



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
MISSISSIPPI VALLEY DIVISION  
1400 WALNUT STREET  
VICKSBURG MS 39180-3262

CEMVD-PDM

MEMORANDUM FOR Commander, New Orleans District

SUBJECT: Approval of the Amite River and Tributaries—Comprehensive Study East of the Mississippi River, LA Flood Risk Management Feasibility Study Updated Review Plan

1. References:

a. USACE, CEMVN-PDF memorandum (Request for Approval of the Updated Review Plan for the Amite River and Tributaries Comprehensive Study East of the Mississippi River, Louisiana), 7 August 2023 (Encl 1)

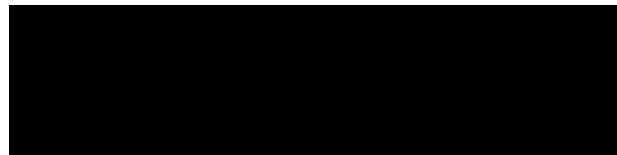
b. USACE, CESPDP-PDP (FRM-PCX) memorandum (Updated Review Plan for Amite River and Tributaries—Comprehensive Study East of the Mississippi River, LA Flood Risk Management Feasibility Study), 11 May 2023 (Encl 2)

c. ER 1165-2-217 (Water Resource Policies and Authorities CIVIL WORKS REVIEW POLICY)

2. The enclosed updated decision document Review Plan (RP) for the Amite River and Tributaries Comprehensive Study East of the Mississippi River, LA Flood Risk Management Feasibility Study has been prepared in accordance with ER 1165-2-217 and has been coordinated with the FRM-PCX, who endorsed this RP, and our staff who concurred with the RP.

3. We hereby approve this RP, which is subject to change as circumstances require, consistent with project development under the Project Delivery Business Process. Non-substantive changes to this RP do not require further approval. Substantive revisions to this RP or its execution will require new written approval from my office.

4. My point of contact for this action is Ms. Nicole Harris, (601) 634-5829 or [nicole.m.harris@usace.army.mil](mailto:nicole.m.harris@usace.army.mil).



Encls

JAMES A. BODRON, P.E., SES  
Director of Programs



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT  
7400 LEAKE AVENUE  
NEW ORLEANS LA 70118-3651

- 7 JUL 2023

CEMVN-PDF

MEMORANDUM FOR Commander, Mississippi Valley Division (MVN-DST/ Mr. Brian Chewning) 1400 Walnut Street Vicksburg, MS 39180

SUBJECT: Request for Approval of the Updated Review Plan for the Amite River and Tributaries Comprehensive Study East of the Mississippi River, Louisiana

1. References:

- a. Review Plan (RP) Template dated 25 January 2023.
- b. ER 1165-2-217, Review Policy for Civil Works, dated 1 May 2021.
- c. Civil Works Director's Policy Memorandum, CW 2019-01, Subject: Policy and Legal Compliance Review, dated 9 January 2019.
- d. Memorandum CESPDPDP (FRM-PCX), 5 May 2023, Review Plan for Amite River and Tributaries Comprehensive Study East of the Mississippi River, Louisiana endorsement memo (Enclosure 1).

2. This memo transmits the Review Plan (RP) (Enclosure 2), for the Amite River and Tributaries Comprehensive Study East of the Mississippi River, Louisiana, for your review and approval. The subject RP and RP Checklist (Enclosure 3) are based on the Review Plan Template Package Memorandum and EC 1165-2-217 referenced above.

3. If you have any questions regarding this transmittal package, please contact Ms. Lesley Prochaska, Plan Formulator, at (504) 862-1454 (Lesley.C.Prochaska@usace.army.mil).

3 Encls

[REDACTED]  
CULLEN A. JONES, P.E., PMP  
COL, EN  
Commanding

**Amite River and Tributaries - East of the Mississippi River, LA**  
**Review Plan**  
October 5, 2023

**1. Project Summary**

**Project Name:** Amite River and Tributaries - East of the Mississippi River, LA

**Location:** Amite, Lincoln, Franklin, and Wilkinson Counties in Mississippi as well as East Feliciana, St Helena, East Baton Rouge, Livingston, Ascension, and Iberville Parishes. Additionally, the study area includes St. James and St. John the Baptist Parishes.

**P2 Number:** 464542

**Decision Document Type:** Feasibility Report

**Congressional Authorization Required:** YES

**Project Purpose(s):** Flood Risk Management

**Non-Federal Sponsor:** Louisiana Department of Transportation and Development (LDOTD)

**Points of Contact for Questions/Comments on Review Plan:**

**District:** Corps of Engineers New Orleans District (CEMVN)

**District Contact:** Senior Project Manager 504-862-1798; Lead Plan Formulator 504-862-1454

**Major Subordinate Command (MSC):** Mississippi Valley Division

**MSC Contact:** Planning Specialist: 601-634-5869

**Review Management Organization (RMO):** Flood Risk Management Planning Center of Expertise

**RMO Contact:** Deputy Director 415-503-6852; PCX Regional Manager for MVD 314-331-8404

**Key Review Plan Dates**

Date of RMO Endorsement of Review Plan	11 May 2023
Date of MSC Approval of Review Plan	Pending
Date of IEPR Exclusion Approval	NA
Has the Review Plan changed since RMO Endorsement?	No
Date of Last Review Plan Revision	NA
Date of Review Plan Web Posting	16 Nov 2023
Date of Congressional Notifications	TBD

**Milestone Schedule and Other Dates**

	Scheduled	Actual	Complete
<b>FCSA Execution</b>	3-Oct-18 (A)	3-Oct-18 (A)	Yes
<b>Alternatives Milestone</b>	7-Feb-19 (A)	7-Feb-19 (A)	Yes
<b>Tentatively Selected Plan</b>	18-Oct-23	TBD	No
<b>Release Draft Report to Public</b>	15-Dec-23	TBD	No
<b>Agency Decision Milestone</b>	28-Feb-24	TBD	No
<b>Final Report Transmittal from District</b>	23-Apr-24	TBD	No
<b>Senior Leaders Briefing</b>	TBD	TBD	No
<b>Chief's Report</b>	3-Jul-24	TBD	No

## 2. References

Engineer Regulation 1165-2-217 – Water Resources Policies and Authorities – Civil Works Review Policy, 1 May 2021.

Engineer Circular 1105-2-412 – Planning – Assuring Quality of Planning Models, 31 March 2011.

Office of Management and Budget, Final Information Quality Bulletin for Peer Review, Federal Register Vol. 70, No. 10, January 14, 2005, pp 2664-267

The online USACE Planning Community Toolbox provides more review reference information at: <https://planning.erdc.dren.mil/toolbox/current.cfm?Title=Peer%20Review&ThisPage=Peer&Side=No>.

## 3. Review Execution Plan

The general plan for executing all required independent reviews is outlined in the following two tables.

Table 1 lists each study product to be reviewed. The table provides the schedules and costs for the anticipated reviews. Teams also determine whether a site visit will be needed to support each review. The decisions about site visits are documented in the table. As the review plan is updated the team will note each review that has been completed.

**Table 1: Schedule and Costs of Reviews**

Product(s) to undergo Review	Review Level	Start Date	End Date	Cost	Complete
Draft Feasibility Report and EIS	District Quality Control <sup>1</sup>	11/02/2023	11/16/2023	\$33,000	No
Draft Feasibility Report and EIS	Legal Sufficiency Review (MVN) <sup>1</sup>	11/17/2023	12/08/2023	n/a	No
Draft Feasibility Report and EIS	Policy and Legal Review (One Policy Review Team) <sup>1</sup>	12/15/2023	01/30/2024	n/a	No
Draft Feasibility Report and EIS	Agency Technical Review <sup>1</sup>	12/15/2023	01/30/2024	\$60,000	No
Draft Feasibility Report and EIS	IEPR <sup>2</sup>	11/28/2019	3/28/2020	\$86,051	Yes
Final Feasibility Report and EIS	District Quality Control	02/28/2024	03/12/2024	\$36,000	No
Final Feasibility Report and EIS	Agency Technical Review	03/13/2024	04/09/2024	\$28,000	No
Final Feasibility Report and EIS	Legal Sufficiency Review (MVN)	03/13/2024	04/16/2024	n/a	No
Final Feasibility Report and EIS	Policy and Legal Review (MSC)	04/23/2024	05/20/2024	n/a	No

### Notes

1: The Draft Feasibility Report and EIS concurrent reviews were originally completed for the November 2019 report but will be conducted again for the revised decision document that is covered

by this Review Plan. The revised report will not include any new alternatives other than optimizations of the originally evaluated nonstructural plan.

2: Independent External Peer Review (IEPR) has already been performed and is not required to be recompleted for the revised decision document.

Table 2 identifies the specific expertise and role required for the members of each review team. The table identifies the technical disciplines and expertise required for members of review teams. In most cases the team members will be senior professionals in their respective fields. In general, the technical disciplines identified for a DQC team will be needed for an Agency Technical Review (ATR) team. Each ATR team member will be certified to conduct ATR by their respective community of practice. The table is set up in a manner to concisely identify common types of expertise that may be applicable to one or more of the types of reviews needed for a study.

**Table 2: Review Teams - Disciplines and Expertise**

<b>Discipline / Role</b>	<b>Expertise</b>	<b>DQC</b>	<b>ATR</b>
DQC Team Lead	Professional with extensive experience preparing Civil Works decision documents and leading DQC. The lead may serve as a DQC reviewer for a specific discipline (such as planning, economics, environmental resources, etc.).	Yes	No
Economics	The Economics reviewer(s) should have a background in developing economic simulation models and analysis for large, and complex regional investigations. Should have extensive experience in analyzing flood risk management projects, to include nonstructural alternatives, in accordance with ER 1105-2-100, the Planning Guidance Notebook. Experience with non-structural analysis preferred. Experience with HEC-FDA and HEC-FIA and is preferred.	Yes	Yes
Plan Formulation	Skilled water resources planner knowledgeable in complex planning investigations and the application of SMART principle to problem solving.	Yes	Yes
Environmental Resources	Experience with environmental evaluation and compliance requirements under ER 200-2-2, national environmental laws and statutes, applicable Executive Orders, and other federal planning requirements for Civil Works projects.	Yes	Yes
Cultural Resources	Experience with cultural resource survey methodology, area of potential effects, Section 106 of the National Historic Preservation Act, and state and federal laws/executive orders pertaining to American Indian Tribes.	Yes	Yes
Hydrology, Hydraulic, and Coastal Engineering	Engineer with experience applying hydrologic principles and technical tools to project planning, design, construction and operation.	Yes	Yes
General Engineering	Civil Engineer with experience in flood risk management and coastal risk management features including nonstructural.	Yes	Yes
Cost Engineering	Experience using cost estimation software; working knowledge of water resource project construction; capable of making professional determinations using experience.	Yes	Yes
Real Estate	Experience developing Real Estate Plans under Chap. 12, ER 405-1-12, and experience in real estate fee/easement acquisition and residential/business relocations for Federal and/or Federally-Assisted Programs for implementation of Civil Works projects.	Yes	Yes
Climate Preparedness and Resilience	A member of the Climate Preparedness and Resiliency Community of Practice knowledgeable of inland and coastal hydrology climate change assessment policy and practice.	Yes	Yes
ATR Team Lead	Professional with extensive experience preparing Civil Works decision documents and conducting ATR. The lead should have the skills to manage a virtual team through an ATR. The lead may serve as a reviewer on the ATR team for a specific discipline (such as planning, economics, or environmental work).	No	Yes
Flood Risk Analysis	For decision documents involving hydrologic, hydraulic, and/or coastal related risk management measures, include on the ATR team an expert on multi-discipline flood risk analysis to ensure consistent and appropriate identification, analysis, and written communication of risk and uncertainty.	No	Yes



## 4. Documentation of Reviews

**Documentation of DQC.** Quality Control will be performed continuously. A specific certification of DQC completion will be prepared at the draft and final report stages. Documentation of DQC will follow the District Quality Manual and the MSC Quality Management Plan. DrChecks will be used for documentation of DQC comments. An example DQC Certification statement is provided in ER 1165-2-217, Appendix D. Documentation of completed DQC will be provided to the MSC, RMO and the ATR Team leader. The ATR team will examine DQC records and comment in the ATR report on the adequacy of the DQC effort.

**Documentation of ATR.** DrChecks will be used to document all ATR comments, responses, and resolutions. Comments should be limited to those needed to ensure product adequacy. All members of the ATR team will use the four-part comment structure (see ER 1165-2-217, Chapter 5). If a concern cannot be resolved by the ATR team and PDT, it will be elevated to the vertical team to resolve using the issue resolution process in ER 1165-2-217, chapter 5.9. Unresolved concerns will be closed in DrChecks by noting the concern has been elevated. The ATR Lead will prepare a Statement of Technical Review (see ER 1165-2-217, chapter 5.11 and Appendix D), for the draft and final reports, certifying that review issues have been resolved or elevated. ATR will be certified when all concerns are resolved or referred to the vertical team and the ATR documentation is complete.

**Documentation of IEPR.** The Outside Eligible Organization has submitted a final Review Report after the end of the 2019 draft report public comment period and it has been placed on the project website at: [Amite River and Tributaries - East of the Mississippi River, LA Feasibility Study. \(army.mil\)](https://www.army.mil/AmiteRiverandTributaries-EastoftheMississippiRiver/LAFeasibilityStudy). USACE response has also been posted on the project website.

**Documentation of Model Review.** Planning models require compliance with EC 1105-2-412. Models developed by the Corps of Engineers are certified and models developed by others are approved. Certifications or approvals may be specific to a single study, a regional application of for nationwide application. Completion of a model review is documented in a memorandum from the Director of a Planning Center of Expertise and should accompany reporting packages for study decisions.

**Documentation of Legal Reviews.** These will not be entered in Dr. Checks, per MVD-OC policy to ensure protection of attorney-client privilege.

**Documentation of Policy Reviews.** The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team.

## 5. Supporting Information

### Study or Project Background

#### Study Authority

This study effort is being investigated due to the Bipartisan Budget Act of 2018, H. R. 1892—13, Title IV, Corps of Engineers—Civil, Department of the Army, Investigations, where funds are being made available for the expenses related to the completion, or initiation and completion, of

flood and storm damage risk reduction, including shore protection, studies which are currently authorized or which are authorized after the date of enactment of this the act, to reduce risk from future floods and hurricanes. The funds are at full Federal expense and funds made available for high-priority studies of projects in states and insular areas with more than one flood related major disaster declared, pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.) in calendar years 2014, 2015, 2016, or 2017.

This study area is based on the August 2016 flood over southeast and southcentral Louisiana and is continuing investigation under the authorization provided by the Resolution of the Committee on Public Works of the United States Senate, adopted on April 14, 1967.

"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES

SENATE, That the Board of Engineers for Rivers and Harbors, created under Section 3 of the River and Harbor Act approved June 13, 1902, be, and is hereby requested to review the report of the chief of Engineers on Amite River and Tributaries, Louisiana, published as House Document Numbered 419, Eighty-fourth Congress. And other pertinent reports, with a view to determining whether the existing project should be modified in any way at this time with particular reference to additional improvements for flood control and related purposes on Amite River, Bayou Manchac, and Comite River and their tributaries."

The "existing project" was authorized in 1955 and construction was completed in 1964. Pursuant to the authorization, the non-Federal sponsors for that project are responsible for the operation and maintenance (O&M) of that project.

### **Study or Project Area**

The Amite River Basin (ARB), which begins in southwest Mississippi and flows southward, crossing the state line into southeastern Louisiana, encompasses 2,200 square miles (Figure 1). It includes portions of Amite, Lincoln, Franklin, and Wilkinson Counties in Mississippi, as well as East Feliciana, St. Helena, East Baton Rouge, Livingston, Iberville, St. James, St. John the Baptist, and Ascension Parishes in Louisiana.

### **Problem Statement**

The primary problem identified in the study area is the risk of flood damages from the Amite River and its tributaries to human life and flood damages of residential and nonresidential structures. Critical infrastructure throughout the region is also at risk of flood damages, including the I-10 and I-12 transportation corridors, government facilities, and schools. This critical infrastructure is expected to have increased risk of damaging rainfall events.



# Amite Study Overview Map

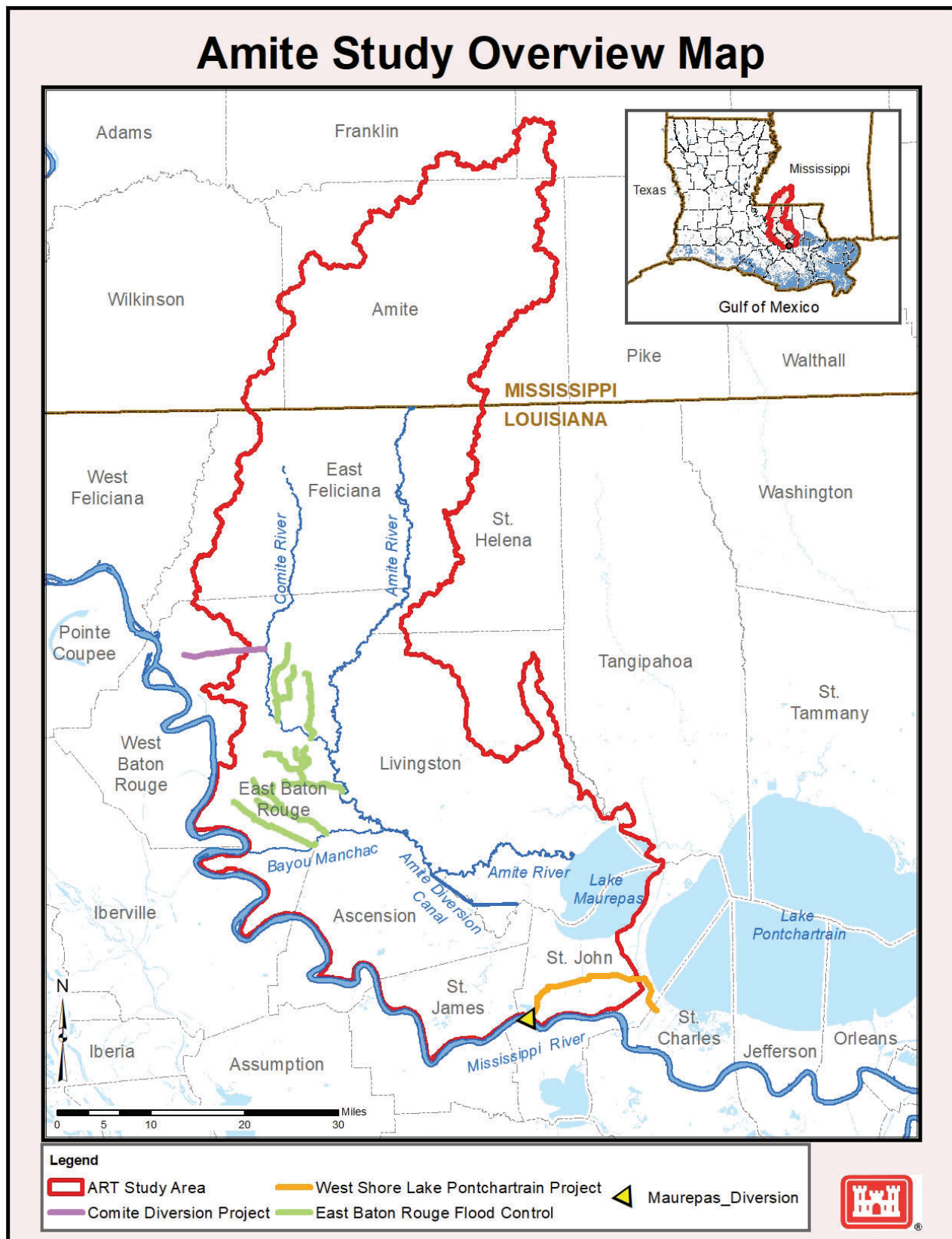


Figure 1 – Study Area Map

### **Goals and Objectives**

The primary goal of the study is to develop alternatives to reduce the severity of flood risk and damages and reduce risk to human life along the Amite River and its tributaries for residents, businesses, and critical infrastructure. The Federal objective of water and related land resources project planning is to contribute to National Economic Development (NED) consistent with protecting the Nation's environment, pursuant to national environmental statutes, applicable EOs, and other Federal planning requirements. Planning objectives represent desired positive changes to future conditions. All of the objectives focus on alternatives within the study area and within the 50-year period of analysis. These planning objectives are:

- Reduce risk to human life from flooding from rainfall events;
- Reduce flood damages in the Amite River Basin to residents, business, and infrastructure;
- Reduce interruption to the National Transportation Corridors (I-10 and I-12);
- Reduce risks to critical infrastructure (e.g., medical centers, schools, transportation, etc.)

### **Types of Measures/Alternatives Being Considered**

Due to public, policy, and technical concerns raised during concurrent reviews and during detailed evaluation and in coordination with the State of Louisiana, including the LA Governor and the NFS, LADOTD, no additional technical analysis of the dam will be completed and further evaluation of the nonstructural evaluation will be conducted. Tasks will be limited to cost updates to bring the dam alternative up to current pricing levels and to verify the cost contingencies previously applied during the abbreviated cost risk analysis. St. Helena Parrish, where 50% of the dam was going to be located, meets minority population thresholds and have more than 20% of the people living below poverty. The District coordinated with the Non-federal sponsor extensively on alternative paths forward and were able to reach an agreement to pursue a Nonstructural only plan that will reduce the risk of flooding in the project area equivalent to the original Recommended Plan. The PDT will perform optimization of the 25-year nonstructural plan for a limited Environmental Justice (EJ) analysis to meet USACE guidance requirements by performing nonstructural sub-aggregation based on existing data. EJ targeted outreach will be performed prior to the selection of the Tentatively Selected Plan (TSP) and concurrently with public meetings when the revised draft integrated feasibility study/environmental impact statement report, that includes the optimized nonstructural plan as the TSP, is publicly released.

The 25-year nonstructural plan will be optimized to present alternatives based on consideration of EJ benefits as part of other social effects, but for the other P&G accounts, past information will be utilized as part of the identification of comprehensive benefits. Alternative evaluation and comparison will be conducted on the final array which will include the 25-year nonstructural plan and the Darlington Dam alternative; however, dam alternative screening language is anticipated to be included in the draft report. Feasibility level design will be performed on a new TSP or on a Locally Preferred Plan (LPP). Documentation of the decision will be included in the resubmittal of the draft integrated feasibility study/environmental impact statement report. If inclusion of a Locally Preferred Plan (LPP) is necessary, the PDT will also include an assessment of that LPP in accordance with ER 1105-2-100.

With the study's 3-year timeline ending on October 1, 2021, an exemption for time and cost was approved on November 4, 2022 to finish vital activities prior to completion of the study. The study meets two (2) of the five (5) factors for consideration of an exemption in the Water Resources Reform and Development Act of 2014 (WRRDA 2014) which includes: 1) the overall scale/type of the project and 2) significant public dispute as to the nature or effects of the project. An additional

\$1.91M and 20 months was allocated to complete critical tasks to inform the decision on the TSP.

### **Estimated Cost/Range of Costs**

The 2019 Recommended Plan was an estimated \$2.3 billion-dollar new large-scale dry dam with a nonstructural component to address residual risk over a 2200 mi<sup>2</sup> study area. The 2019 final array included a nonstructural only plan for 0.4 AEP floodplain of \$2.2 billion.

### **Future Without Project Conditions**

The future without project conditions includes increased flood risk due to rapid change in floodplain hydrology from development activities and changes in riverine geomorphology caused by stream bank erosion and channel degradation. Additionally, three authorized USACE construction projects, which may impact the hydrology of the ARB when construction is completed, are located in or adjacent to the study area: the Comite River Diversion, the East Baton Rouge Flood Control projects and the West Shore Lake Pontchartrain Coastal Storm Risk Management project.

The Comite River and East Baton Rouge projects were built into the hydraulic model to assess their impacts on the project area. The Comite River Diversion showed some impacts, while the East Baton Rouge Flood Control project showed no adverse impact. Therefore, the Comite River Diversion was included in the future-year conditions of the study, while the East Baton Rouge Flood Control was not.

## **6. Models to be Used in the Study**

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models are any models and analytical tools used to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of a planning product. The selection and application of the model and the input and output data is the responsibility of the users and is subject to DQC and ATR.

The following planning models may be used to develop the decision document:

**Table 3: Planning Models.**

<b>Model Name and Version</b>	<b>Brief Model Description and How It Will Be Used in the Study</b>	<b>Certification / Approval</b>
HEC-FDA 1.4.3	To estimate damages, HEC-FDA 1.4.3 uses a point-based structure inventory. Hydraulic stage data are used to determine the flood depths at each structure, and structure depth- damage curves are used to estimate damages. The PDT plans to adapt to the upcoming release of the newly certified HEC-FDA 2.0, when it becomes available.	Certified

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue. The professional practice of documenting the application of the software and modeling results will be

followed. The USACE Scientific and Engineering Technology Initiative has identified many engineering models as preferred or acceptable for use in studies. These models should be used when appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC and ATR.

These engineering models may be used to develop the decision document:

**Table 4: Engineering Models.**

<b>Model Name and Version</b>	<b>Brief Model Description and How It Will Be Used in the Study</b>	<b>Approval Status</b>
Micro-Computer Aided Cost Engineering System (MCACES) MII Version 3.0	MCACES is a cost estimation model. This model will be used to estimate costs for the feasibility study.	Certified
HEC-RAS 5.07	Developed and maintained by the Hydrologic Engineering Center (HEC). Project uses a combined 1-D/2-D Unsteady Flow model. HEC-RAS 1-D is commonly used for: Water surface profiles over long reaches; Depth averaged velocities; Rainfall impact; Sediment transport. HEC-RAS 2D is commonly used for 2-D flow simulation over large domains such as: Rivers, Canals, Flood Plains, Estuaries, Rainfall Catchment Areas; large scale simulations with long durations. The combined 1-D/2-D model uses 1-D cross sections to represent the main river reaches and 2-D flow areas to represent the floodplain.	CoP Preferred
HEC-HMS Version 4.3	The Hydrologic Modeling System (HEC-HMS) is designed to simulate the complete hydrologic processes of dendritic watershed systems.	CoP Preferred

Reviews of the Models HEC-SSP Version 3.0, HEC-ResSim (Reservoir System Simulation) Version 3.3 and HEC-MetVue were conducted as part of the 2019 draft report. The H&H modeling effort for this revised draft report, in accordance with the USACE approved exemption package, does not include the use of those models and are not included in this review plan process.

## **7. Factors Affecting Level and Scope of Review**

All planning products are subject to the conduct and completion of District Quality Control. Most planning products are subject to ATR and a smaller sub-set of products may be subject to Independent External Peer Review and/or Safety Assurance Review. Information in this section helps in the scoping of reviews through the considerations of various potential risks.

### **Objectives of the Reviews**

Due to the size of the study area, differing stakeholder viewpoints, compliance with Engineering Regulations (ERs) and the complexities of addressing EJ, the study reviews will be complex. A shift in the recommended plan from the ADM on April 27, 2020 is required, due to the following:

- Public, policy and technical concerns brought forward, including concerns from the LA Governor (plan acceptability)

- Environmental Justice outreach necessary for evaluation of the optimized nonstructural alternative.
- Sub-aggregation of the nonstructural only 25-year plan to meet minimum USACE guidance requirements for EJ in collaboration with the Flood Risk Management Planning Center of Expertise (FRM-PCX).

The project risks that have been identified to date include but not limited to the following:

Public Dispute - There has been significant public dispute as to the nature or effects of the final array of alternatives that were presented for this study, which has included the following:

- EJ: Six of the 12 parishes or counties in the study area have a majority minority population and four of the 12 parishes/counties in the study have 20 percent or more of individuals living below poverty. As such, there is a potential for high and adverse disproportionate impacts to minority and/or low-income with the structural and nonstructural plans of the final array.
- Cultural Resources: The potential negative impacts may include direct damage to, or destruction of, archaeological and/or built-environment resources, as well as the potential successive introduction of new visual elements and/or modifications to the viewshed and overall visual landscape of known and previously undocumented cultural resources significant at the state, local, and national level and/or of significance to Tribes that may be listed or eligible for the National Register of Historic Places (NRHP), including, but not limited to the following: buildings; structures; archeological sites (including properties of traditional religious and cultural importance to Tribes); prehistoric or historic districts; objects; cemeteries or other sites that may contain human remains, funerary objects, sacred objects, or objects of cultural patrimony; and traditional cultural properties (TCP); including artifacts, records, and remains that are related to and located within such properties and that meet the National Register (NR) criteria.
- Habitat Restoration: For structural alternatives, resource agencies have suggested habitat restoration within the ARB, which falls outside the authority of this study. Restoration of forested habitat within the abandoned sand and gravel pits may provide compensatory mitigation of lost habitat value.
- Acceptability: Public landowners within the project area for the two dam alternatives have expressed opposition, especially regarding them being relocated outside the dry flood pool footprint. Both St. Helena and East Feliciana submitted parish resolutions opposing the Darlington Dam, regarding impacts to displacing residents and loss of tax base. From Mississippi, The Amite County Board of Supervisors also passed a resolution opposing the Darlington Dam on February 25, 2020. On May 29, 2021, a request was received from the State of Louisiana Office of the Governor requesting that the U.S. Army Corps of Engineers, New Orleans District (CEMNVN) proceed with the 25-year nonstructural only plan.

Life Safety and Constructability- During the concurrent reviews of the Draft Feasibility Level Report that was released in November 2019, two high risks associated with the recommended plan were identified that were not acceptable to the reviewers and the vertical team. The two high risks are associated with the timing of the life safety analysis over the life cycle of the project and the level of design at the completion of the feasibility study. Without the increased level of design, the embankment (settlement, seepage, and abutments) and structures (spillway and controlled outlet)



would be insufficient to inform the life safety risk analysis, impacts to environmental resources and development of the residual risk nonstructural plan.

**Nonstructural Alternative-**The nonstructural alternative presents complex challenges for the reformulation, which will be conducted through investigation of possible efficient structure sub-aggregations.

**Environmental-**Due to the scale and complexity of the study area, an Environmental Impact Statement will be included as part of the study. There are no anticipated adverse habitat impacts with the likely nonstructural plan. There is a potential for displaced wildlife as well as concerns with migratory birds adjacent to structures. The PDT plans to implement a programmatic agreement with all interested parties to avoid, minimize, or mitigate any scarce or unique tribal, cultural, or historic resources.

## **8. Risk Informed Decisions on Level and Scope of Review**

**Targeted ATR.** Will a targeted ATR be conducted for the study? *No.* Only an ATR as described in Appendix A will be conducted.

**IEPR Decision.** The results of the previously performed IEPR, will be included in part of plan formulation since the final array of alternatives have not changed significantly.

**Safety Assurance Review.** Safety Assurance Reviews are managed outside of the USACE and are conducted on design and construction products for hurricane, storm and flood risk management projects, or other projects where existing and potential hazards pose a significant threat to human life. In some cases, significant life safety considerations may be relevant to planning decisions. These cases may warrant the development of relevant charge questions for consideration during reviews such as ATR. In addition, if the characteristics of the recommended plan warrant a Safety Assurance Review, a panel will be convened to review the design and construction activities on a regular schedule before construction begins and until construction activities are completed. The review plan for the implementation documents associated with the design and construction products will document this decision.

**Decision on Safety Assurance Review.** A decision on performing a Safety Assurance Review will be made once a plan is recommended. If the Recommended Plan is nonstructural only, a safety assurance review will not be conducted.

## **9. Policy and Legal Compliance Review**

Policy and legal compliance reviews for draft and final planning decision documents are delegated to the MSC (see Director's Policy Memorandum 2018-05, paragraph 9).

### **(i) Policy Review.**

The policy review team is identified through the collaboration of the MSC Chief of Planning and Policy and the HQUSACE Chief of the Office of Water Project Review. The makeup of the Policy Review team will be drawn from Headquarters (HQUSACE), the MSC, the Planning Centers of Expertise, and other review resources as needed.



- The Policy Review Team will be invited to participate in key meetings during the development of decision documents as well as SMART Planning Milestone meetings. These engagements may include In-Progress Reviews, Issue Resolution Conferences or other vertical team meetings plus the milestone events.
- The input from the Policy Review team should be documented in a Memorandum for the Record (MFR) produced for each engagement with the team. The MFR should be distributed to all meeting participants.
- In addition, teams may choose to capture some of the policy review input in a risk register if appropriate. These items should be highlighted at future meetings until the issues are resolved. Any key decisions on how to address risk or other considerations should be documented in an MFR.

## **(ii) Legal Review.**

Representatives from the Office of Counsel will be assigned to participate in reviews. Members may participate from the District, MSC and HQUSACE. The MSC Chief of Planning and Policy will coordinate membership and participation with the office chiefs.

- In some cases, legal review input may be captured in the MFR for the particular meeting or milestone. In other cases, a separate legal memorandum may be used to document the input from the Office of Counsel.

Each participating Office of Counsel will determine how to document legal review input.

## **10. Public Comment**

This Review Plan will be posted on the District's website. Public comments on the scope of reviews, technical disciplines involved, schedules and other considerations may be submitted to the District for consideration. If the comments result in a change to the Review Plan, an updated plan will be posted on the District's website.

## **11. Documents Distributed Outside the Government**

For information distributed for review to non-governmental organizations, the following disclaimer shall be placed on documents,

*“This information is distributed solely for the purpose of pre-dissemination review under applicable information quality guidelines. It has not been formally disseminated by USACE. It does not represent and should not be construed to represent any agency determination or policy.”*

## Appendix A - Brief Description of Each Type of Review

This section describes each level of review to be conducted. Based upon the factors discussed in Section 1, this study will undergo the following types of reviews:

**District Quality Control.** All decision documents and accompanying components (including data, analyses, environmental compliance documents, etc. will undergo DQC. DQC will include verifying previous ATR comments that were closed, have been addressed as appropriate in the revised report. The previous ATR report will be provided to the ATR team. This internal review process covers basic science and engineering work products. It fulfils the project quality requirements of the Project Management Plan.

**Agency Technical Review.** ATR will be performed by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. These teams will be comprised of certified USACE personnel. The ATR team lead will be from outside the home MSC. The previous ATR report will be provided to the ATR team. Significant life safety issues are involved in the study and a safety assurance review will be conducted during ATR if a nonstructural plan is not the TSP.

**Cost Engineering Review.** All decision documents will be coordinated with the Cost Engineering Mandatory Center of Expertise (MCX). The MCX assisted in determining the expertise needed on the ATR and IEPR teams. The MCX will provide the Cost Engineering certification. The RMO is responsible for coordinating with the MCX for the reviews. These reviews occur as part of ATR.

**Policy and Legal Review.** All decision documents will be reviewed for compliance with law and policy. ER 1105-2-100, Appendix H, and Director's Policy Memorandum 2019-01, both provide guidance on policy and legal compliance reviews. These reviews culminate in determinations that report recommendations and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander.

**Public Review.** The district will post the Review Plan and approval memo on the district internet site. Public comment on the adequacy of the Review Plans will be accepted and considered. Additional public review will occur when the report and environmental compliance document(s) are released for public and agency comment.



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94103-1399

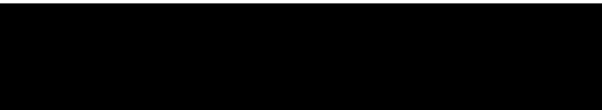
CESPD-PDP (FRM-PCX)

11 May 2023

MEMORANDUM FOR Mr. Troy Constance, Chief, Regional Planning and Environment Division  
South, Mississippi Valley Division (CEMVD-RPEDS)

SUBJECT: Updated Review Plan for Amite River and Tributaries—Comprehensive Study East  
of the Mississippi River, LA Flood Risk Management Feasibility Study

1. The Flood Risk Management Planning Center of Expertise (FRM-PCX) has reviewed the updated review plan dated 27 April 2023 for the subject project. The review plan satisfies the peer review policy requirements outlined in Engineer Regulation (ER) 1165-2-217 Civil Works Review Policy, dated 1 May 2021, and outlines an appropriate scope and level of review given the information in the plan.
2. The FRM-PCX review was led by Ms. Michelle Kniep, FRM-PCX Regional Manager for the Mississippi Valley Division. There were no substantive comments. All minor comments were resolved.
3. The FRM-PCX endorses the review plan for approval by the Mississippi Valley Division Commander. Please include this memorandum when transmitting the review plan for approval. Upon approval of the review plan, please provide a copy of the approved plan, a copy of the Commander's approval memorandum, and the link to where the plan is posted on the District website to Ms. Kniep.
4. Thank you for the opportunity to assist in the preparation of the review plan. Please coordinate the peer review efforts outlined in the plan with Ms. Kniep at 314-331-8404.



Encl

ERIC THAUT  
Deputy Director, Flood Risk Management  
Planning Center of Expertise

CF:  
CEMVP-PD-F (Kniep)  
CEMVN-PDP-W (Price)  
CEMVN-PDF (Prochaska)