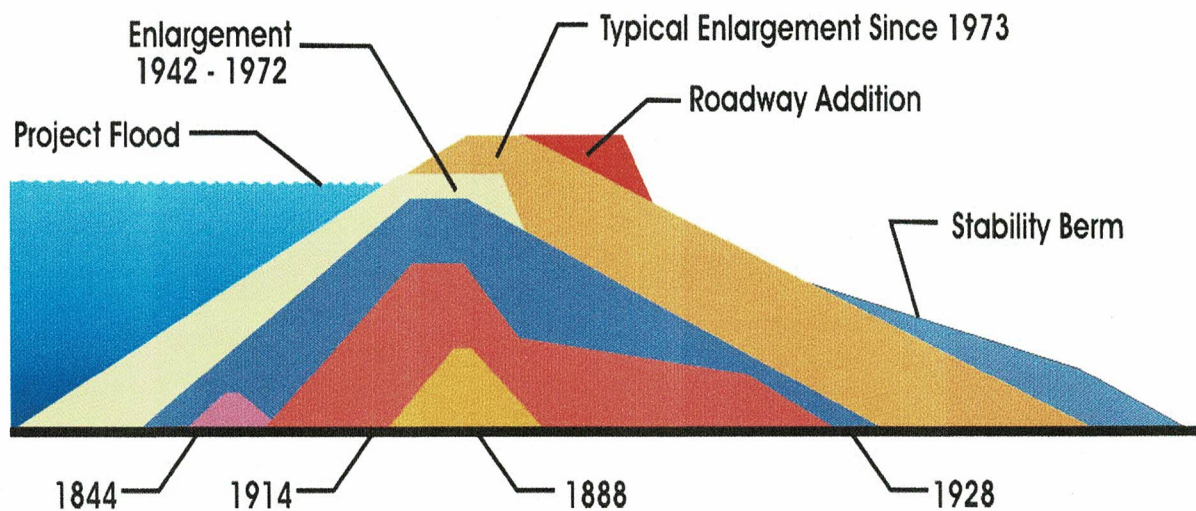


Vicksburg District

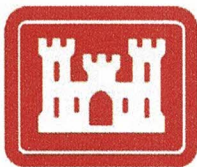
March 2021

Last Revised: July 2015

Mississippi River Levees (MRL)



PROJECT MANAGEMENT PLAN



U.S. Army Corps of Engineers
Mississippi Valley Division

Project Management Plan

Project Title: Mississippi River Levees (MRL)

Project No.: Varies by Sub-Projects and Districts

Location: Memphis District (MVM)

Vicksburg District (MVK)

New Orleans District (MVN)

Document History:


	DATE	DESCRIPTION & LOCATION WITHIN PMP OF REVISION	DATE APPROVED	APPROVED BY
	March 2021			

PMP ACCEPTANCE SHEET

I have reviewed this document and certify that it contains accurate content and is sufficient to guide project execution.

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**PMP APPROVAL
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I have reviewed this Project Management Plan and approve its use as a guide for execution of the Regional Mississippi River Levees Project.

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1. Executive Summary

The Flood Control Act of 1928 authorized the Mississippi River & Tributaries (MR&T) Project, a flood risk reduction project designed to safely pass the MR&T Project Design Flood (PDF). This project, consisting of levees, structures, floodways, tributary basin improvements, and channel stabilization features, includes the construction and maintenance of Mississippi River levees and structures to ensure the Project Design Flood can be safely passed. This Project Management Plan (PMP) includes a discussion of activities required to complete the features of the Mississippi River Levees (MRL) project in order to safely pass the PDF.

The MRL project is authorized as a part of the MR&T project for flood control and improvement of the lower Mississippi River, as adopted by the Flood Control Act of 15 May 1928. The Act was later modified and amended in the subsequent Acts of 15 June 1936, 18 August 1941, 24 July 1946, and 27 October 1965. The MRL project addresses work within the Memphis (MVM), Vicksburg (MVK), and New Orleans (MVN) Districts of the Mississippi Valley Division (MVD). The MRL project is necessary to construct or raise the main stem Mississippi River levees to the grade as determined by the Refined 1973 Project Design Flowline (Appendix A). The areas identified as deficient in grade or needing seepage control measures are listed by District in Appendix B (MRL Prioritization). Also, in areas where seepage is a problem, landside seepage berms or other measures will be constructed to control the adverse effects of through seepage and underseepage that can threaten levee integrity. Stability berms will also be constructed where needed. The construction items contained within this project are located along the 1,610 miles of main stem Mississippi River Levees from the vicinity of Cape Girardeau, Missouri to the Head of Passes, Louisiana.

Throughout the implementation of the MRL project, there has been a need to periodically re-evaluate the project design elevation in order to accommodate changing conditions within the MR&T. The MRL project currently uses the Refined 1973 Project Design Flowline as the baseline for all levee and berm construction or improvements.

This PMP establishes a tier structured priority of remaining work that was compiled by utilizing a risk informed assessment. This priority ranking was established in 2019 as a regional list that took into consideration the presence and severity of seepage problems, height deficiencies, potential risks of levee failure at a location, and existing National Environmental Policy Act (NEPA) coverage of the proposed levee modifications. This priority ranking shows the items to be constructed to reduce the risk and consequences to the system. However items that are planned for construction must be vetted as to whether the sponsor can provide rights of way, whether relocations can be accomplished, impacts can be mitigated for any potential cultural resource sites, and several other issues that could affect the schedule for a particular item.

The MRL project spans three Districts, but is managed at a regional level at the Vicksburg District. Within each District, the work is managed by a Lead District MRL Project Manager (PM). Due to the differences in operations across each District and the vast amounts of information required to manage the project, much of the information referenced throughout the PMP is located in the appendices. Each District PM is responsible for providing the initial

information and updates, as required, to the Regional PM who has overall responsibility for the contents and execution of the PMP.

2. Introduction

The lower Mississippi River System conveys floodwaters originating in 41 percent of the continental United States to the Gulf of Mexico. In 1927, a flood of unprecedented magnitude occurred throughout the Mississippi River System. In response to this major disaster, the US Congress passed the Flood Control Act of 1928. That act directed the US Army Corps of Engineers to develop and implement a plan to prevent further damages and loss of life from floods on the Mississippi River System. Since that time, the US Army Corps of Engineers has developed the comprehensive Mississippi River and Tributaries (MR&T) project to provide flood protection in the alluvial valley of the Mississippi River from Cape Girardeau, Missouri, to the Head of Passes, Louisiana. The MR&T Project is the largest flood control project in the world, which includes a combination of features along the main stem of the Mississippi River and its tributaries. The four major elements of the MR&T are:

- 1) Levees for containing flood flows;
- 2) Floodways for the passage of excess flows past critical reaches of the Mississippi;
- 3) Channel improvement and stabilization to provide an efficient navigation alignment, increase the flood-carrying capacity of the river, and provide protection of the levee system; and
- 4) Basin improvements for major tributary systems, including flood control measures such as dams, reservoirs, pumping plants, auxiliary channels, etc.

The MRL project, a part of the MR&T system, consists of approximately 1,610 miles of levee along the banks of the Mississippi River from Cape Girardeau, Missouri, to the Head of Passes, Louisiana. The project is designed to carry the PDF in accordance with the flows for various sections of the MR&T (Appendix C) as determined by the Refined 1973 Project Flood Flowline report. The MRL project has been under construction since the early 1930s and will continue to be in construction phase until the project meets the design to pass the project flood.

The levees of the MRL project are constructed by the federal government and are operated and maintained by local sponsors, except for federal assistance as necessary during major floods. The non-federal sponsor must perform minor operation and maintenance at the sponsor's cost, and the USACE is responsible for major maintenance. Periodic inspections of maintenance are made by personnel from USACE, the State, local levee Districts and drainage Districts. It is essential that the levees be maintained in good condition for proper functioning in the flood control plan.

This project is being constructed in accordance with ER 5-1-11, the Project Management Business Plan (PMBP). The purpose of this PMP is to provide a management tool for implementation of the project by the Project Delivery Team (PDT). This document describes the process to ensure that the requirements and expectations of the customer are properly developed, understood, documented and communicated to the PDT.

The features of the MRL project have been evaluated by the PDT which developed the scope of work required to complete the project based on the Refined 1973 Project Flood Flowline. Considerations to be included in the scheduling of this work include the Federal and non-Federal resource availability, coordination requirements, construction sequencing, regulatory and environmental requirements, and available annual federal funding.

3. General Scope of Work

The predominant factor in the analysis of the MRL project features is the requirement of the project to function properly and adequately during the project design flood. All other objectives of the project must be subordinate to this goal. The MR&T project must be capable of passing the Project Design Flood along each specific reach of river as noted in Appendix C.

This PMP addresses site specific actions to repair levees with not only height deficiencies but also with seepage issues that have been observed or could be problem areas during the PDF as identified by geotechnical analysis. Sites identified as having deficient height will undergo design and construction as necessary to achieve the design elevation based on the 1973 Project Flood Flowline. The specific items of remaining work that have been currently identified are outlined in the MRL Prioritization (Appendix B). The MRL Prioritization provides a Rough Order of Magnitude (ROM) cost for each reach that would be required to correct height deficiencies, areas of seepage concern, or remaining work on floodwalls. The total indicates the total estimated remaining cost to complete the project. The items submitted in the current 3-Year Budget Plan are found in Appendix D. This plan will be updated each year, and will contain items listed in Appendix B that have been determined to be the highest risk to the system with consideration given to regulatory and environmental requirements, available right of way, and other requirements for execution.

The design of a levee enlargement or other structure depends on site composition, foundation conditions, height deficiency, availability of suitable borrow, surrounding land use, wetlands and other environmental considerations, utility conflicts, existing installations, etc. Preliminary design addresses all of these components in selecting the construction methods, techniques and layouts of the project. Design features are fully evaluated with respect to the latest engineering, economic and environmental regulations for acceptability under current Federal laws and regulations. Adverse effects of the plan that require modifications to the project will be identified and appropriate mitigation measures will be included in the plan. Prior to construction, all work items will be designed in detail with plans and specifications, reviewed, approved and issued in preparation for contract award in accordance with ER 1110-2-1150.

The Scope of Work in this PMP defines the tasks required to implement the recommended actions (levee enlargements, seepage berms, stability berms, relief wells, and structures) at the existing MRL project sites. The description of tasks and associated costs provided in the following sections reflect the efforts required to complete designs and construction including E&D and S&A. Costs will be refined upon completion of each design for construction based on detailed P&S. This PMP was developed generally in accordance with federal policy, guidelines, and regulations.

4. Activity Specific Work Scope

The scope of work consists of the planning, design, construction, and maintenance of authorized MRL features. Existing and future project features or improvements are determined by selecting from Regional priorities that are identified by Lead District PM in conjunction with the Regional MRL Manager and MR&T Program Manager as selected from a list of work items that have NEPA coverage. The plan outlines a strategy for improving the MRL system to authorized levels. This PMP will focus on procedures and requirements necessary to plan and execute the required MRL construction activities.

5. Roles and Responsibilities

5.1. President, Mississippi River Commission (MRC) / MVD Commander is responsible for:

- Overseeing the overall MR&T Project (including the MRL features) to assure that mission execution aligns with prescribed policies and regulations.
- Delegating regional project management responsibilities and mission execution of the Regional MRL Project to the Regional MRL Program Manager
- Consulting with his staff and the Regional MRL Program Manager as necessary to resolve any major conflicts in funding and mission execution pertaining to the MRL within the overall MR&T Project.

5.2. Regional MRL Program Manager is responsible for:

- Providing strategic, technical, and procedural guidance for the planning and execution of the Regional MRL Project.
- Approving the annual budget based on risk based prioritization and submitting it to the MVD Programs Directorate, which includes the MVD Civil Works Integrated Division, the MR&T Program Manager, and the Lower District Support Team.
- Exercising overall supervision for execution of the annual budget.
- Developing strategies for regional efficiencies.
- Resolving priorities and conflicts of regional missions.
- E-Action Annual meeting with all other Districts in the region to assure consensus on planning and execution of the regional project.
- Keeping the MVD Commander apprised of matters relating to the planning and execution of the regional project.

- Overseeing, ensuring, and leading the effective planning and execution of the regional project.
- Leading and directing the development of standard regional processes and procedures.
- Reviewing the consolidated regional budgets before submission to MVD Programs Directorate to ensure the proposed budgets are based on regional prioritization.
- Approving Districts reprogramming requests before submission through the District's Programs Branch to the MVD Programs Directorate.
- Briefing the Division Commander, District Commanders, and each District's Deputy for Planning and Project Management (DPM) on the proposed regional project and any matters requiring command decisions.
- Elevating any priorities and conflicts that cannot be resolved within the regional team or which have significant impact on the regional mission to the Programs Directorate.
- Working closely with the Lead District MRL PMs to effectively plan and execute the regional project. This includes determining and prioritizing the work and budget using risk based criteria.
- Conducting Technical Review of General Plans for the regional project.
- Developing presentations and coordinating the development of presentations by team members for regional team meetings, and for higher command on regional matters.
- Ensuring that items recommended for construction have proper NEPA compliance.

5.3. MR&T Program Manager is responsible for:

- Exercising programmatic review for recommendation of all activities involved in the planning and execution the proposed master plans developed by the MR&T Regional Program Manager.
- Coordinating all programmatic activities including MR&T budgets, PMPs, Acquisition Plans, Review Plans, etc through the MVD staff to obtain approval by the MRC President.

5.4. District Lead MRL PMs are responsible for:

- Developing and maintaining the current status of the District Master Plan for improving the Mississippi River Levees Project.
- Providing funding and allocation information to the District MRL PDT.

- Keeping District leaders abreast of the Regional Team's recommendations on current and long-range projects and relays any concerns or recommendations they have to the Regional Team.
- Reviewing, revising, and submitting annual budget requirements for the District Engineer for consolidation and review by the Regional Project Manager for consistency before submittal to MVD Programs Directorate.
- Developing, presenting, and participating in the review and approval of plans.
- Preparing District's budget projects and supporting data for current and long-range plans for consolidation by the Regional MRL Project Manager.
- Reporting to their respective District's Project Review Board on the current status of MRL execution and expenditure of funds.
- Serving as the project point of contact with the customer(s) and Local Configuration Manager (LCM), (Scheduler) on projects input into the Corporate AIS (P2).
- Guiding the District PDT to initiate design and execute projects that have been approved by the budget process and have NEPA coverage.
- Balancing interests and developing set of mutually acceptable design objectives that meets or exceeds the customer's stated and implied expectations, while taking into account the needs, constraints, and expectations of other stakeholders, and adhering to statutory, regulatory, and policy guidance.
- Ensuring that Independent Engineering Project Reviews (IEPR) and Agency Technical Reviews (ATR) are being conducted on items for construction.
- Updating review plans in conjunction with Regional MRL Project Manager.
- Ensuring that items recommended for construction have proper NEPA compliance prior to recommending for budgeting.
- Providing information as requested from MR&T Program Manager or Regional MRL Project Manager for utilization on high and low water inspection trips.
- Understanding customer/stakeholder needs and expectations (including competing interests), and translating them into specific deliverables.

5.4. PDT Representatives are responsible for:

- Providing accurate WBS, budget, and schedule estimates to the PM/Corporate AIS (P2) that includes the activities listed in the standard templates as well as any additional activities as required per the project scope.

- Providing appropriate quality control and quality assurance requirements for their technical sections of the PMP.
- Endorsing the PMP, if within their delegated responsibility stated in the Change Management Plan.
- Managing their portion of the project in accordance with the approved PMP.
- Add any deviation of roles that are not common as stated in the PMP.

5.5. Local Cooperation

Due to the MRL project covering three Districts each of the District PMs are responsible for providing a list of project sponsors that will be listed in Appendix G by District.

6. Schedule

The schedule in Appendix B represents a potential list of construction contracts for levee enlargements and seepage control measures. All project tasks of the MRL project cannot be implemented simultaneously due to the amount of remaining work and funding limitations.

To establish the sequencing of construction contracts, the PDT will prioritize the work utilizing a risk informed assessment process. An E-Action committee which utilizes the Senior PM's from each of the three Districts along with the MRL Program Manager and MR&T Program Manager will develop the 3-Year Plan in Appendix D in order of construction priority across the Region based on the MRL Prioritization (Appendix B). Key factors to be utilized include the presence and severity of seepage issues coupled with height deficiencies that have the potential risk or contributing to a levee failure as shown in Appendix B. The resulting prioritization of construction contracts will periodically be re-evaluated to ensure continued accuracy.

A number of construction items were not included in the 1998 SEIS but are now being included in the 2020 SEIS II. Updating the NEPA documentation provides the opportunity to gather all relevant information on environmental impacts as a result of the flood control mission on the MRL and use it to develop a more environmentally sustainable approach for providing a safe levee system on these new items included in SEIS II.

The 1998 SEIS will serve as a baseline for development of this NEPA documentation. Almost all NEPA documents are prepared during the planning stage of project development. In this case, the supplement is being prepared well after the planning phase. Since the 1998 SEIS was prepared, new items that either need seepage remediation measures, levee enlargement, or both have been determined to be needed. The SEIS II will cover these items for construction (Appendix F) within the Memphis, Vicksburg, and New Orleans Districts. The SEIS II Stratcom is provided in Appendix H. The MRL SEIS II Record of Decision (ROD) is attached in Appendix I.

7. Critical Assumptions and Constraints

Critical Assumptions

These are the critical assumptions that are made for the MRL Project:

- The non-Federal sponsors will be able to provide Lands, Easements, Right of Way, Relocation, and Disposal Areas (LERRDs) in a timely manner.
- Annual MR&T appropriations from Congress will be sufficient to ensure MRL funding for design and construction.
- NEPA compliance has been obtained on the items recommended for construction.

Constraints

These are items that constrain the PDT's options:

- Budgetary constraints and annual incremental funding fluctuations
- Conflicting customer and sponsors perspectives and priorities
- Legal Constraints
- Availability of land for Borrow
- Size of the MRL
- Coordination and operational constraints with multiple sponsors and levee Districts

8. Change Management Plan

Reporting of PMP progress and expenditures will be conducted utilizing the guidelines given in ER 1105-2-100 and ER 5-1-11.

The MVD Change Management Plan provides the mechanism to document and incorporate changes in contract scope, costs, schedule, and the acquisition plan which was agreed upon and approved in the Project Management Plan (PMP) and shown in the prior year budget. The purpose of the Change Management Plan is to ensure conformity and minimize impacts to the overall MR&T Program costs, schedules, and to small business opportunities.

In each district, the Lead District PM will monitor physical and fiscal progress of all work required for completion of each project, and based on that review, effectively manage project funding and schedule. Changes in funds or schedule requirements will be managed in coordination with the MRL PM by reallocating funds between work activities, work elements, or subproducts as long as funds are not exceeded or the quality of the subproducts is not jeopardized.

If a district's change in cost or schedule will have an impact on execution of the regional project, the Lead District PM will notify the Regional MRL Project Manager of the necessary change and the Regional MRL Project Manager will conduct a conference call with the Regional Team to determine a recommended resolution. For major changes, the Regional MRL Project Manager will present the recommendation to the MR&T Program Manager for approval. If a change will require the reprogramming of funds within the

MR&T Project, the Regional MRL Project Manager will request the recommended reprogramming through the MVD Program Directorate.

PDT Responsibility

- The change management procedure is initiated by the PDT when a requirement for change in scope, cost, schedule or acquisition strategy for single or multiple activities is identified. Schedule and cost changes will be subject to project criteria or constraints established in the Change Management Plan.
- If a change in activity cost or schedule is identified, the identifying team member will submit a Change Request, approved by their respective Chief and forward it to the PM. The PM/PDT members discuss the identified change alternatives and impacts to the MRL project tracked milestones. Once a course of action is identified, the PM finalizes the Change Request Form, obtains appropriate PM Chief approval and, if necessary, completes a Commander's Critical Information Request (CCIR) as outlined in the table below.

Cost Impacts

Increase Threshold per activity or cumulative for project	Level of Approval	Form	Approver Response
< 10%	Branch Chief	Change Request Form	1 day
≥10-15%	Division Chief	Change Request Form	1 day
>15%	DPM	CCIR + Change Req. Form	1 day

Schedule impacts (delays experienced or activities expected to exceed activity duration)

Increase Threshold per activity or cumulative for project	Level of Approval	Form	Approver Response
<5 days	Branch Chief	Change Request Form	1 day
≥5 -10 days	Division Chief	Change Request Form	1 day
All Tracked Milestones	DPM	CCIR + Change Req. Form	1 day

- Submission and approval of CCIRs are not a correction for poor planning, poor execution, or efforts/expenditures outside the scope of the PMP. Necessary efforts/expenditures outside the scope of this PMP will be reviewed and approved by the PM before being undertaken.

PRB Reporting

- PMs are required to report to the PRB any slip in schedule milestones or financial execution.

- Issues regarding achievement of milestones and/or 2101 execution.
- Shall include a 30-day look-ahead.
- Shall include a 90-day look-ahead.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
 ER 1105-2-100 Planning Guidance Notebook
 PMBP PROC 3010 Change Management
 PMBP REF 8009G Change Management Plan
 ES 03011 Project Change Management
 ES 18015 Acquisitions

9. Communications Plan

Public involvement and outreach have been incorporated in the overall design and applied throughout the implementation of the MRL Project. The objectives of the public involvement and coordination have been (1) to provide information about USACE activities and proposed actions to the public; (2) make public desires, needs and concerns available to the decision-makers; (3) provide for adequate interaction with the public before decisions are made, and (4) to adequately account for the views of the public in making decisions.

The PDT coordinates with the District Public Affairs Office (PAO) to ensure a successful public involvement plan. PAO can assist in coordination with public communications media such as newspapers, radio, and television media; meeting support and coordination, publications such as newsletters, reports, and bulletins; and current distribution lists. PAO is instrumental in developing Strategic Communication Plans (Stratcoms) on an as needed basis. Stratcoms are a critical tool used by the PDT for communicating new information.

The PM will coordinate with the PAO, as necessary, for support as a member of the PDT. The development of a Communications Plan, if required per project activity, will be a joint effort between the PAO and the PM. The complexity and sensitivity of the project will determine the level of PAO support. The PDT will assist the PM in determining stakeholder communication requirements, as well as the need for internal communication.

Internal PDT communications will occur both formally and informally, as needed per project. Informally, the PM is responsible for obtaining regular updates from team members to ensure that critical project milestones are being met. If members of the PDT identify a problem that would prevent the accomplishment of critical tasks, it is essential for that PDT member to alert the PM and other appropriate PDT members as soon as possible in order to formulate plans to reduce or eliminate schedule slippages. Formally, the PDT will meet, at minimum, monthly to discuss progress on the MRL Project activities at each district. Meeting minutes and action items will be recorded and tracked from these monthly PDT meetings.

The PM will have regular communication with the local sponsor to facilitate

resolution of issues of particular concern to the local sponsor and to update the local sponsor on project status.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
PMBP REF 8006G Communications Plan
ES 02001.2m Public Interest Checklist
ES02001.2n Communication Plan
ES 02001.2o Communications Plan Check List

10. Risk Management Plan

The purpose of risk management for the MRL project is to provide a systematic process for identifying, analyzing, and responding to risk during the entire project life cycle. Generally, potential risks would be managed at the lowest practical level within the MRL management structure, primarily at the contract level. Each construction item will include risk management guidance to identify, analyze, evaluate, mitigate, and/or elevate issues to a higher management/administrative level to control risk. Risks that cannot be satisfactorily addressed by each construction item, or are programmatic in nature, would be addressed at the project level by the MRL PDT and elevated to the appropriate Regional, District, and or Division level.

Once the potential risks have been identified, a determination of acceptability would be made. If a potential risk is not acceptable, means of eliminating or managing the risk would be determined. If elimination is not possible, then procedure for managing the risk elements would be identified. Risk management measures would be implemented until the level of the potential risk becomes acceptable. Potential risks would be reviewed on a regular basis to include additionally identified items as they become apparent and ensure that actions to mitigate previously identified risks are being properly implemented.

Project Planning

Consequence and risk analysis are to be used in the annual planning process during the annual e-action meeting, that will generally be held in the 2nd quarter of each year, to prioritize work items and obtain approval of General Plans for each fiscal year. During these meetings, work items are placed on the regional priority list, which takes into consideration the presence and severity of seepage problems, height deficiencies, potential risks of levee failure at each location, and existing NEPA coverage. Virtual team meetings will occur as needed throughout the year to plan or revise the project based on funding allocations or changes in funding or priorities.

The scope and cost estimate for a work item can change prior to construction due to various factors, including missed design dates, the Non-Federal Sponsor (NFS) not providing rights-of-way in a timely manner, contract bidding being higher than anticipated, environmental or cultural concerns, and other issues. Significant changes in a project's cost are presented to

the regional team to determine the best source for available funding to cover the cost increase.

Project Execution

Major risks that can impact the execution of the MRL project include high river stages and inclement weather. These events can create lengthy durations in which construction activities are difficult or impossible to undertake, thus impacting the predicted fiscal year expenditures. Gathering of design or environmental data can also be affected by high river stages thereby impacting scheduled award dates. Execution can also be affected by timelines of the local sponsor to provide the necessary right of way or complete any relocation project. Another risk that can impact MRL project execution is the efficiency and proficiency of a contractor's work that is awarded a specific contract. Unscheduled delays, poor work products, or excessive claims can impact schedules as well.

Major changes in the execution plan will be presented by the Regional Project Manager to the MR&T Program Manager who will inform and seek final approval from the MVD Programs Directorate.

11. Quality Management Plan

Review Plan

The review plan (RP) for the MRL project was approved on 16 April 2013 and is attached for reference. The RP can be found in Appendix E. This RP outlines the necessary reviews required for project decision documents and engineering products. All decision documents and their supporting analyses will undergo District Quality Control (DQC) and Agency Technical Review (ATR) and will require Independent External Peer Review (IEPR), to "ensure the quality and credibility of the government's scientific information," in accordance with this EC and the quality management procedures of the responsible command. The circular addresses review of the decision document as it pertains to both approach and planning coordination with appropriate USACE Centers of Expertise. The required technical reviews are listed below. Specific requirements for each review are covered in the RP.

- District Quality Control (DQC).
- Agency Technical Review (ATR).
- Independent External Peer Review (IEPR).
- Policy and Legal Compliance Reviews.

Engineering QA/QC

In accordance with ER 1110-1-12, Engineering and Design Quality Management, a quality control plan (QCP) will be prepared and used for E&D of in-house products and/or a quality assurance plan (QAP) for products and deliverables prepared by architect-engineer (A/E) and other technical services firms (contractors are to prepare their quality control plans). These plans provide additional technical review

requirements to supplement the Review Plan established in the PMP. Technical reviews help insure quality products are completed during the study and design phases of the project. MVD is responsible for verifying MRL products meet customer needs and expectations, and competent technical resources are utilized throughout the design and review process.

Quality control plans and quality assurance plans provide for sound engineering and design procedures and technical review processes at the District level that focus on several objectives. Quality technical products will be produced through an effective and comprehensive single-level technical review process throughout product development to verify that functional, legal, safety, health, and environmental requirements are satisfied. Every engineering and design product is to be covered by an effective quality control plan. In accordance with EC 1165-2-209, District quality control/quality assurance reviews are a part of the Review Plan.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
ER 5-1-14, USACE Quality Management System
EC 1165-2-217 Review Policy for Civil Works
ER 1110-1-12 Engineering and Design, Quality Management
ER-1180-1-6 Construction Project Management
PMBP REF 8008G Quality Management Plan
PMBP REF 8010G Civil Works Program – Specific Information

12. Value Management Plan

All projects greater than \$2 million must have a Value Engineering (VE) study performed in the early stages of planning and design. Each construction item for the MRL project will undergo this process as outlined the Value Engineering (VE) regulation ER 11-1-321.

Construction contracts will include FAR 52.248-3, "Value Engineering - Construction," encouraging the contractor's participation in the VECP program, which is administered in accordance with FAR 48, Value Engineering. Upon notice of award, the VEO or VPM will provide the successful bidder a copy of EP 11-1-4, "Value Engineering: Your Good Ideas Can Increase Profits," an informative pamphlet for construction contractors on the USACE's VECP program.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
ER 11-1-321 Value Engineering
EP 11-1-4, "Value Engineering: Your Good Ideas Can Increase Profits,"
PMBP REF 8023G Value Management Plan
FAR 52.248-3, "Value Engineering - Construction

13. Acquisition Plan

The Federal Acquisition Regulations (FAR) and the Engineer Federal Acquisition Regulations (EFAR) require the preparation of an acquisition plan. The acquisition plan provides a comprehensive and concise picture of what is being procured, how the proposed acquisition will take place, and to document why the type or manner of procurement was most appropriate for the acquisition planned. The acquisition plan is a coordinated product of the appropriate functional elements, District contracting Division, and the District Office of Small Business Programs. The acquisition plan will be developed during each of the feature design phase of project development for construction contracts.

Acquisition

Acquisition for the MRL project would primarily be conducted for each construction item. Where possible, multi-project acquisitions may be made. MRL project integration would be responsible for acquisition management. This includes, but is not limited to, Architecture-Engineering (A-E) design, construction, equipment supply, and rental type contracts. Potential Project-wide issues that will be handled across multiple construction items include cooperative agreements and/or contracts with other governmental agencies.

Acquisition Strategy

All acquisitions undertaken as part of the MRL project will be in accordance with the goals for the MRL project as a whole. An acquisition strategy that is prepared for each construction item represents the best estimate on method of accomplishment (e.g., in-house, A-E, construction, etc.). This acquisition strategy will be used for all project phases, including design and construction. MATOC's are being developed by the Districts to have better pool of levee contractors who have experience in the construction of levee enlargement and seepage projects.

Acquisition Roles and Responsibilities

The Lead District MRL PM is responsible for overall acquisition in connection with the various acquisition strategies and changes, as well as ensuring accurate MRL project acquisition information is maintained.

The District PM in association with the PDT is responsible for the following:

- coordinating projects in connection with approved acquisition strategies
- ensuring accurate project acquisition information is maintained
- serving as the point of contact for the projects
- evaluating procurement options during project planning and execution
- providing coordination and oversight of the acquisition strategy process
- reviewing goals for meeting acquisition targets

The Project Manager, Construction team and District contracting officer will be responsible for developing, documenting and approving changes to individual project acquisition strategies. Construction team members and District Contracting Officer will notify the PM of issues impacting acquisition decisions. The District Office of Small Business Programs is responsible for providing options to achieve various small business goals.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
PMBP PROC 2050 Project Delivery Acquisition Strategy
PMBP PROC 2060 Overall Acquisition Strategy
PMBP PROC 6002 Regional Overall Acquisition Strategy
ES 18015 Acquisitions
EP 715-1-7 Procurement - Architect-Engineer Contracting

14. Environmental Plan

The MRL project area contains significant environmental resources. Impacts to these resources were first described in the 1976 Environmental Impact Statement (EIS) and further described in the Mississippi River Mainline Levees Enlargement and Seepage Control Supplement to the Final Environmental Impact Statement (SEIS) EIS, 1998. Due to the impact of the Refined 1973 MR&T Project Flood Flowline and changes noted in the project after the 2011 flood there are additional work items required to complete the MRL system that will need NEPA clearance. These additional work items are being addressed in SEISII. The SEIS II is scheduled to be completed in 2020.

Each District will conduct the necessary investigations to assure that no unmitigated adverse impacts to significant resources will be caused by the remedial actions to the levees and other structures described in the PMP. This will be accomplished via the following:

Environmental Planning

Construction items will be designed to avoid environmental impacts and minimize any avoidable impacts in the immediate area of construction. Environmental design will be in coordination with Federal, State and local resource agencies including tribes.

Cultural and aesthetic resources will be assessed and impacts considered in plan formulation, design, and mitigation planning.

National Environmental Policy Act (NEPA)

Environmental Personnel from each District will determine the level of National Environmental Policy Act (NEPA) Compliance needed for the additional levee repair, seepage control measures, and floodwall or these structure modification/replacement on

those items covered in both SEIS I and SEIS II. Supplemental environmental Impact Statements take all remaining MRL construction items into account has been prepared and coordinated with the public and appropriate Federal, state, and local agencies in accordance with the NEPA. Compliance documents including, but not limited, to State Coastal Zone consistency determination, Clean Water Act Section 404(b)1 public notice and evaluation, and State Water Quality certification will be prepared or updated as required. Any significant deviation from the anticipated design discussed in SEIS I and II will be covered by an EA. This EA will show the difference between what was proposed in the SEIS and what was designed for construction. Environmental impacts will be quantified and mitigation required.

Mitigation Plan

Mitigation is a project feature and should be planned for and designed according to appropriate regulations and laws. The Regional Planning and Environmental Division South is responsible for determining mitigation requirements and developing and implementing suitable mitigation plans for inclusion in the project. A mitigation plan will be prepared to compensate for any unavoidable environmental or cultural resource losses caused by construction.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
ER 1105-2-100 Planning Guidance Notebook
PMBP REF 8012G Environmental Program-Specific Information

15. Real Estate

Real Estate Division coordinates all real estate transactions for each District and advises District Commanders on all real estate matters for the MRL project. Real estate services include the acquisition through negotiation, condemnation, or leasing of all the real estate interests which are required to accomplish projects assigned to each District; managing and leasing of Corps-owned lands to public and private interest; the disposal of lands excess to the needs of each District; and appraisal, cadastral and planning services.

The Real Estate Division will review those acquisitions by the local sponsor of any additional LER's, especially Rights-of-Way that are now required as a result of implementing the construction of those items listed in either SEIS I II. Real Estate Division will coordinate with the non-Federal sponsor to ensure that the right-of-way (ROW) is free and clear of obstructions. Office of Council will coordinate with Engineering Division and Real Estate Division on relocation agreements and subordination or release instruments to be signed by facility owner and recorded in parish/county records. The Real Estate Division or the local sponsors will acquire all necessary rights-of-entry (ROE) for the accomplishment of field investigations such as surveys; soil borings; cultural resource investigations; environmental assessments; Hazardous, Toxic, and Radio Active Waste (HTRW) determinations; and other exploratory activities, including the right of

ingress and egress to perform these activities, as deemed necessary for completion of the project.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process

16. Safety And Occupational Health Plan

All field investigations and construction activities will be conducted following current safety Regulations. The District PM will coordinate with the District Safety and Occupational Health Manager (SOHM). The SOHM is responsible for the District's Safety and Occupational Health Program (SOHP). The SOHM is responsible for planning, organizing, overseeing, and evaluating the SOHP, in conjunction with the District PM. The SOHM reviews the Site Safety and Health Plans, if required. The SOHM or SOHM staff conducts periodic safety surveys, inspections, and evaluations of all work and procedures associated with a project. The SOHM or SOHM staff ensures that the SOHP include all operational procedures, programmatic safety and occupational health requirements, environmental hazards that could be encountered, construction, recreational and public protection from safety hazards, and personal protective equipment requirements. The SOHM ensures compliance with all applicable safety regulations and provides support to the District PM for overall safety on the various project sites.

Safety Requirements

Safety is the primary concern for all activities on-site. A government representative is required to monitor contractor activities from a QA viewpoint. This includes the contractor's safety program. Under the terms of the contract, Federal Acquisition Regulations (FAR) 52-212-3 Stop-Work Order clause of the basic contract, the Contracting Officer has full authority to require the contractor to take any steps deemed necessary for maintaining safe working conditions. The contractor will be obligated by the terms of the contract to protect the lives and health of persons exposed to their operations and to safeguard property and equipment from accidental loss or destruction. All work would be performed in accordance with the safety and health provisions of the contract, Engineering Manual (EM) 385-1-1 (US Army Corps of Engineers Safety and Health Requirements Manual), and Federal, State and local codes and standards. When a difference in standards exists, the most stringent standard applies. Refer to Safety and Occupational Health Plan – USACE REF8016G.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
PMBP REF 8016G Safety and Occupational Health Plan
EM 385-1-1 U.S. Army Corps of Engineers Safety and Health Requirements Manual
ER 385-1-99 USACE Accident Investigation and Reporting
ER 385-1-40 Occupational Health Program

ER 385-1-85 Safety and Occupational Health Program Management Evaluation
 ER 385-1-92 Safety and Occupational Health Requirements for Hazardous, Toxic, and
 Radioactive Waste (HTRW) Activities
 ER 385-1-86 USACE Dive Program

17. Security Plan

In accordance with Army ATTP 4-10, Operational Contract Support Tactics, Techniques, and Procedures each contract generated in support of this Project will be evaluated as related to force protection/anti-terrorism [AT]/security issues.

However, no component of the project is classified as being sensitive to national security. Any changes in the status of the project security classification will be coordinated with the District's Security Officer, and any necessary precautions will be put in place to ensure security at the project sites and facilities.

18. Records Management Plan

Each District is responsible for maintaining records for the specific projects accomplished under their control. Required records are listed in the following table; there are no specific measurement requirements associated with this procedure.

Type	Description	Responsible Office	Location	Record Media	Retention	Disposition
QR	Copies of all iterations of the PMP and all embedded project plans, with associated review documentation	LR	LR	E	LR	LR
QR	Copies of all PDT meeting Minutes	LR	LR	E or P	LR	LR
QR	Customer correspondence	LR	LR	E or P	LR	LR
M	Not Applicable (N/A)	N/A	N/A	N/A	N/A	N/A

Type:

QR Quality Record
 R Record
 M Measurement
 LR Local Requirement

Record Media

E Electronic
 P Paper

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process

19. Closeout Plan

It is anticipated that closure activities will occur throughout the MRL project, not just at the completion of the sequenced construction items. Individual construction items will be closed out and transferred to the Local sponsors as they are completed. A copy of the transfer letter to the Local Sponsor for each individual construction item will be maintained in District PM file. A final closeout of the MRL Project may be performed by the regional team should the MRL Project be completed. However, it is not appropriate at this time to outline a closeout plan due to the constrained funding and project reevaluation that exists before the MRL Project can be closed out.

POLICY

ER 5-1-11 U.S. Army Corps of Engineers Business Process
ER 415-345-13 Financial Closeout
PMBP PROC 3020 After Action Review (AAR)/Lessoned Learned
PMBP REF 4000 Activity/Project Closeout

20. Uncertainties In Scope of Work

Amendments to the project's scope of work will be developed through consultations between the Federal and non-Federal partners. If modifications in the scope of work are required, the total cost of the project will be adjusted to reflect such changes and will be specified in a revision to the PMP, subject to appropriate approval.

MRL PROJECT MANAGEMENT PLAN

APPENDIX A

REFINED 1973 MR&T PROJECT FLOOD FLOWLINE

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN

APPENDIX B

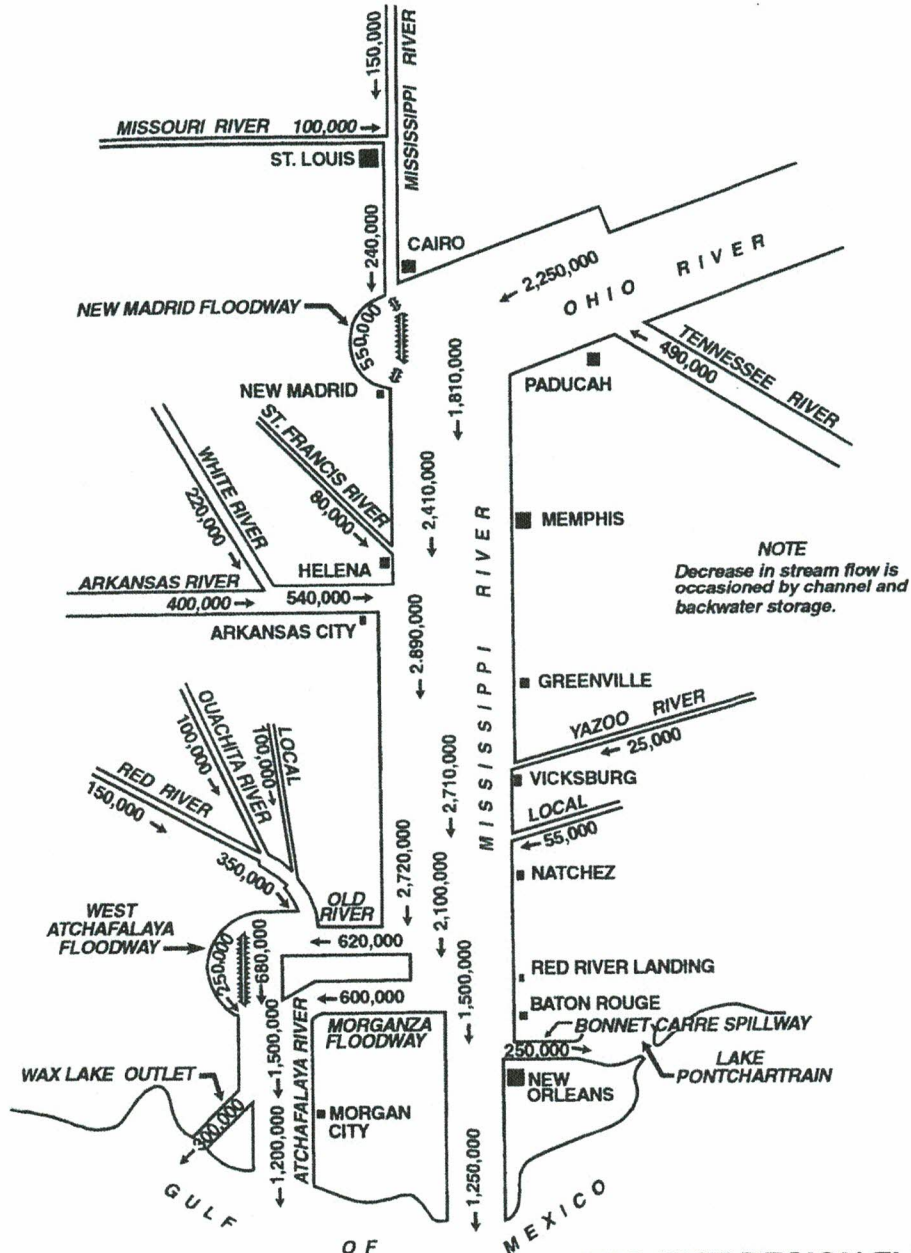
MRL PRIORITIZATION

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN

APPENDIX C

PROJECT DESIGN FLOOD (58A-EN) FLOWS (CUBIC FEET PER SECOND)



MRL PROJECT MANAGEMENT PLAN

APPENDIX D

3-YEAR PLAN
SUBMITTED WITH BUDGET
(WILL BE UPDATED EACH YEAR)

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN

APPENDIX E

PROJECT REVIEW PLAN

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN

APPENDIX F

MRL SEIS II PROJECT DESCRIPTIONS

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN

APPENDIX G

SPONSOR LISTS BY DISTRICT

CEMVK

1. Mississippi River Levee Board
2. Fifth Louisiana Levee District Board
3. Southeast Arkansas Levee District

CEMVM

1. City of Mounds, IL
2. City of Mounds City, IL
3. Cairo Drainage District
4. City of Cairo, IL
5. Levee Drainage District No. 2 of Scott County, MO
6. Levee Drainage District No. 3 of Mississippi County, MO
7. St. Johns Levee and Drainage District
8. St. Francis Levee District of Missouri
9. St. Francis Levee District of Arkansas
10. Fulton County Board of Levee Commissioners
11. Reelfoot Levee District of Lake and Obion County, TN
12. Lake County Levee and Drainage District
13. Dyer County Levee and Drainage District
14. City of Hickman, KY
15. Madrid Bend Levee District of Fulton County, KY
16. Madrid Bend Levee District of Lake County, TN
17. Little River Drainage District
18. Helena Improvement District
19. Cotton Belt Levee District No. 1
20. Laconia Levee and Drainage District of Phillips County, AR
21. Laconia Levee District No. 1 of Desha County, AR
22. Yazoo – Mississippi Delta Levee Board
23. Laconia Circle Special Drainage District of Desha County, AR

CEMVN

1. MRL Main Stem Lake Borgne Levee District
2. Plaquemin's Parish Levee District
3. Orleans Levee District
4. West Jefferson Levee District
5. East Jefferson Levee District
6. Pontchartrain Levee District
7. Lafourche Basin Levee District
8. City of Baton Rouge Levee District
9. Atchafalya Basin Levee District Algiers Levee District
10. Buras Levee District
11. Louisiana State Pentitentiary (Angola) Fifth Louisiana District

MRL PROJECT MANAGEMENT PLAN

APPENDIX H

MRL SEIS II STRATCOM

AS ATTACHED

MRL PROJECT MANAGEMENT PLAN
APPENDIX I
MRL SEIS II RECORD OF DECISION (ROD)

AS ATTACHED