

# **DRAFT ENVIRONMENTAL ASSESSMENT**

MISSISSIPPI RIVER AND TRIBUTARIES

MISSISSIPPI RIVER CHANNEL IMPROVEMENT

ST. FRANCISVILLE MAT CASTING YARD  
LOADOUT DOCK REPLACEMENT

WEST FELICIANA PARISH, LOUISIANA

EA #579



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

# TABLE OF CONTENTS

1. INTRODUCTION.....	4
1.1 PROPOSED ACTION .....	4
1.2 AUTHORITY .....	7
1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION.....	7
1.4 PRIOR NEPA DOCUMENTS .....	9
1.5 PUBLIC CONCERNS.....	9
2. ALTERNATIVES TO THE PROPOSED ACTION .....	9
2.1 ALTERNATIVE 1 – NO ACTION.....	9
3. AFFECTED ENVIRONMENT.....	10
3.1. DESCRIPTION OF THE PROJECT AREA.....	10
3.2 DESCRIPTION OF THE WATERSHED.....	11
3.3 CLIMATE.....	11
3.4 GEOLOGY .....	11
3.5 RELEVANT RESOURCES .....	13
3.6 AQUATIC RESOURCES/FISHERIES.....	14
3.7 WILDLIFE.....	14
3.8 THREATENED OR ENDANGERED SPECIES.....	15
3.9 CULTURAL RESOURCES .....	15
3.10 WATER QUALITY.....	18
3.11 AIR QUALITY.....	18
4. ENVIRONMENTAL CONSEQUENCES .....	19
4.1 AQUATIC RESOURCES/FISHERIES.....	19
4.2 WILDLIFE.....	20
4.3 THREATENED OR ENDANGERED SPECIES.....	20
4.4 CULTURAL RESOURCES .....	20
4.5 WATER QUALITY .....	22
4.6 AIR QUALITY.....	23
4.7 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE .....	23
4.8 CUMULATIVE IMPACTS .....	23
5. COORDINATION AND PUBLIC INVOLVEMENT .....	24
6. COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS .....	24
7. CONCLUSION .....	25
8. PREPARED BY.....	26
9. REFERENCES.....	26

## FIGURES

Figure 1: St. Francisville Mat Casting Yard, Loadout Dock Replacement, Vicinity Map ..	5
Figure 2: St. Francisville Mat Casting Yard, Work Area Map .....	6
Figure 3: St. Francisville Mat Casting Yard, Old Loadout Dock (To Be Demolished).....	8
Figure 4: Louisiana River Basins.....	12

## TABLES

Table 1: Relevant Resources .....	13
Table 2: Final Approved 2018 Integrated Report of Water Quality in Louisiana .....	18

## APPENDICES

Appendix A: USFWS ESA Consultation Response.....	28
Appendix B: Section 106 and 110 NHPA SHPO and Tribal Consultation Response.....	29
Appendix C: Clean Water Act, Section 401, State Water Quality Certificate.....	30

# DRAFT ENVIRONMENTAL ASSESSMENT

## MISSISSIPPI RIVER AND TRIBUTARIES

### MISSISSIPPI RIVER CHANNEL IMPROVEMENT

#### ST. FRANCISVILLE MAT CASTING YARD LOADOUT DOCK REPLACEMENT

#### WEST FELICIANA PARISH, LOUISIANA

EA #579

## 1. INTRODUCTION

1.0 The U.S. Army Corps of Engineers (USACE), Mississippi River Valley Division, Regional Planning and Environment Division South, has prepared this draft Environmental Assessment (EA) for the New Orleans District (CEMVN) to evaluate potential impacts of constructing a replacement load-out dock for barge loading on the left descending bank of the Mississippi River at the St. Francisville Casting Field (“mat casting yard”) located approximately 30 miles north of Baton Rouge, Louisiana. The mat casting yard is situated along the Mississippi River approximately 1.5 miles south of the town of St. Francisville. (Figure 1). As a result of the 2019 Mississippi River high river event, the existing load-out dock sustained significant damage to various support features and no longer retains sufficient structural integrity. This draft EA has been prepared in accordance with the National Environmental Policy Act of 1969 and the Council on Environmental Quality’s Regulations (40 CFR 1500-1508), as reflected in the USACE Engineering Regulation ER 200-2-2. This draft EA provides sufficient information on the potential adverse and beneficial environmental effects to allow the District Commander, USACE, 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

1.1.1 The construction of the new dock would require installation of an estimated 51 (16-inch) precast pre-stressed concrete piles, precast concrete pile caps, and precast concrete slabs. The concrete slabs would measure approximately 25 feet in length, 6 to 8 feet in width, and 16 inches in thickness. The concrete piles would be driven to a pile tip elevation of -57 feet (North American Vertical Datum 1988 (NAVD88)). The top height of the piles would be situated at an elevation of 29.5 feet (NAVD88). The dock would be constructed so that the concrete slabs would be perpendicular to the Mississippi River. Using these slabs to create the dock platform, the overall dock would extend approximately 125 linear feet from the bankline into the Mississippi River in order to accommodate load transfer from the dock to the barges via crane. In addition, the platform would have a turn-around point located on the east side of the dock upon which trucks would be able to orient a load as close to the barge as possible, and where another truck can queue while loading occurs. Jersey barriers would be used to line the sides of the dock platform (Figure 2). The proposed elevation of the dock bridge deck platform would match the elevation of the existing machine shop at approximately 33 feet (NAVD88), which is located just north of



**Figure 1: St. Francisville Mat Casting Yard, West Feliciana Parish, Louisiana**



**Figure 2: St. Francisville Mat Casting Yard, Work Area Map**

the proposed project area. Heavy construction equipment such as bulldozers and front end loaders would be used to perform earthwork utilizing earthen material from the existing load-out ramp to the existing load-out dock in order to build a new permanent ramp up to the entrance of the dock. Construction of the entire new load-out dock would impact approximately one acre of existing river bank and river bottom. Existing access roads both within and around the mat casting yard would be utilized (i.e., Louisiana Highway 1263 (a.k.a. Ferdinand Street), River Road, and the unnamed northern access road to the mat casting yard). These roads are in continuous use by both trucks and construction equipment involved in the mat casting operation. Construction site personnel and construction equipment for the loadout dock would not be expected to disrupt ongoing daily operations at the casting yard.

1.1.2 The existing load-out dock, located immediately to the west of the proposed new load-out dock, would be demolished as a part of project construction (Figure 3). Heavy construction equipment such as jack hammers, front end loaders, bulldozers, and barge mounted cranes would be utilized to demolish the existing top deck and piling caps in their entirety. The existing support piles would then be cut approximately three feet below the mudline. All re-usable concrete material would be stockpiled at a previously disturbed 0.25 acre area of land located along the Mississippi River bank approximately 1,300 feet upriver of the old dock. All other demolished materials would become property of the contractor to be disposed of by any legal means. Demolition of the old dock would impact approximately 0.15 acre of existing riverbank and river bottom.

1.1.3 A half-acre staging area for construction equipment, materials, and personnel would be located in a previously disturbed area immediately adjacent to the existing machine shop adjacent to river road. The construction staging area would be utilized for the duration of the project and would be returned to pre-existing conditions upon completion of the project.

## 1.2 AUTHORITY

1.2.1 The proposed action is authorized by Flood Control Acts of 1928, as amended, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1960, 1962, 1965, 1968, and 1970 and the Water Resources Development Act of 1986. The Flood Control Act of 1928 committed the federal government to a definite program of flood control and authorized general and progressive channel stabilization and river regulation program and appurtenant program features from Cairo, Illinois to Head of Passes, Louisiana.

## 1.3 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.3.1 The purpose of the proposed action is to construct a new load-out dock for the mat casting yard, which is integral to Mississippi River Channel Improvement feature of the Mississippi River and Tributaries (MR&T) Project. As a result of the 2019 Mississippi River high river event, the existing load-out dock sustained significant damage to various support features and no longer retains sufficient structural integrity. The damaged load-out dock was used to offload pertinent channel improvement materials required for building the articulated concrete mattresses manufactured in the adjacent mat casting yard. The purpose of the proposed new load-out dock is the same. The Mississippi River is the primary route for commercial shipping to major ports along the river. There is national interest in providing progressive channel stabilization in order to prevent any alteration of the river flow that could potentially pose a navigation threat for large



**Figure 3: St. Francisville Mat Casting Yard, Old Load-out Dock (To Be Demolished).**

vessels transiting these sections of the river and the mat casting yard is an integral part of this program's continued operation.

## 1.4 PRIOR NEPA DOCUMENTS

1.4.1 Environmental impacts for previously identified MR&T Project features, including the Mississippi River Channel Improvement feature, were originally addressed in the 1976 Final Environmental Impact Statement (FEIS), "*Mississippi River and Tributaries Mississippi River Levees and Channel Improvement.*" A Statement of Findings was signed by Major General Ernest Graves, USACE, Director of Civil Works, on April 4, 1976.

## 1.5 PUBLIC CONCERNS

1.5.1 The comprehensive MR&T Project has four major features: 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 they are affected by backwater of the Mississippi River.

1.5.2 Since the flood of 1927, there has been widespread public concern for flood control along the Mississippi River to protect environmental resources, infrastructure, and navigation. Throughout history, emphasis has been placed on the construction and maintenance of the channel improvement program. The flood control plan of the MR&T Project is designed to control the Mississippi River "Project Design Flood," which is a theoretical flood greater than the flood of 1927. The comprehensive flood control plan includes several features that protect a large part of the alluvial valley from the Project Design Flood. The MR&T, Mississippi River channel improvement feature provides for maintenance of the revetments and dikes constructed to stabilize the Mississippi River and control its natural tendency to meander. Channel improvements also protect adjacent levees from destruction by caving banks which result from the meandering of the river into the levee stability line. The St. Francisville Mat Casting Yard is integral to this process as it produces an average of 120,000 "squares" of concrete mattresses every year.

## 2. ALTERNATIVES TO THE PROPOSED ACTION

### 2.1 ALTERNATIVE 1 – NO ACTION

2.1.1 In the future without project condition (a.k.a. no-action), the proposed action would not be constructed. Without the proposed construction of a new load-out dock, there would be a negative impact to the mat casting yard's ability to offload pertinent channel improvement materials such as articulated concrete mattresses and stone revetment to the USACE Mat Sinking Unit. In turn, this would also negatively impact the overall function of the MR&T channel improvement program.

## 2.2 ALTERNATIVE 2 – EXISTING LOAD-OUT DOCK REPAIR

2.2.1 In October 2019, USACE performed a site inspection of the existing load-out dock to determine the structural integrity as a result of damage sustained from the 2019 Mississippi River high water event. USACE determined that in order to repair of the existing load-out dock, it would require the replacement of numerous support pilings, bracing, and the main deck. Major repair items would include replacement of various support pile misalignments, pile bents, cracks in support bracing, and the generally poor condition of the main deck due to general wearing/dry rot that has occurred over time. A general assessment concluded that there is significant risk using the dock for its design purposes. This alternative was not considered to be reasonable from both a logistical and feasibility standpoint as it would require demolition of approximately 75% of the existing structure in order to complete the overall required repairs. Therefore, this alternative was not carried forward for further analysis.

## 3. AFFECTED ENVIRONMENT

### 3.1. DESCRIPTION OF THE PROJECT AREA

3.1.1 The proposed action would be performed within the Mississippi River deltaic plain, with the Mississippi River acting as the primary influence on geomorphic processes in the delta region in the existing MR&T Project Area and right-of-way. The St. Francisville Mat Casting Yard is situated on the left descending bank of the Mississippi River approximately 1.5 miles south of the town of St. Francisville. The riverbank where the loadout dock is proposed to be constructed is a heavily disturbed area consisting mainly of dirt and gravel roads with interspersed areas of vegetation and is frequently subject to flooding during periods of high water in the Mississippi River.

3.1.2 West Feliciana Parish is located in the southeastern part of Louisiana, approximately 30 miles north of Baton Rouge. The parish has a total area of 426 square miles, with approximately 403 square miles comprised of land and the remaining 23 square miles consisting of water. The parish is located on the Mississippi River, and is bordered by Pointe Coupee Parish to the west and East Feliciana Parish to the east. The parish contains a variety of suburban, agricultural and industrial development. Suburban areas are situated primarily in the town of St. Francisville, which is located at the southern end of the parish approximately 1.5 miles northeast of the Mississippi River. Agricultural and industrial developments exist primarily along the Mississippi River. The parish contains one incorporated area, St. Francisville, which is also the parish seat and largest municipality, as well as several unincorporated areas located in the northern part of the parish spreading from west to east (Tunica, Wakefield, and Bains). The Parish is also home to the Louisiana State Penitentiary (LSP) located in Angola (commonly referred to as “Angola Prison”), located on the left descending bank of the Mississippi River and is approximately 40 miles northwest of Baton Rouge and 22 miles northwest of St. Francisville. The Angola prison encompasses roughly 18,000 acres and is surrounded by the Mississippi River on three sides and by the Tunica Hills on the other. The Angola prison is the largest maximum security prison in the United States and houses over 6,300 inmates and 1,500 staff. Additional critical infrastructure includes a landing strip, an ambulance provider, an electric substation, a fire station, and emergency medical services. The Mississippi River meanders across the western part of the parish and flows from northwest to southeast. The parish is comprised of two major land resource areas-Southern Mississippi Valley Silty Uplands and Southern Mississippi Valley Alluvium. These major land resource areas are used mainly as woodland, pastureland, and cropland. Elevation is

about 360 feet above sea level in the Southern Mississippi Valley Silty Uplands Major Land Resource Area and 25 feet above sea level in the swamps of the Southern Mississippi Valley Alluvium Major Land Resource Area. According to U.S. Census data, the parish had an estimated population of 15,460 in 2018.

## 3.2 DESCRIPTION OF THE WATERSHED

3.2.1 A watershed is an area of land drained by a particular set of streams and rivers. Of the twelve major watersheds within Louisiana, the proposed action is located within the Mississippi River Basin on the left descending bank of the Mississippi River in West Feliciana Parish, Louisiana (Figure 4). The Mississippi River has the third largest drainage basin in the world, exceeded in size only by the watersheds of the Amazon and Congo Rivers. The entire Mississippi River basin covers more than 1,245,000 square miles and includes all or parts of 31 states and two Canadian provinces. The lower Mississippi River is the portion of the Mississippi River downstream of Cairo, Illinois. From the confluence of the Ohio River and upper Mississippi River at Cairo, the lower flows just under 1,000 miles to the Gulf of Mexico. The lower Mississippi River alluvial valley is generally bounded by bluffs on the eastern side of the river and the valleys of merging tributaries to the west (LDWF-CWCS 2005). Within CEMVN, the Mississippi River is bounded by levees that extend along the Mississippi River west bank from the vicinity of Black Hawk, Louisiana, generally southward to the vicinity of Venice, Louisiana, and on the east bank from Baton Rouge, Louisiana to Bohemia, Louisiana encompassing over 500 miles of levee and associated infrastructure.

## 3.3 CLIMATE

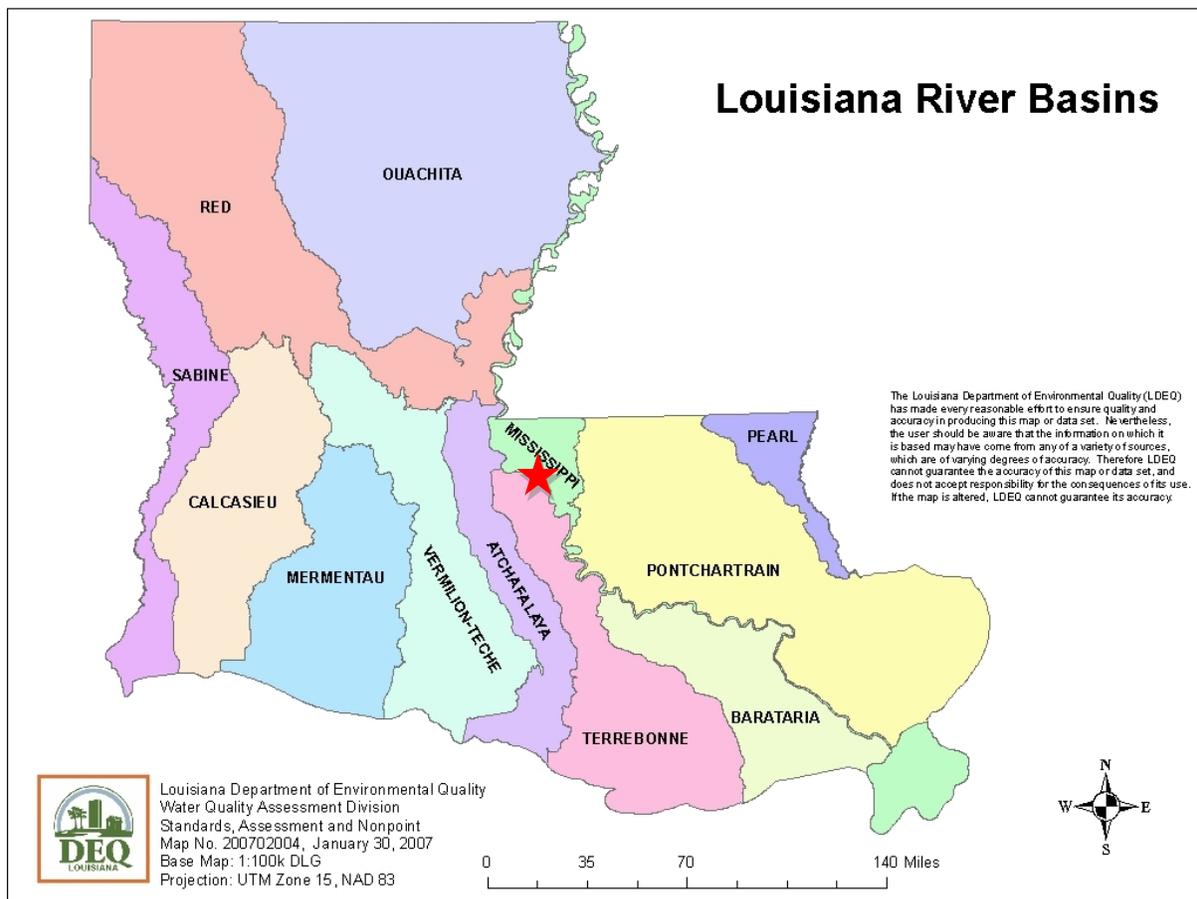
3.3.1 The climate in the proposed action proposed action area is humid and subtropical with a strong maritime character. Warm, moist, southeasterly winds from the Gulf of Mexico prevail throughout most of the year, with occasional cool, dry fronts dominated by northeast high pressure systems. The influx of cold air occurs less frequently in autumn and only rarely in summer. In winter, the average temperature is 54°F and the average daily minimum temperature is 41°F. In summer, the average temperature is 78°F and the average daily maximum temperature is 89°F. Summer thunderstorms are common and tornadoes strike occasionally. The total annual precipitation is about 60.7 inches, of this, 30 inches, or 50 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 16 inches (<http://www.srcc.lsu.edu/>).

## 3.4 GEOLOGY

3.4.1 The area of the proposed action proposed action lies on the east riverbank of the Mississippi River. Fluvial activity in the proposed action area includes lateral migration and overbank deposition during flood stages. This activity is the dominant geologic process operating on the landscape in this region. The formation of natural levees, point bar deposits, and other geomorphic features such as crevasse channels and abandoned river courses has been documented. There are also two major land resource areas-Southern Mississippi Valley Silty Uplands and Southern Mississippi Valley Alluvium. The Southern Mississippi Valley Silty Uplands Major Land Resource Area consists dominantly of well drained, moderately well drained, somewhat poorly drained, and poorly drained loamy soils. The Southern Mississippi Valley Alluvium Major Land Resource Area consists mainly of well drained and somewhat poorly drained

loamy soils on natural levees and poorly drained and very poorly drained clayey soils on natural levees and in backswamps.

3.4.2 The overall Mississippi River Delta complex was formed by river deposits between 700 and 7,400 years ago. The Natural Resources Conservation Service (NRCS) classifies soils within the proposed action area as typically peat, mucks, and clays mixed with organic matter, and silts derived from river deposits. The soil composition is subject to change as floodwaters and storm surges deposit new sediments. They are composed predominantly by Balize and Larose soil types. These soils are classified as continuously flooded deep, poorly drained and permeable mineral clays and mucky clays. Marsh and swamp deposits are found in the vicinity of the River from New Orleans to the Heads of Passes at the Gulf of Mexico. Marsh deposits are primarily organic, consisting of 60 percent or more by volume of peat and other organic material with the remainder being a composition of various types of clays. Total organic thickness is normally 10 feet with variances less than one foot. Inland swamp deposits are composed of approximately 70 percent clay and 30 percent peat and organic materials. The percentage of sand and sandy silts increases with proximity to the open waters of the Gulf of Mexico (Saucier 1974).



**Figure 4: Louisiana River Basins (Map provided by Louisiana Department of Environmental Quality. The Mississippi River Basin is shown in green. The location of the Work is represented by a red star.**

### 3.5 RELEVANT RESOURCES

3.5.1 This section contains a description of relevant resources that could be impacted by the proposed action. 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.

3.5.2 The following resources have been considered and found to not be affected by the proposed action: wetlands; estuarine water bodies; estuarine or marine fisheries resources, including essential fish habitat; recreation resources; aesthetic visuals; and socioeconomic resources, 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 there would be no floodplain impacts from the proposed action. Additionally, there is no practicable alternative for construction outside the 100-year floodplain. No portion of the proposed action area has been designated a Louisiana Natural and Scenic River; therefore, a Scenic Rivers permit is not warranted. Environmental justice concerns were considered in accordance with the Executive Order 12898 of 1994 and the Department of Defense’s Strategy on Environmental Justice of 1995, which direct federal agencies to identify and address any disproportionately high adverse human health or environmental effects of federal actions to minority and/or low-income populations. However, it is our determination that no significant populations or residential areas would be affected by the proposed action. No appreciable terrestrial resources are found within the proposed action area as it is a heavily utilized industrial work area. It is also our determination that no prime or unique farmlands would be adversely affected by the proposed action. Finally, the proposed action is located outside the Louisiana Coastal Zone.

3.5.3 The following relevant resources are discussed in this draft EA: aquatic resources/fisheries, wildlife, threatened or endangered species, cultural resources, water quality, and air quality.

<b>Resource</b>	<b>Institutionally Important</b>	<b>Technically Important</b>	<b>Publicly Important</b>
<b>Aquatic Resources/ Fisheries</b>	Fish and Wildlife Coordination Act of 1958, as amended; Clean Water Act of 1977, as amended; Coastal Zone Management Act of 1972, as amended; and the Estuary Protection Act of 1968.	They are a critical element of many valuable freshwater and marine habitats; they are an indicator of the health of the various freshwater and marine habitats; and many species are important commercial resources.	The high priority that the public places on their esthetic, recreational, and commercial value.
<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 or 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>Resource</b>	<b>Institutionally Important</b>	<b>Technically Important</b>	<b>Publicly Important</b>
<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>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.
<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.

### 3.6 AQUATIC RESOURCES/FISHERIES

3.6.1 General Existing Conditions. The proposed action would occur on the east riverbank of the Mississippi River. The largest aquatic resource in proximity to the proposed action area is that portion of the main stem of the Mississippi River. Aquatic habitat can be found within the Mississippi River, adjacent borrow areas, and associated wetlands. This vast area is relatively healthy in primary productivity on a per acre basis because of high benthic productivity due in part to the existing articulated concrete mattress (ACM) and stone rip-rap that covers the underwater bank line as well as lower river velocities and an overall shallower main river channel. The aquatic habitat is home to large predaceous fishes, some plankton feeders, and a group of omnivorous species. Minnow, catfishes, carp, carpsuckers, and sunfishes are some of the fishes that may be found in the vicinity of the proposed action area. Clams, dipterans, and mayflies are some of the area's representative invertebrates.

### 3.7 WILDLIFE

3.7.1 General Existing Conditions. Developed habitat in the vicinity of the area of the proposed action area consists mainly of industrial land use with the adjacent mat casting yard. The proposed action area provides relatively limited wildlife habitat due to its heavy industrial use and lack of both foraging and sustained livable habitat.

3.7.2. Forested wetlands exist both upstream and downstream along the east riverbank of the river and provide habitat for many wildlife species including raccoons, opossum, fox, mink, rabbits, and bats. Many species of neotropical migratory and resident birds utilize this type of habitat for nesting and rearing. In addition, many species of reptiles and amphibians can be found in these forested areas.

3.7.3 Mammals that adapt in varying degrees to periodically wet riparian or early successional bottomland hardwood habitat are likely to inhabit or frequent land adjacent to the Proposed action area. Beaver, swamp rabbit, nutria, muskrat, gray squirrel, fox squirrel, and white-tailed deer are likely present in the vicinity of the proposed action area. Woodlots in the batture also provide

habitat for many resident passerine birds and essential resting areas for many migratory songbirds including warblers, orioles, thrushes, vireos, tanagers, grosbeaks, buntings, flycatchers, and cuckoos. Many of these and other passerine birds have undergone a decline in population primarily due to habitat loss. The area also supports resident hawks and owls including the red-shouldered hawk, barn owl, common screech owl, great horned owl, and barred owl. The red-tailed hawk, marsh hawk, and American kestrel are seasonal residents which utilize habitats within the vicinity of the proposed action area. Amphibians such as the pig frog, bullfrog, leopard frog, cricket frog, and Gulf Coast toad are expected to occur in the fresh and low salinity wetlands adjacent to the proposed action area. Reptiles such as the snapping turtle, soft-shell turtle, and red-eared turtle are also expected to occur in the wetlands and water bodies adjacent to the proposed action area.

### 3.8 THREATENED OR ENDANGERED SPECIES

3.8.1 General Existing Conditions. The U.S. Fish and Wildlife Service (USFWS) lists one endangered species known to occur in West Feliciana Parish, the pallid sturgeon (*Scaphirhynchus albus*) (endangered) (USFWS 2020).

3.8.2 The pallid sturgeon only occurs in large rivers within the Mississippi and Missouri River Basins from Montana to Louisiana. This includes the Mississippi River and Atchafalaya River in South Louisiana. The pallid sturgeon tends to select main channel habitats in the Mississippi River. Aquatic habitats in the Mississippi River have been modified through the construction of flood control levees and channel modification through time, and some changes resulting from those modifications have likely been detrimental to pallid sturgeon. Although the river flows unobstructed for about 2,000 river miles from Gavins Point Dam in the middle Missouri River to the Gulf of Mexico, tributary impoundments, bendway cutoffs and dike and levee construction have each changed localized patterns of channel erosion and deposition in the Mississippi River. Collectively, they have resulted in a degradation trend throughout the system. Effects of these changes on pallid sturgeon are unknown, because there are no historical data for comparison. The Pallid Sturgeon Lower Basin Recovery Workgroup has identified information gaps essential to the consultation and recovery processes in the Lower Mississippi River Basin. These include: relative abundance of pallid sturgeon; demographics; feeding habits; habitat use; hybridization ratios; presence of fish diseases in the wild; population anomalies; and reliable separation and identification of pallid sturgeon, shovelnose sturgeon, and hybrids. While recent publications have contributed to filling some of these data gaps (e.g., Killgore et al., 2007), incomplete knowledge of those areas remains.

### 3.9 CULTURAL RESOURCES

3.9.1 General Existing Conditions. In June, 2020, CEMVN plotted the latitudes and longitudes of the mat casting yard against various data sets: the National Register of Historic Places (NRHP) database, the Louisiana Cultural Resources Map provided by the Louisiana State Historic Preservation Officer (SHPO), the U.S. Department of Agriculture (USDA) Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov>), U.S. Geological Survey (USGS) Quadrangle Maps (<http://nationalmap.gov/historical>), and other available historic maps on file with CEMVN. Additional background information consulted included the Louisiana Cultural Resources Management (CRM) Bibliography (LDOA Website), SHPO Site Forms, pertinent site and survey reports regarding previous investigations within 1-mile (1.6 km) of the Area of Potential Effect (APE), and aerial photography.

3.9.2 The information regarding historic properties identified within the APE was evaluated by CEMVN staff applying the criteria for evaluation of the NRHP as defined at 36 CFR 60.4 [a-d]. CEMVN determined that the mat casting yard encompasses a portion of the former town of Bayou Sara (16WF37). Bayou Sara was an important port and commercial center on the Mississippi River from the early-nineteenth through the early-twentieth century and rapidly became a thriving river port for the Felicianas. A detailed developmental history of Bayou Sara and analysis of historic maps is presented in Ryan et al. (2018). In its prime (ca. 1860), Bayou Sara ranked amongst the largest shipping ports between Natchez and New Orleans and remained an important center of shipping and commerce until it was devastated by a series of catastrophic floods from 1912-1937 and then mostly abandoned. Since abandonment, notable changes include the construction of a major access road (Ferdinand Street) and the construction of the mat casting yard. CEMVN began constructing the mat casting yard in 1961. Additionally, part of the former Bayou Sara town levee was improved surrounding the mat casting yard and drainage canals were constructed in a semi-circle around the facility's eastern, northern, and western sides. Between 1963 and 1967 the mat casting yard was expanded westward and now overlaps a portion of the former town's location. Prior to the expansion of the facility, some blocks of the former town were destroyed by borrow pitting for the elevation of Ferdinand Street (LA Hwy 1258) between the years 1949-1953. Historic research suggests that parts of the former town of Bayou Sara located under the 1963-1967 expansion of the mat casting yard may still contain areas of intact deposits because river sand was imported to level the site and raise the elevation of the area prior to the construction of the mat casting yard (Ryan et al. 2018). However, the boundary of Site 16WF37 falls completely beyond the present APE and will not be affected by this undertaking.

3.9.3 The sequence of historic maps reviewed indicates that the 1883 *Survey of the Mississippi River* (MRC) depicts the location of the Archaeological APE on the batture-side of the town's levee south of the former location of the West Feliciana Railroad Depot. Ryan et al. (2018:53) hypothesize that during the Civil War, Union troops likely destroyed the West Feliciana Railroad Bridge that crossed Bayou Sara on the western-side of the town, and the railway did not resume operation again until 1875 at which point the terminus of the line and the depot were moved to the east bank of Bayou Sara. Because the former location of the railroad depot/line was located on the land-side of the town's levee, opposite the APE, it is unlikely that the APE contains any cultural deposits related to the former railroads. Later maps (e.g. MRC, USGS, others) do not show any type of waterborne-landing unrelated to the mat casting yard, and aerial imagery surrounding the time of construction of the mat casting yard depicts the APE as densely vegetated with water-loving species. Soils within the Archaeological APE consist of types that are frequently flooded and indicative of flood plains indicating that the property possesses a low potential to contain pre-historic or early-historic archaeological deposits. However, it can be reasonably assumed that at least on a temporary basis, the batture in the vicinity of the present APE would have served as an opportunistic river landing for small watercraft during times of inundation. However, no submerged resources have been previously identified within the APE and prior reconnaissance level survey did not identify any sunken resources in close proximity to the APE. Furthermore, any substantial submerged resources within the APE would have been cleared during the 1961 construction of the extant loading docks and nearby sunken ACM mattresses. Similarly, the portion of the APE above the ordinary high water mark on the batture has been subjected to frequent inundation/erosion and has been in use by heavy machinery for loading ACM since the early-1960. Since that time, access to the loading docks maintained and repeatedly hardened following flood events. Therefore, any cultural deposits that may have been

present would likely have been heavily disturbed and/or destroyed and would be unlikely to retain the integrity necessary for listing on the NRHP.

3.9.4 Since the flood of 1927, there has been widespread public concern for flood control along the Mississippi River to protect infrastructure, navigation, and environmental resources. The Flood Control Act of 1928 committed the federal government to a definite program of flood control and authorized general and progressive channel stabilization and a river regulation program and appurtenant program features from Cairo, Illinois, to Head of Passes, Louisiana. In Louisiana, special emphasis has been placed on the construction and maintenance of the USACE channel improvement program. The flood control plan of the MR&T Project is designed to control the Mississippi River "Project Design Flood," which is a theoretical flood greater than the great flood of 1927. The comprehensive flood control plan is dependent on the installation of ACM that are produced at the mat casting yard and other Corps-owned facilities. ACM was first introduced on the Mississippi River in 1915 (MRC 1922). This unique revetment construction method replaced willow fascine mattresses. ACM originally was cast on the river with a "quarterboat," dredge, floating mixing barge, and a series of material and casting barges (Dardeau et al. 1991). As the volume of stabilization work increased, casting began at sites strategically located along the river; including the mat casting yard.

3.9.5 The mat casting yard contributes to a unique revetment construction method and has been in continuous operation since approximately 1961. The mat casting yard still retains the same integrity regarding mission, function, general site configuration, and viewshed presence along the Mississippi River. Therefore, as a longstanding government facility, representing an integral part of the comprehensive MR&T Project's flood control plan, it generally retains its historical significance as an integrated element of the historical landscape. Because the mat casting yard possess integrity of location, for purposes of this Section 106 review, CEMVN has determined that mat casting yard is eligible for listing on the NRHP at the state level under Criterion C; as a significant and distinguishable entity whose components lack individual distinction but taken together represent an important context with its own exceptional significance as it relates to Mississippi River flood control as authorized by the Flood Control Act of 1928. Furthermore, for purposes of this Section 106 review, CEMVN has determined that the mat casting yard is eligible for listing on the NRHP at the state level under Criterion A for Engineering accomplishments associated to significant events in Louisiana history. Assessment of the eligibility of the mat casting yard for inclusion in the NRHP at the national level would require a comparison of the USACE's other Mississippi Valley Division mat casting fields (i.e., St. Paul, Rock Island, St. Louis, Memphis, and Vicksburg) and is presently beyond the current scope of review for this undertaking. Furthermore, based on CEMVN's background research it was determined that the Standing Structures APE is not located within a listed or eligible National Register Historic District (NRHD), nor is it located within the viewshed of a property individually listed in the NRHP. The present Standing Structures APE contains three (3) extant structures: 1) Machine Shop; 2) Loading Dock 1 (to be demolished); and, Loading Dock 2 (to remain). Machine Shop does not meet the criteria to qualify for NRHP listing under Criterion Consideration G and neither dock adds significant architectural value to the overall integrity of the mat casting yard and as such are not considered individually eligible for listing in the NRHP. Additionally, the replacement of the existing damaged dock will be consistent with the historic use of the facility and will not detract from the overall integrity of location, design, setting, feeling, and/or association of the mat casting yard.

### 3.10 WATER QUALITY

3.10.1 General Existing Conditions. Water quality in the proposed action area is affected by both point source and non-point source discharges. Point sources include mainly industrial discharges. Non-point sources include storm water runoff, industrial discharges, landscape maintenance activities, and natural sources.

3.10.2 Section 303(d) of the Clean Water Act requires states to identify water bodies that are not meeting water quality standards and to develop total maximum daily loads for those pollutants suspected of preventing the water bodies from meeting their standards. Total maximum daily loads are the maximum amount of a given pollutant that can be discharged into a water body from all natural and anthropogenic sources including both point and non-point source discharges. In Louisiana, the Department of Environmental Quality oversees the program.

3.10.3 The Louisiana Department of Environmental Quality (LDEQ) surface water monitoring program is designed to measure progress towards achieving water quality goals at state and national levels, to gather baseline data used in establishing and reviewing the state water quality standards, and to provide a data base for use in determining the assimilative capacity of the waters of the state. Information is also used to establish permit limits for wastewater discharges. The program provides baseline data on a water body to monitor long-term trends in water quality.

3.10.4 LDEQ Section 305(b) and 303(d) reports for 2018, included in the Water Quality Inventory Integrated Report, lists one water body that is located adjacent to the proposed action area, the Mississippi River. The assigned sub-segment code for the Mississippi River is LA070201. Sub-segment Code LA070201 boundaries are described as Mississippi River – from Old River Control Structure to Monte Sano Bayou. Available LDEQ records indicate that prior to the 2004 Water Quality Inventory (WQI) Report, suspected causes of impairment for the Mississippi River are listed as mercury, nitrate/nitrite (nitrite + nitrate as N), pesticides, phosphorous, priority organics (including dioxin) and total fecal coliforms.

3.10.5 As shown in Table 2, utilizing the 2018 U.S. Environmental Protection Agency (USEPA) Integrated Report methodology guidance categories, which categorize water body/pollutant combinations, the LDEQ 2018 report no longer assigns the LA070201 (Mississippi River) segment an Integrated Report Category number since it is fulfilling all standards (LDEQ 2018).

Subsegment Number	Designated Uses					Impaired Use	Suspected Causes of Impairment	Suspected Sources of Impairment
	PCR <sup>1</sup>	SCR <sup>2</sup>	FWP <sup>3</sup>	DWS <sup>4</sup>	OYS <sup>5</sup>			
LA070201	F <sup>6</sup>	F	F	F				

<sup>1</sup> Primary Contact Recreation (swimming), <sup>2</sup> Secondary Contact Recreation (boating), <sup>3</sup> Fish and Wildlife Propagation (fishing), <sup>4</sup> Drinking Water Supply, <sup>5</sup> Oyster Propagation, and <sup>6</sup> Fully supporting.

### 3.11 AIR QUALITY

3.11.1 General Existing Conditions. The USEPA, under the requirements of the Clean Air Act (CAA), has established National Ambient Air Quality Standards (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 (PM2.5), 5) lead (Pb), and 6) sulfur dioxide (SO2).

3.11.2 Ozone is the only parameter not directly emitted into the air, forming in the atmosphere when three atoms of oxygen (O<sub>3</sub>) are combined by a chemical reaction between oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents are some of the major sources of NO<sub>x</sub> and VOC, also known as ozone precursors. Strong sunlight and hot weather can cause ground-level ozone to form in harmful concentrations in the air.

3.11.3 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 area (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 West Feliciana Parish is currently in attainment for all Federal NAAQS pollutants, including the 8-hour ozone standard (USEPA 2011). 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.

## 4. ENVIRONMENTAL CONSEQUENCES

### 4.1 AQUATIC RESOURCES/FISHERIES

4.1.1 Future Conditions with No-Action Alternative. With no action, no change to the aquatic or fishery resources in the vicinity of the proposed action is expected to occur.

4.1.2 Future Conditions with the Proposed Action. With implementation of the proposed action, it is possible that some adjacent existing fisheries resources could be indirectly impacted from both installation and removal of support pilings for the demolition of the old loadout dock and construction of the new loadout dock in the Mississippi River. It is expected that there would be a temporary increase in turbidity within the river directly surrounding the pile driving and removal activities. The initial increases in turbidity would likely be diminished by the moving currents of the river, and any free-floating sediment would likely settle downstream. Direct impacts to aquatic and benthic (bottom dwelling) resources would include the permanent loss of available water habitat along the bank line as a result of the new loadout dock construction footprint. These negative impacts would be offset by the beneficial habitat opportunities directly and indirectly created by the proposed action.

4.1.3. The underwater surfaces of submerged structures such as pilings would provide positive direct and indirect benefits to the aforementioned fisheries. Spaces in between the individual pilings may provide cover habitat, thus directly benefiting baitfish, juvenile fish, and benthic species seeking cover from predators. The predator species then indirectly benefit by the forage opportunities provided. The surrounding banklines also contain both stone rip-rap and ACMs, with the concrete surfaces being designed with a rough texture incorporated with long, shallow grooves. Studies of the benefits provided by various surface texture designs of ACMs have shown that rough and grooved surfaces provide velocity shelters for a variety of aquatic invertebrates which in turn provide an important food source for various fish and wading bird species (Way et.

al. 1992). Additionally, the demolition and removal of the existing loadout dock would provide positive direct benefits to fisheries through the creation of additional open water habitat along the left descending riverbank. Stockpiling of re-usable demolished concrete material at a previously disturbed 0.25-acre area of land located along the Mississippi River riverbank would have no effect on aquatic resources. Overall, the proposed action would have minimal negative effects on fisheries resources, which would ultimately be offset by the aforementioned direct and indirect positive impacts.

## 4.2 WILDLIFE

4.2.1 Future Conditions with No-Action. With no action, no change to the wildlife resources in the vicinity of the proposed action is expected to occur.

4.2.2 Future Conditions with the Proposed Action. With implementation of the proposed action, a total of approximately 1 acre of riverbank and river bottom would experience a loss of both land-based and water-based habitat. While it is unlikely that any wildlife would be present within the heavily industrialized project area, there remains ample adjacent suitable habitat both upstream and downstream of the project area that would allow wildlife to temporarily relocate, if necessary. Stockpiling of re-usable demolished concrete material at a previously disturbed 0.25-acre area of land located along the Mississippi River bank would have no effect on wildlife. Overall, the proposed action would not be expected to result in any long-term adverse effects to any wildlife resources.

## 4.3 THREATENED OR ENDANGERED SPECIES

4.3.1 Future Conditions with No-Action. With no action, there would be no effect to any listed threatened or endangered species or their critical habitat.

4.3.2 Future Conditions with the Proposed Action. Pallid sturgeon are normally found in the fast moving, deep waters of the Mississippi River main current, so their presence near or within the work area (i.e., riverbank) would be considered highly unlikely. Should pallid sturgeon be present in or near the work area, they would be able to temporarily relocate to adjacent suitable habitat during the construction period. With implementation of the proposed action, CEMVN has determined that the project would not likely adversely affect the endangered pallid sturgeon or any critical habitat. The USFWS concurred with CEMVN's determination of "not likely to adversely affect" under Section 7 of the Endangered Species Act of 1973, and returned a copy of USACE's letter with their office stamp of concurrence dated August 14, 2020. (Appendix A).

## 4.4 CULTURAL RESOURCES

4.4.1 Regulatory Setting. Federal regulations require CEMVN, as an agency responsible for funds appropriated by Congress, to identify if properties are historic (listed or eligible for listing in the NRHP); to assess the effects the work would have on historic properties; to seek ways to avoid, minimize, or mitigate any adverse effects to historic properties; and to evaluate the proposed action's potential for significant impacts to the human and natural environment. The consideration of impacts to historic and cultural resources is mandated under Section 101(b)(4) of the NEPA as implemented by 40 CFR, Parts 1501-1508, Section 106 of the National Historic Preservation Act (NHPA), as amended (54 U.S.C. § 300101 et seq.), that requires federal agencies to take into account their effects on historic properties (i.e., historic and cultural

resources) and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment, and Section 110 of the NHPA, that requires each federal agency to assume responsibility for the preservation of historic properties or resources that fall under the agency's jurisdiction and that such properties are maintained and managed in a way that considers the preservation of their historic, archeological, architectural, and cultural values in compliance with Section 106. Additionally, it is the policy of the federal government to consult with Indian tribal governments on a government-to-government basis as required in E.O. 13175 (U.S. President 2000). CEMVN has chosen to address potential impacts to historic properties through the "Section 106 consultation process" of the NHPA as implemented through 36 CFR, Part 800. The "Section 106 process" requires the identification of historic properties that may be affected by the proposed action or alternatives within the area of potential effects (APE). Historic properties, defined in Section 101(a)(1)(A) of NHPA, include districts, sites (archaeological and religious/cultural), buildings, structures, and objects that are listed in or determined eligible for listing in the NRHP. Historic properties are identified by qualified agency representatives in consultation with interested parties. Below is a consideration of various alternatives and their effects on historic properties.

4.4.2 Prior Evaluation. In November 2018, CEMVN conducted Identification and Evaluation for the renewal of the Facilities Supply Contract (materials and labor) for Casting Articulated Concrete Mattress at the mat casting yard. At that time, CEMVN determined that the mat casting yard facility was constructed prior to the implementation of Section 106 and no consultation with SHPO or tribal governments had occurred prior to CEMVN's 2018 review. Accordingly, on November 01, 2018, CEMVN consulted with SHPO and tribes in a letter entitled: "*Casting Articulated Concrete Mattress Supply Contract (materials and labor), St. Francisville Casting Field, St. Francisville, West Feliciana Parish, Louisiana*" and determined that the continued operation of the facility would have "No Adverse Effect to Historic Properties with Conditions." SHPO concurrence with this determination was received on December 12, 2018. On December 11, 2018, the Muscogee (Creek) Nation provided concurrence with CEMVN's determination and the additional protocols in place to prevent significant impact to the site. On December 13, 2018, the Choctaw Nation of Oklahoma concurred with CEMVN's determination and requested "that work be stopped and our office contacted immediately in the event that Native American artifacts or human remains are encountered." On December 18, 2018, the Alabama-Coushatta Tribe of Texas responded: "Upon review of your November 1, 2018 submission, West Feliciana Parish exists beyond our scope of interest for the state of Louisiana. Therefore, no impacts to cultural assets of the Alabama-Coushatta Tribe of Texas will occur in conjunction with this proposal. We defer to the other Tribal Nations with interest in this project." No other responses were received.

4.4.3 Future Conditions with No Action. This alternative does not include any CEMVN undertaking; therefore, CEMVN has no further responsibilities under Section 106 of the NHPA. With no action, conditions would remain largely the same as present and CEMVN's previous November 01, 2018, consultation and CEMVN's prior determination that the continued operation of the mat casting yard will result in "No Adverse Effect to Historic Properties" remains applicable subject to adherence with the conditions contained in the November 01, 2018, consultation.

4.4.4 Future Conditions with the Proposed Action. CEMVN has made a reasonable and good faith effort to identify historic properties within the Archaeological/Standing Structures APE, including potential historic properties not yet identified. For purposes of this Section 106 review, CEMVN has determined that the mat casting yard is eligible for listing on the NRHP at the state level under Criterion C; as a significant and distinguishable entity whose components lack individual distinction but taken together represent an important context with its own exceptional

significance as it relates to Mississippi River flood control as authorized by the Flood Control Act of 1928. Furthermore, for purposes of this Section 106 review, CEMVN has determined that the mat casting yard is eligible for listing on the NRHP at the state level under Criterion A for engineering accomplishments associated to significant events in Louisiana history.

4.4.5 Based on the available evidence; CEMVN confirmed that none of the present work items have any potential to affect a previously recorded archaeological site. CEMVN further identified that the APE is located within an area with some potential for the presence of prehistoric and historic archaeological resources and that historical map/USACE aerial imagery research and indicates that the APE possesses potential for deposits associated with the historic use of the property by USACE dating from the mid-20th century up until the present time. While the pre-nineteenth-century and/or indigenous occupation of the APE is largely unknown, CEMVN has determined that any archaeological deposits not identified within the present APE would likely have been heavily impacted or obliterated as a result of the previous construction and operation/maintenance of the mat casting yard and that these deposits, if present, possess limited research potential are unlikely to possess the integrity needed to contribute significant information beyond that contained in existing historical documentation and therefore; would not be substantial enough for contributing to the NRHP under Criterion D. Additionally, background research has not identified any information indicating that the undertaking may affect historic properties that may have a religious and cultural significance to Indian tribes.

4.4.6 In summary, for purposes of this Section 106 review, CEMVN has determined that there is one (1) historic property (the mat casting yard) as defined in 36 CFR 800.16(l) within the Standing Structures APE. Based on the information presented in this letter, CEMVN has determined that the visual character of the dock replacement is consistent with the current use of the mat casting yard and will not adversely affect any of the characteristics that make this resource eligible for inclusion in the NRHP. Furthermore, CEMVN has determined that the undertaking has little potential to impact NRHP-eligible archaeological deposits. Accordingly, on July 20, 2020, CEMVN submitted a finding of “**No Adverse Effect to Historic Properties**” for this undertaking to the Louisiana State Historic Preservation Officer of the Department of Culture Recreation and Tourism, the Choctaw Nation of Oklahoma, the Coushatta Tribe of Louisiana, Chitimacha Tribe of Louisiana, the Jena Band of Choctaw Indians, the Mississippi Band of Choctaw Indians, Muscogee Creek Nation, the Seminole Nation of Oklahoma, Seminole Tribe of Florida, and the Tunica-Biloxi Tribe of Louisiana. SHPO concurrence with this determination was received on August 18, 2020 (Appendix B), the Muscogee Creek Nation concurred on July 28, 2020, and the Choctaw Nation of Oklahoma concurred on August 21, 2020. CEMVN may proceed with the Undertaking assuming concurrence in compliance with Section 106 of the NHPA and in coordination NEPA, as amended (42 U.S.C. § 4321 et seq.).

## 4.5 WATER QUALITY

4.5.1 Future Conditions with No-Action. With no action, no new direct or indirect impacts to water quality would be expected to occur.

4.5.2 Future Conditions with the Proposed Action. With implementation of the proposed action, it is expected that there would be an indirect impact to water quality through a temporary increase in turbidity within the river directly surrounding both the old loadout dock demolition area and proposed new loadout dock construction area. Any increases in turbidity would be temporary and likely be diminished by the moving currents of the river. Any free-floating sediment would also likely settle downstream within the main channel of the river. Stockpiling of re-usable demolished

concrete material at a previously disturbed 0.25-acre area of land located along the Mississippi River riverbank would have no effect on water quality.

4.5.3 A Clean Water Act (CWA) draft Section 404(b)(1) public notice has been completed for this project and would be circulated for public comment with this draft Environmental Assessment. Additionally, a CWA Section 401 State Water Quality Certificate (WQC 200903-02/AI 101235/CER 20200006) was issued by the Louisiana Department of Environmental Quality by letter dated September 09, 2020. (Appendix C).

## 4.6 AIR QUALITY

4.6.1 Future Conditions with No-Action. With no action, no new direct or indirect impacts to ambient air quality would be expected to occur.

4.6.2 Future Conditions with the Proposed Action. With implementation of the proposed action, direct and indirect impacts to ambient air quality within the immediate vicinity of the project area are expected to be temporary, primarily due to the emissions of construction equipment. Due to the short duration of the proposed project, 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 is expected to return to pre-construction conditions.

## 4.7 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

4.7.1 CEMVN 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 American Standard Test Methods E 1527-13 Phase 1 Environmental Site Assessment (ESA), HTRW 20-05 dated July 16, 2020, has been completed for the Work area. A copy of the Phase 1 ESA would be maintained on file at the CEMVN Headquarters. The probability of encountering HTRW for the proposed action is low based on the initial site assessment. If no recognized environmental conditions are identified in relation to the proposed action area, the probability of encountering HTRW for this proposed action would be considered low. If a recognized environmental condition is identified in relation to the Proposed action area site, CEMVN would take the necessary measures to avoid the recognized environmental condition so that the probability of encountering or disturbing HTRW would continue to be low.

## 4.8 CUMULATIVE IMPACTS

4.8.1 The Council on Environmental Quality's (CEQ) regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.) define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR 1508.7)". Cumulative Effects can result from individually minor but collectively significant actions taking place over a period of time."

4.8.2 While the proposed action would result in a loss of approximately 1 acre of land-based and water-based habitat, it is not considered adverse to any of the aforementioned resources as the project area is located in a heavily utilized industrial area and would further return approximately (acre) of habitat upon removal of the damage load-out dock. Both wildlife and aquatic resources would be able to temporarily relocate to adjacent suitable habitat during the period of construction of the new load-out dock. Aquatic species, including benthic species, would be able to return to the project area upon completion of construction. The demolition and removal of the old loadout dock would provide additional water-based habitat for aquatic species. As previously stated, it is highly unlikely any wildlife species would be present within the project area due to the continuous industrial land use. Impacts to water quality would be temporary and minor, as previously noted. Stockpiling of re-usable demolished concrete material at a previously disturbed 0.25-acre area of land located along the Mississippi River riverbank would have no effect on any resources. It is expected that no other significant adverse cumulative impacts would occur as a result of implementation of the proposed action. Overall, the proposed action, in comparison to the past, present, and reasonably foreseeable future actions, would not incrementally contribute adversely to the general proposed action area.

4.8.3 The proposed action would support the operational efficiency of the mat casting yard which is a vital component of channel improvements to continued flood risk management along the Lower Mississippi River and is also part of an ongoing comprehensive plan for the Mississippi River and Tributaries Project. The proposed action would contribute to the continued accomplishment of flood risk management objectives, which are of great importance in the Lower Mississippi Valley. It would also provide a continued reduced risk of flood damage to the natural and human environment on the land side of the Mississippi River levee system in CEMVN as well as provide for the preservation and enhancement of the very significant fish, wildlife, and other natural resources within the Mississippi River Basin.

## **5. COORDINATION AND PUBLIC INVOLVEMENT**

Preparation of this draft EA and draft FONSI is being coordinated with the public, appropriate congressional, federal, tribal, state, and local interests, as well as environmental groups and other interested parties.

## **6. COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS**

Environmental compliance for the proposed action would be achieved upon coordination of this draft EA and draft FONSI with all appropriate agencies, organizations, and individuals for their review and comments.

- USFWS concurrence with CEMVN's not likely to adversely affect determination on any threatened or endangered species (Appendix A);
- CEMVN National Historic Preservation Act, Section 106 consultation and coordination of a finding of No Adverse Effect to Historic Properties" with the Louisiana State Historic Preservation Officer and any affected Federally and State recognized Tribes (Appendix B);
- Clean Water Act, Section 404(b)(1) Public Notice and Evaluation;
- Clean Water Act, Section 401 State Water Quality Certificate received from the Louisiana Department of Environmental Quality (Appendix C);

- Additionally, USACE, requires that its agents understand and acknowledge the following conditions required as a result of Section 106 consultation for ground disturbing activities that provide for the protection of and notification protocols for, unexpected discoveries or unexpected effects to historic properties and human remains:
  - **Inadvertent Discovery and Unexpected Effects:** If during the course of work, archaeological artifacts (prehistoric or historic) are discovered or unexpected effects to historic properties, including architecture, architectural elements, and/or archaeology, are identified, the contractor shall stop work in the general vicinity of the discovery or unexpected effect and take all reasonable measures to avoid or minimize harm to the finds or affected property. The contractor would ensure that the discovery or unexpected effects are secured and stabilized, as necessary, and access to the area is restricted. The contractor shall inform their Operations Division (OD) contacts at USACE, who would in turn contact Planning Division (PD) staff. The contractor would not proceed with work until USACE PD completes consultation with the Louisiana SHPO and others, as appropriate.
  - **Louisiana Unmarked Human Burial Sites Preservation Act:** If human bone or unmarked grave(s) are present within the proposed action area, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The contractor shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The contractor shall also notify USACE and the Louisiana Division of Archaeology within seventy-two hours of the discovery. Discoveries of unmarked graves, burials, human remains, or items of cultural patrimony on federal or tribal lands shall be subject to the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. §3001-3013, 18 U.S.C. § 1170) and the Archaeological Resources Protection Act of 1979 (ARPA)(16 U.S.C. §470aa – 470mm).

A FONSI would not be signed until the proposed action achieves environmental compliance with all applicable laws and regulations, as described above.

## 7. CONCLUSION

The proposed action would support the operational efficiency of the mat casting yard, a vital component of flood risk management along the Lower Mississippi River as part of an ongoing comprehensive plan for the Mississippi River and Tributaries Project. This office has assessed the environmental impacts of the proposed action and has determined that the proposed action will have minimal impacts to the aquatic and wildlife species referenced in 3.5.2, potential cultural resources, and local air quality. Additionally, the project is not likely to adversely affect the endangered pallid sturgeon, and there are likely no adverse impacts to water quality. Finally, this project will likely have a net neutral impact to the human environment within the proposed action area, and a net positive impact to the surrounding area by allowing continued off-loading of the flood-control mattresses.

## 8. PREPARED BY

Draft Environmental Assessment 579 and the associated Finding of No Significant Impact were prepared by Mr. Mark Henry Lahare, Environmental Protection Specialist, with relevant sections and contributions prepared by: Mr. Joseph Musso (HTRW); Mr. Jeremiah Kaplan and Mr. Noah Fulmer (Cultural Resources); and Mrs. Jill Enersen (Historical Architecture). The address of the preparers is: U.S. Army Corps of Engineers, New Orleans District; Regional Planning and Environment Division South, CEMVN-PDC-C; 7400 Leake Avenue; New Orleans, Louisiana 70118.

## 9. REFERENCES

Coastal Wetland Forest Conservation and Use Science Working Group (LaCoast). 2005. Conservation, Protections and Utilization of Louisiana's Coastal Wetland Forests. Final Report to the Governor of Louisiana.

Dardeau, Elba A., Stephen W. Ellis, and John G. Collins. 1991. The Articulated Concrete Mattress: History and Use. *Proceedings of the Fifth Federal Interagency Sedimentation Conferences, 1947 to 2001*. Section 3:3-1-3-7.

Killgore, K. J., J. J. Hoover, S. G. George, B. R. Lewis, C. E. Murphy, and W. E. Lancaster. 2007. Distribution, relative abundance and movements of pallid sturgeon in the free-flowing Mississippi River. *Journal of Applied Ichthyology* 23:476-483.

Louisiana Department of Environmental Quality (LDEQ). 1996. State of Louisiana Water Quality Management Plan, Water Quality Inventory. Appendices A and B. Baton Rouge, LA.

Louisiana Department of Environmental Quality (LDEQ). 2018. 2018 Louisiana Water Quality Inventory: Integrated Report. Louisiana Department of Environmental Quality, Office of Environmental Assessment, Water Quality Assessment Division, Baton Rouge, LA. 194 p. + appendices.

Louisiana Department of Wildlife and Fisheries (LDWF). 2005. Louisiana Comprehensive Wildlife Conservation Strategy (CWCS).

Mississippi River Commission (MRC). 1883. *Map of the Lower Mississippi River from the Mouth of the Ohio River to the Head of the Passes in Eighty Six Sheets: Survey of the Mississippi River, Sheet No. 63*. Scale 1:20,000.

Ryan, Joanne, Michael P. Carpenter, and Donald G. Hunter. 2018. *Phase III Data Recovery at Bayou Sara (16WF37), Hazard Mitigation Project 1603-0436, Bayou Sara Bank Stabilization Project, West Feliciana Parish, Louisiana*. Coastal Environments, Inc. Submitted to the Federal Emergency Management Agency, Louisiana Recovery Office, Baton Rouge, Louisiana (LA DOA Report No. 22-5805).

Saucier, R. T. 1974. Geomorphology and Quaternary Geologic History of the Lower Mississippi Valley. Arkansas Archeological Survey Research Series No. 6.

U.S. Army Corps of Engineers (USACE). July 1998. 1998 Final Supplemental Environmental Impact Statement (FSEIS) “*Flood Control, Mississippi River & Tributaries, Mississippi River Mainline Levees Enlargement and Seepage Control, Cape Girardeau, Missouri to Head of Passes, LA.*” Vicksburg, Memphis and New Orleans Districts.

U.S. Environmental Protection Agency (USEPA). 2011. Accessed online June 9, 2020.  
<http://www.epa.gov/oar/oaqps/greenbk/multipol.html>.

U.S. Fish and Wildlife Service (USFWS). 2020. Information for Planning and Consultation. Online address: <https://ecos.fws.gov/ipac/>

Way, Carl H., Andrew C. Miller, Barry S. Payne, and C. Rex Bingham. 1992. Effects of Surface Texture of Articulated Concrete Mattress Blocks on Their Habitat Value. Lower Mississippi River Environmental Program, Report 19, Mississippi River Commission, Vicksburg, MS.

# APPENDIX A

## Endangered Species Act Determination

To: Mr. David Walther, U.S. Fish and Wildlife Service  
200 Dulles Drive  
Lafayette, Louisiana 70506

From: Mark Henry Lahare  
Telephone: 504-862-1344  
Date: 10 August 2020  
E-mail: [mark.h.lahare@usace.army.mil](mailto:mark.h.lahare@usace.army.mil)

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act.) The project, as proposed,

Is not Likely to adversely effect those resources



14 Aug 2020

Supervisor  
Louisiana Ecological Services Office  
U.S. Fish and Wildlife Service

Date

**Subject: Draft Environmental Assessment #579, “Mississippi River and Tributaries, Mississippi River Channel Improvement, St. Francisville Mat Casting Yard Loadout Dock Replacement, West Feliciana Parish, Louisiana.**

Dear Mr. Walther:

The U.S. Army Corps of Engineers, New Orleans District (CEMVN) proposes to construct a replacement load-out dock for barge loading on the Mississippi River at the St. Francisville Casting Field (“mat casting yard”) located approximately 30 miles north of Baton Rouge, Louisiana. The mat casting yard is situated along the Mississippi River approximately 1.5 miles south of the town of St. Francisville, West Feliciana Parish, Louisiana (Figure 1). The environmental impacts associated with the proposed work are currently being addressed in draft EA #579, which is scheduled to be available for review and comment in mid-August 2020.

The construction of the new dock will require installation of an estimated 51 - 16-inch precast pre-stressed concrete piles, precast concrete pile caps, and precast concrete slabs. The concrete slabs will measure approximately 25 feet in length, 6 to 8 feet in width, and 16 inches thick. The concrete piles will be driven to a pile tip elevation of -57 feet (North American Vertical Datum 1988 (NAVD88)). The top height of the piles will be situated at an elevation of 29.5 feet (NAVD88). The dock will be constructed so that the concrete slabs will be perpendicular to the Mississippi River. Using these slabs to create the dock platform, the overall dock will extend approximately 125 linear feet from the bankline into the Mississippi River in order to accommodate load transfer from the dock to the barges via crane. In addition, the platform will have a turn-around point located on the east side of the dock on which trucks will be able to orient the load as close to the barge as possible, and where another truck can queue while loading occurs. Jersey barriers will be used to line the sides of the dock platform (Figure 2). The proposed elevation of the dock bridge deck platform will match the elevation of the existing machine shop at approximately 33 feet (NAVD88), which is located just north of the proposed project area. Heavy construction equipment such as bulldozers and front end loaders will be utilized to perform earthwork in order to build a ramp up to the entrance of the dock. Construction of the entire new load-out dock would impact approximately 1 acre of existing river bank and river bottom. Existing access roads both within and around the Mat Casting Yard would be utilized (i.e., Louisiana Highway 1263 (a.k.a. Ferdinand

## APPENDIX B



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, NEW ORLEANS DISTRICT  
7400 LEAKE AVE  
NEW ORLEANS LA 70118-3651

July 20, 2020

The proposed undertaking will have no adverse effect on historic properties subject to the conditions detailed within the consultation letter. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention or the conditions are not implemented.

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

Kristin Sanders, SHPO  
LA State Historic Preservation Officer  
P.O. Box 44247  
Baton Rouge, LA 70804-4241

Kristin P. Sanders  
State Historic Preservation Officer

Date

**RE: Section 106 Review Consultation**

**Undertaking:** Mississippi River and Tributaries, Mississippi River Channel Improvement, St. Francisville Mat Casting Field Loading Dock Replacement, West Feliciana Parish, Louisiana (Project ID 108867)

Project Coordinates: 30.764561, -91.385759

**Determination:** **No Adverse Effect to Historic Properties**

Dear Ms. Sanders:

The U.S. Army Corps of Engineers (USACE), New Orleans District (CEMVN), proposes to construct a replacement loading dock for barge loading at the St. Francisville Mat Casting Field (SFMCF) located in West Feliciana Parish, Louisiana. As part of CEMVN's evaluation and in partial fulfillment of responsibilities of the National Environmental Policy Act (NEPA), as amended (42 U.S.C. § 4321 et seq.), and Section 106 of the National Historic Preservation Act (NHPA), as amended (54 U.S.C. § 300101 et seq.), and its implementing regulations, and Section 110 of the NHPA, that requires each Federal agency to assume responsibility for the preservation of historic properties or resources that fall under the agency's jurisdiction and that such properties are maintained and managed in a way that considers the preservation of their historic, archeological, architectural, and cultural values in compliance with Section 106, CEMVN offers you the opportunity to review and comment on the potential of the proposed action to affect historic properties, protected tribal resources, tribal rights, or Native lands. Documentation in this letter is consistent with the requirements in 36 CFR § 800.11(e).

**Description of the Undertaking**

The St. Francisville Mat Casting Field is located at 9111 River Road, approximately 1.5 miles (2.4 km) south of the town of St. Francisville and 30.0 miles (48.2 km) north of Baton Rouge, along the left descending bank of the Mississippi River at mile 265, in West Feliciana Parish, Louisiana. The Undertaking location is shown in Figure 1. The comprehensive Mississippi River and Tributaries (MR&T) flood control plan includes several features that protect a large part of the alluvial valley from the "Project Design Flood." The MR&T, Mississippi River channel improvement feature provides for maintenance of the revetments and dikes constructed to stabilize the Mississippi River and control its natural tendency to meander. Channel

## APPENDIX C

JOHN BEL EDWARDS  
GOVERNOR



CHUCK CARR BROWN, PH.D.  
SECRETARY

**State of Louisiana**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

SEP 09 2020

Mr. Mark Lahare  
US Army Corps of Engineers  
CEMVN-PDC-C  
7400 Leake Avenue  
New Orleans, LA 70118

AI No.: 101235  
Activity No.: CER20200006

RE: St. Francisville Mat Casting Yard Loadout Dock Replacement (EA #579)  
Water Quality Certification WQC 200903-02  
West Feliciana Parish

Dear Mr. Lahare:

The Louisiana Department of Environmental Quality, Water Permits Division (LDEQ), has reviewed the application to construct a replacement load-out dock for barge loading on the Mississippi River at the St. Francisville Casting Field located approximately 1.5 miles south of St. Francisville, West Feliciana Parish.

The information provided in the application has been reviewed in terms of compliance with State Water Quality Standards, the approved Water Quality Management Plan and applicable state water laws, rules and regulations. LDEQ determined that the requirements for a Water Quality Certification have been met. LDEQ concludes that the discharge of fill will not violate water quality standards as provided for in LAC 33:IX. Chapter 11. Therefore, LDEQ hereby issues US Army Corp of Engineers, New Orleans District - St. Francisville Mat Casting Yard Loadout Dock Replacement (EA #579) Water Quality Certification, WQC 200903-02.

Should you have any questions concerning any part of this certification, please contact Elizabeth Hill at (225) 219-3225 or by email at [elizabeth.hill@la.gov](mailto:elizabeth.hill@la.gov). Please reference Agency Interest (AI) number 101235 and Water Quality Certification 200903-02 on all future correspondence to this Department to ensure all correspondence regarding this project is properly filed into the Department's Electronic Document Management System.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott Guilliams".

Scott Guilliams  
Administrator

Water Permits Division

c: IO-W

ec: Mark Lahare  
[mark.h.lahare@usace.army.mil](mailto:mark.h.lahare@usace.army.mil)

Post Office Box 4313 • Baton Rouge, Louisiana 70821-4313 • Phone 225-219-3181 • Fax 225-219-3309  
[www.deq.louisiana.gov](http://www.deq.louisiana.gov)