1.0 INTRODUCTION AND PURPOSE AND NEED

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1.0 INTRODUCTION AND PURPOSE AND NEED

1.1 Project Introduction and Overview

The Coastal Protection and Restoration Authority of Louisiana (CPRA, or the Applicant) is proposing to construct, operate, and maintain the proposed Mid-Barataria Sediment Diversion Project (proposed MBSD Project or Project). The proposed Project consists of a multi-component river diversion system intended to convey sediment, fresh water, and nutrients from the Mississippi River at approximate river mile (RM) 60.7 in the vicinity of the town of Ironton, Plaquemines Parish, Louisiana to the mid-Barataria Basin. After passing through a proposed intake structure complex on the bank of the Mississippi River and a proposed intake channel, the sediment-laden water would be transported through a conveyance channel to the mid-Barataria Basin located in Plaquemines and Jefferson Parishes. A more detailed description of the features and components of the proposed MBSD Project is provided in Section 1.3 and Chapter 2, Alternatives.

Under Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403) and Section 404 of the Clean Water Act (CWA) (33 USC 1344) (collectively referred to as “Section 10/404”), the U.S. Army Corps of Engineers (USACE) authorizes: (1) activities and structures in navigable waters, including construction, excavation, or deposition of materials in, over, or under such waters, or any work that would affect the course, location, condition, or capacity of those waters and (2) the discharge of dredged or fill material into wetlands and other waters of the U.S. at specific disposal sites through the issuance of Department of the Army (DA) permits. In addition, Section 14 of the RHA of 1899 (33 USC 408 [Section 408]) authorizes the Secretary of the Army, through the Chief of Engineers, to grant permission for the alteration, occupation, or use of a USACE civil works project, if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. Individual DA Section 10/404 permits and Section 408 permissions are issued after public notice and opportunity for public hearing.

Because the construction, operation, maintenance, repair, replacement, and rehabilitation of the proposed Project and/or its features has the potential to directly and indirectly impact navigable waters and wetlands and other waters of the U.S. and USACE civil works projects (such as federal levees and the Mississippi River navigation channel), CPRA submitted a Joint Permit Application on June 23, 2016 (revised March 16, 2018 and August 16, 2022) and a Section 408 Permission Request Letter on January 13, 2017 to USACE, New Orleans District (CEMVN) for a Section 10/404 permit and Section 408 permission.

For major federal actions with the potential to significantly affect the quality of the human environment, the National Environmental Policy Act (NEPA) (42 U.S. Code [USC] 4321 *et seq.* [1969]), and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508 [1978]), require that federal agencies prepare a detailed, interdisciplinary Environmental Impact Statement (EIS) assessing the environmental impacts of and

alternatives to such actions prior to deciding whether to undertake them.[1] Approval of a Section 10/404 permit and a Section 408 permission to construct, operate, and maintain the MBSD Project would be a major federal action and consequently, USACE has prepared this EIS to understand the potential impacts associated with the proposed Project and reasonable alternatives to it. The USACE is the lead federal agency in preparing the EIS and has coordinated with other agencies with jurisdiction by law or special expertise acting as cooperating agencies (see Section 1.8).

The EIS describes the purpose and need; affected environment; potential direct, indirect, and cumulative impacts of the proposed Project and a reasonable range of alternatives; and identifies measures, as necessary, to avoid or minimize any adverse impacts. The information in the EIS will help decision makers, public officials, and citizens to understand the potential environmental impacts of the proposed Project and its alternatives before decisions regarding the proposed Project are made.

In addition to informing the USACE decisions, this EIS will be used to inform decisions that the *Deepwater Horizon* (DWH) Natural Resource Damage Assessment (NRDA) Louisiana Trustee Implementation Group (LA TIG)[2] may make regarding restoration planning in the Barataria Basin under the Oil Pollution Act (OPA) and the *Deepwater Horizon Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic EIS* (PDARP/PEIS) (DWH Trustees 2016a) and associated Record of Decision (ROD) (DWH Trustees 2016b). Additional information is provided in Section 1.6.1.

The MBSD Project has been added to the inventory of "covered projects" that are pending environmental review or authorization by the head of a federal agency pursuant to the requirements set forth in Title 41 of Fixing America's Surface Transportation Act (FAST-41) (42 USC 4370m-l(c)(1)(A)(i)). As required by FAST-41, the USACE has developed a coordinated project plan (CPP) that includes a permitting timetable and

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[1] USACE recognizes that on July 16, 2020, CEQ published a Final Rule revising its NEPA-implementing regulations at 40 CFR Parts 1500 – 1508 (85 FR 43304). The revised regulations apply to NEPA processes begun after their effective date, September 14, 2020, although agencies may apply the revised regulations to ongoing NEPA evaluations begun before that date. 40 CFR 1506.13. USACE has chosen to proceed under the regulations in effect at the time the MBSD EIS process began in 2017 (The Notice of Intent was published on April 27, 2017 [82 FR 19361]). The USACE public interest review and EPA's CWA 404(b)(1) guidelines both currently require evaluation of cumulative effects (33 CFR 320.4; 40 CFR 230.11).

[2] On April 4, 2016, the LA TIG was established in Appendix 2 of the Consent Decree resolving civil claims by the DWH NRDA Trustees against BP Exploration and Production Inc. arising out of the DWH oil spill. (See United States v. BPXP et al., Civ. No. 10-4536, centralized in MDL 2179, In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010 [E.D. La.]). The LA TIG is comprised of: the State of Louisiana [which includes the following state agencies: CPRA, Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana Oil Spill Coordinator's Office (LOSCO), Louisiana Department of Natural Resources (LDNR), and Louisiana Department of Environmental Quality (LDEQ)], the National Oceanic and Atmospheric Administration (NOAA), the U.S. Environmental Protection Agency (USEPA), the U.S. Department of the Interior (USDOI), and the U.S. Department of Agriculture (USDA).

comprehensive schedule for all federal environmental reviews and authorizations to meet the requirements and intent of FAST-41, and to guide public and agency participation throughout the federal environmental review process (Permitting Dashboard 2017).

1.1.1 Project Location

The structural features of the proposed Project would be located in south Louisiana on the west bank of the Mississippi River at RM 60.7 just north of the town of Ironton, and the proposed Project outfall area for sediment, fresh water, and nutrients conveyed from the river is located within the mid-Barataria Basin (see Figures 1.1-1 and 1.1-2). The proposed Project area comprises the area within the hydrologic boundaries of the Barataria Basin and the western portion of the Lower Mississippi River Delta Basin, the latter of which includes the Lower Mississippi River from Donaldsonville in Ascension Parish to the birdfoot delta in the Gulf of Mexico. Detailed information regarding the proposed Project site features can be found in Section 1.3 and Chapter 2, Section 2.8.1 and details regarding the MBSD Project area can be found in Chapter 3, Section 3.1.

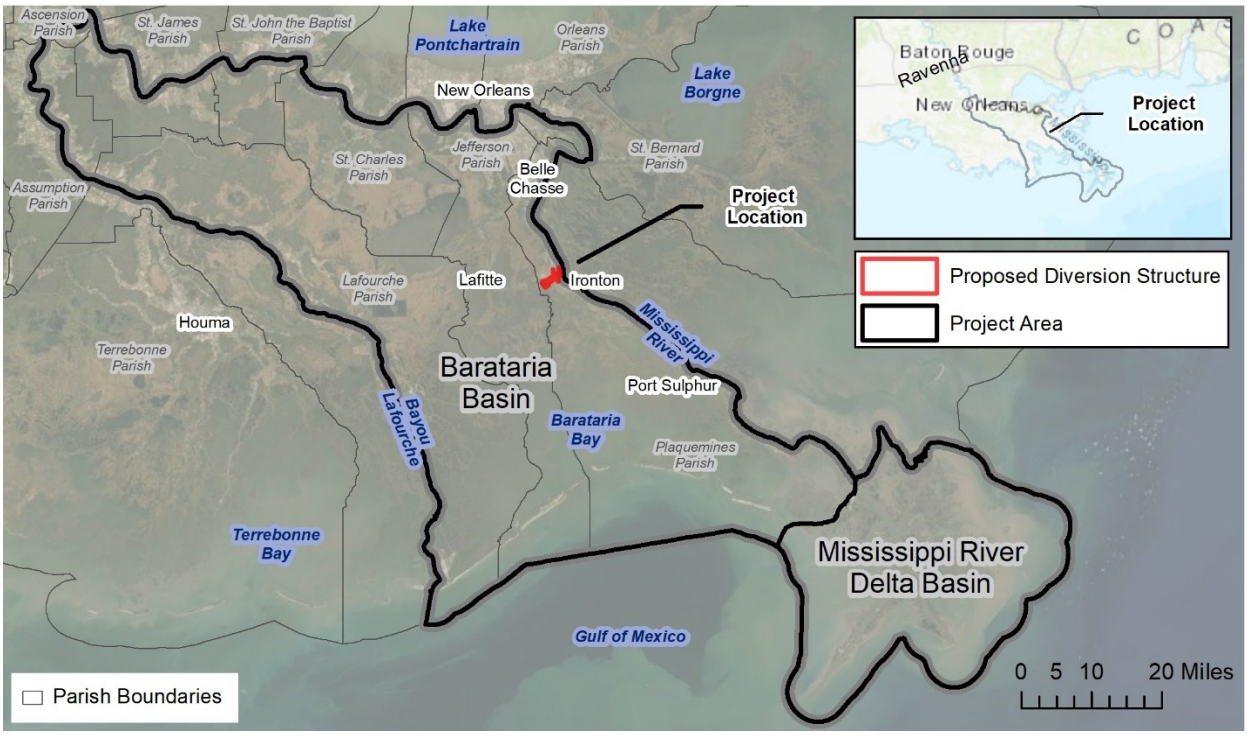

Figure 1.1-1. Project Area (Barataria Basin and Western Portion of the Lower Mississippi River Delta Basin).

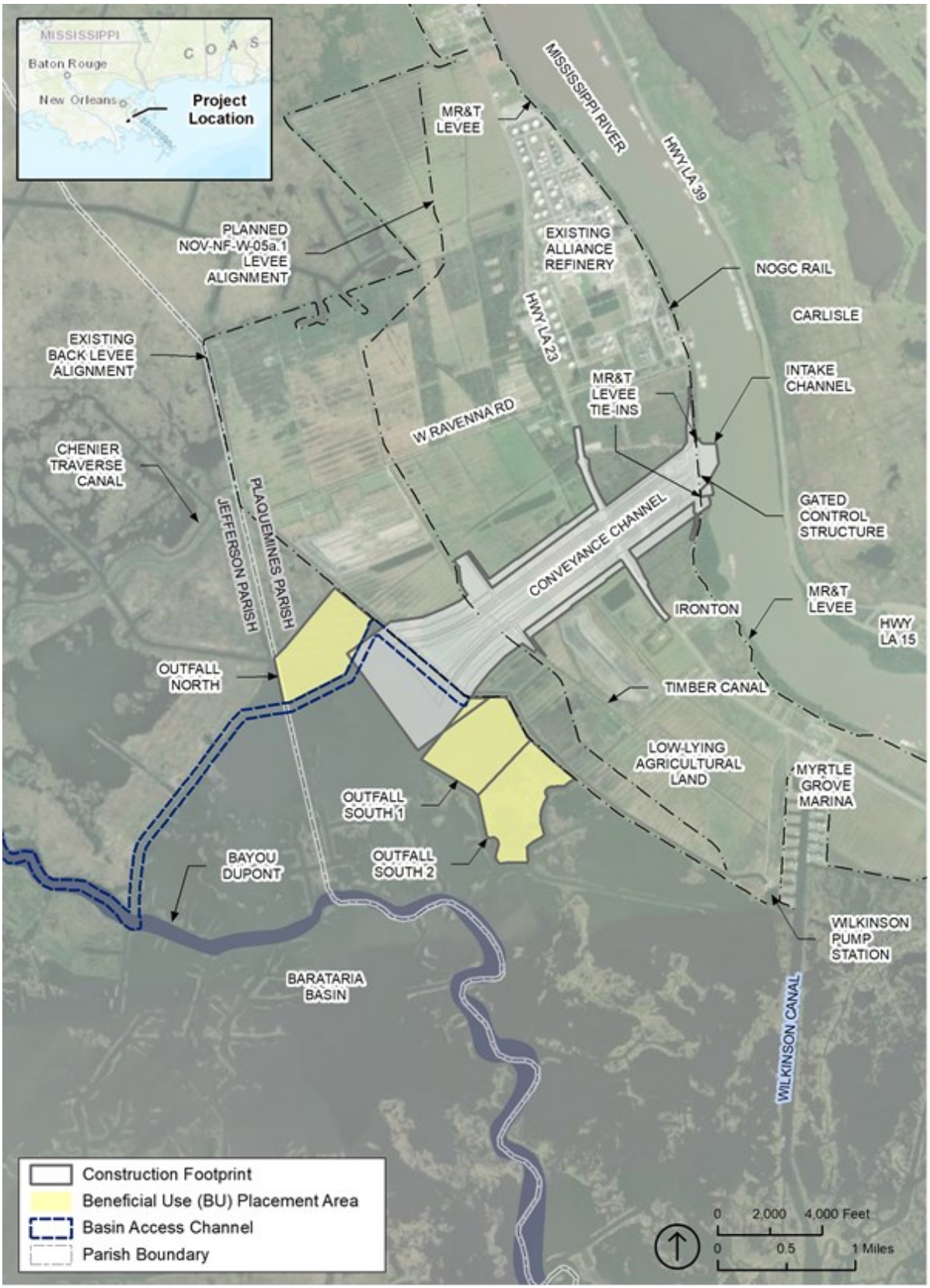

Figure 1.1-2. Project Site Map.

1.2 Project Background

1.2.1 History of the Barataria Basin

The Barataria Basin was formed over 1,000 years ago as part of the Lafourche delta complex and is a sub-estuary within the Mississippi River deltaic plain (U.S. Fish and Wildlife Service [USFWS] 1987). Historically, Mississippi River overbank flooding deposited sediment, fresh water, and nutrients into the Barataria Basin during annual flooding cycles, nourishing and sustaining wetland habitats. Levees and channelization of the Mississippi River altered natural sediment transport from the river into the basin, removing the source of sediment and fresh water that built and maintained wetlands and marshes. As a result, the basin is suffering from significant coastal habitat loss (U.S. Geological Survey [USGS] 2015, CPRA 2012).

Over time, the Barataria Basin has also been impacted by multiple events and forces (described further in Chapter 3), including:

- storm and hurricane events;
- erosion, subsidence, and sea-level rise;
- industrial, commercial, and residential development;
- additional flood risk management and drainage efforts; and
- the DWH oil spill.

As a result, various agencies and non-governmental organizations have implemented coastal protection, restoration, and rehabilitation projects within the basin. Additional information on these projects can be found in Chapter 4, Section 4.25 Cumulative Impacts.

1.2.2 Project History

1.2.2.1 Previous Studies

Since the 1990s, several previous studies, under varied agencies and authorities, have explored the concept of diverting fresh water, sediments, and nutrients from the river to the Barataria Basin. Below is a brief overview of some of these various studies that, in part, led to the development of the proposed Project.[3]

- The Mississippi River Sediment, Nutrient, and Freshwater Redistribution Feasibility Study (MRSNFR Study) evaluated the potential environmental and socioeconomic impacts from several alternative designs and flow rates for

[3] These studies are not part of the current proposed Project.

diverting sediment, fresh water, and nutrients from the river to the Barataria Basin. The MRSNFR Study identified two potential diversion alternatives in the vicinity of Myrtle Grove as a cost-effective means of utilizing Mississippi River resources for ecosystem restoration (USACE 2000).

- The Louisiana Coastal Wetlands Conservation and Restoration Task Force (LCWCRTF) and the Wetlands Conservation and Restoration Authority published a report entitled *Coast 2050: Toward a Sustainable Coastal Louisiana* (Coast 2050 Report), with the goals of implementing projects to restore and sustain Louisiana's coastal ecosystem for the benefit of Coastal Louisiana communities and resources (LCWCRTF and the Wetlands Conservation and Restoration Authority 1998). The restoration strategies included a 15,000 cubic feet per second (cfs) sediment diversion at Myrtle Grove.

- The Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) funded the Delta Building Diversion at Myrtle Grove Project (CWPPRA Project BA-33), which evaluated the feasibility of a controlled diversion structure and conveyance system with alternative design flows ranging from 2,500 to 15,000 cfs, coupled with the beneficial placement of dredged material in identified material deposition sites within the mid-Barataria Basin (LCWCRTF 2003). In 2008, CWPPRA Project BA-33 was de-authorized and transferred from CWPPRA to the USACE's Louisiana Coastal Area (LCA) program.

- The LCA Ecosystem Restoration Study Report and Programmatic EIS (USACE 2004) and the subsequent 2005 Chief's Report and Title VII of the Water Resources Development Act (WRDA) of 2007 authorized 15 coastal restoration projects including the 2,500 to 15,000 cfs Medium Diversion at Myrtle Grove with Dedicated Dredging Project (MDMG Project). The USACE and CPRA executed a Feasibility Cost Share Agreement for the MDMG Project in 2010 to develop a feasibility study and EIS, which has since been suspended. In 2011, CPRA and the USACE agreed to coordinate modeling efforts on the Mississippi River and signed a Feasibility Cost Sharing Agreement to evaluate sediment diversions on the Lower Mississippi River, resulting in the Mississippi River Hydrodynamic and Delta Management Study (MRHDM Study).

- The MRHDM Study is comprised of two efforts, the Mississippi River Hydrodynamic Study and the Mississippi River Delta Management Study. The Hydrodynamic effort was a comprehensive analysis of the water and sediment transport characteristics of the Lower Mississippi River through data collection, data analysis, and modeling (Meselhe and Sadid 2015). The Delta Management effort was a feasibility study that built on the Hydrodynamic Study designed to assess restoration alternatives (USACE 2015). Work continued on these efforts when CPRA submitted an application for the currently proposed Project to CEMVN for a DA permit review in 2013 (see

Section 1.2.2.2); however, the DA permit request was later administratively withdrawn. In 2016, CPRA submitted a modified DA permit application and requested an orderly shutdown of the MRHDM Study.

In 2012, CPRA completed its legislatively mandated update to Louisiana's Comprehensive Master Plan for a Sustainable Coast (Coastal Master Plan), which was approved by the Louisiana Legislature (CPRA 2012). The plan recommended sediment diversions as a land-building restoration tool (CPRA 2012). One such proposed diversion was the Mid-Barataria Sediment Diversion located at Myrtle Grove Project. CPRA's next legislatively mandated update to its Coastal Master Plan was completed and approved by the Louisiana Legislature in 2017 (CPRA 2017a). This Plan includes a Mid-Barataria Sediment Diversion with a 75,000 cfs capacity. The 2017 Coastal Master Plan supplants the 2012 Coastal Master Plan.

1.2.2.2 CPRA Permit Application and Permission Request for Proposed MBSD Project

In 2013, CPRA submitted an application to CEMVN for a DA permit for the proposed Project. In 2015, CPRA administratively withdrew the application. In 2016, CPRA submitted a modified DA permit application and permission request to CEMVN for the currently proposed Project. In 2018, CPRA submitted a revised permit application with a revised purpose and need. In 2022, CPRA submitted a revised permit application based on 60 percent engineering and design updates (see Appendix A Section 10/404 Permit Application).

1.3 Proposed Project

The proposed Project consists of a controlled sediment and freshwater intake diversion structure in Plaquemines Parish on the right descending bank of the Mississippi River at RM 60.7, with a conveyance channel that would discharge sediment, fresh water, and nutrients from the Mississippi River into the mid-Barataria Basin in Plaquemines and Jefferson Parishes (see Figure 1.3-1). An outfall transition feature would be included that gradually transitions the conveyance channel to the natural ground within the basin, which would help facilitate sediment dispersal away from the diversion and reduce velocities to limit scour at the end of the structure. The conveyance channel would cross a portion of Louisiana Highway 23 (LA 23) and the New Orleans Gulf Coast (NOGC) Railroad. The proposed Project would also alter a portion of the Mississippi River Levee, which is part of the Mississippi River and Tributaries (MR&T) Project, and would alter the existing non-federal back levee and future NOV-NF-W-05a.1 levee reach of the New Orleans to Venice, Louisiana (NOV-NFL) Project. When operational, the proposed MBSD Project could discharge up to 75,000 cfs of sediment, fresh water, and nutrients into the mid-Barataria Basin during periods when Mississippi River flows are 450,000 cfs or greater at Belle Chasse, Plaquemines Parish, Louisiana. The structure is designed to discharge 75,000 cfs when the Mississippi River flow is at 1 million cfs. When the Mississippi River flows exceed 450,000 cfs and the gates are opened fully, the diversion flow would increase to approximately 25,000 cfs, and, thereafter, flows would increase proportionally as the

river flow increases. This ramp would continue up to maximum diversion capacity flow of 75,000 cfs when the Mississippi River reaches a flow of 1 million cfs.

When Mississippi River flows are below 450,000 cfs at Belle Chasse, the proposed MBSD Project would maintain a background (base) flow of up to 5,000 cfs to protect, sustain, and maintain newly vegetated or recently converted fresh, intermediate, and brackish marsh near the diversion outflow.

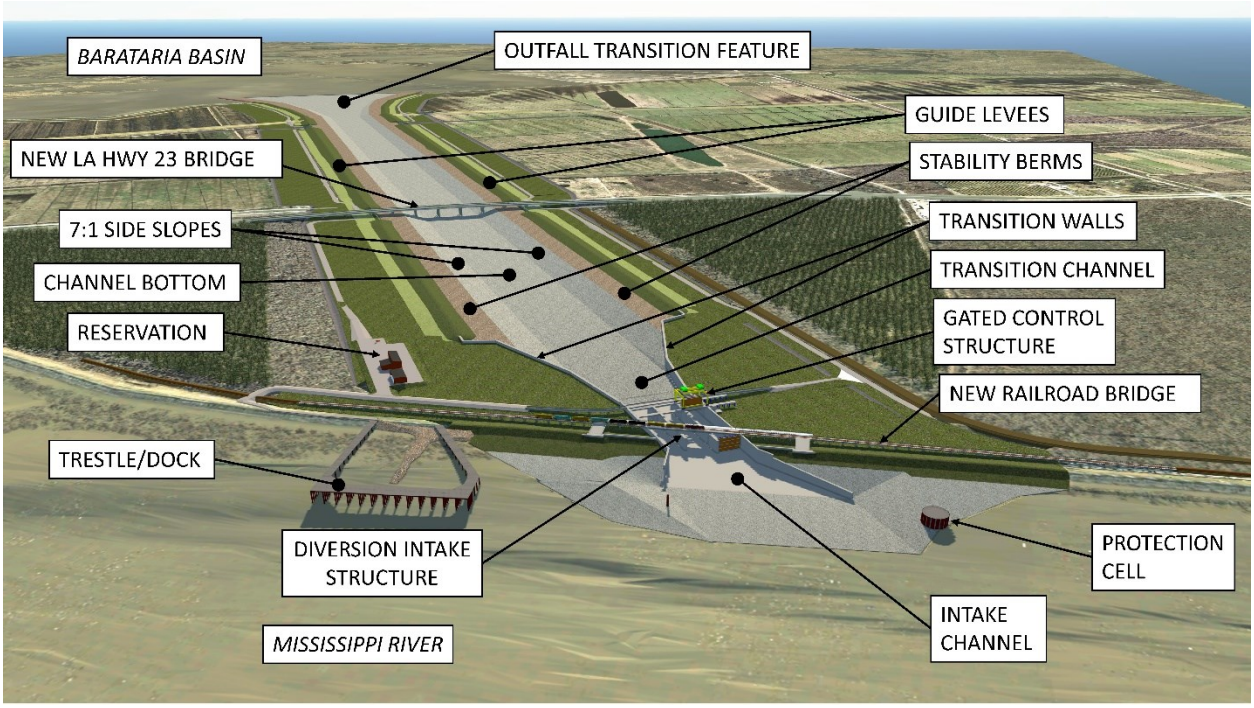

Figure 1.3-1. Proposed MBSD Structure Intake System and Conveyance Channel.

Construction of the conveyance channel would require that a portion of LA 23 and the NOGC Railroad be raised and relocated over the conveyance channel (see Figure 1.3-1). A number of other public and private facilities and utilities would also require relocation due to the construction, operation, and maintenance of the MBSD Project, including a crude oil pipeline, electrical transmission line and distribution line, and a parish water line. The MBSD Project would require an inverted drainage siphon below the conveyance channel to maintain drainage flows to the Wilkinson Canal Pump Station. Additional details on the design and operation of the proposed Project are provided in Chapter 2, Section 2.8.1.

If constructed as currently proposed, the footprint of the proposed Project would directly impact 204.2 acres of wetlands and 307.2 acres of open water (including waters of the U.S., waters containing submerged aquatic vegetation, and other waters, and excluding beneficial use placement areas) subject to USACE jurisdiction under the CWA Section 404. As previously noted, specific DA authorization and permission from the USACE are required for construction and operation of the proposed Project:

- because the proposed Project includes discharges of dredged or fill material in CWA Section 404 jurisdictional waters, a CWA Section 404 permit is required;

- because the proposed Project requires construction to be performed in and structures to be located in the Mississippi River, an RHA Section 10 permit is required; and

- because the proposed Project would alter USACE civil works projects, permission to proceed under Section 408 is also required.

Required approvals from other federal and state agencies are discussed in Section 1.8 and Chapter 5, Consultation and Coordination.

1.4 Purpose and Need

Defining the purpose and need of a proposed project is a critical component of the NEPA process, as it forms the basis for the scope of alternatives considered in the EIS. In short, federal agencies are required to evaluate the impacts of the proposed project and a range of reasonable alternatives that satisfy the project's purpose and need. NEPA regulations (40 CFR 1502.13) state that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The purpose and need statement should be clear and concise in order to facilitate development of a reasonable range of alternatives. In this case, the purpose and need for this Project was developed taking into consideration the Applicant's stated purpose and need along with the public's and other perspectives, including input from the LA TIG and cooperating agencies (identified in Section 1.8), and input from representatives of the CEQ and the Federal Permitting Improvement Steering Council (FPISC).[4] The underlying purpose and need for the project (hereinafter called the "Project purpose and need") is:

> Consistent with the LA TIG's Strategic Restoration Plan and Environmental Assessment #3 and the Louisiana Coastal Master Plan, the purpose is to restore for injuries caused by the DWH oil spill by implementing a large-scale sediment diversion in the Barataria Basin that will reconnect and re-establish sustainable deltaic processes between the Mississippi River and the Barataria Basin through the delivery of sediment, fresh water, and nutrients to support the long-term viability of existing and

[4] The Applicant's original purpose and need statement did not reference consistency with the SRP/EA #3 or the Louisiana Coastal Master Plan and did not state that the purpose is to restore for injuries caused by the DWH oil spill by implementing a large-scale sediment diversion. In January 2018, the LA TIG submitted a proposed revised statement of purpose and need in the form set forth here. During a joint meeting between USACE, the Applicant, the LA TIG, representatives of the CEQ, and representatives of the FPISC held on January 25, 2018, the participants discussed the proposed purpose and need changes. The CEQ and FPISC representatives were supportive of the changes to the Project purpose and need and USACE agreed to the change.

planned coastal restoration efforts. The proposed Project is needed to help restore habitat and ecosystem services injured in the northern Gulf of Mexico as a result of the DWH oil spill.

The CWA Section 404(b)(1) guidelines require that a basic and overall purpose for a proposed project be identified by the USACE. The overall project purpose is a statement designed to be concise, apply to the basic project purpose, and serve as the basis for the alternatives analysis. The basic project purpose is designed to capture the fundamental, essential, or irreducible purpose of a proposed project and is used to determine whether an action is water dependent. These purposes are further addressed in the CWA Section 404(b)(1) analysis, which will be completed prior to CEMVN's decision.

1.5 USACE Civil Works Projects in the Project Area

The proposed Project has the potential to alter USACE civil works projects and requires a Section 408 permission to proceed. Below is a list of USACE civil works projects located within the Project area that may be subject to a Section 408 review.

1.5.1 Navigation Projects

USACE navigation projects include planning and constructing navigation channels, locks, and dams; and dredging to maintain authorized channel depths in U.S. harbors and inland waterways (USACE 2018a). The USACE navigation projects that are located in the Project area are summarized below. See Chapter 3, Section 3.21 for additional details about navigation in the Project area.

1.5.1.1 Mississippi River Ship Channel Gulf to Baton Rouge Project

The Mississippi River Ship Channel (MRSC) Gulf to Baton Rouge Project is a deep draft navigation channel in the Mississippi River extending from Baton Rouge, Louisiana (RM 232.4 above head of passes [AHP]) to the Gulf of Mexico (RM 22 below head of passes [BHP]). In 1985, the channel was authorized to be deepened from 40 feet to 55 feet in accordance with the 1983 Report of the Chief of Engineers (1983 Chief's Report), with the exception of that portion of the channel extending from RM 115 to RM 13 AHP, which historically has channel depths exceeding 55 feet and does not require maintenance dredging (USACE 2016a). Construction of the channel deepening was planned in three phases, with the first two phases deepening the channel to 45 feet. The third phase planned to deepen the channel to 55 feet but has not been constructed. In 2018, the USACE prepared a final integrated draft general reevaluation report (GRR) and supplemental EIS (SEIS) to deepen the existing MRSC Gulf to Baton Rouge Project from the current depth of 45 feet to a depth of 50 feet. Construction began in 2020.

1.5.1.2 Saltwater Sill Mitigation Project

The 1983 Chief's Report (mentioned above) recommended the installation of a submerged sill (made of Mississippi River sediments using a hydraulic dredge) at

Mississippi River RM 64.1 AHP during periods of low flow to mitigate potential saltwater intrusion associated with deepening the MRSC. The sill is mandated to be constructed when a salinity trigger point is reached. Since completion of the -45-foot navigation channel, a sill has been constructed three times (in 1988, 1999, and 2012) due to saltwater intrusion during periods of low water (USACE 2018b).

1.5.1.3 Gulf Intracoastal Waterway

The Gulf Intracoastal Waterway (GIWW) is a navigable inland waterway extending approximately 1,050 miles from Carrabelle, Florida to Brownsville, Texas with a depth of 12 feet, designed primarily for barge transportation. The GIWW was authorized by the RHA of July 24, 1946 and was constructed in 1949. The GIWW extends across the proposed Project area from Bayou Lafourche at Larose, through Jean Lafitte, to the Harvey and Algiers Locks on the west bank of the Mississippi River near New Orleans (USACE 2018c) (see Figure 1.5-1).

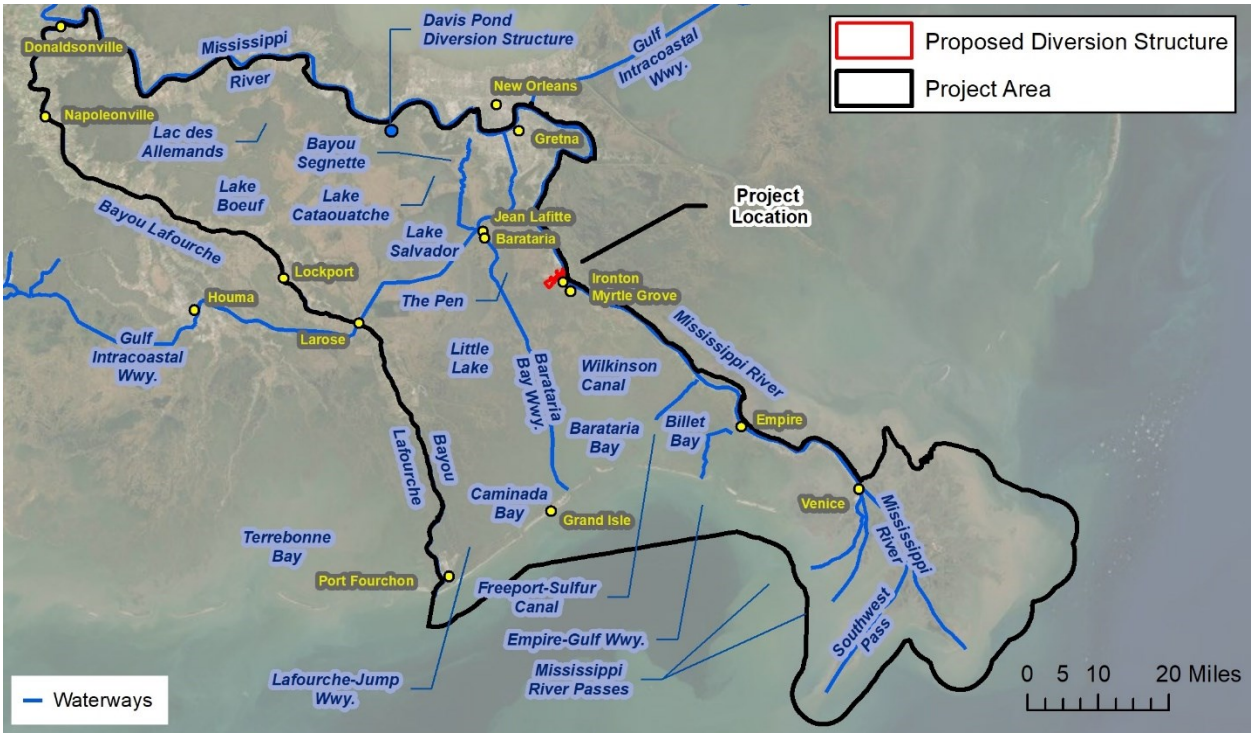

Figure 1.5-1. Major Waterbodies in the Project Area.

1.5.1.4 Bayou Segnette Waterway

The Bayou Segnette Waterway Project was authorized by the RHA of September 3, 1954 to construct a 9-foot-deep channel extending approximately 12.2 miles from Company Canal at Westwego, Louisiana to the GIWW. In June 1957, an interim channel 6 feet deep consisting of a new land cut along the eastern shore of Lake Salvador at the GIWW (RM 0 to RM 6.4) and enlargement and realignment of Bayou Segnette (RM 6.4 to RM 12.2) to Company Canal was completed. The channel provides a shorter and more direct route for navigation for the larger and modern fishing

and shrimping boats to the packing and canning industries. The completion of the channel to the authorized project dimensions may be accomplished when it is economically advisable and adequate right-of-way is provided by local interests (USACE 2022).

1.5.1.5 Empire-Gulf Waterway

The RHA Act of July 24, 1946 provides for a navigable channel 9 feet deep, extending approximately 10 miles from Empire, Louisiana to the Gulf of Mexico. The channel is used primarily by large fishing fleet and mineral resource production companies and also provides an abundance of recreational activities, such as fishing and hunting. The waterway extends across the proposed Project area west of the Mississippi River at the state-owned lock at Empire, Louisiana southward to the Gulf of Mexico. Construction of the channel to the 9-foot depth contour and rubble stone jetties to the 6-foot depth contour was completed in 1950. The completion of the channel to extend the jetties to the authorized 9-foot depth contour may be accomplished at a later date if it is deemed necessary (USACE 2022).

1.5.1.6 Barataria Bay Waterway

The Barataria Bay Waterway extends through the Project area from the GIWW at the town of Jean Lafitte, past the town of Barataria, to the Gulf of Mexico near Grand Isle (see Figure 1.5-1). The waterway was originally authorized for construction through the RHA of March 2, 1919. Multiple authorizations since then have modified the waterway to its current configuration consisting of three reaches: the Dupre Cut Inland Reach (RM 36.7 to RM 16), the Barataria Bay Reach (RM 16 to RM 0), and the Bar Channel Reach (RM 0 to RM -3.8), with depths of 10 feet, 10 feet, and 17 feet, respectively (USACE 2016b). Maintenance dredging of segments of these reaches is conducted on an as-needed basis approximately every 2 to 3 years (USACE 2016b).

1.5.1.7 Bayou Lafourche and Lafourche-Jump Waterway

Bayou Lafourche comprises the western boundary of the Project area, extending from the Mississippi River in Donaldsonville to the Gulf of Mexico near Port Fourchon (see Figure 1.5-1). The bayou was a distributary of the Mississippi River until a dam was built at its junction with the Mississippi River in 1904, which was later replaced with the Mississippi River Levee (USACE 2007). Since the 1950s, efforts have been underway to reconnect freshwater flow from the Mississippi River to the bayou (CWPPRA 2018). The RHAs of 1935 and 1960 authorized modifications to the bayou that have culminated in existing authorized channel depths of 6 feet from Napoleonville to Lockport, 9 feet from Lockport to RM 3, and depths of 27 feet to 28 feet in the Jetty and Bar Channels (USACE 2016b). The authorized Lafourche-Jump Waterway consists of a 12-foot-deep channel from Bayou Lafourche at Leeville through the Southwestern Louisiana Canal and to Bayou Rigaud along the inland side of Grand Isle (USACE 2018d).

1.5.2 Mississippi River and Tributaries Project, Mississippi River Levee

In the wake of the devastating 1927 flood, the 1928 Flood Control Act authorized the construction of the MR&T Project for the purposes of flood risk management and channel improvement for efficient navigation. The Mississippi River Levee system is a main component of the MR&T Project and is comprised of levees, floodwalls, and various control structures, including 1,607 miles along the Mississippi River. In the proposed Project area, the levee extends along the Mississippi River from Donaldsonville to 10 miles AHP. The levees were constructed by the USACE. Local non-federal interests perform minor operations, maintenance, and repair (such as grass-cutting) while USACE performs any major maintenance or repair involving construction (USACE 2018e). See Section 3.20.3.1 Federal Risk Reduction Levees for more details about the Mississippi River Levee.

1.5.3 Hurricane and Storm Damage Risk Reduction System Projects

Following Hurricanes Katrina and Rita in 2005, the USACE was authorized and funded to construct the Hurricane and Storm Damage Risk Reduction System (HSDRRS) to strengthen flood and storm surge risk reduction infrastructure for the 133-mile Greater New Orleans perimeter system consisting of the authorized Lake Pontchartrain and Vicinity, Louisiana and West Bank and Vicinity, Louisiana projects. Initiatives have included raising and strengthening levees, constructing floodwalls, gated structures, and pump stations, as well as improving approximately 70 miles of interior risk reduction structures. Major storm surge barrier gate and floodwall features on the west bank of the river include the GIWW-West Closure Complex (GIWW-WCC) and the Harvey Canal Floodwall. The HSDRRS system is designed to defend against a 100-year level of storm surge, also known as a storm that has a 1 percent chance of occurring in any given year (USACE 2018f).

1.5.4 New Orleans to Venice Hurricane Protection Project, Plaquemines Parish, Louisiana with Incorporation of Non-Federal Levees

The New Orleans to Venice (NOV) Hurricane Protection Project and the incorporation of non-Federal levees (NFL) into the NOV Project reduce risk to people and property in Plaquemines Parish below Oakville where the HSDRRS ends. The NOV Project is located along the east bank of the Mississippi River from Phoenix (approximately 28 miles southeast of New Orleans), to Bohemia, and along the west bank of the river from St. Jude (approximately 39 miles south of New Orleans), down to the vicinity of Venice. The NOV Project consists of back levees on the east bank and back levees and “co-located” hurricane levees and the Mississippi River Levee on the west bank. Additionally, 32 miles of pre-existing Plaquemines Parish NFL between Oakville and St. Jude, Louisiana on the west bank of the Mississippi River are being modified or replaced and incorporated into the NOV system. These back levees provide hurricane surge risk reduction from the Barataria Basin on the western side of Plaquemines Parish. (Together, these federal levees are referred to as the NOV-NFL Project levees in this EIS.) As part of the overall NOV Louisiana Project, in November 2021 USACE awarded the NOV-NF-W-05a.1, LaReussite to Myrtle Grove levee

contract. The Notice to Proceed with construction was issued in January 2022. Construction of this reach is currently ongoing and scheduled to be completed in calendar year 2026. Once constructed, the proposed Project would pass through and connect to this levee segment. The existing non-federal back levee will remain in place. For further details about the levees and HSDRRS projects in the basin, see Chapter 3, Section 3.20.3.1 Federal Risk Reduction Levees.

1.5.5 Larose to Golden Meadow Project

The purpose of the Larose to Golden Meadow Project is to provide an authorized hurricane risk reduction system to the communities located along Bayou Lafourche between Larose and Golden Meadow (USACE 2012a). The project is located along Bayou Lafourche in Lafourche Parish about 50 miles south of New Orleans. Authorized by the Flood Control Act of 1965, the project includes floodwalls, navigable floodgates, drainage structures, and a 48-mile ring levee that protects the communities of Larose, Cut Off, Galliano, and Golden Meadow within its perimeter (USACE 2018g).

1.5.6 Davis Pond Freshwater Diversion Project

Located on the west bank of the Mississippi River at RM 118 AHP, the Davis Pond Freshwater Diversion Project was authorized by the Flood Control Acts of 1928 and 1965 and amended by WRDA 1986 and 1996 with the goal of introducing fresh water, nutrients, and sediments to reduce marsh deterioration in the Barataria Basin. The project consists of a gated, four barrel, reinforced concrete culvert with corresponding inflow and outflow channels, approximately 19 miles of guide levees, 1.8 miles of rock weir, a 570 cfs pumping station, and a 9,311-acre ponding area (USACE 2018h). Construction began in 1996 and operations began in 2002.

1.6 Scope of the EIS

This EIS was developed in accordance with applicable NEPA, CEQ, and USACE regulations and guidance, as described in Section 1.1, and provides the USACE with information relevant to the socioeconomic and environmental impacts to be considered in making a decision whether to issue the requested permit and permission, as well as affording the public and other agencies the opportunity to provide comments. This EIS may also be used to inform decisions made by other federal agencies for additional regulatory, permitting, or funding processes required for the proposed Project and alternatives, to the extent practicable. This document analyzes both the direct impacts (those caused by implementing the proposed Project and occurring at the same time and place) and the indirect impacts (those caused by the proposed Project and occurring later in time or farther removed in distance but still reasonably foreseeable) of all alternatives carried forward for consideration, including the No Action Alternative. The potential for cumulative impacts (the impact on the environment that results from the incremental impact of the proposed Project when added to other past, present, and reasonably foreseeable future actions) is also addressed.

CEMVN and cooperating agencies identified relevant issues through public outreach during scoping and coordination with federal, state, and local agencies and Tribal Nations. Issues identified in scoping comments were used to inform the scope and development of the EIS. Table 1.6-1 below lists the primary topics that were identified in the public scoping comments and the chapter of the EIS that addresses each comment topic. Further details about scoping comments are provided in Chapter 7, Public Involvement, and in the scoping report (see Appendix B).

Table 1.6-1
Example Comment Topics Expressed in Public Scoping Comments and EIS Chapters that Address Them [a,b]

Comment Topic	PN	ALT	AE	EC	CLR	PUB
Alternatives analysis		X				
Public coordination						X
Project operations		X		X		
Timeframe/schedule	X				X	
Adaptive management and monitoring		X		X		
Land loss and sea-level rise	X	X	X	X		
Flooding and storms			X	X		
Geology and sediment transport			X	X		
Wetland impacts			X	X		
Water and sediment quality			X	X		
Protected species			X	X		
Marine mammals			X	X		
Commercial fishing			X	X		
Fish resources			X	X		
Socioeconomics and environmental justice			X	X		
Land-based transportation and public utilities		X	X	X		
Navigation			X	X		
Environmental impact analysis and modeling				X		
Cumulative impacts				X		
Other		X		X		

[a] Many comments provided input on multiple issues and therefore will be addressed in multiple chapters of the EIS.

[b] PN = Purpose and Need (Chap. 1), ALT = Alternatives (Chap. 2), AE = Affected Environment (Chap. 3), EC = Environmental Consequences (Chap. 4), CLR = Compliance with Other Environmental Laws and Regulations (Chap. 5); and PUB = Public Involvement (Chap. 7)

1.6.1 The OPA and DWH NRDA Decisions

On March 20, 2018, consistent with OPA and the PDARP/PEIS, the LA TIG published the Final Strategic Restoration Plan and Environmental Assessment #3: Restoration of Wetlands, Coastal, and Nearshore Habitats in the Barataria Basin, Louisiana (SRP/EA #3). In the SRP/EA #3, the LA TIG Trustees selected the proposed Project as part of a suite of restoration projects that constitutes the Trustees' preferred

alternative for restoring DWH oil spill injuries through restoration in the Barataria Basin. The Trustees further decided, in the SRP/EA #3, to move forward with further restoration planning to determine whether to fund construction of the proposed MBSD Project (the Louisiana TIG Phase II Restoration Plan #3.2: Mid-Barataria Sediment Diversion [LA TIG's Restoration Plan]). Thus, in addition to informing USACE's permit and permission decisions, this EIS will serve as the environmental review required by NEPA to inform the Trustees' OPA decision regarding funding the construction of the MBSD. CEMVN has coordinated and continues to coordinate with the LA TIG regarding its ongoing restoration planning for the Barataria Basin in an effort to ensure consistency between the EIS and the LA TIG's restoration planning efforts to the extent possible.

1.7 Public Involvement Summary

NEPA regulations require input from the public, stakeholders, and government agencies throughout the NEPA process. The following provides a brief summary of the public involvement activities completed throughout development of this EIS. Public involvement activities are further discussed in Chapter 7, Public Involvement and supporting documentation is provided in Appendix B.

- **October 4, 2013**: A Notice of Intent (NOI) to prepare an EIS for the proposed Project was published by CEMVN in the Federal Register on October 4, 2013 (78 Federal Register [FR] 61843) (see Appendix C);

- **March 17, 2017**: The CPP was made available on the FAST-41 and USACE websites;

- **April 27, 2017**: Following receipt of a modified DA permit application from CPRA (see Appendix A), an updated NOI was published by CEMVN in the Federal Register to supplement the original NOI (82 FR 19361) (see Appendix C);

- **July 5, 2017**: CEMVN provided official Public Notice of upcoming scoping meetings and announced the 60-day formal NEPA scoping comment period of July 6, 2017 through September 5, 2017 (see Appendix B);

- **July 4, 5, 11, 14, and 17, 2017**: Scoping meeting dates and locations were published in local newspapers (Plaquemines Gazette, The Times Picayune, and The Advocate) and press releases were issued;

- **July 20, 25, and 27, 2017**: Three public scoping meetings were held in the vicinity of the proposed Project; and

- **March 5, 2021**: A Notice of Availability (NOA) for the MBSD Draft EIS was published in the *Federal Register.* The formal Draft EIS comment period along with public meeting dates were announced through a Public Notice that was published to the CEMVN's MBSD Project website, mailed or emailed to

interested parties, and advertised in local media. The 60-day public review and comment period established by the NOA for the Draft EIS began on March 5, 2021 and originally was to end on May 4, 2021. Based on requests by the public during the comment period, the 60-day public comment period was extended by an additional 30 days (for a total of 90 days) to June 3, 2021.

Following publication of the Draft EIS, three public meetings were held virtually using an internet/web-based conferencing application and/or telephone since there were COVID restrictions on in-person gatherings. The meetings were held to inform the public about the Project and to obtain and record public comments. The public meetings were held on April 6, 7, and 8, 2021. A Public Notice to announce the public meetings and the Draft EIS comment period was provided by USACE. Comments received during these meetings and during the formal Draft EIS comment period are addressed in this Final EIS as required by relevant regulations. Changes made to the EIS between the Draft and Final EIS are identified through markings along the margins on the applicable pages. Additionally, Table 1.7-1 lists the section numbers where substantial changes to the EIS were made. All public comments are being considered as appropriate under relevant regulations by CEMVN and LA TIG in their respective decision-making processes on the proposed MBSD Project. The Final EIS will be made available for public review for 30 days. After public review, USACE and any other agency relying on the Final EIS to support its decision will issue their respective RODs. Any public comments received during the Final EIS review period will be provided to the decision maker for consideration. Information regarding the proposed Project, the permitting process, and development of the EIS can be found at the USACE Project website at: https://www.mvn.usace.army.mil/ Missions/Regulatory/Permits/Mid-Barataria-Sediment-Diversion-EIS/.

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
EIS-wide, as applicable	
Updates to construction footprint acreages to reflect the current diversion footprint, pursuant to additional engineering and design	NA
Updates to figures to reflect the current diversion footprint, pursuant to additional engineering and design	NA
Chapter 1: Introduction and Purpose and Need	
Additional information about federal waterways (Bayou Segnette and Empire to the Gulf Waterways)	1.5.1.4 and 1.5.1.5
Clarification on diversion flow rates	1.3
Updates to NOV-NF-W-05a.1 levee contract/construction timing	1.5.4
Updates to the public involvement process since the release of the Draft EIS	1.7
Inclusion of new Table 1.7-1 to identify the section numbers of substantial changes made between the Draft and Final EIS	1.7
Inclusion of new Table 1.8-3 to detail FAST-41 agency roles	1.8

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
Chapter 2: Alternatives	
Updated text regarding how public and agency comments on the Draft EIS regarding suggested new alternatives were considered and/or evaluated for the Final EIS	2.2
Revised the Large-Scale Marsh Creation Alternative discussion to further clarify the reasons for elimination	2.3.5
Updated Project design features based on 60 percent designs including footprint acreages, beneficial use areas, disposal sites, and the temporary cofferdam, along with associated figures and renderings	2.8.1
Updated Table 2.9-1 (Comparative Summary of Impacts under Each Alternative) to match updates in Chapter 4	2.9
Chapters 3 and 4: Affected Environment and Environmental Consequences	
Introduction (Chapter 3 only)	
Additional information on Hurricane Ida impacts in the Project area	3.1.3
Additional detail on the historic characteristics and delta cycle of the Barataria Basin	3.1.4
Approach to Evaluation of Environmental Consequences (Chapter 4 only)	
Additional detail on Delft3D modeling calculations	4.1.3.3
Geology and Soils	
Additional detail on the delta cycle of the Barataria Basin	3.2.1
Further explanation about the potential for slip events along the Ironton fault during operations	4.1.3.2
Surface Water and Coastal Processes	
Updates to stormwater management and drainage per 60 percent design updates	4.4.5.2
Surface Water and Sediment Quality	
Additional section about Project operational protocol in the event that hazardous spills in the Mississippi River occur during Project operations	4.5.5.11
Water quality standards and designated uses updated per LDEQ's 2020 Louisiana Water Quality Inventory: Integrated Report (LDEQ 2020)	3.5.1, 4.5.5
Wetland Resources and Waters of the U.S	
Additional analysis of historic wetland losses/gains in the Project area, along with climate impacts and the influence of salt as a stressor to vegetation	3.6.2
Additional analysis of the influence of canals and spoil banks on the Project area	3.6.2.2.4
Additional detail on beneficial use areas and maintenance dredging	4.6.4
Additional detail regarding hurricane impacts and marsh resiliency	4.6.5.1.2
Additional detail regarding the impact of nutrients transported by the proposed Project	4.6.5.1.2.2
Additional analysis of soil shear strength impacts	4.6.5.1.2.3
Added discussion of land loss and offsets associated with fine/coarse sediments	4.6.5.1.2.4
Revision to the WVA analysis to account for 60 percent design and associated text regarding compensatory mitigation	4.6.5.3
Air Quality	
Consideration of air quality impacts from tree clearing and existing air pollution sources near the diversion structure	3.7.2; 4.7.3.2
Noise	
N/A (other than figure updates for design changes)	N/A

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
Terrestrial Wildlife and Vegetation	
Additional detail on the historic characteristics and delta cycle of the Barataria Basin	3.9.1
Additional detail on beneficial use areas and maintenance dredging	4.9.3
Consideration of adverse/beneficial impacts from other diversions or diversion-like structures	4.9.4.2, Appendix U
Impacts on levees from feral hogs	4.9.4
Aquatic Resources	
Additional detail on the historic characteristics and delta cycle of the Barataria Basin	3.10.1
Additional consideration of hypoxia and nutrient loading	3.10.5
Consideration of adverse/beneficial impacts from other diversions or diversion-like structures	4.10.4.1, Appendix U
Impacts on SAV from temperature decreases	4.10.4.1
Modified water filtration capacity in the basin (through changes in benthic species)	3.10.5.2, 4.10.4.2
Additional analysis of fouling of oyster reefs from increased nutrients	4.10.4.4, 4.10.4.5
Added analysis of bioaccumulation of contaminants through the food web	4.10.4.4
Added analysis of fecal coliform impacts on oysters and habitat	4.10.4.4
Added analysis of salinity impacts on the growth rate and survival of brown shrimp	4.10.4.5
Added analysis of predator avoidance of brown and white shrimp through burrowing	4.10.4.5
Added discussion of potential for increased aquatic invasive plants to cause habitat impacts and navigation challenges	4.10.4.6
Marine Mammals	
Discussion of the MMPA waiver	3.11.1
Incorporation of recent literature pertinent to the assessment of BBES dolphins, including additional analyses of population declines (for example, Thomas et al. 2021)	4.11
Verification and/or update of data in the Draft EIS to account for recently published papers that were available to NMFS as “pre-published” data at the time of writing the Draft EIS	3.11, 4.11
Threatened and Endangered Species	
Added discussion of results of Section 7 Consultation under the ESA	4.12.2
Added description and assessment of the giant manta ray	3.12 and 4.12
Added description and assessment of proposed critical habitat for the red knot	3.12 and 4.12
Additional consideration of acute salinity changes	4.12
Socioeconomics	
Added section to describe the National Flood Insurance Program including Risk Rating 2.0 and potential impacts on availability and costs of flood insurance	3.13.3 and 4.13.5.3
Added storm hazard impacts on Ironton due to negligible to minor risk of levee overtopping gulfward of the immediate outfall area during certain 1 percent storms	4.13.5.3
Clarified assessed value and property value estimates	4.13.5.3
Commercial Fisheries	
Updated section using newly released NMFS data to include an economic summary of the Louisiana seafood industry	3.14.7

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
Added impacts on restaurants due to impacts on the shrimp fishery	4.14.4.1 and 4.14.4.2
Added impacts on commercial fisherman, particularly for shrimp and oysters, that travel to Barataria Basin	4.14.4.2
Added details on fecal coliform levels and oyster harvests	4.14.4.2
Clarified that the only significant off-bottom oyster fisheries in the Barataria Basin occur in the lower basin	4.14.4.2
Environmental Justice	
Added details on Executive Order 14008 (2021)	3.15
Updated Appendix H Socioeconomics Technical Report to replace the data used for Commercial Social Vulnerability Indices from older OXFAM data to NOAA data	Appendix H1 (Section 2.2)
Updated Tables 3.15-6 and 4.15-1 to reflect 2020 (rather than 2010) U.S. Census data	3.15, 4.15.4.2
Added new figure (3.15-1) to show selected communities, their populations, and major levee systems	3.15 and Ex. Summary
Added section to describe the National Flood Insurance Program including Risk Rating 2.0 and potential impacts on the cost of flood insurance	4.15.4
Added storm hazard impacts on Ironton due to negligible to minor risk of levee overtopping gulfward of the immediate outfall area during certain 1 percent storms	4.15.4.2
Added section to summarize construction and operational impacts on the community of Ironton under the Applicant's Preferred Alternative to provide a cohesive summary on that community	4.15.5.1
Recreation and Tourism	
Added tourism impacts on consumers and restaurants due to impacts on the shrimp and oyster fisheries	4.16.5
Public Lands	
Information added about CPRA or LA TIG funding for wetland preservation and restoration work in the Delta NWR and Pass A Loutre WMA to offset Project impacts on wetlands	4.17.4.2, 4.25.17.4, 4.27.1
Public Health and Safety, Including Flood and Storm Hazard and Risk Reduction	
Updated Figure 4.10-1 and associated acreages to reflect newest effective FIRMS	4.20.4.1
Added simplified illustrations (Figures 4.20-14 and 4.20-15) of the impact of land building on storm surge elevation and wave heights within the Project area	4.20.4.2
Added discussion regarding the potential contribution of accelerated loss of wetlands in the birdfoot delta on storm hazard vulnerability south of the delta formation area	4.20.4.2
Navigation	
Downgraded impacts on navigation safety and efficiency during Project construction from moderate, temporary, adverse to minor, temporary, adverse	4.21.4.1
Hazardous, Toxic, and Radioactive Waste Assessment	
Described the potential impacts of a hazardous material spill upriver of the diversion structure	4.23.4.2
Cultural Resources	
Described the results of Phase II cultural resource investigations	3.24.3. 4.24, App. K
Assessed Project impacts on cemeteries	4.24.2.2, 4.24.3.2
Cumulative Impacts (Chapter 4 only)	
2022 cumulative impacts addendum	4.25.25

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
Mitigation Summary (Chapter 4 only)	
Modifications to reflect CPRA's updates to its Mitigation and Stewardship Plan and MAM Plan	4.27
Modifications to Tables 4.21-1 and 4.21-2 to reflect CPRA's updated mitigation and stewardship measures	4.27.1
Modifications to refer to the Final Mitigation and Stewardship Plan (Appendix R1) to describe mitigation for environmental justice communities	4.21.1
Updated the estimates of impacts on wetlands and waters of the U.S. for compensatory mitigation considerations	4.27.2.1
Updated the list of proffered permit special conditions	4.27.3
Chapter 5: Consultation and Coordination	
Updated Table 5.1-1 to reflect status of compliance with environmental laws, regulations, and executive orders at the time of the Final EIS	5.1
Updated list of FWCAR recommendations and CPRA responses to reflect changes between the draft and final CAR	5.3
Chapter 7: Public Involvement	
Updated Public Involvement process since the release of the Draft EIS including Opportunity for Public Comment, Distribution of Documents for Public Review, and Summary of Public Meetings	7.3
Updated Other Public Outreach and Engagement Efforts including the Applicant's and the LA TIG for NRDA Restoration Planning	7.6
Appendices	
Appendix A: Permit Application (Section 10/404) and Permissions Request (Section 408)	
Included an updated Joint Permit Application for work within the Louisiana Coastal Zone	App A1
Included agency (cooperating/participating/commenting) invitation and response letters	App A3
Appendix B: Public Involvement	
Included a Public Meeting Record to describe Draft EIS public meetings	App B2
Included a Public Meeting Report including Public Comments and Responses	App B2
Included the NOA for the Draft EIS, as well as the notification for extension of the comment period	App B3
Included records of coordination with the U.S. Department of the Interior, the USEPA, USCG, and various navigation stakeholders	App B3
Appendix D: Alternatives Information	
Updated the Eliminated Alternatives Matrix	App D2
Appendix E: Delft3D Basinwide Modeling	
Additional detail on Delft3D modeling inputs	3.2.2
Included additional detail on water velocity upstream and downstream of the diversion structure	7.2
Appendix F: MBSD Design and Operations Information	
Included CPRA's 60 percent design report	App F1
Appendix G: Wetlands/Waters of the U.S.	
Included the methodology and assumptions for the WVA	App G2
Appendix H: Socioeconomics Technical Information	
Updated applicable data to reflect 2020 U.S. Census data	App H2
Included information on NMFS' Community Social Vulnerability Indicators	App H1 Section 2.2

Table 1.7-1.
Summary of Substantial Changes to the Final EIS as a Result of Comments on the Draft EIS, Updated Project Designs, and Continued Project Coordination

Topics By Section[a]	Section Number
Appendix N: Aquatic Resources including Essential Fish Habitat	
NMFS response letter to USACE's request to initiate Essential Fish Habitat consultation	App N3
Appendix O: Biological Assessment & Biological Opinion	
Included the USACE request letters for formal consultation under the ESA	App O2
Included the Biological Opinions from USFWS	App O3
Included the Biological Opinions from NMFS	App O4
Appendix R: Mitigation & Monitoring and Adaptive Management Plans	
Included CPRA's updated Mitigation and Stewardship Plan	App R1
Included CPRA's updated Monitoring and Adaptive Management (MAM) Plan	App R2
Included CPRA's updated Summary Table NEPA Analysis for Mitigation and Stewardship Measures, and FWCAR and ESA Measures	App R3
Included CPRA's updated Mitigation and Stewardship Measures Environmental Analysis	App R4
Included Marine Mammal Intervention Plan	App R5
Appendix S: Compliance Documentation	
Included LDEQ's Water Quality Certification letter to CPRA	App S
Included USDA-NRCS Farmland Conversion Impact Rating and Classification Map	App S
Appendix T: USFWS Coordination Act Report (CAR)	
Included the Final FWCAR	App T
Appendix U: Summary of Select Natural and Man-made Diversions in Southeastern Louisiana	
Included a report summarizing selected natural and man-made diversions in Southeastern Louisiana	App U

[a] Sections or appendices that are not listed did not require substantial edits between issuance of the Draft EIS and Final EIS, although minor or EIS-wide edits may have been made and can be identified through markings along the margins on the applicable pages.

In addition to the USACE NEPA process for public involvement, as part of the public review process for the DWH NRDA restoration planning process, an NOA for the draft SRP/EA #3 was published in the Federal Register by the LA TIG on December 8, 2017. A 45-day comment period was held from December 20, 2017 through February 8, 2018, and a public meeting was held in New Orleans on January 24, 2018. The Final SRP/EA #3 was published in the Louisiana Register on March 20, 2018 and the Federal Register on March 21, 2018.

Concurrent with the CEMVN's NOI for the EIS, the LA TIG issued an NOI regarding the LA TIG's Restoration Plan on April 28, 2017 (82 FR 19659). Thereafter, concurrent with the CEMVN's NOA for the Draft EIS, the LA TIG published a separate NOA for the LA TIG's Restoration Plan on March 5, 2021. The LA TIG held a 60-day public comment period for the LA TIG's Restoration Plan (concurrent with the comment period on the MBSD Draft EIS). The comment period was also extended by an additional 30 days (for a total of 90 days) to June 3, 2021 (86 FR 12915). The LA TIG held public meetings on the Restoration Plan in conjunction with the MBSD Draft EIS public review period and public meetings, since the LA TIG intends to use this EIS to

satisfy its obligations for NEPA review of its proposed action in the LA TIG's Restoration Plan. Thereafter, concurrent with the CEMVN's issuance of the Final EIS, LA TIG will issue the LA TIG's Final Restoration Plan in September 2022. Additional details regarding the LA TIG's additional outreach efforts for their Restoration Plan are explained in Section 1.8 of the LA TIG's Final Restoration Plan. Refer to Chapter 7 Public Involvement and Appendix B Public Involvement of this Final EIS for further details regarding the public involvement process.

1.8 Agency Roles and Responsibilities

Pursuant to 40 CFR 1501.5 and 1508.16, the USACE as the lead agency is ultimately responsible for implementing the NEPA process in the preparation of the Draft EIS and the Final EIS to support the USACE decision making on the DA Section 10/404 permit and Section 408 permission relative to the proposed Project. Per NEPA regulations (40 CFR 1508), the lead agency is "…the agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement." The USACE is coordinating with multiple cooperating agencies, including the federal agencies that are members of the LA TIG (see Table 1.8-1 for a complete list of cooperating agencies). NEPA (40 CFR 1508) defines cooperating agencies as "…any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action…" For the purposes of describing the role of other agencies and Tribal Nations that are participating in the NEPA process for the proposed Project, a "commenting agency" is defined as a federal, state, or local agency or Tribal Nation that is likely to provide substantive comments during the NEPA process related to a regulatory authority, law, policy, or executive order that is applicable to the proposed Project. The cooperating and commenting agencies pursuant to NEPA and Section 106 for this EIS and the related federal and state laws, regulations, executive orders, and policies applicable to the proposed Project are shown in Tables 1.8-1 and 1.8-2. Appendix A3 Agency Letters includes the relevant agency invitation and response letters.

Table 1.8-1
Proposed MBSD Project NEPA Contributing Agencies and Relevant Authorities

Agency	NEPA Role	Responsibility
Federal Agencies		
CEMVN	Lead federal agency	• CWA (Section 404) (33 USC 1344); • RHA of 1899 (Section 10) (33 USC 403); and Section 14 (Section 408) (33 USC 408)
U.S. Environmental Protection Agency (USEPA)	Cooperating agency	• CWA (33 USC 1344); • Clean Air Act (42 USC 7401, et seq.); • OPA (33 USC 2701, et seq.)
National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS)	Cooperating agency	• Endangered Species Act (ESA) (16 USC 1531 et seq.); • Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) (16 USC 1801 et seq.); • Marine Mammal Protection Act (MMPA) (16 USC 1361 et seq.); • OPA (33 USC 2701, et seq.)
USFWS	Cooperating agency	• ESA (16 USC 1531 et seq.); • Fish and Wildlife Coordination Act (16 USC 661-666c); • Migratory Bird Treaty Act (40 Stat. 755, as amended 16 USC 703-712); • Bald and Golden Eagle Protection Act (54 Stat.250, as amended, 16 USC 668-668d); • Coastal Barrier Resources Act (16 USC 3501-351092017)
U.S. Department of the Interior (USDOI)	Cooperating agency	• OPA (33 USC 2701 et seq.)
U.S. Department of Agriculture (USDA)	Cooperating agency	• Farmland Protection Policy Act (7 USC 73); • OPA (33 USC 2701 et seq.)
U.S. Coast Guard (USCG)	Commenting agency	• RHA (Sections 9, 10, and 14) (33 USC 401) – Navigation Interests and Safety
Federal Railroad Administration (FRA)	Commenting agency	• Potential relocation of an existing railroad (64 FR 28545)
Advisory Council on Historic Preservation (ACHP)	Commenting agency	• National Historic Preservation Act (54 USC 300101 et seq.)
USGS	Commenting agency	• Research, modeling, mapping, and project relevant data
Federal Highway Administration (FHWA)	Commenting agency	• Not applicable
State Agencies		
Louisiana State Historic Preservation Office (SHPO)	Cooperating agency	• National Historic Preservation Act (54 USC 300101 et seq.)
Louisiana Department of Transportation and Development (DOTD)	Cooperating agency	• Project Permit for relocation of Louisiana Highway 23 (application processed through DOTD District and Headquarter offices); • Temporary Access Connection (application processed through DOTD District office)

Table 1.8-1
Proposed MBSD Project NEPA Contributing Agencies and Relevant Authorities

Agency	NEPA Role	Responsibility
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)	Commenting agency	• Potential impacts, closures, and modifications to Louisiana Highway 23
Louisiana Department of Wildlife and Fisheries (LDWF)	Commenting agency	• Louisiana fish and wildlife resources and supporting habitats
Louisiana Department of Natural Resources (LDNR)	Commenting agency	• Louisiana State and Local Coastal Resources Management Act; • Louisiana Coastal Resources Program requirements, Coastal Use Permit (CUP)
CPRA	Commenting agency	• Applicant (10/404 permit and 408 permission); • Coastal Master Plan; • OPA (33 USC 2701 et seq.)
Louisiana Office of State Lands	Commenting agency	• Waterbottom Permit (L.R.S. 41:1701-1714)
Louisiana Department of Environmental Quality (LDEQ) Louisiana Department of Environmental Quality (LDEQ)	Commenting agency	• CWA (33 USC 1341); • Water Quality Certification (WQC) procedures (Title 33, Part IX, Subpart 1, Chapter 15)
Local Government		
Plaquemines Parish Government (PPG)	Commenting agency	• Potential economic and social impacts; • Local issues
Jefferson Parish Government	Commenting agency	• Potential economic and social impacts; • Local issues

Table 1.8-2
National Historic Preservation Act, Section 106 Consultation

Agency	Role	Responsibility
Federal Agencies		
Advisory Council on Historic Preservation (ACHP)	Commenting agency	• National Historic Preservation Act (Section 106)
State Agencies		
Louisiana State Historic Preservation Office (SHPO)	Commenting agency	• Section 106
Tribal Nations		
Alabama Coushatta	Consulting party	• Section 106
Caddo Nation of Oklahoma	Consulting party	• Section 106
Chitimacha	Consulting party	• Section 106
Choctaw Nation of Oklahoma	Consulting party	• Section 106
Coushatta Tribe of Louisiana	Consulting party	• Section 106
Jena Band of Choctaw	Consulting party	• Section 106
Mississippi Band of Choctaw	Consulting party	• Section 106
Muscogee Nation	Consulting party	• Section 106
Seminole Nation of Oklahoma	Consulting party	• Section 106
Seminole Tribe of Florida	Consulting party	• Section 106
Tunica-Biloxi Tribe of Louisiana	Consulting party	• Section 106

As described in Section 1.1 Project Introduction and Overview, the MBSD Project has been added to the inventory of "covered projects" that are pending environmental review or authorization by the head of a federal agency pursuant to the requirements set forth in FAST-41 (42 USC 4370m-l(c)(1)(A)(i)). Table 1.8-3 describes the federal, state, and local agencies, and Tribal Nations and their corresponding roles associated with the Project's FAST-41 processes. Additional information regarding the roles and responsibilities of these entities as part of the FAST-41 process can be found in the USACE CPP on the permitting dashboard (Permitting Dashboard 2017) which was prepared for FAST-41.

Table 1.8-3
FAST-41 Agency Roles

Agency	FAST-41 Role
Federal Agencies	
CEMVN	Lead federal agency
U.S. Environmental Protection Agency (USEPA)	Cooperating agency
National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS)	Cooperating agency
NOAA Damage Assessment, Remediation, and Restoration Program	Not applicable[a]
USFWS	Cooperating agency
U.S. Department of the Interior (USDOI)	Not applicable[a]
U.S. Department of Agriculture (USDA)/Natural Resources Conservation Service (NRCS)	Cooperating agency
U.S. Coast Guard (USCG)	Cooperating agency
Federal Railroad Administration (FRA)	Participating agency
Advisory Council on Historic Preservation (ACHP)	Participating agency
USGS	Participating agency request declined
Federal Highway Administration (FHWA)	Cooperating agency request declined
State Agencies	
Louisiana State Historic Preservation Office (SHPO)	Cooperating agency
Louisiana Department of Transportation and Development (DOTD)	Cooperating agency
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)	Cooperating agency
Louisiana Department of Wildlife and Fisheries (LDWF)	Participating agency
Louisiana Department of Natural Resources (LDNR)	Cooperating agency
CPRA	Project Sponsor
Louisiana Office of State Lands	Cooperating agency
Louisiana Department of Environmental Quality (LDEQ)	Cooperating agency
Local Government	
Plaquemines Parish Government (PPG)	Participating
Jefferson Parish Government	Participating
Tribal Government	
Alabama Coushatta	Participating
Caddo Nation of Oklahoma	Participating
Chitimacha	Participating
Choctaw Nation of Oklahoma	Participating
Coushatta Tribe of Louisiana	Participating
Jena Band of Choctaw	Participating
Mississippi Band of Choctaw	Participating
Muscogee Nation	Declined invitation
Seminole Nation of Oklahoma	Declined invitation
Seminole Tribe of Florida	Participating
Tunica-Biloxi Tribe of Louisiana	Participating

[a] No environmental reviews associated with FAST-41

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