

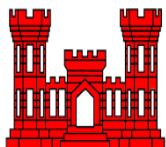
# **DRAFT ENVIRONMENTAL ASSESSMENT MISSISSIPPI RIVER AND TRIBUTARIES PROJECT**

## **ATCHAFALAYA BASIN PROTECTION LEVEES, LEVEES WEST OF BERWICK BAYOU, EAST WEST LEVEE TIE-IN**

**Saint Mary Parish, Louisiana  
EA 510-202-00-B2P-1781691684**



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**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**

## **MISSISSIPPI RIVER AND TRIBUTARIES PROJECT**

### **ATCHAFALAYA BASIN PROTECTION LEVEES, LEVEES WEST OF BERWICK BAYOU, EAST WEST LEVEE TIE-IN**

**St. Mary Parish, Louisiana**

**EA #510**

#### **1. Introduction**

The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division, Regional Planning and Environment Division South (RPEDS), has prepared this Environmental Assessment (EA) for the New Orleans District (CEMVN) to evaluate potential impacts from constructing an approximately 0.70-mile levee along the Gulf side of the Gulf Intracoastal Waterway (GIWW) while utilizing a government-furnished borrow area to construct it. It traverses under the LA 317 bridge and ties in two sides of Ellerslie that are above the design levee elevation for this reach (Figure 1). The borrow area and the proposed levee work are both in the vicinity of St. Mary Parish, Louisiana. This EA was completed in accordance with the National Environmental Policy Act (NEPA) (42 U.S. Code Part 4321, et seq.) and was informed by new administration policies and the Department of War NEPA Implementing Procedures published June 30, 2025, and updated April 30, 2026, in Version 1.2. This EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the District Commander, USACE, and CEMVN, to make an informed decision on the appropriateness of an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

#### **1.1 Proposed Action**

The CEMVN proposes to construct an approximately 0.70-mile levee of the Atchafalaya Basin, Levees West of Berwick along the Gulf side of the GIWW that traverses under the LA 317 bridge that ties in two sides of Ellerslie that are above the design levee elevation for this reach. The levee would connect the West Bayou Sale Gordy Levee and the East Bayou Sale Gordy Levee near Ellerslie, Louisiana (Figure 2). The levee on the east side will run alongside a 16-foot-wide existing road leading to the plant located just east of the project, which is to be maintained. A ditch running along the east side of the project that ties into an existing ditch at the end of the project will also be included. In addition, there are four points along the project which will have new or realigned ramps for continued access. The project is entirely levee; no floodwalls or other items will be required for this project.

The Limit of Work for the proposed project is from approximately baseline B/L Station - 0+77.58 West Ellerslie to B/L Station 36+00 East Ellerslie (Figure 2). Approximately 32,500 cubic yards of earthen material will be required to raise the levee height to the

design grade of approximately +10.0 feet North American Vertical Datum (NAVD). The existing levee has an average grade deficiency ranging in 2.0 feet and will be brought to an elevation range of 10 to 15 ft. NAVD88. At the crown, the levee will slope down at 1V:4H until reaching the existing ground. Earthen material would be obtained from a proposed 44.5-acre borrow area (Figures 3 and 4).

ACCESS ROADS: The project site will be accessed via Highway 317 and Rosebud Road on the western side. The east side can be accessed by an unnamed shell road of Highway 317. The site is also accessible by the GIWW. The proposed borrow area is located on Cotten Rd., south of Patterson, Louisiana, approximately 19 miles from the Work Area adjacent to the Wax Lake East Levee, which is a segment of the West Atchafalaya Basin Protection Levee (WABPL).

BORROW AREA: The use of this government-furnished borrow area was evaluated and previously permitted by CEMVN Regulatory Division under permit number MVN-2018-00726-WPP. This borrow area has undergone a separate environmental review process and includes comprehensive mitigation measures to address potential impacts to water quality, wetlands, and other resources. This EA is referencing the continued validity of the permit, confirms the implementation of required mitigation measures and assesses potential indirect impacts associated with its use for this project. No further detailed environmental analysis of the borrow area itself is required, as all necessary environmental protections are already in place and regulated under the existing permit.

Approximately 660,000 cubic yards of earthen material is available for use at the proposed borrow area. Approximately 32,500 cubic yards of earthen material would be excavated from the proposed borrow area. Bulldozers would be utilized to clear and grub the proposed borrow area prior to excavation. The borrow area would then be excavated to a depth of approximately –20.0 feet NAVD88, with shallow-side sloped banklines of 1-foot vertical on 4-feet horizontal (1V:4H) on all sides to encourage diverse aquatic habitats and/or wetlands along the land-water interface. The most prominent soil types in the proposed borrow area are clay (CH) and silty clay (CL). Any vegetation and unsuitable earthen material would be replaced inside the borrow area. A silt fence or similar materials would be placed along the perimeter of the borrow area to contain runoff material during construction activities. Excavated material may be temporarily stockpiled adjacent to the borrow area, and within existing construction easements, to be used as a future source of borrow material for any levee that is part of the East Atchafalaya Basin Protection Levee (EABPL) and WABPL. All construction activities would be within existing levee rights-of-way or within the borrow area construction easements. In sum, all excavation activities would be conducted in accordance with the CEMVN Regulatory Division permit's special conditions. Furthermore, the proposed work would occur during dry or low-water conditions if practicable. The proposed action would strengthen the ability of the Levees West of Berwick to reduce the risk of loss of life and property from future flooding of the Atchafalaya River.

LEVEE EMBANKMENT: A silt fence will be constructed around the entire project approximately 1 ft from the proposed limits of construction for erosion control. The silt

fence would be designed to retain sediment from runoff during clearing and grubbing, excavation, embankment placement, and final grading.

Before placement of the new embankment material, the entire earth surface on which fill is to be placed, shall be thoroughly broken or scarified to a depth of 6 in. The materials for compacted fill shall be placed or spread in layers, the first or bottom layer and the last two layers not more than 6 in thick and all layers between the first and the last two layers not more than 12 in thick prior to compaction. Layers would be started full, out to the existing levee right-of-way (ROW) and would be carried substantially horizontally and parallel to the levee centerline with sufficient crown or slope to provide drainage during construction.

To prepare the site, it is anticipated that clearing and grubbing on the west side of LA 317 will be required to access the project area and construct the levee.

The Harvest Midstream Burns Dock is located just to the east of the project, via the existing road leading from LA 317 to the facility. The contractor will stage their work so that continued access to the facility is maintained. There will be a layer of aggregate sloping to the GIWW upon completion of the levee work.

All levee embankments and areas disturbed by the construction activities will be seeded with either Bermuda, Bahia or Seashore Paspalum or rye grass and fertilized. Removal of silt fence barriers would be after construction is complete and the soil is stabilized.



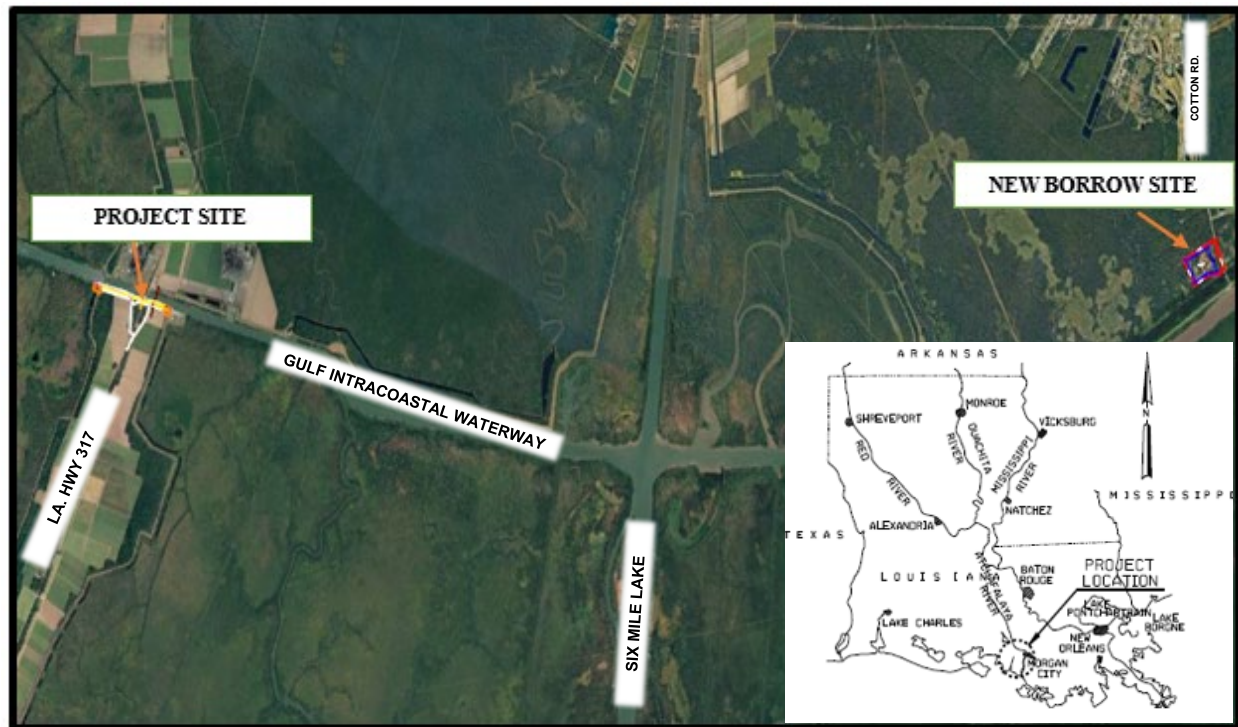


Figure 1. Project Vicinity.

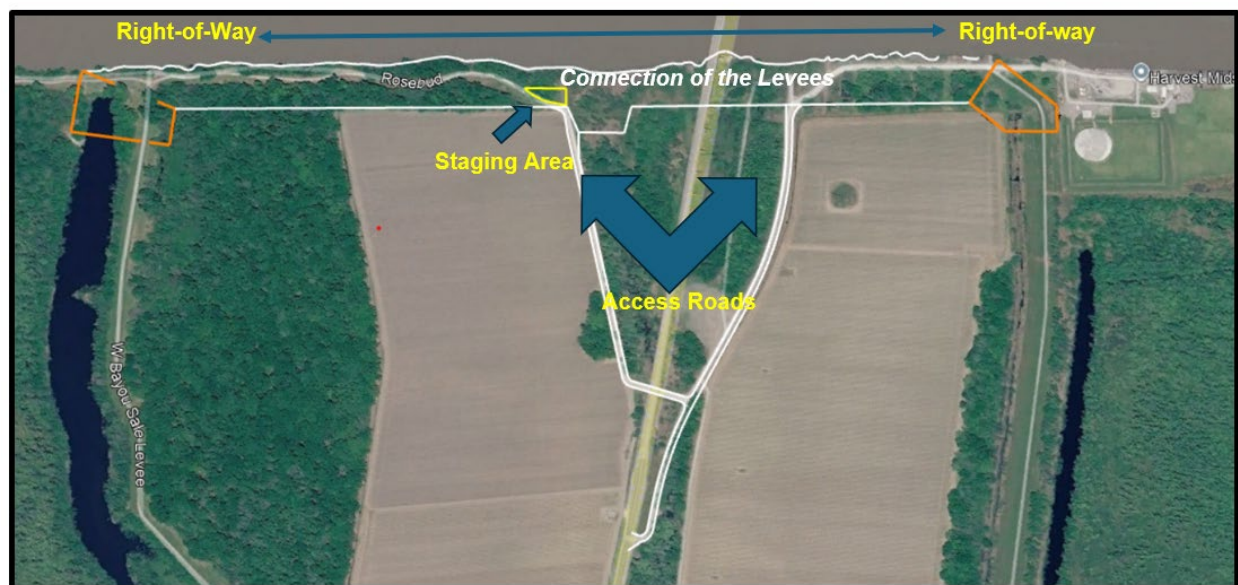
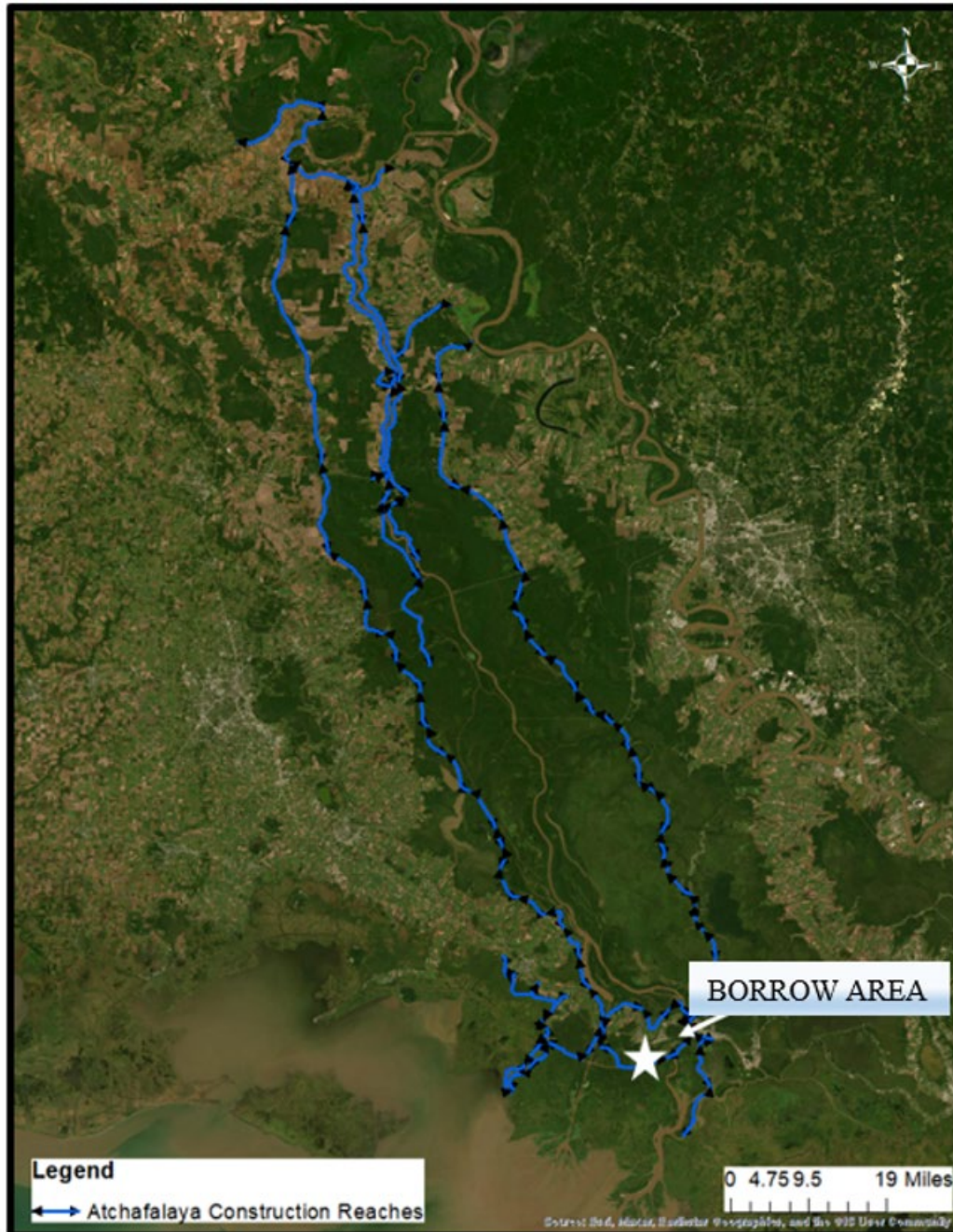


Figure 2: Atchafalaya Basin Protection Levee, Levees West of Berwick Bayou Sale' East-West Tie-in Work Area ROW



**Figure 3. Borrow Area Vicinity**





**Figure 4. New Borrow Area**

## **1.2 Authority**

The east and west Atchafalaya Basin protection levees are part of the Atchafalaya Basin Floodway project, a prominent feature of the flood control, Mississippi River and Tributaries (MR&T) project. The MR&T project was authorized by the Flood Control Act of May 15, 1928, 70th Congress (Public Law 70-391) as amended and supplemented. The Levees West of Berwick feature was authorized by the Flood Control Act of 1936 (Public Law 76-678). The West and East Bayou Sale Gordy levees are sections of the Levees West of Berwick feature.

## **1.3 Purpose and Need for the Proposed Action**

The purpose of the proposed action is to connect the West Bayou Sale Gordy Levee and the East Bayou Sale Gordy Levee. This action would also raise the height of the levees to the original design grade and would provide a source of borrow material for future operation and maintenance activities (e.g., slides and lifts) associated with the EABPL and WABPL. The material would be obtained from this proposed borrow area which is located approximately 19 miles from the work area. The levee has settled over the years and requires a total of approximately 32,500 cubic yards of earthen material to raise its

height to the design grade of approximately +10 feet NAVD88. This levee is part of a connecting levee system that provides essential flood protection to over 47,000 residents of St. Mary Parish (U.S. Census Bureau, 2024 census). The proposed action is needed to strengthen the ability of the levees to reduce the risk of loss of life and property and to reduce the risk of flooding from the Atchafalaya River and Gulf Intracoastal Waterway (GIWW).

#### **1.4 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 (e.g., flood risk management, restoration, etc.) contain inherent uncertainties. The effects of tropical storms and changing conditions on each project's performance are uncertain and are addressed through future projections based on existing information.

#### **1.5 Prior NEPA Documents**

In 1982, the Atchafalaya Basin Floodway System Feasibility Study and a Final Environmental Impact Statement (FEIS) were filed with the U.S. Environmental Protection Agency (August 20, 1982). Among an array of features, the FEIS addressed modification of existing features, such as the Levees West of Berwick. A Record of Decision for the FEIS was signed on December 3, 1986.

#### **1.6 Public Concerns**

Since the great flood of 1927, there has been widespread public concern for flood control along the Mississippi River and its tributaries to protect environmental resources, infrastructure, and navigation. Throughout history, special emphasis has been placed on the construction and maintenance of channel training devices such as levees. The flood control plan of the MR&T project is designed to control the Mississippi River Project Design Flood (PDF), which is a theoretical flood greater than the great flood of 1927. The comprehensive flood control plan includes several features that protect a large part of the alluvial valley from the PDF, with a major element of this plan being levees for the containment of flood flows. One of the MR&T features is the Atchafalaya Basin Floodway which extends from the Old River Control Complex southward to the Gulf of America, and it is designed to protect southern Louisiana from MR&T floods by diverting up to 1.5 million cubic feet per second (cfs) to the Gulf of America.

The comprehensive MR&T project has four major elements: levees and floodwalls to contain flood flows; floodways to pass excess flows past critical Mississippi River reaches; channel improvement and stabilization to provide efficient navigation alignment, increased flood-carrying capacity and protection of the levee system; and tributary basin improvements. The MR&T project in the alluvial valley between Cape Girardeau, Missouri, and Head of Passes, Louisiana, provides protection from floods by means of levees, floodwalls, flood ways, reservoirs (in Yazoo and St. Francis basins), bank

stabilization and channel improvements in and along the river and its tributaries and outlets insofar as affected by backwater of the Mississippi River.

Historically, the Mississippi River Levees feature has been under construction since 1928 and the engineering and construction capability exists to complete the project in the year 2020. When completed, approximately 35,000 square miles will be protected from the Mississippi River PDF. The Mississippi River mainline levees were first constructed by settlers at New Orleans in the early 1700s. Federal construction of the Mississippi River mainline levees began shortly after the passage of the Flood Control Act of 1928 and has continued ever since. The Mississippi River mainline levees protect the lower Mississippi River valley against the PDF by confining flow to the leveed channel, except where it enters backwater areas, allowing the overflow of several levees designed to overtop and fill tributary basins, or diverting flow into four project floodway areas. The mainline levee system, comprised of levees, floodwalls, and various control structures, is approximately 1,610 miles long.

## **2. Alternatives Including the Proposed Action**

### **2.1 Proposed Action**

The proposed work would provide a borrow source of earthen material and manage seepage flow to improve levee stability by designing seepage control measures. The proposed work is located along the Gulf side of the Gulf Intracoastal Waterway (GIWW) which traverses under the LA 317 bridge and ties in two sides of Ellerslie that are above the design levee elevation for this reach. The levee would connect the West Bayou Sale Gordy Levee and the East Bayou Sale Gordy Levee near Ellerslie, Louisiana. The levee on the east side will run alongside a 16-foot-wide existing road leading to the plant located just east of the project which is to be maintained. A ditch running along the east side of the project that ties into an existing ditch at the end of the project will also be included. In addition, there are two points along the project which will have new or realigned ramps for continued access. The project is entirely levee, no floodwalls or other items will be required for this project. All excavated material removed from the site during construction would be hauled in watertight trucks with secured binders on tailgates to an approved commercial disposal facility.

### **2.2 No-Action Alternative (Future without Project [FWOP])**

One alternative to the proposed action was considered. This alternative was: no-action. In the no-action alternative (a.k.a. future without project condition), the proposed action would not be constructed. There would be no excavation in the borrow area and a viable source of borrow material for future operation and maintenance activities (e.g., slides and lifts) associated with the EABPL and WABPL would not be available. The developed area to the southwest of the proposed levee would continue to be at risk of flooding during high water events.

### **3. Affected Environment**

#### **3.1 Description of the Work Area**

The existing Levees West of Berwick feature consists of approximately 57 miles of levees that tie into high ground for the purpose of protecting development along the Teche and Sale Ridges. Lands in this area are subject to backwater flooding from the Atchafalaya Basin floodway system, Wax Lake Outlet, and the Lower Atchafalaya River. During extreme flood conditions, this area would also be influenced by GIWW flood stages. The portion of Bayou Sale located within the study area no longer accommodates boat access or contributes flow to the GIWW. The former inlet to Bayou Sale on the GIWW south bank, now enlarged to accommodate barge tie-ups, is cut off from Bayou Sale by the deposition of dredged material. Vegetation in the depression that now forms Bayou Sale consists of early-to-mid successional bottomland hardwoods. Soils generally consist of a substratum of sand and gravel sand overlain by a top stratum of backswamp deposits of clay, silt, and organic materials.

##### **3.1.1 Description of the Watershed**

The Atchafalaya River flows approximately 140 miles through southeast Louisiana from Simmesport to Atchafalaya Bay and the Gulf of America, with an average headwater discharge of 218,400 cfs. In the early 1500s, the Mississippi River captured the lower Red River and established the Atchafalaya River as a distributary. Until the 1950s, the Mississippi River was diverting an increasing amount of its discharge into the Atchafalaya, an indication the Mississippi was about to shift its course. In the 1960s the Old River Control Structure was completed to prevent the Mississippi from taking over the Atchafalaya. By Congressional mandate, at the Old River Control Structure 30 percent of the combined flows of the Red River and the Mississippi River are joined to become the Atchafalaya River system. As highlighted in the Federally-authorized MR&T project, the Atchafalaya Basin Floodway (Figure 5) is designed to pass one half of the project flood for the Mississippi River, or 1.5 million cfs, to the Gulf of America. Today the Atchafalaya River is the main distributary of the Mississippi.

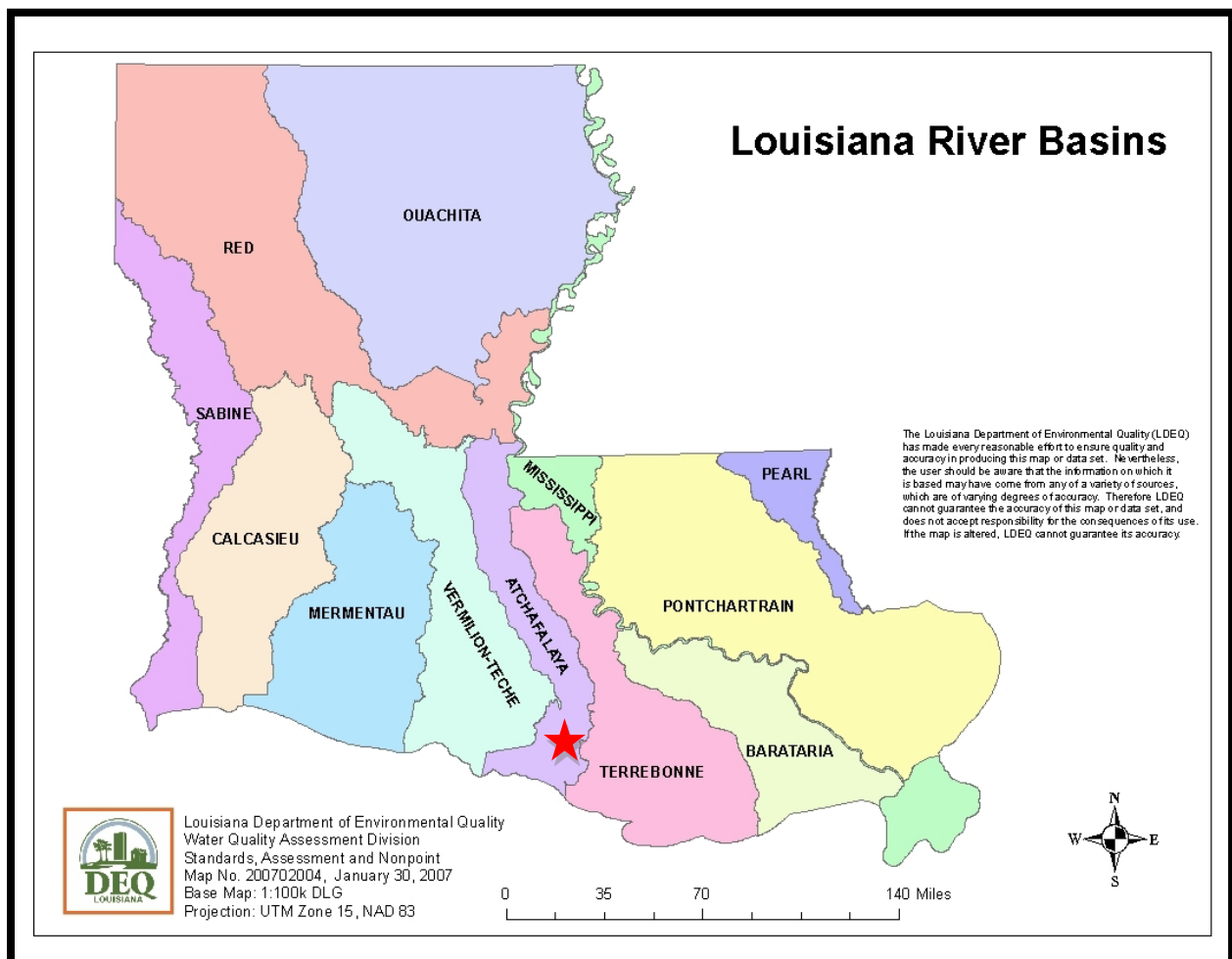
The Atchafalaya River is the primary source of water to one of the largest wetland complexes in the world. The Atchafalaya River Basin is extremely rich in biodiversity and productivity and is bounded on the east and west by artificial levees that were constructed in the 1930s as a direct result of the flood of 1927. There are primarily three eco-regions in the Atchafalaya Basin: the upper part composed of bottomland hardwood forest; the middle, composed of cypress-willow-tupelo swamps; and the lower, which contains freshwater and brackish marsh. The most ecologically important parts of the Atchafalaya Basin are 885,000 acres of forested wetlands and 517,000 acres of marshland that combine to make this the largest river swamp in North America.

Atchafalaya Bay was once the delta system for the Mississippi River as it flowed into the Gulf of America prior to its re-routing through New Orleans to the east (Walker et al. 2003). Therefore, the area used to receive significantly more flow and sediment load and, as a result, the bay is very shallow with an average depth of 5 feet mean low gulf (MLG).



Historically, this higher flow would have pushed much further into Atchafalaya Bay and the mixing zone where river water and seawater met would have been much further seaward than its current position. The river discharges into Atchafalaya Bay in southern Louisiana through two outlets, Lower Atchafalaya (70 percent of the discharge) and Wax Lake (30 percent) (Neill and Allsion 2005).

The United States Geological Survey has delineated all the discrete watersheds in the United States, and it describes each discrete watershed unit with a hydrologic unit code (HUC). The proposed work is located in the Lower Atchafalaya River HUC 0808010105; further discussion of the watershed occurs in Water Quality Sections 3.2.9 and 4.8.



**Figure 5: Louisiana River Basins (Map provided by Louisiana Department of Environmental Quality). The Atchafalaya River Basin is shown in purple. The location of the Work is represented by a red star.**

### **3.1.2 Climate**

The area climate is humid, subtropical with a strong maritime character. Warm, moist southeasterly winds from the Gulf of America prevail throughout most of the year, with

occasionally cool, dry fronts dominated by northeast high-pressure systems. The influx of cold air occurs less frequently in autumn and only rarely in summer. Tropical storms and hurricanes are likely to affect the area three out of every ten years, with severe storm damage approximately once every two or three decades. The majority of these occur between early June and November. The largest recent hurricanes were Katrina and Rita in 2005 which caused damage in the project area. Hurricanes Gustav and Ike in 2008, Isaac in 2012, and more recently Francine in 2024 caused additional damage in the project area. Summer thunderstorms are common, and tornadoes strike occasionally. Average annual temperature in the area is 67 Fahrenheit (°F), with mean monthly temperatures ranging from 82 °F in August to 52 °F in January. Average annual precipitation is 57.0 inches, varying from a monthly average of 7.5 inches in July, to an average of 3.5 inches in October (<http://www.srcc.lsu.edu/>).

### **3.1.3 Geology**

The proposed project area is located within the coastal zone of the lower Atchafalaya River Basin. The major hydrologic influences in the project area are the Atchafalaya River, Wax Lake Outlet, GIWW, and the Gulf of America. As part of the Mississippi River alluvial plain, soil generally consists of a substratum of sand and gravelly sand, overlain by deposits of clay, silt, and organic materials. Specifically, the Soil Conservation Service classifies the soil within and adjacent to the proposed project area as being primarily comprised of Aquents, Baldwin silty clay loam, Dupuy silt loam, and Schriever clay; with slopes of 0 to 5 percent (USDA 2019a).

## **3.2 Relevant Resources**

This section contains a description of relevant resources that could be impacted by the proposed work. 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 general public. Table 1 provides summary information of the institutional, technical, and public importance of these resources.

The following resources have been considered and found not to be affected by the proposed action: navigation; soils and water bottoms; aquatic resources/fisheries; essential fish habitat; and socioeconomic resources including land use, population, transportation, oil and gas, environmental health and safety, community cohesion, desirable community growth, tax revenues, property values, public facilities and services, business activity and employment, and displacement of people. The objectives of Executive Order 11988 (Floodplain Management) were considered; however, CEMVN has determined that floodplain impacts, if any, from the proposed work would be mainly positive. Additionally, there is no practicable alternative for the proposed work outside the 100-year floodplain. No portion of the work area has been designated a Louisiana Natural and Scenic River; therefore, a Scenic Rivers permit is not warranted.

The following relevant resources are discussed in this EA: wetlands, wildlife, threatened and endangered species, cultural resources, recreational resources, visual resources (aesthetics), air quality, and water quality.

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

| Resource                                 | Institutionally Important                                                                                                                                                                                                              | Technically Important                                                                                                                                                                                                                                                                                                                                                                       | Publicly Important                                                                                                                                                                                                                                                                                  |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Wetlands</b>                          | 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. | They 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.                                                                                                                                 |
| <b>Wildlife</b>                          | Fish and Wildlife Coordination Act of 1958, as amended and the Migratory Bird Treaty Act of 1918.                                                                                                                                      | They are 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 their esthetic, recreational, and commercial value.                                                                                                                                                                                                     |
| <b>Threatened and Endangered Species</b> | 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.                                                                                                                                                                                                               |
| <b>Cultural Resources</b>                | 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.                                                                                                                                                                                             |
| <b>Recreation Resources</b>              | Federal Water Project Recreation Act of 1965 as amended and Land and Water Conservation Fund Act of 1965 as amended.                                                                                                                   | Provide high economic value of the 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, as measured by the large number of fishing and hunting licenses sold in Louisiana; and the large per-capita number of recreational boat registrations in Louisiana. |
| <b>Visual Resources (Aesthetics)</b>     | USACE ER 1105-2-100, and National Environmental Policy Act of 1969, the Coastal Barrier Resources Act of 1990, Louisiana's National and Scenic Rivers Act of 1988, and the National and Local Scenic Byway Program.                    | Visual accessibility to unique combinations of geological, botanical, and cultural features that may be an asset to a study area. State and Federal agencies recognize the value of beaches and shore dunes.                                                                                                                                                                                | Environmental organizations and the public support the preservation of natural pleasing vistas.                                                                                                                                                                                                     |
| <b>Air Quality</b>                       | 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.                                                                                                                                                                                                                                              |
| <b>Water Quality</b>                     | 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.                                                                                                                                                 |

### **3.2.1 Wetlands**

#### **Existing Conditions**

The wetlands in the proposed levee work area are nontidal freshwater forested/shrub wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens. These wetlands are typically characterized by woody vegetation that is approximately 20 feet or taller and with trees and shrubs that have relatively wide, flat leaves that are shed during the cold or dry season. Surface water in these wetlands is usually present for extended periods of time early in the growing season but is generally absent by the end of the growing season (USFWS 2019a). Vegetation in these areas includes willows (*Salix spp.*) and water elm (*Planera aquatica*), woody shrubs such as mayhaw (*Crataegus opaca*), swamp privet (*Forestiera acuminata*), wax myrtle (*Myrica cerifera*), buttonbush (*Cephalanthus occidentalis*), and some herbaceous vegetation (USDA 2019b).

Wetlands in the vicinity of the project area are freshwater forested/shrub wetlands (described above) and freshwater emergent wetlands. Freshwater emergent wetlands contain a high soil organic matter content and a high diversity of plant species and are typically dominated by maidencane (*Panicum hemitomon*), bulltongue (*Sagittaria lancifolia*), pickerelweed (*Pontederia cordata*), alligatorweed (*Alternanthera philoxeroides*), cattail (*Typha sp.*), and sawgrass (*Cladium jamaicense*) (USDA 2019b).

### **3.2.2 Wildlife**

#### **Existing Conditions**

The area provides some habitat for wildlife. Common inhabitants of grassy, weedy areas are soil-dwelling and surface-dwelling invertebrates, such as nematodes, annelids, arthropods, snails, amphibians (frogs and toads), and reptiles (snakes, lizards, and turtles). Small mammals likely to inhabit uncultivated and ungrazed fields and grassy ditch banks include the swamp rabbit, hispid cotton rat, and marsh rice rat. Some insect species in ditches, such as mosquitos, may function as vectors for the transmission of diseases and parasites harmful to other organisms, including humans.

Any of the wildlife species found in the Atchafalaya Floodway may occasionally pass through the project area. Game mammals include deer, gray squirrel, fox squirrel, swamp rabbit, raccoon, otter, mink, nutria, muskrat, opossum, and beaver; non-game species include the nine-banded armadillo and the southern flying squirrel. Many species of wading birds, raptors, and songbirds are occasionally seen in the area.

### **3.2.3 Threatened, Endangered or Candidate Species**

#### **Existing Conditions**

The national importance of Endangered or Threatened species is recognized by the Bald Eagle Protection Act of 1940, the Endangered Species Act of 1973, as amended, and the Marine Mammal Protection Act of 1972. Threatened or endangered species are



technically important because the status of such species provides an indication of the overall health of an ecosystem. These species are publicly important because of the desire of the public to protect them and their habitats.

The U.S. Fish and Wildlife Service (USFWS) lists three threatened species that may occur in Saint Mary Parish: West Indian manatee (*Trichechus manatus*), Loggerhead sea turtle (*Caretta caretta*), and Gulf sturgeon (*Acipenser oxyrinchus desotoi*) (USFWS 2019b). No critical habitat for any threatened or endangered species has been designated within the proposed project area, and none of these species are known to breed within the project vicinity.

### **West Indian Manatee**

The threatened West Indian manatee is known to regularly occur in Lakes Pontchartrain and Maurepas and their associated coastal waters and streams. It also can be found less regularly in other Louisiana coastal areas, most likely while the average water temperature is warm. Based on data maintained by the Louisiana Natural Heritage Program (LNHP), over 80 percent of reported manatee sightings (1999-2011) in Louisiana have occurred from the months of June through December. Manatee occurrences in Louisiana appear to be increasing and they have been regularly reported in the Amite, Blind, Tchefuncte, and Tickfaw Rivers, and in canals within the adjacent coastal marshes of southeastern Louisiana. Manatees may also infrequently be observed in the Mississippi River and coastal areas of southwestern Louisiana. Cold weather and outbreaks of red tide may adversely affect these animals. However, human activity is the primary cause for declines in species number due to collisions with boats and barges, entrapment in flood control structures, poaching, habitat loss, and pollution.

### **Loggerhead Sea Turtle**

Loggerhead sea turtles nest within the coastal United States from Louisiana to Virginia, with major nesting concentrations occurring on the coastal islands of North Carolina, South Carolina, and Georgia, and on the Atlantic and Gulf coasts of Florida (NMFS/USFWS 2009). In Louisiana, loggerhead sea turtles are known to nest on the Chandeleur Island (LDWF 2011). Nesting and hatching for loggerheads in the Gulf of America occur from May through November.

### **Gulf Sturgeon**

The Gulf sturgeon is an anadromous fish inhabiting coastal rivers from Louisiana to Florida during the warmer months and overwintering in estuaries, bays, and the Gulf of America (NOAA 2018). Historically, Gulf sturgeon occurred from the Mississippi River east to Tampa Bay. Its present range extends from Lake Pontchartrain and the Pearl River system in Louisiana and Mississippi east to the Suwannee River in Florida; however, sporadic occurrences have been recorded as far west as the Rio Grande between Texas and America, and as far east and south as Florida Bay. The only documented catches of Gulf sturgeon in the Mississippi River have reportedly taken place

near its mouth; however, these are considered incidental occurrences since no resident (i.e., reproducing) population for the Mississippi River is believed to exist. The proposed work area is not located within any designated critical habitat in Louisiana.

The brown pelican (*Pelecanus occidentalis*), a year-round resident of coastal Louisiana that may occur in the project area, was removed from the Federal List of Endangered and Threatened Wildlife (i.e., “delisted”) by USFWS on November 17, 2009. Despite its recent delisting, brown pelicans—and other colonial nesting wading birds and seabirds—remain protected under the Migratory Bird Treaty Act of 1918. Portions of the proposed project area may contain habitats commonly inhabited by colonial nesting wading birds and seabirds. To minimize disturbance to pelicans and other colonial nesting birds and seabirds potentially occurring in the project area, CEMVN would observe restrictions on activity provided by the USFWS, Lafayette, Louisiana Field Office. Special operating conditions addressing pelicans and other colonial nesting wading birds and seabirds (reporting presence of birds and/or nests; no-work distance restrictions—2000 ft for brown pelicans; bird nesting prevention and avoidance measures; marking discovered nests) would be included in any CEMVN plans and specifications developed prior to construction activities. In addition, construction activities would be restricted to non-nesting periods for colonial nesting wading birds and seabirds (i.e., September 16 through February 14), when practicable (maintenance dredging of Baptiste Collette Bayou has historically been performed by CEMVN during the winter).

## **Monarch Butterfly**

The monarch butterfly (*Danaus plexippus*) is proposed for listing as threatened. The North American monarch population has severely declined. Habitat loss, pesticides, disease, climate change, predators, extreme weather, and other anthropogenic factors all threaten monarchs. Since the late 1990s both the eastern and western overwintering populations have declined by over 70 percent (Semmens et. al 2016). Monarchs make an excellent flagship species for pollinator conservation. Creating habitat for monarchs by planting diverse, native nectar plants and milkweed also creates habitat for other pollinators, which we rely on for pollination services in agricultural and natural settings. Conserving pollinators and their habitat have positive cascading effects leading to conservation of other animals like songbirds and mammals. This pays dividends towards the health of our natural and managed habitats, paving a future for our own species.

Adult monarch butterflies 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. 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 1,864 miles and last for over two months.

## Louisiana Black Bear

Louisiana black bears (*Ursus americanus luteolus*) are known to occur within St. Mary Parish and are primarily associated with forested wetlands; however, they utilize a variety of other habitat types, including scrub-shrub, marsh, spoil banks, and upland forests. They normally den from December through April and preferred den sites include large, hollow trees (36 inches or more in diameter at breast height) with sufficiently sized openings that allow access to interior cavities. Due to recovery, the Louisiana black bear was officially removed from the List of Endangered and Threatened Species on March 11, 2016 (effective April 11, 2016); critical habitat designation for this subspecies has also been withdrawn. Because the Louisiana black bear is no longer protected under the Endangered Species Act (ESA), consultation with the Service is not required for this subspecies. The Louisiana black bear remains protected, however, under Louisiana state law.

Although ESA consultation is no longer required regarding project impacts on this subspecies, in the interest of conserving the Louisiana black bear, projects proposed in areas of the state that are inhabited by bears should be designed to avoid adversely affecting this subspecies or its habitat.

Conservation measures for the Louisiana black bear include reducing the footprint of proposed actions to the maximum extent feasible, avoiding impacts to trees that are 36 inches or more in diameter at breast height, implementing programs to prevent the habituation of bears to human-associated food sources (e.g., use of “bear-proof” waste disposal containers or daily removal of food and garbage), and avoiding vegetative clearing during the black bear denning season (i.e., December 1 through April 30).

## Tricolored Bat

The tricolored bat (*Perimyotis subflavus*) is one of the smallest bats native to North America. 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 found in caves and mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. As its name suggests, the tricolored bat is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle and dark at the tip.

White-nose syndrome, a disease that impacts bats, is caused by a fungal pathogen. It has led to 90 to 100% declines in tricolored bat winter colony abundance at sites impacted by the disease. Since white-nose syndrome was first observed in New York in 2006, it has spread rapidly across the majority of the tricolored bat range.

## **Alligator Snapping turtle**

The alligator snapping turtle (*Macrochelys temminckii*) is the largest freshwater turtle in the United States. This hulking, dinosaur-like turtle lurks along the bottom of waterways in the Midwest, Southeast, and some parts of the Southwest. It is a member of the *Chelydridae* family of turtles, which includes the common snapping turtle of the order *Chelydra*. People often mistake the common snapping turtle for the alligator snapping turtle, but the alligator snapping turtle stands out due to its prehistoric appearance and massive size.

Commercial harvesting in the late 1960s and 1970s caused a significant decline in alligator snapping turtle populations across its historic range. At one point, people harvested three to four tons of alligator snapping turtles per day from Flint River, Georgia. Commercial harvest of alligator snapping turtles is against the law in all states within its range. However, Mississippi and Louisiana allow recreational harvest with some restrictions.

Despite their decades-long lifespans, their chances of survival are low before they reach maturity. This makes their populations sensitive to the effects of harvest, especially that of adult females. Surveys conducted in Flint River 22 years after commercial harvest ended showed populations had not recovered. Although adult alligator snapping turtles do not have predators other than humans, their nests and young are vulnerable to natural predators.

The American alligator is still listed as threatened under the Similarity of Appearance provisions of the Endangered Species Act of 1973, as amended. Alligators are common throughout Louisiana, and populations have recovered sufficiently to allow a state-regulated trapping season.

### **3.2.4 Prime and/or Unique Farmland**

#### **Existing Conditions**

The major agricultural commodity in St. Mary Parish is sugarcane, but other common crops grown are soybeans and citrus fruits. Livestock production, which includes cattle, horses, rabbits, sheep, goats, and swine are also managed. There are no prime farmland soils within the aforementioned areas.

### **3.2.5 Cultural Resources**

Except for possible deeply buried sites, the earliest anticipated prehistoric sites in the vicinity of the project area would date from the Poverty Point Culture of approximately 1700 B.C. – 500 B.C. Poverty Point sites range in size from small hamlets to large centers. Site 16SMY157 was recorded approximately 2 km (1.25 miles) south of the current project area and north of Gordy and may have a Poverty Point component.



The Tchefuncte Culture (500 B.C. – A.D. 300) presented the first widespread evidence of the prehistoric use of pottery in the region. Tchefuncte sites include coastal middens or inland villages and hamlets. The North Bend site (16SMY132) is located on the Bayou Sale natural levee adjacent to the Gulf Intracoastal Waterway and contains Tchefuncte-like pottery. This site is located approximately 5.8 km (3.6 miles) from the current project area.

Marksville Culture (A.D. 100 – A.D. 300) settlements are generally located along natural levees and distributary channels. Marksville culture signified inter-regional exchange of prestige items and also marks the use of maize. No known Marksville sites have been recorded in vicinity to the project area.

The Troyville/Coles Creek culture (A.D. 300 – A.D. 100) is characterized by ceramics and temple mound construction. Maize agriculture is also notable during this period, and the bow and arrow were utilized. Population size is thought to have increased during the Coles Creek period. The project area does not contain any documented Troyville/Coles Creek remains.

By A.D. 1000, Plaquemine culture emerged from Coles Creek culture in the lower Mississippi Valley. Plaquemine groups maintained a high degree of trade with other Mississippian settlements. There are numerous Plaquemine sites in Louisiana, but the project area does not contain any of these remains.

When Europeans began to arrive in the area, the earliest settlers were Acadian, French, and Spanish soldiers, trappers, and missionaries. The 1803 Louisiana Purchase transferred the territory to U.S. hands, which brought an influx of English-speaking settlers. Forests were cleared, lands were drained, and levees were constructed to protect the fertile agricultural lands. By the early 1800s, cotton was the main commercial crop in the immediate area.

There has been extensive cultural resources investigation of the project area. EA #201 referenced the presence of recorded cultural resources 16SMY132 and 16SMY66 (later defined to deserve the nomenclature 16SMY132/66), as overlapping the proposed levee boundary. As a result, a cultural resources survey was conducted of the area by Earth Search, Inc. (Lee et al. 1998; State Report 22-2164). These Phase I investigations overlap almost the entirety of the current project footprint, where no other historic properties were located to exist. The survey also repeated the need for further investigation at Site 16SMY132/66.

As a result of the recommendations for Site 16SMY132/66, Phase III Investigations were conducted and are documented by State Report 22-3527 (Lee et al. 2010). Numerous defined research questions were aided by collected data, and previously unknown prehistoric signs of use in the area were identified and discussed. As a result of the Phase III excavations, no further potential of further research was found for the portion of Site 16SMY132/66 that is overlapped by the currently proposed project footprint. The boundaries of site 16SMY132/66 as shown on the SHPO Database, are classified to be

ineligible for the National Register of Historic Places (NRHP). A letter re-affirming that the current project will have No Adverse Effect to Historic Properties was sent to SHPO and Tribes on July 8, 2025. A response of agreement was received from SHPO on August 5, 2025. The current project has chosen a different borrow source than was coordinated in July and August 2025, and a coordination letter concluding No Historic Properties Affected for this borrow source was sent to SHPO and Tribes on May 22, 2026. No letters of response were received.

### **3.2.6 Recreational Resources**

#### **Existing Conditions**

The Atchafalaya Floodway provides various recreational opportunities for the public, including eco-tourism, fishing, and hunting.

**Table 2. Louisiana Department of Wildlife and Fisheries Recreational Data for St. Mary Parish**

|                                      | Quantity | State<br>Average per<br>Parish |
|--------------------------------------|----------|--------------------------------|
| Active Boat Registrations (2024)     | 6,621    | 4,390                          |
| Resident Freshwater License (2019)   | 5,090    | 5,049                          |
| Resident Saltwater License (2019)    | 4,122    | 3,106                          |
| Resident Hunting License (2019)      | 1,447    | 2,032                          |
| Resident Duck Hunting License (2019) | 425      | 681                            |

In the immediate vicinity of the proposed project, fishing and hunting are the main recreational activities occurring mainly on the flood side of the levee. As the property within and adjacent to the borrow area is privately-owned and currently used as agriculture land, public access to this area is restricted.

### **3.2.7 Visual Resources (Aesthetics)**

#### **Existing Conditions**

The project area is primarily agricultural in nature with flat terrain and minimal topographical features. Due to the project area's location on the protected side of the

Levee, there are minimal public view sheds from State Highway 317. Although the project site itself has already been cleared of trees and is generally under cultivation, the surrounding landscape on the protected side of the levee features a variety of tree species within a small, forested area. The landscape on the un-protected side of the levee features marshland, canals and other channels, though view sheds here are blocked by the levee, from the perspective of anyone standing on the protected side of the levee system.

### 3.2.8 Air Quality

#### Existing Conditions

The U.S. Environmental Protection Agency (USEPA), under the requirements of the Clean Air Act (CAA), has established NAAQS for six contaminants, referred to as “criteria” pollutants (40 CFR 50). These are 1) carbon monoxide (CO), 2) nitrogen dioxide (NO<sub>2</sub>), 3) ozone (O<sub>3</sub>), 4a) particulate matter less than 10 microns in diameter (PM<sub>10</sub>), 4b) particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>), 5) lead (Pb), and 6) sulfur dioxide (SO<sub>2</sub>). The NAAQS standards include primary and secondary standards. The primary standards were established at levels sufficient to protect public health with an adequate margin of safety. The secondary standards were established to protect the public welfare from the adverse effects associated with pollutants in the ambient air. The primary and secondary standards are presented in Table 3.

**Table 3: Primary and Secondary NAAQS for the Six Contaminants Established by EPA**

| National Ambient Air Quality Standards [3][4] |                                                                   |                             |                                        |                       |
|-----------------------------------------------|-------------------------------------------------------------------|-----------------------------|----------------------------------------|-----------------------|
|                                               | Primary Standard                                                  |                             | Secondary Standard                     |                       |
| Criteria Pollutant                            | Concentration Limit                                               | Averaging Time              | Concentration Limit                    | Averaging Time        |
| Carbon monoxide                               | 9 <a href="#">ppmv</a><br>( 10 <a href="#">mg/m<sup>3</sup></a> ) | 8-hour <sup>(1)</sup>       | None                                   |                       |
|                                               | 35 ppmv<br>( 40 mg/m <sup>3</sup> )                               | 1-hour <sup>(1)</sup>       |                                        |                       |
| Sulfur dioxide                                | 0.03 ppmv<br>( 80 <a href="#">µg/m<sup>3</sup></a> )              | Annual<br>(arithmetic mean) | 0.5 ppmv<br>( 1300 µg/m <sup>3</sup> ) | 3-hour <sup>(1)</sup> |
|                                               | 0.14 ppmv<br>( 365 µg/m <sup>3</sup> )                            | 24-hour <sup>(1)</sup>      |                                        |                       |
| Nitrogen dioxide                              | 0.053 ppmv<br>( 100 µg/m <sup>3</sup> )                           | Annual<br>(arithmetic mean) | Same as primary                        |                       |
| Ozone                                         | 0.075 ppmv<br>( 150 µg/m <sup>3</sup> )                           | 8-hour <sup>(2)</sup>       | Same as primary                        |                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                               |                                            |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------|-----------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.12 ppmv<br>( 235 $\mu\text{g}/\text{m}^3$ ) | 1-hour <sup>(3)</sup>                      | Same as primary |
| Lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.15 $\mu\text{g}/\text{m}^3$                 | Rolling 3-month average                    | Same as primary |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.5 $\mu\text{g}/\text{m}^3$                  | Quarterly average                          | Same as primary |
| Particulate Matter (PM <sub>10</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 150 $\mu\text{g}/\text{m}^3$                  | 24-hour <sup>(4)</sup>                     | Same as primary |
| Particulate Matter (PM <sub>2.5</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 15 $\mu\text{g}/\text{m}^3$                   | Annual <sup>(5)</sup><br>(arithmetic mean) | Same as primary |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 35 $\mu\text{g}/\text{m}^3$                   | 24-hour <sup>(6)</sup>                     | Same as primary |
| <p>(1) Not to be exceeded more than once per year.</p> <p>(2) The 3-year average of the fourth-highest daily maximum 8-hour average at each monitor within the area over each year must not exceed 0.075 ppmv.</p> <p>(3a) The expected number of days per calendar year with maximum hourly averages above 0.12 ppm must be equal to or less than 1.</p> <p>(3b) As of June 15, 2007, the U.S. EPA revoked the 1-hour ozone standard in all areas except for certain parts of 10 states.</p> <p>(4) Not to be exceeded more than once per year on average over 3 years.</p> <p>(5) The 3-year average of the weighted annual mean PM<sub>2.5</sub> concentrations from single or multiple community-oriented monitors must not exceed 15 <math>\mu\text{g}/\text{m}^3</math>.</p> <p>(6) The 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within the area must not exceed 35.5 <math>\mu\text{g}/\text{m}^3</math>.</p> |                                               |                                            |                 |

The USEPA Green Book Nonattainment Areas for Criteria Pollutants (Green Book) maintains a list of all areas within the United States that are currently designated “nonattainment” areas with respect to one or more criteria air pollutants. Nonattainment areas are discussed by county or metropolitan statistical areas (MSA). MSAs are geographic locations, characterized by a large population nucleus, that are comprised of adjacent communities with a high degree of social and economic integration. MSAs are generally composed of multiple counties. Review of the Green Book indicates that Saint Mary Parish is currently in attainment for all Federal NAAQS pollutants, including the 8-hour ozone standard (USEPA 2019). This classification is the result of area-wide air quality modeling studies. Therefore, further analysis required by the CAA general conformity rule (Section 176(c)) would not apply for the proposed Federal action.

### 3.2.9 Water Quality

#### Existing Conditions

As part of its surface water quality monitoring program, the Louisiana Department of Environmental Quality (LDEQ) routinely monitors various parameters using fixed station, long-term monitoring sites (LDEQ 2024). Based upon these data and the use of less-continuous information (Evaluated Assessments), such as fish tissue contaminants data, complaint investigations, and spill reports, the LDEQ has assessed water quality fitness for the following uses: primary contact recreation (swimming), secondary contact recreation (boating, fishing), fish and wildlife propagation, drinking water supply, oyster propagation, agriculture, and outstanding natural resource waters (LDEQ 2024). Based

upon existing data and more subjective information, water quality is determined to either fully, partially, or not support those uses. A designation of “threatened” is used for waters that fully support their designated uses but that may not fully support certain uses in the future because of anticipated sources or adverse trends in pollution.

According to the LDEQ Final 2024 Louisiana Water Quality Inventory: Integrated Report (305(b)/303(d)), the Intracoastal Waterway-From New Iberia Southern Drainage Canal to Bayou Sale (Estuarine) (subsegment LA060906) is “not supporting designated use” for primary contact recreation (i.e., swimming) and is “fully supporting designated use” for secondary contact recreation (i.e., boating); and is “not supporting designated use” for fish and wildlife propagation (i.e., fishing) (LDEQ 2024).

## **4. Environmental Consequences**

### **4.1 Wetlands**

#### **Future Conditions with No Action**

Under the No Action Alternative, the proposed action would not be undertaken and impacts to BLH would not likely immediately change from current conditions.

#### **Future Conditions with the Proposed Action**

With implementation of the proposed action, 4.8 acres (2.98 AHU) of bottomland hardwood habitat would be cleared and filled for the project to construct a new levee. A physical visit was conducted on October 07, 2025. On December 19, 2025, personnel from the USFWS provided a preliminary estimate for work induced impacts to forested wetland habitats using the Wetland Value Assessment (WVA) model for BLH, which calculated the project’s induced impacts to wetland habitats. The WVA methodology is a quantitative habitat-based assessment methodology developed for use in determining wetland benefits or losses. The WVA quantifies changes in wildlife habitat quality and quantity that are expected to result from a proposed project. The results of the WVA are measured in Annualized Habitat Units (AHUs). The WVA methodology provides an estimate of the number of acres benefited or lost due to the project’s construction. The WVA model indicates 2.98 AHUs would be lost due to the project’s construction. The impacts to the acres of bottomland hardwood and cypress swamp are unavoidable because of the foundation needed for the design levee elevation for this reach. Approximately 32,500 cubic yards of earthen material would be excavated from approximately 2 acres in the proposed borrow area. The material would be utilized for routine operations and maintenance activities on levee segment.

Executive Order 11990, Protection of Wetlands, directs Federal agencies to avoid to the extent possible, long and short-term adverse impacts associated with the destruction or modification of wetlands, and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. All unavoidable impacts would be mitigated for as described in Section 6.



**Table 4: East West Levee Tie-In, Imagery Analysis of Preliminary BLH Impacts of Project Area Acres and Average Annual Habitat Units (AAHUs)**

|              | Acres       | AAHUs <sup>1</sup> |
|--------------|-------------|--------------------|
| Project Area | 4.80        |                    |
| <b>Total</b> | <b>4.80</b> | <b>-2.98</b>       |

<sup>1</sup> US Fish and Wildlife Service WVA survey data from EA 510 for preliminary estimate.

## 4.2 Wildlife

### Future Conditions with No-Action

Under the No Action Alternative, the proposed action would not be undertaken and wildlife that presently occupy the riverside forested habitat would continue to inhabit the area. The impacts to wildlife species within the work area would not likely immediately change from current conditions.

### Future Conditions with the Proposed Action

With the proposed action, approximately 4.8-acres of BLH forested wetlands would be permanently converted as result of the excavation of the construction site. Effects to wildlife are unlikely to occur because the work area is located in a previously developed area and would be designed and constructed to avoid impacts to wildlife. Any wildlife that may be present in the work area is highly mobile and would simply utilize an adjacent stretch of levee during construction activities. Disturbance and noise from the construction equipment would temporarily disperse wildlife species from the work area. However, once the work is completed, wildlife species would be expected to return to the work area. The temporary disturbance would not adversely impact the general populations of wildlife species within the region, as extensive forested areas and suitable habitat is readily available within the vicinity of the work area.

## 4.3 Threatened or Endangered Species

### Future Conditions with No-Action

Under the No Action Alternative, there would be no effect to any threatened or endangered species. The proposed action would not be constructed and impacts to threatened and endangered species in the area would not likely change from current conditions.

### Future Conditions with the Proposed Action

The CEMVN has determined that the proposed action would have “no effect” on listed species and not likely to jeopardize the continued existence of proposed species or result

in the destruction or adverse modification of proposed critical habitat. Given the absence of preferred habitats for these species, their presence in the project area is highly unlikely. If a site lacks the specific biological requirements, native vegetation types, or structural microhabitats necessary for a proposed listed species, the project area fails to provide a suitable habitat for the species' survival and reproduction. Application for Information for Planning and Consultation (IPaC), developed by the U.S. Fish and Wildlife Service, resulted in a determination of "no effect" for the West Indian Manatee on December 18, 2025.

#### **4.4 Prime and/or Unique Farmland**

##### **Future Conditions with No Action**

With implementation of this alternative, no direct or indirect impacts to prime and unique farmland would occur.

##### **Future Conditions with the Proposed Action**

Because no prime farmland soils are present, construction activities would not result in any changes to farmland classification or use, and there would be no direct or indirect impacts to prime or unique farmlands.

#### **4.5 Cultural Resources**

##### **Future Conditions with No Action**

Without implementation of the proposed action, any undiscovered or unreported cultural resources would remain in their current state. If levee failure were to ever occur, unknown and known cultural resources could be damaged or destroyed.

In addition to cultural resources or historic properties considered eligible for the National Register of Historic Places, USACE's 2023 Tribal Consultation Policy requires the agency to determine if the proposed action significantly adversely affects Tribal Rights, Tribal lands, and protected tribal resources. There are no tribal lands, nor are there specific tribal treaty rights related to access or traditional use of the natural resources in the Project Area. Tribal resources exist as pre-contact utilization of the landscape, burial practices, and continued historic period occupation. These are affected by passage of time and have been coordinated with Tribes as parts of the cultural landscape. The No Action condition will not add additional effects to these Tribal resources.

##### **Future Conditions with the Proposed Action**

With implementation of the proposed action, any undiscovered cultural resources may be damaged during construction operations. However, review of records and cultural surveys do not suggest that any undiscovered cultural resources exist in the project area. Therefore, no direct or indirect impacts to cultural resources would be expected, and there

is no reason to believe that the proposed action would have any positive or negative impact to cultural resources or traditional cultural properties.

In addition to cultural resources or historic properties considered eligible for the National Register of Historic Places, USACE's 2023 Tribal Consultation Policy requires the agency to determine if the proposed action significantly adversely affects Tribal Rights, Tribal lands, and protected tribal resources. There are no tribal lands, nor are there specific tribal treaty rights related to access or traditional use of the natural resources in the Project Area. Tribal resources exist as pre-contact utilization of the landscape, burial practices, and continued historic period occupation. These may be affected by the Proposed Action, but coordination for a finding of no adverse effects has been carried out with Tribes.

#### **4.6 Recreational Resources**

##### **Future Conditions with No Action**

With no action, the continued degradation of the Bayou Sale East-West tie-in levee section would impair its ability to pass project floods. A levee breach would cause damage to local property and would adversely impact recreational resources in the surrounding area. People who have camps, boat docks, and marinas in the area would likely suffer some degree of property loss. The floodwaters and resulting erosion would cause loss of habitat that provide existing recreational opportunities, thus reducing or potentially eliminating public use opportunities.

##### **Future Conditions with the Proposed Action**

With implementation of the proposed action, recreational opportunities for the public in and around the project area would experience limited, short-term disruption caused by the project equipment. Haul trucks transporting the material from the borrow area to the levees would cause a minor inconvenience for the public. Additionally, project equipment and the associated noise may disturb recreational activities (i.e., bird watching, bank fishing, hunting) within and adjacent to the project area, until project activities are completed.

#### **4.7 Visual Resources (Aesthetics)**

##### **Future Conditions with No-Action**

With the no action alternative, visual resources would most likely evolve as dictated by future land use and local maintenance practices.

##### **Future Conditions with Proposed Action**

With the proposed action, there may be temporary impacts to aesthetic (visual) resources during construction (raising) of the levee reaches and excavation of the borrow area. Trucks and construction and excavation equipment and material could disrupt view sheds from Highway 317. These distractions would be temporary and would end at the

completion of the project. Upon completion of the levee portion of the construction project, the reaches are expected to be re-seeded and allowed to regenerate to preconstruction conditions.

Long term impacts to aesthetic (visual) resources at the borrow site are unavoidable but minimal due to the remoteness of the site and lack of public view sheds.

## **4.8 Air Quality**

### **Future Conditions with No-Action**

Under the No Action Alternative, the proposed action would not be undertaken and no new direct or indirect impacts to ambient air quality would be expected to occur.

### **Future Conditions with the Proposed Action**

With implementation of the proposed action, it is expected that there would be minimal short-term direct impacts to air quality surrounding the immediate work area including the access road, hauling road(s), and staging area during construction activities. Construction will be restricted to normal construction hours (e.g., daylight hours) for the duration of the project. For the proposed borrow site excavation, it is expected that portable and stationary equipment such as bulldozers, excavators (i.e. backhoes), dump trucks, diesel generators, and groundwater pumps would likely be responsible for the temporary bulk increase in air pollution impacting the surrounding work area. Due to the short duration of the proposed action, any increases or impacts to ambient air quality are expected to be short-term and minor and are not expected to cause or contribute to a violation of Federal or State ambient air quality standards. Once all construction activities associated with the proposed action cease, air quality within the vicinity of the project area is expected to return to pre-construction conditions.

## **4.9 Water Quality**

### **Future Conditions with No-Action**

Under the No Action Alternative, the proposed action would not be undertaken and no new direct or indirect impacts to water quality are expected to occur.

### **Future Conditions with the Proposed Action**

With implementation of the proposed action, it is expected that there would be a temporary impact to water quality through an increase in turbidity within the GIWW directly surrounding any areas of runoff. Best management practices would be employed to minimize disturbances to the surrounding water bodies during the excavation of earthen material from the borrow area. After the protective vegetative cover is removed from the levee surface, a silt fence would be placed along the levee toe to contain any sediment runoff material. After completion of the levee enlargement, vegetative cover would be replaced and maintained on the levees, and natural vegetative growth would be expected

to return. It is expected that there would be no long-term adverse effects to water bodies with construction of the proposed action.

A Section 404(b)(1) evaluation, as required by the Clean Water Act (CWA), has been completed to assess the impacts associated with the discharge of dredged and fill material into waters of the United States. The public notice for this evaluation will be circulated for a 30-day review period from August XX, 2026, to September XX, 2026. All comments received during this period, along with the signed Section 404(b)(1) evaluation, will be included in the final EA. Additionally, a Water Quality Certificate (WQC 251211-01/AI 249632 CER 20250001) was issued by the LDEQ in a letter dated January 13, 2026 (Appendix B).

#### **4.10 Hazardous, Toxic, and Radioactive Waste**

The USACE is obligated under Engineer Regulation (ER) 1165-2-132 to assume responsibility for the reasonable identification and evaluation of all Hazardous, Toxic, and Radioactive Waste (HTRW) contamination within the vicinity of proposed actions. ER 1165-2-132 identifies that HTRW policy is to avoid the use of project funds for HTRW removal and remediation activities. An ASTM E 1527-05 Phase 1 Environmental Site Assessment (ESA), HTRW 25-07 dated December 29, 2025, and HTRW 26-03 dated March 27, 2026, has been completed for the work area and the borrow area. A copy of the Phase 1 ESA will be maintained on file at CEMVN. The probability of encountering HTRW for the proposed action is minimal based on the initial site assessments. If a recognized environmental condition is identified in relation to the work area, CEMVN would take the necessary measures, in accordance with ER 1165-2-132, to avoid the recognized environmental condition so that the probability of encountering or disturbing HTRW would continue to be low.

### **5. Coordination and Public Involvement**

A Public Notice for *EA #510* was published for public comment on CEMVN's "NEPA Compliance Documents" webpage for 30 days beginning August 13, 2026.

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

U.S. Department of the Interior, Fish and Wildlife Service  
U.S. Environmental Protection Agency, Region VI  
U.S. Department of Commerce, National Marine Fisheries Service  
U.S. Natural Resources Conservation Service, State Conservationist  
U.S. Coast Guard Sector New Orleans  
U.S. Coast Guard Marine Safety Unit Baton Rouge  
Maritime Navigation Safety Association  
The Associated Branch (Bar) Pilots



Crescent River Port Pilots Association  
New Orleans Baton Rouge Steamship Pilot Association  
Associated Federal Pilots  
Big River Coalition  
Lower Mississippi River Committee (LOMRC)  
Coastal Protection and Restoration Authority Board of Louisiana  
Advisory Council on Historic Preservation  
Governor's Executive Assistant for Coastal Activities  
Louisiana Department of Wildlife and Fisheries  
Louisiana Department of Conservation and Energy  
Louisiana Department of Environmental Quality  
Louisiana State Historic Preservation Officer  
Plaquemines Parish Government  
Alabama-Coushatta Tribe of Texas  
Caddo Nation of Oklahoma  
Chitimacha Tribe of Louisiana  
Choctaw Nation of Oklahoma  
Coushatta Tribe of Louisiana  
Mississippi Band of Choctaw Indians  
Jena Band of Choctaw Indians  
Seminole Tribe of Florida  
Seminole Nation of Oklahoma  
Tunica Biloxi Tribe of Louisiana

## **6. Mitigation**

The implementation of the Congressionally authorized Atchafalaya Basin Floodway System (ABFS) Recommended Plan described in the 1982 Final Environmental Impact Statement (FEIS) would result in over 40,000 Annualized Habitat Units (AHU) of forested wetland habitat (bottomland hardwoods and cypress-tupelo), and nearly 3,000 AHU of swamp habitat for the ABFS. These cumulative benefits are specifically provided as a result of the authorized acquisition of interests in real estate in approximately 388,000 acres; 70,000 acres of USACE owned "fee" property to be managed for public access and 318,000 acres of environmental protection easement lands addresses conversion of the land to uses that exceed the existing use and impose limitations on silvicultural operations by the private landowners. The Water Resources Development Act (WRDA) of 1986 authorized the acquisition of approximately 48,000 acres of fee owned lands from willing sellers (now referred to as 50,000 acres). WRDA 2007 authorized the acquisition of an additional 20,000 acres of fee-interest land from willing sellers. Of the authorized 70,000 fee acres, USACE has purchased about 47,323 acres on both sides of the Atchafalaya River between U.S. Hwy 190 and 1-10. Concurrently, USACE has acquired approximately 94,000 acres of the 318,000 acres of environmental protection easements over private lands in the basin, which will control the harvesting of timber over certain species and sizes of trees and the conversion of the use of those lands to a more intensive use from that which existed at the time of acquisition. Additionally, under the MR&T Project, Atchafalaya Basin Flood Control Project, USACE has acquired developmental

control easements over the same 94,000 acres that imposes various limitations over construction of new structures and modification of existing structures.

The proposed East West Levee Tie-In project would impact 4.8 acres (2.98 AHU) of bottomland hardwood habitat based upon the net change reported in the U.S. Fish and Wildlife Service (USFWS) Coordination Act Report (CAR) (see appendix A). These impacts are compensated for by the aforementioned net benefit of 40,000 AHU for forested wetland habitats and 3,000 AHU for swamp habitat under the Congressionally authorized ABFS Recommended Plan, which the project qualifies for. Direct construction impacts of various project measures were designed to be offset by the overall positive contribution of environmental and nonstructural real estate features in the ABFS Recommended Plan. The loss of 4.8 acres (2.98 AHU) of bottomland hardwood habitat with the proposed East West Levee Tie-In project, when taken in context of similar wetland losses addressed by the 1982 FEIS, are more than adequately compensated for by the aforementioned mitigation plan. Therefore, no additional mitigation is necessary. As of the date of this EA, approximately 3% of the 40,000 AHU of forested wetland habitat has been utilized and approximately 3% of the 3,000 AHU for the swamp habitat has been utilized. These gains more than offset the cumulative loss of habitat associated with the projects that qualify for implementation under the ABFS. Upon completion of the work, all levee embankments and areas disturbed by the construction activities would be seeded with Bermuda grass, fertilized, and mulched.

The proposed action is in the overall public interest as it will provide clay material for improvement of the Atchafalaya Basin Levee system and will reduce the risk from future flooding of the Atchafalaya River. Moreover, the environmental and real estate features of the Atchafalaya Basin Flood Control Project have provided for offsetting unavoidable impacts associated with construction or modification of authorized features.

## **7. Compliance with Environmental Laws and Regulations**

Environmental compliance for the proposed action is complete. Coordination soliciting review and comments on this EA and FONSI has been completed with the agencies, organizations, and individuals listed below:

- USFWS concurrence with the CEMVN determination that the proposed action is not expected to impact any federally listed threatened or endangered species under the Endangered Species Act (Appendix A);
- USFWS Coordination Act Report under the Fish and Wildlife Coordination Act (Appendix A) and made the following recommendations:
  1. The USACE shall fully compensate for any unavoidable losses to BLH caused by project implementation. That compensatory mitigation shall be “in-kind” and within, or as close as possible to, the same watershed as the project impacts.

USACE Response: USACE will fully compensate for any unavoidable losses to BLH caused by project implementation. The proposed East West Levee Tie-In

project would impact 4.8 acres (2.98 AHU) of bottomland hardwood habitat based upon the net change reported in the U.S. Fish and Wildlife Service (USFWS) Coordination Act Report (CAR) (see appendix A). These impacts are compensated for by the aforementioned net benefit of 40,000 AHU for forested wetland habitats and 3,000 AHU for swamp habitat under the Congressionally authorized ABFS Recommended Plan, which the project qualifies for. Direct construction impacts of various project measures were designed to be offset by the overall positive contribution of environmental and nonstructural real estate features in the ABFS Recommended Plan. The loss of 4.8 acres (2.98 AHU) of bottomland hardwood habitat with the proposed East West Levee Tie-In project, when taken in context of similar wetland losses addressed by the 1982 FEIS, are more than adequately compensated for by the aforementioned mitigation plan. Therefore, no additional mitigation is necessary.

2. The Service recommends that the unimproved, elevated road, within the project area be utilized as part of the proposed levee to minimize impacts to bottomland hardwoods and associated fish and wildlife species.

USACE Response: Within the project area, USACE will utilize the unimproved, elevated road. This road will also be incorporated into the proposed levee, which will contribute to minimizing the adverse effects on bottomland hardwoods and the associated fish and wildlife species.

3. Forest clearing associated with project features should be conducted during the fall or winter, when practicable, to minimize impacts to nesting migratory birds.

USACE Response: USACE will ensure that forest clearing associated with project features be conducted during the fall or winter, when practicable, to minimize impacts to nesting migratory birds.

4. Post construction, the levee should be seeded with native species.

USACE Response: USACE will ensure that during post construction, all levee embankments and areas disturbed by the construction activities will be seeded with either Bermuda, Bahia or Seashore Paspalum or rye grass and fertilized. Removal of silt fence barriers would be after construction is complete and the soil is stabilized.

5. The Service recommends that the USACE contact the Service and the LDWF for additional ESA section 7 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.

USACE Response: Concur. The CEMVN has and would continue to coordinate with the resource agencies, including FWS, if the proposed project changes in scope or location; new information becomes available that affects listed species or their designated habitat; if the action is modified in ways that affect listed species; or if new species become listed or habitats are designated as critical habitat.

- The LDEQ Water Quality Certificate 251211-01/AI 249632/CER20250001 was applied for on December 11, 2025. Requirements were requested by their office on January 13, 2026 and will be fulfilled before issuance of the certificate. Date of concurrence will be input once consultation is complete (will be located as Appendix B); Louisiana SHPO concurrence with the determination that no known historic properties would be affected by the proposed action was received on August 25, 2025. The current project has chosen a different borrow source than was coordinated in July and August 2025, and a coordination letter concluding No Historic Properties Affected for this borrow source was sent to SHPO and Tribes on May 22, 2026. No letters of response were received. (Appendix C);
- Clean Water Act, Section 404(b)(1) Public Notice and Evaluation. (Appendix D)
- Pursuant to the Coastal Resources Management Act of 1978, as amended, the Louisiana Department of Conservation and Energy (LDCE) concurred with the USACE determination that the project as proposed is consistent with the Louisiana Coastal Resources Program. LDCE issued an updated Coastal Zone Consistency in a letter dated June 09, 2026 (C20250109 Mod 01). (Appendix E)

The FONSI will be signed given the proposed action achieves compliance with applicable laws and regulations, as described above. The above-mentioned coordination is complete.

## **8. Conclusion**

This office has assessed the environmental impacts of the proposed action and has determined that the proposed action would have no impact upon cultural resources and no impact would occur to threatened or endangered species. Unavoidable permanent impacts to wetlands would require 4.8 acres (2.98 AHU) of compensatory mitigation.

The loss, when taken in context of similar wetland losses addressed by the 1982 FEIS, are more than adequately compensated for by the aforementioned mitigation plan. Therefore, no additional mitigation is necessary. As of the date of this EA, approximately 3% of the 40,000 AHU of forested wetland habitat has been utilized and approximately 3% of the 3,000 AHU for the swamp habitat has been utilized. These gains more than offset the cumulative loss of habitat associated with the projects that qualify for implementation under the ABFS.

The proposed action has been found to have an overall beneficial effect on the human environment by insuring adequate flood protection along the flood prone lower GIWW.

While there would be impacts to bottomland hardwood resources, these impacts would be fully mitigated in a manner that would provide comparable wildlife habitat value to the areas impacted. The proposed action would not have a significant adverse impact on fisheries, wildlife, public recreation, aesthetics, or air quality. The proposed action would ensure the ability of the Levees West of Berwick to reduce the risk from future flooding of the Atchafalaya River.

## **9. Prepared By**

Environmental Assessment #510 and the associated Finding of No Significant Impact were prepared by Ms. Samantha Martin, Environmental Protection Specialist, with relevant sections and contributions prepared by: Dr. Paul Highbanks (Cultural Resources); Mr. Joseph Musso (HTRW), and Jack Milazzo (Recreational and Visual Resources). The address of the preparers is: U.S. Army Corps of Engineers, New Orleans District; Regional Planning and Environment Division South, Environmental Compliance Branch, Coastal Environmental Compliance Section, CEMVN-PDC-C; 7400 Leake Ave, New Orleans, Louisiana 70118.



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## APPENDIX A

## **APPENDIX B**

## **APPENDIX C**



## APPENDIX D