating JanTran dock.
- Alternative 4: Expand the turning basin on the northern reach of the channel and use material beneficially. This alternative modifies the turning basin and expands the basin from a dimension of 400ft by 1000ft to a dimension of 600ft by 1000ft.
- Alternative 5: Increase the length of the navigation channel and widen the turning basin while using the dredge material beneficially. This alternative extends the navigational channel to the north and relocates the existing turning basin to the north. The expansion is a 1000ft to the north and 600ft to the west.
- Alternative 6: Shifting the channel at the location of JanTran dock and use the dredge material beneficially. This alternative shifts/opens up the 150ft navigational channel to the west 100ft along the sharpest part of the bend to eliminate the navigation restriction at JanTran. The original channel around the bend will be maintained as well and result in a 250ft wide channel around the bend at JanTran dock.
- Alternative 7: Will be a combination of Alternatives 3 and 5. Widen and deepen to a consistent depth throughout the channel and shift the channel to the west in the area of JanTran dock. Also Increase the length of the navigation channel and widen the turning basin.

PROJECT IMPACTS

Much of the channel enlargement work would impact open water portions of the existing Port channel. However, some alternatives would impact terrestrial habitats adjacent to the turning basin and at the constricted portion of the channel, midway between the turning basin and the Mississippi River. Some of the impacted terrestrial habitat is forested, but other areas consist of a low-elevation frequently flooded herbaceous/shrub zone. The impacted forested areas are frequently flooded bottomland hardwood forest vegetated primarily with black willow (*Salix nigra*).

These wetland forests provide habitat for white-tailed deer, raccoon, swamp rabbit, and a variety of migratory songbirds and other birds. Such forests also provide floodwater storage and water quality improvement functions.

ENDANGERED AND THREATENED SPECIES

The Mississippi River adjacent to the study area may provide habitat for two endangered mussel species: the fat pocketbook (*Potamilus capax*) and the pink mucket (*Lampsilis abrupta*). These mussel species might be impacted by the disposal of spoil hydraulically dredged from the Port channel.

In accordance with Section 7(c) of the Endangered Species Act, the Corps must prepare a biological assessment to determine the effects of the recommended plan on the above-mentioned species. That biological assessment should be completed and submitted to this office prior to initiating construction or operation of proposed project features.

If the Corps determines that the proposed work may affect any listed species, the Corps must request, in writing, a formal consultation from this office pursuant to Section 7(a) of the Endangered Species Act. A request to initiate formal consultation can accompany submission of the biological assessment to the Service. In keeping with the consultation requirements of the Endangered Species Act (ESA), informal and formal (if needed) consultation must be completed before the Record of Decision for these tier-off projects can be signed.

The Service recommends that the Corps contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.

MIGRATORY BIRDS

Over nine-tenths of all the bird species of eastern North America use bottomland hardwood forests at one time or another (Harris et al., 1984). Forest interior songbirds are dependent upon large expanses of BLH forests. Their populations have declined; fragmentation, human disturbances, and high edge to area ratios all contributed to their decline (Robinson et al. 1995). To help minimize impacts to migratory birds, forest clearing associated with project features should be conducted during the fall or winter to minimize impacts to nesting migratory bird habitat.

The Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.) and the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) offer protection to many bird species within the project area including colonial nesting birds, osprey, and the bald eagle (*Haliaeetus leucocephalus*). We recommend that a qualified biologist inspect proposed work sites for the presence of undocumented colonial nesting colonies during the nesting season (e.g. February through September depending on the species). If colonies exist, work should not be conducted within 1,000 feet of the colony during the nesting season.

On-site personnel should also be informed of the possible presence of nesting bald eagles and ospreys within the project boundary, and should identify, avoid, and immediately report any such nests to this office. If a bald eagle nest is located within 660 feet of the proposed activities, the USACE should complete an on-line evaluation at https://www.fws.gov/program/eagle-management to determine potential disturbance to nesting bald eagles and any protective measures necessary. A copy of that evaluation should be provided to this office. If assistance is needed in completing the evaluation, please contact this office. Question regarding non-listed species should be directed to Dr. Jeffrey Gleason (352-493-0238 ext. 231) the Service's Gulf of Mexico Migratory Bird Coordinator.

AT RISK SPECIES

The Service's Southeast Region has defined "at-risk species" as those that are:

1. Proposed for listing under the Endangered Species Act (ESA) by the Service;
2. Candidates for listing under the ESA, which means the species has a "warranted but precluded 12-month finding"; or
3. Petitioned for listing under the ESA, which means a citizen or group has requested that the Service add them to the list of protected species. Petitioned species include those for which the Service has made a substantial 90-day finding as well as those that are under review for a 90-day finding. As the Service develops proactive conservation strategies with partners for at-risk species, the State's Species of Greatest Conservation Need (defined as species with low or declining populations) will also be considered.

Alabama Spike

Alabama Spike (*Elliptio arca*) is a freshwater mussel found in moderate to fast currents in gravel and sand substrates. Shells of this species are elliptical and up to 5 inches in length, with shell color ranging from brown to greenish brown exterior and nacre (inner lining of shell) color ranging from white to orange to purple.

Freshwater mussels have a parasitic life cycle which requires mussel larvae (glochidia) to attach to a host fish. Some mussels are host generalists while others require a particular species of host fish, with attraction of host fish often involving the use of mantle lures or conglutinates (packages of glochidia formed by the female mussel) which may resemble food items for targeted host fish. Alabama Spike may release larvae (glochidia) in strands of mucus and host fish include Redspot Darter (*Etheostoma artesiae*) and Blackbanded Darter (*Percina nigrofasciata*).

Common threats to freshwater mussels include water quality degradation, altered flow regime, and habitat fragmentation. View ECOS species profile for the Alabama Spike.

Wetern Fanshell

Western Fanshell (*Cyprogenia aberti*) is a species of freshwater mussel found in large creeks and rivers with good water quality, moderate to swift current and gravel-sand substrates.

Shells of this species are thick, compressed yet moderately inflated, round to triangular in shape and up to three inches in length. Shell color is dark greenish brown to yellowish brown with prominent rays. Nacre, the inner lining of the shell, is white in this species, and one study detected individuals as old as 26 years, with mean age ranging from 12-13 years of age (Jones and Neves 2002).

Freshwater mussels have a parasitic life cycle which requires mussel larvae (glochidia) to attach to a host fish. Some mussels are host generalists while others require a particular species of host fish, with attraction of host fish often involving the use of mantle lures or conglutinates (packages of glochidia formed by the female mussel) which may resemble food items for targeted host fish. Western Fanshell release conglutinates which resemble annelid worms and range in color from white to brown to pink or red. Host fish for Western Fanshell include Logperch (*Percina caprodes*) range-wide, and various species of darter (*Etheostoma spp.*; i.e. Rainbow, Fantail, Orangebelly, or

Slenderhead darters) depending on river basin of the mussels, as some mussels may utilize different species of host fish in different parts of their range (Eckert 2003).

Threats to Western Fanshell include water quality degradation (e.g. sedimentation, point and non-point source pollution), altered flow regime (including altered depths which may remove riffle habitat), landscape changes (e.g. clear-cutting of bank vegetation which alters temperature regime from reduced cover and increases sediment erosion), and habitat fragmentation (which may separate mussels from their host fish). View ECOS species profile for the Western Fanshell.

Monarch Butterfly

Adult monarch butterflies (*Danaus plexippus*) are large and conspicuous, with bright orange wings surrounded by a black border and covered with black veins. The black border has a double row of white spots, present on the upper side of the wings. Adult monarchs are sexually dimorphic, with males having narrower wing venation and scent patches. The bright coloring of a monarch serves as a warning to predators that eating them can be toxic.
During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.), and larvae emerge after two to five days. Larvae develop through five larval instars (intervals between molts) over a period of 9 to 18 days, feeding on milkweed and sequestering toxic chemicals (cardenolides) as a defense against predators. The larva then pupates into a chrysalis before emerging 6 to 14 days later as an adult butterfly. There are multiple generations of monarchs produced during the breeding season, with most adult butterflies living approximately two to five weeks; overwintering adults enter into reproductive diapause (suspended reproduction) and live six to nine months.

In many regions where monarchs are present, monarchs breed year-round. 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. This migration can take monarchs distances of over 3,000 km and last for over two months. In early spring (February-March), surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds and their offspring start the cycle of generational migration over again.

Threats to Monarch Butterfly include habitat degradation and fragmentation (by converting grasslands to agriculture, logging, and urban use) and insecticides. View ECOS species profile for the Monarch Butterfly.

Sicklefin Chub

The Sicklefin Chub (*Macrhybopsis meeki*) is a large-river minnow adapted to turbid waters. Adaptations for rapidly flowing, low visibility environments include fusiform body shape, long sickle-shaped pectoral fins, deeply forked caudal fin, reduced eyes, and development of external sensory organs (i.e. compound taste buds) used to find food (Dieterman and Galat 2005).

Sicklefin Chub are lithopelagic spawners which release eggs over rock or gravel and may be initially adhesive and may remain suspended in the water column as they float downstream in high flow environments. Sexual maturity is reached by age 2-3.

Threats to Sicklefin Chub include habitat modification and fragmentation, dredging, channelization, altered hydrology (e.g. dams), water depletion, and pollution. View ECOS species profile for the Sicklefin Chub.

Alligator Snapping Turtle

The alligator snapping turtle (*Macrochelys temminckii*) is the largest species of freshwater turtle in North America and is highly aquatic and somewhat secretive. This species is currently being proposed for listing as threatened throughout 14 states in the Southeast and Midwest United States (November 8, 2021; Federal Resister FWS-R4-ES-2021-0115). They are primitive in appearance and are characterized by a large head, long tail, and an upper jaw with a strongly hooked beak. They have muscular legs and webbed toes with long, pointed claws. They have three keels with posterior elevations on the scutes of the carapace, which is dark brown and often has algal growth that adds to the alligator snapping turtle's camouflage. Their hinge-less plastron is significantly smaller than their carapace and is narrow and cross-shaped with a long, narrow bridge. The plastron is greyish-brown in color in adults; in juveniles it may be somewhat mottled with small whitish blotches. Their eyes are positioned on the side of the head and are surrounded by small, fleshy, pointed projections. Numerous epidermal projections are also present on the side of the head, chin and neck. Hatchlings look very similar to adults. Sexual maturity is achieved in 11-21 years for males and 13-21 years for females. No more than one clutch per year per female has been observed in the wild.

Alligator snapping turtles are opportunistic scavengers and consume a variety of foods. Fish comprise a significant portions of their diet; however, crayfish, mollusks, smaller turtles, insects, nutria, snakes, birds and vegetation (including acorns). The alligator snapping turtle is the only turtle species that has a predatory lure (a small, worm-like appendage on the tongue). Both adults and juveniles use this lure to attract fish into striking range. The lure is white or pale pink in juveniles and mottled or gray in adults.

The alligator snapping turtle is confined to river systems that flow into the Gulf of Mexico, extending from the Suwannee River in Florida to the San Antonio River in Texas. They are found in large rivers, major tributaries, bayous, canals, swamps, lakes, ponds and oxbows. It is most common in freshwater lakes and bayous, but also found in coastal marshes and sometimes in brackish waters near river mouths. The alligator snapping turtle is highly associated with in-stream structure (e.g., tree root masses, stumps, submerged trees, etc.).

Extensive commercial and recreational harvesting in the last century resulted in significant declines to many alligator snapping turtle populations. Commercial harvesting is now prohibited in all states within its range and recreational harvest is prohibited in every state except for Mississippi and Louisiana. Currently, the primary threats to the species are legal and illegal intentional harvest, drowning as a result of bycatch associated with commercial fishing (e.g. catfish and buffalo fishing), hook ingestion, nest predation, and habitat alteration. View ECOS species profile for the Alligator Snapping Turtle.

Golden-Winged Warbler

The golden-winged warbler (*Vermivora chrysoptera*) is a small bird, about 5 inches long, with a slim and pointed beak. The bird is silver, with bright yellow patches on the wings and head. They forage in shrubby areas, feeding on caterpillars and other insects as they hop along branches.

Population declines are associated with loss of habitat, owing to succession and reforestation. Range expansion of the blue-winged warbler has increased competition and hybridization with the golden-winged warbler. Use of wetland habitat is important for the species. The loss of wintering habitat in Central and South America, along with migratory habitat, also contributes to decline.

The golden-winged warbler relies on early successional forests with sparse trees and shrubs with an herbaceous understory of grasses and forbs in either wetland or upland settings. They use wetlands more than a closely related and competitive species, the blue-winged warbler. Golden-winged warblers occur in Mississippi during spring and fall migration in forested habitats. They depend on the forested habitats to provide food and water resources during migration. Protection and restoration of such forests could aid in this species survival. View ECOS species profile for the Golden-winged Warbler.

EVALUATION METHODS

Bottomland Hardwood Forest Impact Assessment

USACE supplied kmz files for each alternative were overlaid onto current project area imagery (2021) and impacted forest areas were delineated. Figure 2 shows the impact polygons for project alternatives 2, 3, and 7. Alternative 6 has slightly less impact area (Table 1).

The Mississippi Alluvial Valley Hydrogeomorphic Model (HGM) was used to quantify project impacts to area BLH forest. The HGM impacts reported in Table 1 are an average of the model's individual Function Capacity Units (FCUs). It was assumed that the impacted forest would remain unchanged throughout the 50-year project life. Hence the currently estimated impact in Function Capacity Units (FCUs) is equivalent to the average annual FCUs over the 50 year project life.

Figure 2. Project area BLH impact areas under Alternatives 2, 3, and 7.

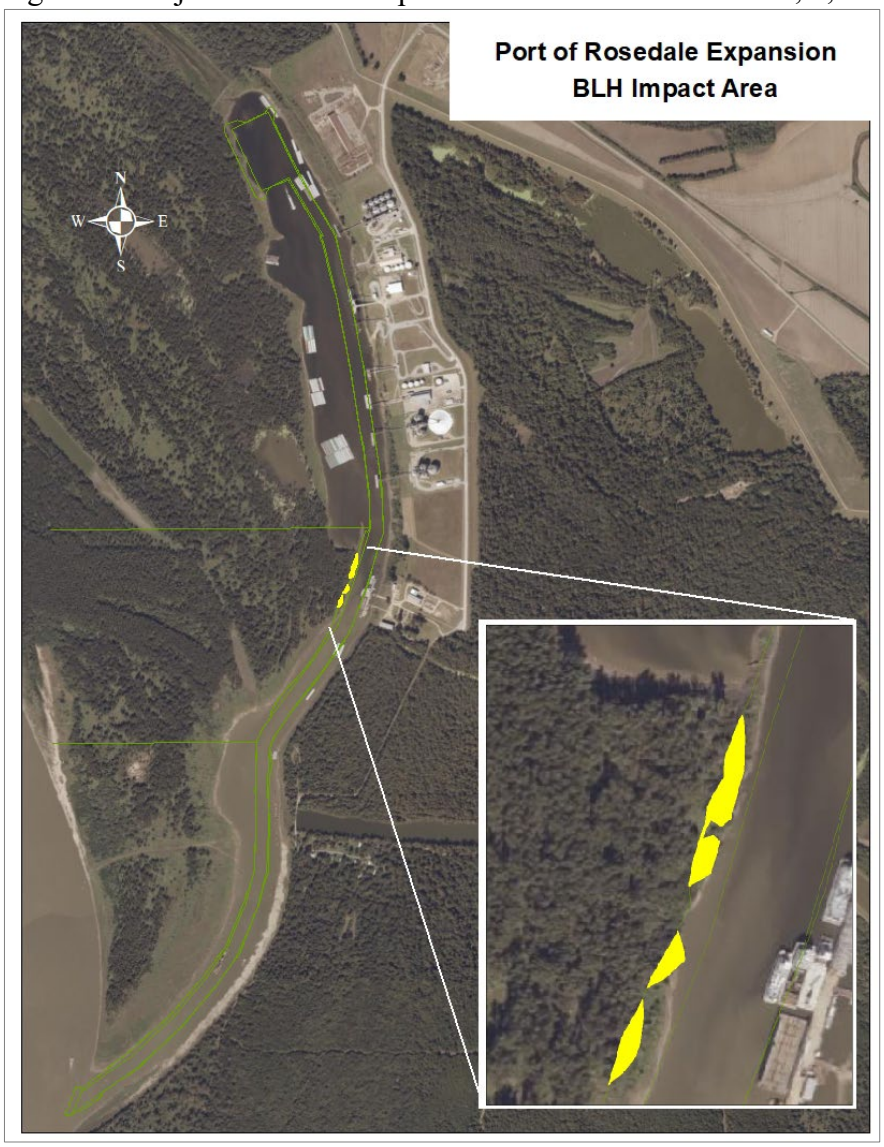


Table 1. BLH impact acreage and HGM results by alternative.

Summary of Rosedale Port Expansion HGM Results				
Alt	BLH Impact (acres)	BLH Impact (ha)	Current HGM Impact (FCUs)	**Average Annual FCUs**
2	0.72	0.29	0.22	**0.22**
3	0.72	0.29	0.22	**0.22**
4	0	0	0	**0**
5	0	0	0	**0**
6	0.57	0.23	0.18	**0.18**
7	0.72	0.29	0.22	**0.22**

Methods and assumptions used to determine the project benefits and impacts are summarized in the WVA Project Information Sheets (PIS) which are available online via the Service's ECOS ServCat website: https://ecos.fws.gov/ServCat/Reference/Profile/150308.

SERVICE POSITION AND RECOMMENDATIONS

The President's Council on Environmental Quality regulations for implementing the National Environmental Policy Act define mitigation to include: (1) avoiding the impact; (2) minimizing the impact; (3) rectifying the impact; (4) reducing or eliminating the impact over time; and (5) compensating for impacts. The Service supports and adopts this definition and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process. Through this process, the Service strives to make the project's goals co-equal to fish and wildlife resource conservation.

The Service's Mitigation Policy (Federal Register, Vol. 46, pp. 7644-7663, January 23, 1981) has designated four resource categories which are used to ensure that the level of mitigation recommended will be consistent with the fish and wildlife resources involved. The mitigation planning goals and associated Service recommendations should be based on those four categories, as follows:

> **Resource Category 1** – Habitat to be impacted is of high value for evaluation species and is unique and irreplaceable on a national basis or in the ecoregion section. The mitigation goal for this Resource Category is that there should be no loss of existing habitat value.
>
> **Resource Category 2** – Habitat to be impacted is of high value for evaluation species and is relatively scarce or becoming scarce on a national basis or in the ecoregion section. The mitigation goal for habitat placed in this category is that there should be no net loss of in-kind habitat value.
>
> **Resource Category 3** – Habitat to be impacted is of high to medium value for evaluation species and is relatively abundant on a national basis. The Service's mitigation goal here is that there be no net loss of habitat value while minimizing loss of in-kind habitat value.
>
> **Resource Category 4** – Habitat to be impacted is of medium to low value for evaluation species. The mitigation goal is to minimize loss of habitat value.

The BLH wetland habitats associated with the proposed project are designated as Resource Category 2, the mitigation goal for which is no net loss of in-kind habitat value.

To achieve fish and wildlife resource conservation, the Service recommends the following:

1. Forest clearing associated with project features should be conducted during the fall and winter to minimize impacts to nesting migratory songbirds.

2. Conserve forested wetlands by avoiding and minimizing the acreage of forest habitats directly impacted by project features.

3. Avoid impacts to threatened and endangered species, at-risk species, and species of concern such as the bald eagle, and wading bird nesting colonies.

4. A survey should be conducted to determine if a bald eagle nest is present within or adjacent to the project area. If a bald eagle nest occurs within 660 feet of the proposed project area, then an evaluation must be performed to determine whether the project is likely to disturb nesting bald eagles. That evaluation may be conducted on-line at https://www.fws.gov/program/eagle-management.

   The Service developed the National Bald Eagle Management Guidelines to provide landowners, land managers, and others with information and recommendations to minimize potential project impacts to bald eagles. The guidelines are available at https://www.fws.gov/media/national-bald-eagle-management-guidelines.

5. To minimize disturbance to colonies containing nesting wading birds (i.e., herons, egrets, night-herons, ibis, and roseate spoonbills), anhingas, and/or cormorants, all activity occurring within 1,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 1 through February 15, exact dates may vary within this window depending on species present). In addition, we recommend that on-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season.

6. The Service recommends that the USACE contact the Service for additional consultation if: 1) the scope or location of the proposed project is changed significantly, 2) new information reveals that the action may affect listed species or designated critical habitat; 3) the action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. Additional consultation as a result of any of the above conditions or for changes not covered in this consultation should occur before changes are made and or finalized.

7. Compensation should be provided for any unavoidable losses of BLH and aquatic habitats, caused (directly or indirectly) by project features. All mitigation should be developed and coordinated with the Service and other natural resource agencies. While not quantified, aquatic impacts will occur; therefore, if a BLH mitigation bank is used, the Service recommends using a bank that includes stream restoration and/or stream/aquatic benefits.

8. Any proposed change in project features or plans should be coordinated in advance with the Service, the MDWFP, and other resource agencies.

9. As construction engineering and design is refined, assessment of project impacts and mitigation needs may need to be revised accordingly. Any proposed change in impacts, or plans should be coordinated in advance with the Service.

We will continue to work closely with your staff to ensure that fish and wildlife resources are conserved. If you require further assistance in this matter, please contact Ronald Paille (337-291-3117) of this office.

Sincerely,

James Austin
Field Supervisor
Mississippi Ecological Services Office

cc: MDWFP, Jackson MS

LITERATURE CITED

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From: Paille, Ronald (Ronny)
To: Piefke, Taylor J CIV USARMY CEMVN (USA)
Cc: Breaux, Catherine
Subject: [Non-DoD Source] Re: [EXTERNAL] MVN Port of Rosedale Project
Date: Wednesday, June 28, 2023 11:28:12 AM

Taylor, yes I concur with all of our determinations. Thanks for your efforts!

From: Piefke, Taylor J CIV USARMY CEMVN (USA) <Taylor.Piefke@usace.army.mil>
Sent: Wednesday, June 28, 2023 10:55 AM
To: Paille, Ronald (Ronny) <ronald_paille@fws.gov>
Subject: RE: [EXTERNAL] MVN Port of Rosedale Project

Hi Ronny,

The U.S. Army Corps of Engineers, Regional Planning and Environment Division South (RPEDS), Vicksburg District, is currently reviewing a port expansion project near the city of Rosedale, Bolivar County, MS. The purpose of the project is to improve navigation and safety for barges using the port. I have attached the completed IPaC , northern long eared bat determination key, a KMZ showing the site location, and a project description with a map of the tentatively selected plan. This project was originally handled by a different biologist, but I was recently assigned to complete it.

Proposed actions for this project include widening and extending the current navigation channel and relocating and expanding the turning basin. This will involve dredging the channel and clearing 7 acres of trees including 0.72 acres of scrub/shrub wetland as determined by the hydrogeomorphic wetland study performed by USFWS. USACE has made the following determinations about possible effects to TES at the project site:

Northern Long-eared Bat (Myotis septentrionalis)	May affect but unlikely to adversely affect
Tricolored Bat (Perimyotis septentrionalsis)	May affect but unlikely to adversely affect
Eastern Black Rail (Laterallus jamaicensis ssp.)	No Effect
Ivory-billed Woodpecker (Campephilus principalis)	No Effect
Piping Plover (Charadrius melodus)	No Effect
Red Knot (Calidris canutus rufa)	No Effect
Pondberry (Lindera melissifolia)	No Effect
Alligator Snapping Turtle (Macrochelys temminckii)	No Effect
Pallid Sturgeon (Scaphirhynchus albus)	No Effect
Fat Pocketbook (Potamilus capax)	No Effect
Monarch Butterfly (Danaus plexippus)	No Effect

A determination of no effect was given for the Eastern Black Rail, Piping Plover, Red Knot, Pondberry, Alligator Snapping Turtle, Pallid Sturgeon, Fat Pocket Mussel, and Monarch Butterfly due to poor habitat conditions caused by regular dredging and port activity. The project area is a very active port with frequent barges entering and exiting channel, causing disturbances to the aquatic environment and surrounding areas. The project area is also not coastal and the sandy shores in the area are of

poor quality. Regular dredging has removed firm sandy and gravel substrates from the water that are necessary for many aquatic species life cycles.

It was determined using the NLEB determination key that the proposed project actions may affect but are unlikely to adversely affect the NLEB. Due to having a similar natural history and roosting behavior as the NLEB, it was determined that the proposed actions may also affect but are unlikely to adversely affect the Tricolored bat.

Please let me know if you concur with the determinations or if you have any questions. I look forward to working with you!

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

From: Ruppel, Ashley S <ashley_s_ruppel@fws.gov>
Sent: Wednesday, June 7, 2023 5:15 PM
To: Piefke, Taylor J CIV USARMY CEMVN (USA) <Taylor.Piefke@usace.army.mil>
Cc: Paille, Ronald (Ronny) <ronald_paille@fws.gov>
Subject: [Non-DoD Source] Re: [EXTERNAL] MVN Port of Rosedale Project

Hello Taylor,

You are correct that I did assist with this project, but I'm going to refer you to Ronny Pallie who is the USFWS lead on this project. I've CC'd him on this email.

Thanks!

Ashley Seagroves Ruppel
Aquatic Biologist
Mississippi Ecological Services Field Office
U.S. Fish and Wildlife Service
6578 Dogwood View Pkwy, Jackson, MS 39213
601.321.1126 office
830.832.6358 cell
ashley_seagroves@fws.gov
(She/Her/Hers)

From: Piefke, Taylor J CIV USARMY CEMVN (USA) <Taylor.Piefke@usace.army.mil>

Sent: Wednesday, May 31, 2023 2:43 PM
To: Ruppel, Ashley S <ashley_s_ruppel@fws.gov>
Subject: [EXTERNAL] MVN Port of Rosedale Project

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

Hi Ashley,

I have recently taken over completing the EA for the port expansion project in Rosedale, Mississippi. My records show that you performed a wetland delineation for the project last year and found that .72 acres of wetland would be affected by the project actions. I saw a previous IPaC was completed but I recently filled out a new IPaC for the project in order to have the most recent species list:

Northern Long-eared Bat (Myotis septentrionalis)	Endangered
May Affect But Unlikely to Adversely Affect	
Tricolored Bat (Perimyotis septentrionalsis)	Proposed Endangered
Eastern Black Rail (Laterallus jamaicensis ssp.)	Threatened
Ivory-billed Woodpecker (Campephilus principalis)	Endangered
Piping Plover (Charadrius melodus)	Threatened
Red Knot (Calidris canutus rufa)	Threatened
Pondberry (Lindera melissifolia)	Endangered
Alligator Snapping Turtle (Macrochelys temminckii)	Proposed Threatened
Pallid Sturgeon (Scaphirhynchus albus)	Endangered
Fat Pocketbook (Potamilus capax)	Endangered
Monarch Butterfly (Danaus plexippus)	Candidate

I also filled out the NLEB determination form and received a may affect but is unlikely to adversely affect. Did you reach any concurrence regarding threatened and endangered species with the previous biologist for the project? I appreciate the help.

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

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Assistant Regional Director-Ecological Services
5600 American Blvd. West
Bloomington, MN 55437-1458
Phone: (612) 713-5350 Fax: (612) 713-5292

In Reply Refer To: May 22, 2023
Project code: 2023-0084363
Project Name: Port of Rosedale CAP

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

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Port of Rosedale CAP'

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 22, 2023, for 'Port of Rosedale CAP' (here forward, Project). This project has been assigned Project Code 2023-0084363 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements may not be 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 the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (DKey), invalidates this letter.

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis completed by the Service, your project has reached the determination of “May Affect, Not Likely to Adversely Affect” the northern long-eared bat. Unless the Service advises you within 15 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that consultation on the Action is complete and no further action is necessary unless either of the following occurs:

- new information reveals effects of the action that may affect the northern long-eared bat in a manner or to an extent not previously considered; or,
- the identified action is subsequently modified in a manner that causes an effect to the northern long-eared bat that was not considered when completing the determination key.

15-Day Review Period

As indicated above, the Service will notify you within 15 calendar days if we determine that this proposed Action does not meet the criteria for a “may affect, not likely to adversely affect” (NLAA) determination for the northern long-eared bat. If we do not notify you within that timeframe, you may proceed with the Action under the terms of the NLAA concurrence provided here. This verification period allows the identified Ecological Services Field Office to apply local knowledge to evaluation of the Action, as we may identify a small subset of actions having impacts that we did not anticipate when developing the key. In such cases, the identified Ecological Services Field Office may request additional information to verify the effects determination reached through the Northern Long-eared Bat DKey.

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

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

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Fat Pocketbook *Potamilus capax* Endangered
- Ivory-billed Woodpecker *Campephilus principalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Pallid Sturgeon *Scaphirhynchus albus* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Pondberry *Lindera melissifolia* Endangered
- Red Knot *Calidris canutus rufa* Threatened
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

You may coordinate with our Office to determine whether the Action may affect the species and/or critical habitat listed above. Note that reinitiation of consultation would be necessary if a new species is listed or critical habitat designated that may be affected by the identified action before it is complete.

If you have any questions regarding this letter or need further assistance, please contact the Assistant Regional Director-Ecological Services and reference Project Code 2023-0084363 associated with this Project.

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

1. Name

Port of Rosedale CAP

2. Description

The following description was provided for the project 'Port of Rosedale CAP':

> The selected alternative (alternative 7) proposes 3 primary modifications to the existing port footprint:
>
> 1. Realigning and widening the authorized channel limits at the existing barge facility;
> 2. Widening the channel for the entire length to facilitate two way traffic and larger barge configurations; and
> 3. Enlarging the turning basin to support increased mobility with larger barge configurations.
>
> The existing barge loading facility (JANTRAN) is located approximately halfway up the 2.7 mile (14,256 feet) long by 150 foot wide navigation channel, which runs between the port and the Mississippi River. The current authorized depth of the channel is 93 feet, which is 9 feet below the Low Water of Reference (LWRP) of 102 feet.
>
> The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 feet to 200 feet to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily. The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting 3,600 feet (0.68 miles) of the navigational channel 100 feet to the west.
>
> The remaining portion of the navigation channel between the Mississippi River and the turning basin at the upper end of the port would be expanded from 150 feet to 185 feet (except for the portion mentioned above). This additional width would allow improved facilitation of two-way traffic and provide navigational support for larger barge configurations.
>
> The final main feature of this alternative is the reconfiguration and enlargement of the existing 400 foot by 1000 foot turning basin. The new proposed configuration

would lengthen the navigational channel to extend through the existing turning basin and shifts the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure 600 feet by 1000 feet. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port.

All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 feet would be maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredged would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure XX). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.8083388,-91.02249930492997,14z

DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect, but not likely to adversely affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

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

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

   No

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

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

   No

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

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

   No

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

   Yes

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

   No

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

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

   Yes

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

   No

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

   No

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

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

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

   No

10. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

    No

11. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

    No

12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
    (If unsure, answer "Yes.")

    Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    Yes

13. Will the action cause effects to a bridge?

    No

14. Will the action result in effects to a culvert or tunnel?

    No

15. Does the action include the intentional exclusion of northern long-eared 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 are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared 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

16. 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

17. 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

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic 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

19. 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

20. 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)?

    No

21. 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

22. Will the proposed action involve blasting?

    No

23. 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

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

    No

25. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

    Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

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

    Note: Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

    No

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

    Yes

28. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area? If unsure, answer "No."

    No

29. 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 and has a diameter breast height of six inches or greater.

    No

30. Are any of the trees proposed for cutting or other means of knocking down, bringing down, topping, or trimming suitable for northern long-eared bat roosting (i.e., live trees and/or snags ≥3 inches dbh that have exfoliating bark, cracks, crevices, and/or cavities)?

    Yes

31. [Semantic] Does your project intersect a known sensitive area for the northern long-eared bat?

    Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state agency or USFWS field office

    Automatically answered
    No

32. Will all tree cutting/trimming or other knocking or bringing down of trees be restricted to the inactive season for the northern long-eared bat?

    Note: Inactive Season dates for summer habitat outside of staging and swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas.

    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.

7

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the inactive (hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

0

In what extent of the area (in acres) will trees be cut, knocked down, or trimmed during the active (non-hibernation) season for northern long-eared bat? **Note:** Inactive Season dates for spring staging/fall swarming areas can be found here: https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas

7

Will all potential northern long-eared bat (NLEB) roost trees (trees ≥3 inches diameter at breast height, dbh) be cut, knocked, or brought down from any portion of the action area greater than or equal to 0.1 acre? If all NLEB roost trees will be removed from multiple areas, select 'Yes' if the cumulative extent of those areas meets or exceeds 0.1 acre.

Yes

Enter the extent of the action area (in acres) from which all potential NLEB roost trees will be removed. If all NLEB roost trees will be removed from multiple areas, entire the total extent of those areas. Round up to the nearest tenth of an acre.

7

For the area from which all potential northern long-eared bat (NLEB) roost trees will be removed, on how many acres (round to the nearest tenth of an acre) will trees be allowed to regrow? Enter '0' if the entire area from which all potential NLEB roost trees are removed will be developed or otherwise converted to non-forest for the foreseeable future.

0

Will any snags (standing dead trees) ≥3 inches dbh be left standing in the area(s) in which all northern long-eared bat roost trees will be cut, knocked down, or otherwise brought down?

No

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

No

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

APPENDIX F (Locational Maps Redacted): NHPA CORRESPONDENCE

PORT OF ROSEDALE EXPANSION, BOLIVAR COUNTY, MISSISSIPPI

CAP SECTION 7 NAVIGATION IMPROVEMENTS

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A6-1 ITEM 1: PORT OF ROSEDALE EXPANSION NHPA SECTION 106 INITIATION LETTER AND RESPONSES

A6-1.1.1 PORT OF ROSEDALE EXPANSION NHPA SECTION 106 Initiation Letter

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Jason Dalton
Tribal Historic Preservation Officer
United Keetoowah Band of Cherokee Indians
P.O. Box 746
Tahlequah, OK 74465

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Dalton:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

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Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Earl Barbry, Jr.
Tribal Historic Preservation Officer
Tunica-Biloxi Indian Tribe of Louisiana
P.O. Box 1589
Marksville, LA 71351

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Barbry:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

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The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

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Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

David Frank
Tribal Historic Preservation Officer
Thlopthlocco Tribal Town
P.O. Box 188
Okemah, OK 74859

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Frank:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
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References Cited

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Mr. Benjamin Yahola
Tribal Historic Preservation Officer
Historic Preservation
Seminole Nation of Oklahoma
P.O. 1498
Wewoka, OK 74884

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Yahola:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

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The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Everett Bandy
Tribal Historic Preservation Officer
Quapaw Nation
P.O. Box 765
Quapaw, OK 74363

RE: Section 106 Review Consultation
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84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Liana Hesler
Tribal Historic Preservation Officer
Ponca Tribe of Indians of Oklahoma
20 White Eagle Drive
Ponca City, OK 74601

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Ms. Hesler:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

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Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
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Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Dr. Andrea A. Hunter
Tribal Historic Preservation Officer/Director
Osage Nation
627 Grandview Avenue
Pawhuska, OK 74056

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Dr. Hunter:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
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References Cited

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Corain Lowe-Zepeda
Tribal Historic Preservation Officer
Attn: Historic and Cultural Preservation Office
Muscogee Nation
P.O. Box 580
Okmulgee, OK 74447

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
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Determination: No Historic Properties Affected

Dear Ms. Lowe-Zepeda:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

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The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Hal Bell
State Historic Preservation Office
Mississippi Department of Archives and History Historic Preservation Division
P.O. 571 Jackson, Mississippi 39205-0571

RE: Section 106 Review Consultation
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84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Melanie Carson
Tribal Historic Preservation Officer
Mississippi Band of Choctaw Indians
P.O. Box 6257, Choctaw Branch
Philadelphia, MS 39350

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Ms. Carson:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

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Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Darren Shields
Environment Director
Kickapoo Tribe of Oklahoma
P.O. Box 70
McLoud, OK 74851

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Shields:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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References Cited

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Henry Harjo
EPA Director
Kialegee Tribal Town
P.O. Box 332
Wetumka, OK 74883

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Harjo:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

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The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
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4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

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

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
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The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

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mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Paul Barton
Tribal Historic Preservation Officer/Culture Preservation Director
Eastern Shawnee Tribe of Oklahoma
70500 E. 128 Road
Wyandotte, OK 74370

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Barton:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government. 6

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

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Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
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References Cited

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History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Russell Townsend
Tribal Historic Preservation Officer
Qualla Boundary Reservation
Eastern Band of Cherokee Indians
P.O. Box 455
Cherokee, NC 28719

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Townsend:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
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DEPARTMENT OF THE ARMY
VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Mr. Dakota John
Tribal Historic Preservation Officer
Tribal Historic Preservation
Coushatta Tribe of Louisiana
P.O. 818
Elton, LA 70532

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
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Determination: No Historic Properties Affected

Dear Mr. John:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
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The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

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Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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Baca, Keith A., and Jeffrey S. Alvey
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Bolivar Commercial (Cleveland, Mississippi)
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VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

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

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The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

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

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Ms. Brunso:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

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Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
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References Cited

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History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Jonathan M. Rohrer
Tribal Historic Preservation Officer
Caddo Nation of Oklahoma
117 Memorial Lane
Binger, OK 73009

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Rohrer:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
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DEPARTMENT OF THE ARMY
VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Scott Kaufman
Deputy SHPO
Department of Arkansas Heritage
Arkansas Historic Preservation Program, Section 106 Review
1100 North Street Little Rock, Arkansas 72201

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
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Navigation Channel Northern Terminus	33.823608°	-91.022999°
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Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Kaufman:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

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Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

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The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

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Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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References Cited

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Baca, Keith A., and Jeffrey S. Alvey
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Cobb, James C.
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Futch, Jana J., and Steven Rabbysmith
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4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Mr, Wamblee Smith
Apache EPA
Apache Tribe of Oklahoma
P.O. Box 1330
Anadarko, OK 73005

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
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The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Ms. Samantha Robison
Tribal Historic Preservation Officer
Alabama-Quassarte Tribal Town
P.O. Box 187
Wetumka, OK 74883

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Ms. Robison:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

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17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

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Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

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Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
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References Cited

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History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1939 Pace, MS, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Bryant J. Celestine
Tribal Historic Preservation Officer
Alabama Coushatta Tribe of Texas
571 State Park Road
Livingston, TX 77351

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Mr. Celestine:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

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Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
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History of the Port of Rosedale-Bolivar County [HPR]
n.d. History of the Port of Rosedale-Bolivar County. A brief history manuscript provided to the author by personnel at the Port of Rosedale. Likely written in the late 1970s or early 1980s.

U.S. Geological Survey [USGS]
1939 Big Island, AR, [Contours]. 15-Minute Series (Topographic). Reston, VA: USGS.

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1969 Beulah, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

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

August 25, 2023

Regional Planning and
Environment Division, South
Environmental Planning Branch
Attn: CEMVK-PDS-N

Ms. Devon Frazier
Tribal Historic Preservation Officer
Cultural Preservation Department, Tribal Historic Preservation Board
Absentee-Shawnee Tribe of Indians of Oklahoma
2025 S Gordon Cooper Drive
Shawnee, OK 74801

RE: Section 106 Review Consultation
Undertaking: Continuing Authorities Program (CAP)
Section 107, River and Harbor Act of 1960 (Small Navigation Project)
Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi

(**Location**	**Latitude**	**Longitude**
Existing Turning Basin Center	33.824553°	-91.024129°
Proposed Turning Basin Center	33.826840°	-91.026017°
Navigation Channel Northern Terminus	33.823608°	-91.022999°
Navigation Channel Southern Terminus	33.788473°	-91.035162°
Navigation Channel Center	33.807310°	-91.022437°)

Determination: No Historic Properties Affected

Dear Ms. Frazier:

The U.S. Army Corps of Engineers, Vicksburg District (USACE MVK), is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP) (Figure 1). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions. The project areas are located as follows on the *Beulah, MS* and *Rosedale, MS* 7.5-minute USGS quadrangle maps: Sections 21, 28, and 29 in Township 10S, Range 1E (Arkansas) and Sections 21, 22, 27, and 28 in Township 23N, Range 8W (Mississippi) (Figure 2).

Project Authority

Section 107 of the River and Harbor Act of 1960 provides authority for the Corps of Engineers to improve navigation including dredging of channels, anchorage areas, and turning basins and construction of breakwaters, jetties and groins, through a partnership with non-Federal government sponsor such as cities, counties, special chartered authorities (such as port authorities), or units of state government.

Description of Undertaking

The Port of Rosedale owes its creation to the start of a Federal Revenue Sharing program for development projects in the 1970s (History of the Port of Rosedale-Bolivar County [HPR] n.d.:2). A study group organized by the Bolivar County Board of Supervisors recommended that federal funds could be used most advantageously in the construction of a new port at Rosedale. In 1977, the Vicksburg District (USACE), was given a grant to “clear and grub and dredge” the slack water channel known as Log Loader Chute and fill the 20-acre site to be used for the Port facilities. Work began almost immediately and was completed by early 1978 (HPR:3). Today, the Port of Rosedale continues to contribute to the area and is hoping to expand to handle larger vessels and house more facilities. As part of its annual operation, portions of the existing channel are dredged as state-allocated funding allows, though the funding is not sufficient to cover dredging of the full channel length during any individual spending cycle.

The selected alternative proposes 3 primary modifications (Figures 3 & 4):

- Realigning and widening the authorized channel limits at the existing barge facility;
- Widening the channel for the entire length to facilitate two-way traffic and larger barge configurations; and
- Enlarging the turning basin to support increased mobility with larger barge configurations.

The existing barge loading facility (JANTRAN) is centrally located in the 2.7 mile (4.35 km) long by 150-ft. (45.7 meter) wide navigation channel that runs between the port and the Mississippi River (see Figures 1, 3, & 4) The current authorized channel depth is 93 ft. (28.4 meters), which is 9 ft. (2.7 meters) below the Low Water of Reference (LWRP) of 102 ft. (31.1 meters).

Realignment and Widening of Channel Limits

The route to the turning basin poses certain navigational challenges when in operation. The position of the JANTRAN in the bend in the channel, creates challenges for pilots, particularly when barges that are being loaded encroach into the navigation channel. As part of the proposed alternative, the existing bend in the channel would be expanded from the currently authorized width of 150 to 200 ft. (45.7 to 61.0 meters) to alleviate some of the difficulties of traversing the channel bend during busier time frames. This expansion would also permit larger barge configurations to navigate the bend more easily (see Figures 3 & 4).

The channel would also be realigned in the vicinity of the JANTRAN facility to avoid encroachments from barges that are moored at the facility for loading and unloading. The realignment would involve shifting the central axis of the navigational channel approximately 100 ft. (30.5 meters) to the west for approximately 0.68 miles (1.09 km) in length. The remaining portions of the navigation channel south of this point to the Mississippi River and north to the turning basin at the upper end of the port would be expanded from 150 ft. (45.7 meters) to approximately 185 ft. (56.4 meters) (see Figures 3 & 4). This additional width would better allow two-way traffic and provide navigational support for larger barge configurations.

Enlarging Turning Basin

The final main feature of this alternative is the reconfiguration and enlargement of the existing approximately 400-x-1,000 ft. (121.9-x-304.8 meters) turning basin. The new proposed configuration would lengthen the navigational channel to extend through the existing turning basin and shift the footprint of the turning basin further upstream past its current location. The newly enlarged and relocated turning basin would measure approximately 600-x-1,000 ft. (182.9-x-304.8 meters) in size. This increase in size allows larger barge configurations to utilize the turning basin, and its new location would provide better access to the water with more frontage for the port. All the proposed changes and dimensions were determined based on input from the local sponsor and existing port customers. The currently authorized navigation depth of 93 ft. (28.4 meters) would be

maintained for all the modifications and limits described herein. The channel would not be deepened below the authorized Mississippi River channel depth.

Dredged Material Disposal

A cutter head dredge barge would be utilized to excavate material from the navigational channel and the turning basin. All dredged material would be pumped from the cutter head and carried via a dredge pipe and cast out to the Mississippi River near the mouth of the Port Navigation Channel (Figure 3). The dredge pipe would be placed along the eastern side of the navigation channel as to not interfere with any ingress or egress navigation at the port. During work hours, a boat on the discharge pipe would be utilized and move the line for passing tows as needed. Because of the distance needed to pump material to the river, a booster pump would be required. The distance into the river needed to discharge all dredge material would be determined based on a hydrographic survey, and the pipe would not impact navigation on the Mississippi River. To ensure there are no issues with self-inflicted shoaling at the mouth of the harbor, dredging the mouth will be conducted last to prevent sediment build-up.

Area of Potential Effects (APE)

The APE is defined as all areas where channels are to be realigned, widened, or otherwise enlarged (Figures 1-4). The APE totals approximately 108 acres (43.5 hectares) and includes all direct, indirect, and cumulative effects from the Undertaking. Access routes are not included in this calculation, as they are either public roads, heavily used agricultural roads, or already utilized waterways.

Identification and Evaluation of Historic Properties

The undertaking is in Bolivar County, Mississippi, and Desha County, Arkansas, in addition to the APE USACE MVK revised a 1-mile buffer around proposed undertaking. Historic properties in the project vicinity were identified based on a review of the National Register of Historic Places (NRHP) database, the Automated Management of Archaeological Site Data in Arkansas (AMASDA), Mississippi Department of Archives and History's Historical Site Management Tool (HSMT), historic aerial photography, historic map research, and a review of cultural resources survey reports (Figure 5). Review of current cultural resources map revealed no historic properties within and relatively few known cultural resources adjacent to the APE.

According to the Automated Management of Archaeological Site Data in Arkansas (AMASDA), in Desha County, AR, there is one previously recorded archaeological site, consisting of the purported location (listed but not field-verified) of the 19th-century community of Napoleon (Table 1), three cultural features (McCloud Landing, Napoleon Landing, and O'Neal Landing), which are the historic locations of 20th-century landscape features (e.g., cemeteries, dams, military encampments/structures, oilfields, towers, trails, and wells), and two 20th-century rural structures, transposed from the Arkansas Highway and Transportation Department (AHTD) county maps. Additionally, one cultural resources survey was previously executed within a 1-mile radius of the APE (Table 2). There are no National Register of Historic Properties (NRHP) sites within or adjacent to the Arkansas APE.

According to data from the Mississippi Department of Archives and History's (MDAH) Historical Site Management Tool (HSMT) for the Bolivar County, Mississippi, APE, there are 12 previously recorded archaeological sites in the vicinity, which includes resources with little-to-no provided, a prehistoric mound, and post-Civil War tenant sites (see Table 1; see Figure 5). Although none have been listed to the NRHP, one of these archaeological sites (a multi-component site is considered eligible for listing to the National Register. The remainder are ineligible for listing (n=8) or have not been assessed/evaluated (undetermined [n=3]) for listing to the National Register. Additionally, 14 historic structures have been inventoried with this same search radius, consisting

mostly of early twentieth-century residences (see Table 1; Figure 5). Furthermore, there have been five cultural resources surveys conducted in or adjacent to the APE in Bolivar County; one of these efforts overlaps with where the turning basin enlargement at the northern project terminus and channel realignment and widening in the center, respectively (MDAH Report No. 13-0717) (see Table 2; Figure 5). There are no NRHP sites within or adjacent to the Mississippi APE.

Table 1. Previously recorded cultural resources located within an approximately 1-mile (1.6 km) radius of the APE.

Resource Designation	**Period(s)**	**Date Recorded**	**NRHP Status**
3DE0128 (AR)	19th Century	1988	Undetermined
22Bo0114 (MS)	Early 20th Century (MS River Levee)	2013	Ineligible
22Bo630 (MS)	Middle Woodland; Mississippian; Late 19th through early 20th Centuries	1984	Ineligible
22Bo668 (MS)	Undetermined prehistoric period; Late 19th through early 20th Centuries	1994	Ineligible
22Bo669 (MS)	Woodland; Mississippian; Late 19th through mid - 20th Centuries	1994	Eligible
22Bo771 (MS)	Mounds Site – Undetermined age	2000	Undetermined
22Bo804 (MS)	Late 19th through early 20th Centuries	2002	Undetermined
22Bo805 (MS)	Late Woodland; Late 19th through early 20th Centuries	2002	Ineligible
22Bo806 (MS)	Mississippian	2002	Undetermined
22Bo975 (MS)	Woodland; Mid-to-late 19th through 20th Centuries	2017	Ineligible
22Bo976 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo977 (MS)	Undetermined prehistoric period; Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
22Bo978 (MS)	Mid-to-late 19th through Mid-20th Centuries	2017	Ineligible
011-ROS-0191 (MS)	Circa 1890 Aaron Tabernacle Missionary Baptist Church	Not listed	Undetermined
011-ROS-0192 (MS)	Circa 1930 vernacular house	Not listed	Undetermined
011-ROS-0193 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0194 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0195 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0196 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0197 (MS)	Circa 1920 Shotgun-style house	Not listed	Undetermined
011-ROS-0198 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0199 (MS)	Circa 1920 vernacular house	Not listed	Undetermined
011-ROS-0281 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0282 (MS)	Circa 1935 vernacular house	Not listed	Undetermined
011-ROS-0285.1-X (MS)	Circa 1940 Rosedale School complex – Classroom Building I	Not listed	Undetermined
011-ROS-0285.2-X (MS)	Circa 1948 Rosedale School complex – Classroom Building II	Not listed	Undetermined
011-ROS-0285.3-X (MS)	Circa 1952 Rosedale School complex – Classroom Building III	Not listed	Undetermined

Table 2. Previously recorded cultural resources surveys conducted within an approximately 1-mile (1.6 km) radius of the APE.

Report No.	Title	Author/Principal Investigator	Date
1313 (AR)	Cultural Resources and Geomorphological Reconnaissance of the McClellan-Kerr, Arkansas River Navigation System Pools 1 through 9 of the McClellan-Kerr Arkansas River Navigation System between Dardanelle, Arkansas, and the Mississippi River	W. J. Bennett, Jr., Phyllis L. Breland, and Lawson M. Smith – Archeological Assessment, Inc.	1/1989
84-036 (MS)	A Cultural Resources Survey Near Rosedale, Bolivar County, Mississippi	Sam Brookes - Private	3/1984
04-106 (MS)	Cultural Resources Survey of the Proposed Route of Interstate 69 Between Robinsonville and Benoit-Bolivar, Coahoma, Tunica and Sunflower Counties, Mississippi	Joanne Ryan, Douglas C. Wells, Richard A. Weinstein, David B. Kelley, and Sara A. Hahn – Coastal Environments, Inc.	4/2004
12-0307 (MS)	A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23, R8W, Bolivar County, MDAH Project Log #04-108-12	Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	6/2012
13-0717 (MS)	A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale Bolivar County, Mississippi, and Desha County, Arkansas	Jana J. Futch – Brockington Cultural Resources Consulting	11/2013
17-0108 (MS)	A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi	Keith Baca and Jeffrey Alvey – Cobb Institute of Archaeology (Mississippi State University)	4/2017

Cartographic Analysis

The landscape that constitutes the study area has been dramatically altered over the last few centuries, most dramatically over the last 90 years by both natural and man-made processes. Analysis of available historic maps from the 19th-century indicate that according to the 1833 General Land Office (GLO) plats for the townships and ranges, the Mississippi River channel flowed to the west of the APE, snaking southeast and crossing the center of the APE before turning almost due south to the east of the southern project terminus (Figure 6). Congress created the Mississippi River Commission in 1879 to centralize flood-fighting measures along the Mississippi River, coordinating efforts with the U.S. Army Corps of Engineers to provide protection against flood devastation as well as facilitate the river shipping frequently hindered by alluvial deposits below New Orleans. By the late nineteenth century, arguments over the most appropriate method of controlling the river led to a “levees-only” policy. Despite the constant construction of levees, the man-made structures failed to harness the river; between 1858 and 1922, the Delta experienced eleven “major” floods (Cobb 1992:129).

According to the published 1880s Mississippi River Commission Maps, the Mississippi River channel shifted slightly to the east near the northern project terminus, while the main channel flowed to the west and southwest of the APE. The center of the APE crossed the northern edges of Lake Beulah, an oxbow lake formed from the abandoned and cut-off main Mississippi River channel, while portions of the APE fall across a mix of improved and unimproved lands north and south of the oxbow lake (Figure 7). The Mississippi River continued its meandering course shifting again in the 1930s, moving westward away from the town of Rosedale (United States Geological Survey [USGS] 1939) (Figure 8). Within the APE, the northern third falls within a slack water channel, later referred to as Log Loader Chute, the eastern banks of which had been fortified by a series of levees and a revetment (a measure placed along a waterway bank to stabilize or protect from erosion). To the immediate west of and parallel to the APE is an alluvial peninsula extending to the south between this channel and the Mississippi River. Continuing south, the center of the APE follows the banks of the Mississippi River, while the southern third crosses forested backwater lowlands in Arkansas designated Island No. 74 (see Figure 8). By the late 1960s/early 1970s, much of the slack water channel had been backfilled by alluvial deposition, increasing the size of the peninsula, and extending its tip much further to the south (USGS 1969, 1972; see Figure 2). When Log Loader Chute was dredged in the 1970s to deepen its waters in preparation for the Port, the dredge material was discharged both back into the Mississippi River and redeposited onto the peninsula (Bolivar Commercial 1977), further evidenced by the Ak (Alluvial land, frequently flooded) symbology on modern soil maps (Figure 9 – soil map).

The presence of borrow pits (BP), as well as the extant levee (LV), are additional indications of an altered, manmade landscape (see Figure 9 – soil map). The USDA indicates that most of the natural soils in the southern reaches of the APE (Arkansas) are identified as the Sharkey-Commerce-Coushatta association (Sm), which are frequently flooded clays that form in backswamps (USDA 2023). Other than the Mississippi River and Log Loader Chute, other substantial hydrological features near the study area include Beulah Lake, an oxbow of the Mississippi River located to the southeast of the Port, and Long Lake and Legion Lake, both backswamp areas and remnants of the former river channel near Log Loader Chute (see Figures 2 and 9).

Previous Cultural Resources Investigations

Three cultural resources surveys have been conducted on behalf of the Port of Rosedale over the last 11 years in association with a proposed new boating access facility, industrial park development, and other anticipated facilities improvements (MDAH Report Nos. 12-0307, 13-0717, & 17-0108; see Figure 5). According to recent cultural resources surveys, fill from the 1970s dredging was also piled up on the north and east banks of Log Loader Chute to create an artificial landscape for Port facilities (Alvey and Baca 2012; Baca and Alvey 2017; Futch and Rabbysmith 2013). Additional subsurface investigation of the area north of the existing turning basin as well as across the peninsula that separates the port channel and the Mississippi River, exhibited evidence of fill from dredging activities down to a depth of 1.31-1.64 ft. (40-50 cm). Several deep auger tests were randomly excavated to a depth of up to 4.75 ft. (145 cm) to the north of the turning basin and across the alluvial peninsula west of the existing channel to investigate the possibility that deeply buried cultural deposits could be present. However, each auger test only demonstrated the continued presence of subsoil, usually composed of brownish orange sandy clay. No deeply buried cultural horizons or cultural material were identified (Futch and Rabbysmith 2013:31, 35).

Given the absence of identified historic properties, existing survey coverage, previous construction, development, and maintenance activities, and the low probability of the presence of unidentified resources, USACE has determined that the existing surveys constitute a reasonable and good faith effort at identification and evaluation of historic properties and that it is unlikely that any unidentified historic properties are present in the currently proposed APE; therefore, no further cultural resources investigation is recommended.

Assessment of Effects to Historic Properties

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c)

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Sincerely,

MOORE.DANIEL.R.1388299416 Digitally signed by MOORE.DANIEL.R.1388299416 Date: 2023.08.24 09:46:11 -05'00'

Dan Moore
Chief, Environmental Compliance Section
Regional Planning and Environmental Division South

List of Recipients:
Alabama Coushatta Tribe of Texas
Caddo Nation
Chickasaw Nation
Choctaw Nation of Oklahoma
Jena Band of Choctaw Indians, Louisiana
Mississippi Band of Choctaw Indians
Muscogee Nation
Quapaw Nation
Tunica-Biloxi Tribe of Louisiana
Arkansas State Historic Preservation Office (AR SHPO)
Mississippi State Historic Preservation Office (MS SHPO)

References Cited

Alvey, Jeffrey S., and Keith A. Baca
2012 *A Phase I Cultural Resources Survey of a Proposed New Boating Access Facility on the Mississippi River in S21, T23N, R8W, Bolivar County, Mississippi, MDAH Project Log #04-108-12*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Baca, Keith A., and Jeffrey S. Alvey
2017 *A Phase I Cultural Resources Survey in Association with the Proposed Rosedale Industrial Park Development, Bolivar County, Mississippi*. Cobb Institute of Archaeology, Mississippi State University. Submitted to Eley-Barkley Engineering and Architecture, Cleveland, Mississippi. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 12-0307).

Bolivar Commercial (Cleveland, Mississippi)
1977 Short article about dredging Log Loader Chute. October 18. Cleveland, Bolivar County, Mississippi.

Cobb, James C.
1992 *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*. Oxford University Press, New York, New York.

Futch, Jana J., and Steven Rabbysmith
2013 *A Cultural Resources Survey of 141 Acres for Improvements to the Port of Rosedale, Desha County, Arkansas, and Bolivar County, Mississippi*. Brockington and Associates, Inc. Submitted to Pickering Firm, Inc. Report on file at the MDAH, Jackson, Mississippi (MDAH Report No. 13-0717).

History of the Port of Rosedale-Bolivar County [HPR]
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U.S. Geological Survey [USGS]
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1972 Rosedale, MS [Contours]. 7.5-Minute Series (Topographic). Reston, VA: USGS.

A6-1 ITEM 1: PORT OF ROSEDALE EXPANSION NHPA SECTION 106 INITIATION LETTER AND RESPONSES

A6-1.1.2 PORT OF ROSEDALE EXPANSION NHPA SECTION 106 Initiation Letter Figures

Figure 1. Port of Rosedale APE. Project Area Overview (Aerial).

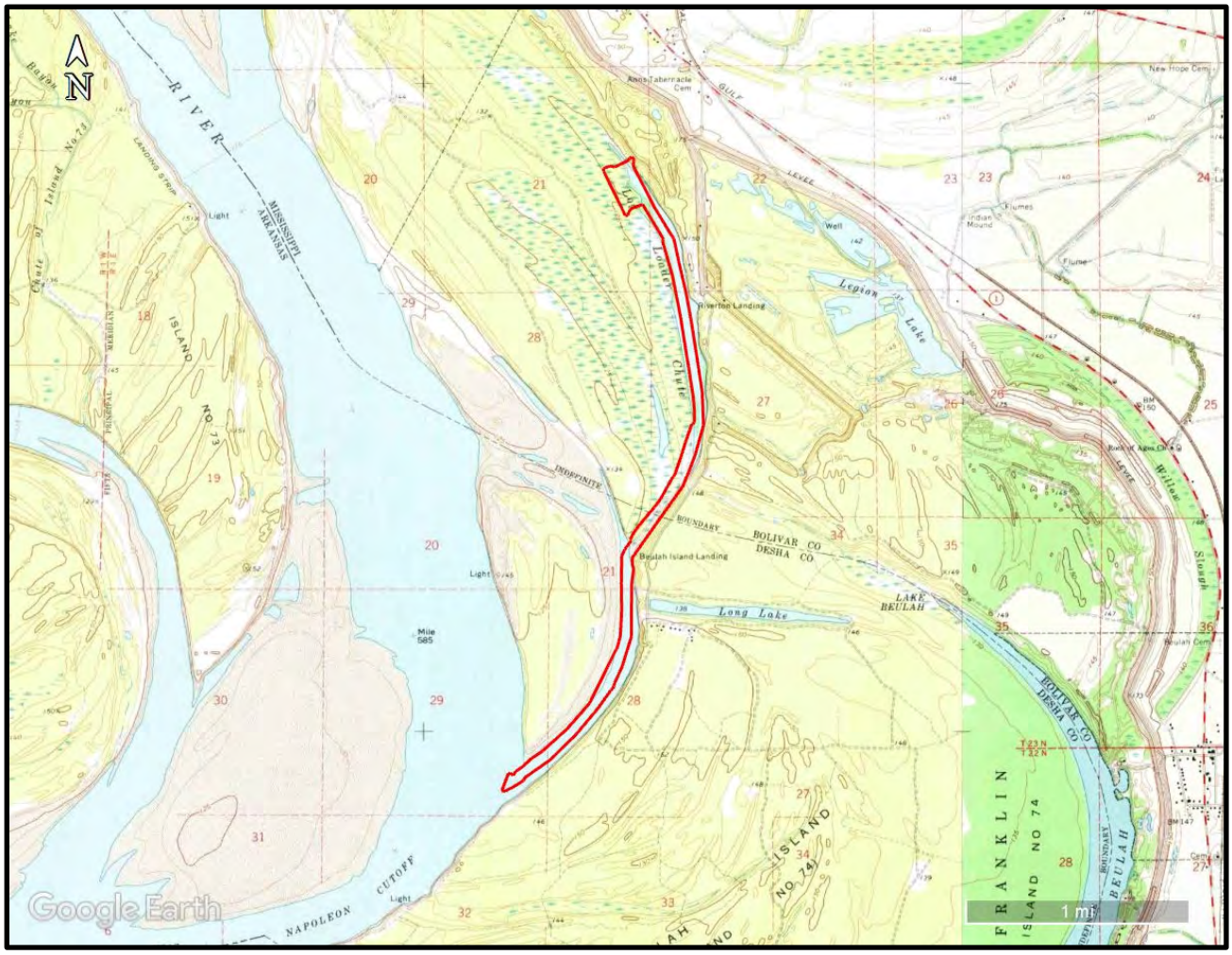

Figure 2. Port of Rosedale APE. Project Area Overview (Topo).

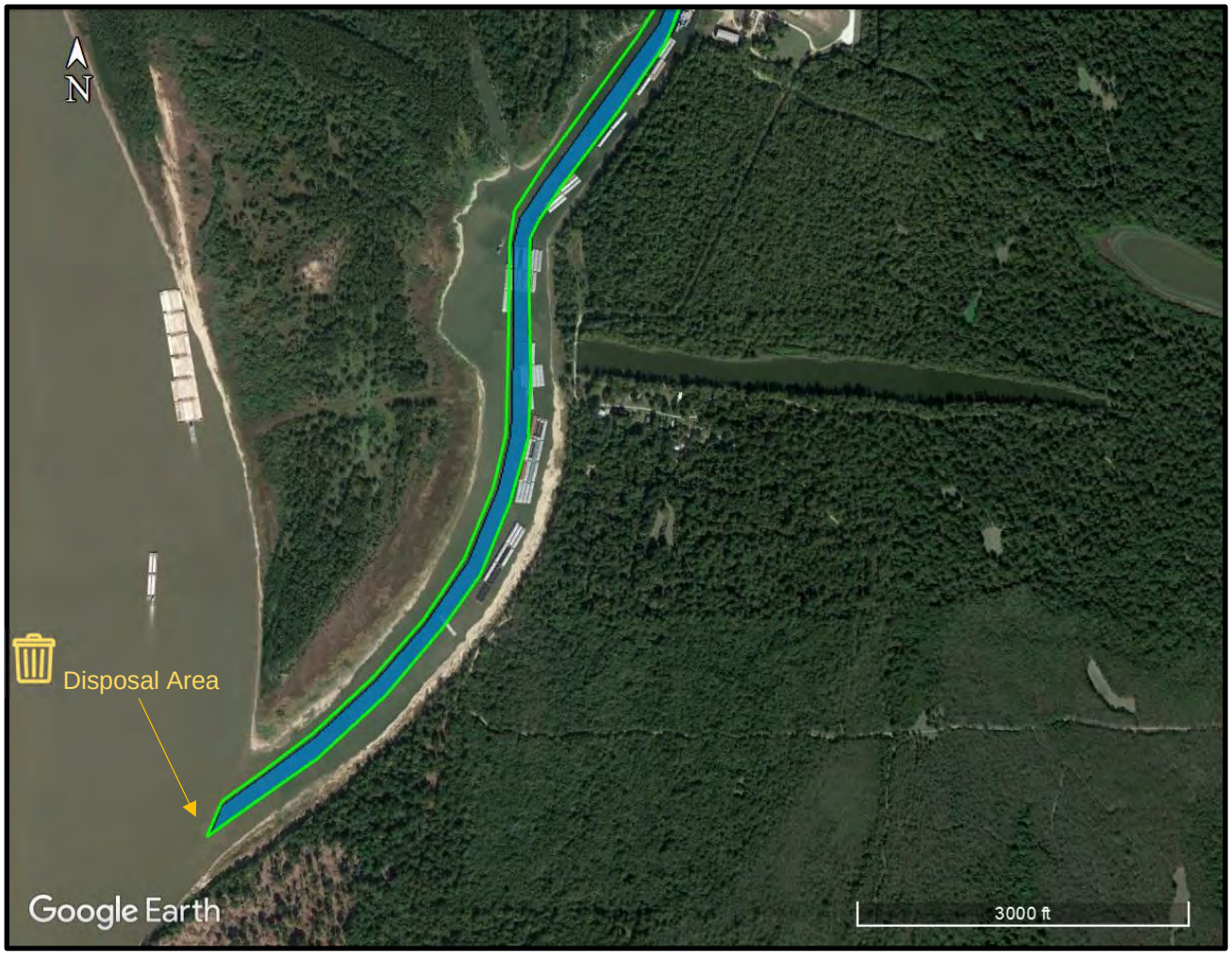

Figure 3. Southern portion of the Port of Rosedale APE. Existing channel limits (blue) and proposed channel limits (green).

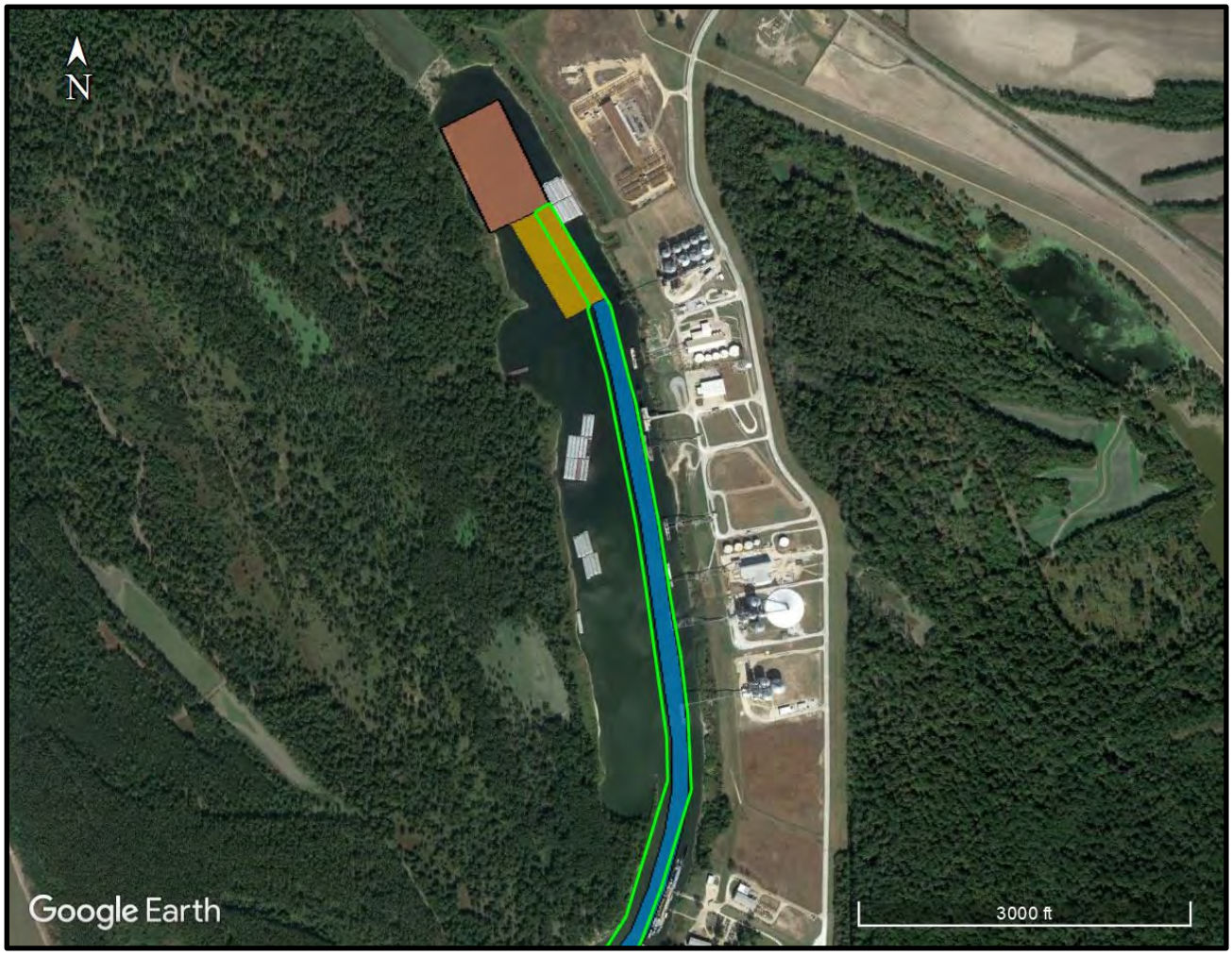

Figure 4. Northern portion of the Port of Rosedale APE. Existing channel limits (blue), proposed channel limits (green), existing turning basin (gold), and proposed relocated and enlarged turning basin (brown).

Figure 9. NRCS soil map of the APE and vicinity.

A6-1 ITEM 1: PORT OF ROSEDALE EXPANSION NHPA SECTION 106 INITIATION LETTER AND RESPONSES

A6-1.2 PORT OF ROSEDALE EXPANSION NHPA SECTION 106 Initiation Letter Responses

MISSISSIPPI BAND OF CHOCTAW INDIANS
TRIBAL HISTORIC PRESERVATION OFFICE
101 INDUSTRIAL ROAD
CHOCTAW, MS 39350

Mr. John Underwood, District Archaeologist
Cultural & Social Resources Section
USACE Vicksburg District
Regional Planning & Environment Division, South

September 5, 2023

VIA E-MAIL AT: john.r.underwood@usace.army.mil

RE: Section 106 Review Consultation, Port of Rosedale Expansion, Desha County, AR, & Bolivar County, MS

Determination: No Adverse Effect to Historic Properties/No Tribal Interests Affected

Dear Mr. Underwood:

The Mississippi Band of Choctaw Indians' (MBCI) THPO has received and appreciates your email dated August 25, 2023, in which you request our Tribe's review and consultation on the above-referenced site.

We have reviewed the full description of the proposed project that you have provided and the MBCI concurs with the finding of No Adverse Effect to Historic Properties. Additionally, MBCI does not have any tribal interests that would be affected by this project. However, we would like to be notified if there are any inadvertent discoveries of any potentially significant cultural items or artifacts during the execution of this project.

Thank you for consulting with the Mississippi Band of Choctaw Indians on the above-referenced project. If you have any questions that we at MBCI may be able answer, please do not hesitate to contact me by phone at (601) 663-7606, or by email at THPO@choctaw.org.

Sincerely,

Melanie Carson
Planner/THPO
Mississippi Band of Choctaw Indians
Planning Office
101 Industrial Rd
Choctaw, MS 39350

Sarah Huckabee Sanders
Governor
Shea Lewis
Secretary

September 20, 2023

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

RE: Desha County: General
Section 106 Review: COE
Proposed Undertaking: Port of Rosedale Expansion
AHPP Tracking Number: 111490

Dear Mr. Underwood:

The staff of the Arkansas Historic Preservation Program (AHPP) reviewed the submission for the above referenced undertaking in Sections 21, 28, and 29, Township 10 South, Range 1 East, in Desha County, Arkansas, and extends into Bolivar County, Mississippi. The proposed undertaking entails the realigning and widening channel limits and enlarging the basin.

There are no previously recorded archeological sites within the Arkansas APE. In addition, the APE has been heavily disturbed to previous construction, development, and maintenance activities in and around the Port of Rosedale.

Based on the provided information, the AHPP concurs with the finding of **no historic properties affected pursuant to 36 CFR § 800.4(d)(1)** for the proposed undertaking.

Tribes that have expressed an interest in the area include the Caddo Nation, the Cherokee Nation, the Choctaw Nation of Oklahoma, the Jena Band of Choctaw Indians, the Muscogee (Creek) Nation, the Osage Nation, the Quapaw Nation, the Shawnee Tribe, and the Tunica-Biloxi Tribe of Louisiana, Inc. (Mr. Earl J. Barbry. We recommend consultation in accordance with 36 CFR § 800.2(c)(2).

We appreciate the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, call Kathryn Bryles at 501-324-9784 or email kathryn.bryles@arkansas.gov.

Sincerely,

for
Scott Kaufman
AHPP Director and State Historic Preservation Officer

cc: Dr. Melissa Zabecki, Arkansas Archeological Survey

MDAH
MISSISSIPPI DEPARTMENT OF
ARCHIVES & HISTORY

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Jackson, MS 39205-0571
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September 22, 2023

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

RE: Proposed Port of Rosedale Expansion Project,
(USACE) MDAH Project Log #08-093-23, Bolivar County

Dear Mr. Underwood:

We have reviewed your August 25, 2023, request for a cultural resources assessment, for the above referenced project, in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, it is our determination that no cultural resources are likely to be affected. Therefore, we have no objection with the proposed undertaking.

Should there be additional work in connection with the project, or any changes in the scope of work, please let us know in order that we may provide you with appropriate comments in compliance with the above referenced regulations. If you have any questions, please do not hesitate to contact us at (601) 576-6940.

Sincerely,

Hal Bell

Hal Bell
Review and Compliance Officer

FOR: Katie Blount
State Historic Preservation Officer

Board of Trustees: Spence Flatgard, *president* | Hilda Cope Povall, *vice president* | Carter Burns | Kimberly L. Campbell | Nancy Carpenter | Betsey Hamilton | Mark E. Keenum | Lucius M. Lampton, MD | TJ Taylor

From:	Lindsey Bilyeu
To:	Underwood, John R CIV USARMY CEMVK (USA)
Subject:	[Non-DoD Source] RE: Section 106 Consultation - Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi
Date:	Tuesday, October 3, 2023 10:16:58 AM

John,

The Choctaw Nation of Oklahoma thanks the USACE, Vicksburg District, for the correspondence regarding the above referenced project. This project lies in our area of interest, including part of our Trail of Tears Removal Corridor.

The Choctaw Nation has reviewed the project information and we concur with the finding of "no historic properties affected". However, we ask that work be stopped, and our office contacted immediately, if Native American artifacts or human remains are encountered.

If you have any questions, please contact me.

Yakoke (thank you),

Lindsey D. Bilyeu
Program Coordinator II
NHPA Compiance Review
Historic Preservation
Choctaw Nation of Oklahoma
Desk Phone: 580-642-8377
Cell Phone: 580-740-9624

From: Underwood, John R CIV USARMY CEMVK (USA) <John.R.Underwood@usace.army.mil>
Sent: Friday, August 25, 2023 2:00 PM
To: Ian Thompson <ithompson@choctawnation.com>; Lindsey Bilyeu <lbilyeu@choctawnation.com>
Subject: Section 106 Consultation - Port of Rosedale Expansion, Desha County, Arkansas, and 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 Section 106 Review Consultation Letter and Google Earth files associated with the U.S. Corps of Engineers (USACE), Vicksburg District (MVK) undertaking, is proposing expansion of and improvements to the existing navigation capacity of the Port of Rosedale in Desha County, Arkansas, and Bolivar County, Mississippi, under the auspices of the Continuing Authorities Program (CAP). The purpose of CAP is to establish and provide authority for USACE to plan and implement projects of limited size, cost, scope, and complexity. The Port of Rosedale expansion project intends to reduce transportation costs

during low water conditions resulting from: (1) limited channel depth; (2) limited channel width; and (3) turning basin restrictions.

Based on the information presented in this letter, USACE MVK has determined that there are no historic properties, as defined in 36 CFR 800.16 (l) in the APE, for the CAP Section 107, River and Harbor Act of 1960 (Small Navigation Project) Port of Rosedale Expansion, Desha County, Arkansas, and Bolivar County, Mississippi. Therefore, USACE MVK is making a finding of **No Historic Properties Affected** for this undertaking and submitting it to you for review and comment. This project will be subject to the standard change in scope of work, unexpected discovery, and unmarked human burial sites act provisions. USACE MVK requests your comments within 30 days, per 36 CFR 800.5(c).

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 Ms. Rachelle Androwski, Vicksburg District Tribal Liaison at (601) 631-5920 or via e-mail at rachelle.r.androwski@usace.army.mil.

Respectfully,

John R. Underwood, MA, RPA
District Archaeologist
Cultural & Social Resources Section (CEMVK-PDS-U) U.S. Army Corps of Engineers Vicksburg District
Regional Planning and Environment Division, South
John.R.Underwood@usace.army.mil
601.631.5017

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