RECLAMATION

Managing Water in the West

St. Mary Diversion Dam Project Management Plan

Milk River Project
St. Mary Unit
Montana

U.S. Department of the Interior
Bureau of Reclamation
Missouri Basin Region
Montana Area Office

Ver. 1.0
June 2022

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Version	Date	Changes
1.0	6/7/22	Original

St. Mary Diversion Dam Project Management Plan

Missouri Basin Region
Montana Area Office

prepared by

Project Management Team
Chris Gomer, P.E. – Facility O&M Division Manager, MTAO
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Bureau of Reclamation
Missouri Basin Region
Montana Area Office

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Contents

Introduction

This Project Management Plan (PMP) describes how Reclamation will study, obtain data, develop and submit the funding documentation, design, procure, construct, provide construction management, and close out the replacement of the St. Mary Diversion Dam. The PMP needs some flexibility and through progressive collaboration, the PMP is likely to change as the project proceeds and more detail is developed or due to initially unforeseen circumstances. The focus of the PMP is to:

- Document the objectives and scope of the project.
- Develop a project schedule.
- Develop a budget and financial plan: Ensure that the work and budgets required for each project phase have been thoroughly developed and appropriately assigned to responsible parties before significant funds for that phase are expended.
- Serve as the baseline for scope, schedule, and costs for the associated project tasks.
- Establish the change management process and the responsible charge for any project changes.
- Establish methods for scope, schedule, cost monitoring, and control such as status reports and Earned Value Management (or other tracking methods).
- Provide a common understanding between the participating entities on managing and monitoring the project from Project Approval through design, construction, and closeout for the project.
- Document the Roles and Responsibilities for all of the offices involved.
- Develop and document a communications plan for internal communications as well as external communications with the stakeholders and the general public.
- Provide for a systematic approach to ensure responsibility, authority, coordination, documentation, and appropriate staffing levels are achieved throughout the project process.
- Ensure that design and as-built documentation is completed in a timely manner.
- Ensure that transfer inspections and project closeout activities are performed in a timely manner following completion of the project.

Project Background

The St. Mary Diversion Dam and Canal were completed in 1915 as part of the Milk River Project (Project) in north-central Montana. The dam is located near Babb, MT and approximately 0.75 miles downstream from Lower St. Mary Lake. The existing dam consists of a 198-foot long and 6-foot-high concrete weir and sluiceway. It diverts water from the St. Mary River into the St. Mary Canal through the gated headworks structure. Much of the dams existing structural components are dilapidated and in need of replacement.

In 1999, the U.S. Fish and Wildlife Service (Service) listed Bull Trout (native to the Saint Mary River) as a threatened species. The Service concluded that Bull Trout are negatively impacted by the Diversion Dam by acting as a passage barrier and entrainment in the canal. The current dilapidated structural components of the dam and the lack of fish passage and screening are the main reasons for this dam replacement and modification project.

ESA Background

The Montana Area Office (MTAO) has been conducting bull trout research since 1999 and has extensive data on this bull trout population. The MTAO has and will continue to work collaboratively with stakeholders.

Reclamation entered formal consultation with the Service through submittal of a Biological Assessment (BA) on April 24, 2020 on current O&M. The BA action area includes the entire St Mary Unit from Lake Sherburne to the terminus of the St Mary Canal at the North Fork Milk River. The Service issued a BO and ITS September 4, 2020. The BO included three Reasonable and Prudent Measures (RPMs) that are nondiscretionary:

RPM #1: Implement measures to reduce the direct loss of bull trout due to entrainment into the canal.

RPM #2: Implement measures to reduce the likelihood of bull trout stranding in Swiftcurrent Creek.

RPM #3: Continue assessing, developing, and implementing measures designed to reduce the direct loss of bull trout associated with the operations of the St Mary Unit, Milk River Project.

The Service is an affiliated/ad hoc member of the PMT. Reclamation will consult with the Service on this proposed action's effects on threatened and endangered species. This project will directly address RPM's #1 and #3.

Project Organization

Operations and maintenance of the St. Mary Unit is the responsibility of the Montana Area Office Area Manager in coordination with the Missouri Basin Regional Director and the Milk River Joint Board of Control. The Montana Area Office and Missouri Basin Region will provide project administration and oversight for carrying out this Project Management Plan. The Montana Area Office will provide overall project management for the project and will coordinate funding under the Section 40904(a) of the Bipartisan Infrastructure Law. The project will be performed in accordance with the general guidance provided in the current version of the Project Management Guidebook and Missouri Basin Region Business Practices.

The Decision-Making Management Team (DMMT) is responsible for all project related decisions including but not limited to total project cost, schedule, and scope. The DMMT consists of the Missouri Basin Regional Director and the Montana Area Office Manager. DMMT members are listed at the bottom of Table 1. The DMMT has delegated this responsibility to the PM and PMT through the Project Charter and PMT Charter which were developed and signed on February 11, 2022.

Project Management Team

The DMMT has designated a Project Manager and a Project Management Team (PMT) to provide oversight for staffing, work planning, work scheduling, funding needs, and direction and guidance regarding project beneficiary involvement throughout all phases of the project. The PMT will convene via conference call on a regular basis, it is expected that PMT meetings will be held at least monthly or as needed, throughout the project. The PMT consists of core members and affiliated members, as described in Table 1.

PMT Core Team Membership

The core team consists of the Resource Management Division Manager for the Montana Area Office, Regional Construction Engineer from the MB Region, the Civil Structures Group Supervisor from the Denver Technical Services Center (TSC), the Facility Operations and Maintenance (O&M) Division Manager for the Montana Area Office, and the Manager for the Milk River Project Joint Board of Control.

PMT Affiliated Members

The affiliated members include the Technical Team Lead from the TSC, Contracting Officer from the MB Regional Office, design team members from the TSC, the Resident Engineer from the MB Regional Office, and other key personnel from the TSC, MB Region and MTAO. Additional personnel may be identified as PMT affiliated members at a later date. Positions on the team are listed in Table 1:

Table 1 - Project Management Team and Decision-Making Management Team

Project Management Team Members				
Role		**Expertise**	**Name**	**Title/Organization**
Core PMT Members	Project Manager	Project Management	Steve Darlinton	Civil Engineer, Facility O&M Division, MTAO
	Resource Management Representative	ESA, Land Use, NEPA/NHPA	Jeff Baumberger	Resource Management Division Manager, MTAO
	Stakeholder Representative	Budget, Financial Risk	Jennifer Patrick	Manager, MRJBOC
	Facility O&M Representative	Facility Management, Operational Risk	Chris Gomer	Facility O&M Division Manager, MTAO
	Construction Office Representative	Construction Management	Kurt Anderson	Regional Construction Engineer, MB Region
	Technical Service Center Representative	Design, Technical Risk	Chou Cha	Supervisor, Civil Structures, TSC
Affiliated/Ad Hoc Members	Principal Designer, Civil	Design, Technical Risk	Ryan Kent	Design Team Leader, Civil Structures, TSC
	Contracting Officer	Contracting, Legal and Contractual Risks	Gerri Voto-Braun	Contract Specialist, MB Region
	Construction Liaison Engineer	Construction Scheduling, Schedule Risk	Linda Tilstra	Specifications and Construction Management, TSC
	Environmental Protection Specialist	NEPA Coordinator, ESA,	Lauri Teig	Environmental Specialist, MTAO
	Cultural Protection	NHPA, THPO	Rick Hanson	Area Archeologist, MTAO
	Resident Engineer	Construction Management	TBD	Construction Services, MB Regional Office
DMMT	Regional Director	Organizational Risks	Brent Esplin	Missouri Basin Regional Director
	Area Manager	Organizational Risks	Ryan Newman	Montana Area Office Manager

PMT Role and Decision-Making Method

The PMT is responsible for the planning and execution of an efficient and cost-effective project using various teams and individuals to accomplish the tasks identified in this PMP. The PMT will monitor the progress of the project, including the schedule and budget and periodically report status to the DMMT. The PMT will determine the need for and ensure that periodic peer and independent reviews are conducted throughout the project.

Decisions will be made by consensus of the Core Team membership in coordination meetings. A consensus is a position reflecting the collective thinking of the Core Team with input of the Affiliated Team membership. All Core and Affiliated Team members will participate in developing, fully understanding, and actively supporting any decision that the Core team believes to be in the best interest of the project. The PMT will revisit decisions if significant changes occur or circumstances warrant.

Dispute Resolution: Should disputes arise that cannot be resolved by the PMT Core membership, the dispute will be elevated to the DMMT for resolution and final ruling. If a final ruling is not achieved and further dispute resolution is required, the issue can be elevated at the discretion of the DMMT.

Project Manager Role and Responsibilities

In accordance with the *Project Management Body of Knowledge Guide*, they will be responsible for keeping the team focused on achieving the project objectives. As such, they must understand and apply the knowledge, tools, and techniques that are recognized as good project management practices.

Specifically, the Project Manager will:

1. Participate in the technical team meetings, acquisition strategy meetings, and construction meetings as necessary to keep the PMT apprised of potential risks, budget or schedule impacts;
2. Facilitate PMT meetings and discussion to ensure that work is proceeding in accordance with the identified scope, schedule, and budget and that project risks are identified, mitigated, and updated throughout the project;
3. Appropriately document decisions and maintain a file of the meeting minutes and decision documents. (As stated in the Communication Plan, below, note-taking may be delegated to other meeting participants);
4. Involve the DMMT in all important decisions and/or changes in the project scope, schedule, or budget and notify the DMMT of any decisions and/or changes which are made within the authority of the PMT;
5. Coordinate funding requirements between the Joint Board, the Area Office, and the Regional Office;
6. Serve as a focal point for communication between various Reclamation Offices, project stakeholders, and the public, including coordinating requests for assistance/information, site visits, and media statements;
7. Keep the Project Management Plan current as scope, schedule, budget, and project risks are updated;
8. Coordinate with the Regional Office, Area Office and TSC to update budget and schedule data on a monthly basis for discussion at a PMT meeting;
9. Ensure that project closeout activities are completed, including assembling, documenting, and disseminating lessons learned, and closing out all cost authorities.

Communication Plan

This plan (Appendix A) will serve as a basis for communication between DMMT members, PMT members, and other parties with responsibilities and interests in the management of the St. Mary Diversion Dam Replacement. The principal component of the communication plan is the PMT Coordination Meeting. Additionally, various other meetings and accountability reporting will occur to assure all parties are informed of project status and have the opportunity for input into the management process.

PMT Coordination Meeting

The PMT will convene via conference call on a regular basis during all phases of final design, construction, and project closeout. PMT meetings may be called on an as-needed basis to resolve issues, but generally it is anticipated that Project Coordination meetings will be held at least monthly through project completion.

Draft agendas will be developed and distributed to all Team Members and Affiliated Team Members for input in advance of each meeting. A final agenda is distributed before the meeting date. Any member can assume the role of discussion leader when presenting specific agenda items.

Minutes of the meetings, including PMT deliberations and action items, are recorded by the PM and circulated for review, comment, and approval within one week after the meeting. Action items are assigned and listed with deadline dates. The PM will incorporate comments from the group and distribute final minutes. The PM will maintain an official file of the minutes.

Cost Analysis Reporting

The PM will use the project schedule and cost estimates to establish a time-phased budget or cost baseline. On a monthly basis, the PM will compare the actual work accomplishments and costs to the cost baseline and assess project progress within the current phase of the project. An updated cost report will be distributed by the PM quarterly. If cost or schedule variances are noted, the PMT will decide what remedial actions are required – if any. During the construction phase, a cost loaded schedule will be required of the Contractor along with monthly updates to allow for Earned Value methodology to be applied to Contract. Non-Contract costs for CM will be tracked using EVA or an alternate reporting form.

As the project is funded by the Bipartisan Infrastructure Law additional reporting requirements are likely, though unclear at the time of drafting of this PMP.

Decision Documents

In accordance with Reclamation Manual Policy FAC-P02 and Appendix A of the Project Management Guidelines, the PMT will prepare and sign a decision document for each decision that significantly impacts project cost, time, scope, or significant technical details. DMMT signatures will also be required for all decisions that have been elevated to their level. The format and formality of the decision document will be commensurate with the level of decision, and will be determined by the PMT. At a minimum, the following Decision Documents will be needed:

1. Finalization of Biological Assessment;
2. Acceptance of Design C and to proceed to Specification development;
3. Proceed with SpecB and Issue Solicitation;
4. Modifications over $1,00,000 using the CO's Determination and Findings statement;

5. Acceptance of substantial completion and transition to monitoring plan.

Status Reports

Quarterly status reports will be generated by the PM which captures the planned status of the project versus actual accomplishment. These reports should include full reporting on the current status of the project from perspective of scope, schedule, and budget as well as future potential risks and responses. The reports will be distributed to the DMMT and project stakeholders.

During construction phase of the project, Daily Inspection Reports will be made available to the PMT for review.

Periodically, the Joint Board, MB Region or MTAO may produce brief Issue Papers which are tailored to brief the Commissioner of the Bureau of Reclamation as well as the project's stakeholders.

Public Involvement

The PM will respond to all communications with the general public, and direct them appropriately. The MTAO will distribute appropriate information to a variety of public media sources.

Tribal Involvement

The PM will coordinate with the Blackfeet Tribe (Tribe) and the Bureau of Indian Affairs (BIA) through the Environmental Technical Team to ensure the Project complies with the Tribe's environmental, land use, and cultural laws. The PM will also engage with the Blackfeet Tribal Employment Rights Office (TERO) to ensure the Project will enforce the preference requirements as set forth by the Blackfeet Tribe. In addition, a member of the Blackfeet Water Resources Division will be an affiliated member of the PMT and a member of the DMMT will brief the Blackfeet Tribal Business Council quarterly.

Financial and Schedule Reports

The PM will provide financial and schedule reports to Project Beneficiaries and/or their designated representative on a monthly basis.

Special Reports and Analyses

Special reports and analyses will be prepared as needed or as requested. Reclamation will generate several reports as part of this project. These reports may include, but are not limited to: Value Engineering and Accountability Reports, Environmental and Cultural compliance reports, Biological Assessment, Consultant Reviews, Drawings and Specifications packages, all appropriate Project design and construction documentation, the Technical Report of Construction, and other construction closeout documentation.

Project Scope

The St. Mary Diversion Dam Replacement Project will include all activities required to design, construct, and closeout construction of a new diversion dam and fish protection structure that will comply with the Endangered Species Act. The main features of the project will be a low head diversion dam and rock ramp for upstream passage, a new headworks structure, a canal fish screen, a check structure downstream of the fish screen, a fish bypass to return fish to the river, O&M and control buildings, and auxiliary features. The project will be conducted in accordance with the Bureau of Reclamation's Project Management and Design Guidelines.

Work Breakdown Structure

The Work Breakdown Structure (WBS) in Appendix E defines the primary tasks that will be performed as part of the overall scope of the Project. Tasks are separated into four major processes: Initiating, Planning, Executing, Monitoring and Controlling, and Closing. Sub tasks are identified under the process heading. At the time this written project management plan was developed, the initiation phase was complete and the planning phase was underway. Details of completed tasks are, therefore, not included or very brief in this project management plan. A responsible individual for each task is identified in Appendix A of this report.

Schedule and Finance Management

The PMT is responsible for establishing a schedule and an estimated budget for the project. The Project Manager will be responsible for tracking the project schedule and project budget as part of the Project Management task. Earned Value Analysis techniques will be utilized, as needed, in an effort to minimize budget and scheduling problems.

Project Schedule

A Project Schedule for key milestones of this project is included in Appendix B. The schedule as shown for construction of the project does not have the details developed at this time and are estimated for project planning purposes only. Once schedule and scope details for construction are finalized, the Master Project Schedule will be updated to include those tasks in the Work Breakdown Structure and will be distributed by the PMT to all parties with interest in the project.

Project Budget

A high-level project budget has been developed for planning and funding availability purposes and is included in Appendix C. At the time of initial preparation of this PMP non-contract costs for construction administration were estimated for planning purposes only and should not be taken as the baseline estimates to complete the Project. Total project estimated costs will be updated at the start of the Construction phase and will be used as the baseline for budget

analysis of the project for the current phase of the project. Design, Field Exploration, NEPA/ESA and PM costs have all been baselined as part of this PMP.

Project costs will be tracked by task using individual accounting Work Breakdown Structures associated with each major task for each phase of the project. Several tasks relate to overall project management and development, while others are specific to individual phases of the project. Cost authorities specific to the individual project phases will not be opened until that phase begins. When the task has been completed to the team's satisfaction, the cost authority number associated with that task will be closed allowing the team to compare actual costs with the original estimated.

Prior to the start of each major phase of the Project (Final Design, Construction, Closeout), the Responsible Team Lead for that specific phase of the Project will prepare and submit a service agreement with the estimated budget to the PM for approval.

Change Management

Service Agreements

Changes to Reclamation staff service agreements will be revised via a change order form. The revised Service Agreements will be approved by the PM and the AO budget personnel in advance of exhausting current budgets. Significant changes to the Service Agreements that impact the scope, schedule, or budget will be brought to the PMT prior to the change being approved. Explicit examples of significant changes shall include:

- Cost increase of 10% of originally approved service agreement;
- Schedule delay of 3 months or more of the current service agreement;
- Any change to the current scope.

Construction Contract

Any changes during the construction phase will be directed by the CO, with input from the PMT. Changes will be handled by formal contract modification by the CO as necessary. Any contract change or modification that is estimated to cost over $500,000, or major schedule impacts, should be discussed and a resolution to the issue agreed upon by the PMT, but ultimately the CO has the final word on all issues related to the contract. Modifications greater than $1,00,000 will require the PMT to develop a Decision Document, using the CO's Determinations and Findings, justifying the need and will be sent to the DMMT and Stakeholders.

Cost Reporting and Schedule

To assess and respond to potential budget and schedule problems, cost reporting will be used to track progress for the duration of the project. The planned budget and schedule developed at the beginning of each phase will be used as the baseline for that phase (NEPA, Final Design, Construction Management).

Individuals listed in Table 1 of this report will be responsible for assessing the work accomplished (percent complete) for tasks assigned to them. The PM will collect progress data and update the cost report to track budget versus actual costs. The PM will distribute an updated cost report to the PMT monthly.

Managing Budget and Schedule Risks

At the time of drafting this PMP no formal risk development or response had been conducted. The PMT will implement formal risk development and response strategies during the design phase. On a regular basis, the PMT will review those factors which pose a risk to the project budget and/or schedule. A preliminary list of those risks will be developed and included in Appendix D.

Tasks and Associated Cost Authorities

Table 5 – Tasks and Associated Work Breakdown Structures

Activity	**Work Breakdown Structure**	**Description of activities to be charged to the cost structure**
Project Management		Costs related to scheduling, budgeting, and participation in PMT meetings and follow-up documentation.
NEPA		All environmental compliance activities. Cultural resources related activities will be tracked separately.
Cultural Resources		Cultural resources activities.
Field Exploration		Costs related to field explorations to gather design data for final design.
Final Design		Costs related to development of designs and specifications and including consultant reviews
Procurement		Costs incurred by the Regional Office as related to procurement and contract administration
Construction Management		Costs incurred for construction management, quality control, quality assurance, etc.
Construction Design Support		TSC design support activities during construction.
Construction Contract(s)		Direct contract costs (modification contract, contracts for miscellaneous activities, etc.).
Project Closeout and Documentation		Costs related to Design Report, Final Construction Report, As-built drawings, SOP revisions, etc.

Final Design Activities

The PMT has established that the TSC Civil Structures Group will be responsible for implementing the final design activities as outlined in the Final Design Process Guidelines with a request for technical specifications at the 60% design stage, if possible.

Final Design Data Collection

At the time of drafting this PMP the Final Design Service Agreement included the necessary information on overall schedules, budget, and staffing for the collection and documentation of the design data required for preparing the analyses, designs, and specifications for the project objectives and scope.

As the design progresses, any unanticipated changes to the design and construction of the project, and an assessment of the impact of these changes, will be communicated to the PMT through change management.

Final Design Process Milestones

The Final Design Process Guidelines defines the major final design milestones prior to solicitation, some of which are decision points within this PMP, as follows:

- 30% Final Design (CONCEPTC) (completed on August 3, 2021)
- 60% Final Design (DESIGNC)
- 90% Final Design (SPECD)
- REVIEWC
- 100% Final Design (SPECB)

The 60% Final Design, Review C (90%), and 100% Final Design milestones require a briefing from the design team to the PMT and possibly the DMMT. The briefings include presentations of the tasks completed to meet the milestone. After the briefing, the PMT and the design team lead will sign the decision document agreeing to the completion of the milestone.

Design-Acquisition-Construction Transition

The PMT, Design Staff, Acquisitions Staff, and Construction Staff will conduct a transition meeting that will confirm all constructability comments have been resolved, confirm acquisition plan and participation, communicate designer's considerations (see Appendix 4 of the Final Design Process Guidelines), review the latest government estimate and schedule, identify known risks that were accepted, and identify targeted design team site visits. This meeting should occur approximately two weeks after Review C, prior to the finalization of Spec B. Meeting minutes will be prepared by the Project Manager and approved by the PMT.

In addition to the above meeting, Design and Construction staff will participate in an on-site plan-in-hand review prior to the 60% Final Design milestone being considered complete. This task may be considered as the Constructability Review

(CR). Acquisition will join Design and Construction staff during the Constructability Review to discuss the acquisition plan and goals.

Construction Activities

There remains some uncertainty with internal resources, but the PMT has currently established that the MB Regional Office Construction Services Group (CSG) will be responsible for all Construction Management/Oversight duties. These responsibilities are represented in the WBS as the Construction Management and Construction Documentation tasks for each phase of the project. Key positions will be identified at a later date.

Construction Management Plan

The CSG will draft the CMP and service agreement after completion of Spec B and finalize the CMP and service agreement prior to award. An independent evaluation of the CMP activities by a qualified individual, familiar with Reclamation's processes, will be conducted with a focus on the quality of the construction oversight and resources required as it relates to meeting the design intent of the construction, budget availability and risks.

The PMT, TSC design staff, and the CSG staff will collaboratively review the Construction Management Plan (CMP) once the independent review is completed. All efforts will be made to maintain a consistent field staff throughout the project.

The PMT, TSC design staff, and the CSG staff shall be in continual communication throughout the duration of the construction contract. Any issues considered to be a change in site conditions or significant modification to the contract will be coordinated with the PMT, TSC design staff, and the CSG.

Post Construction Activities

The PMT has assigned post construction tasks to various parties as outlined in the WBS. Post Construction activities are defined by the *Closeout and Documentation* tasks for each phase of construction. Additional direction on the various activities associated with these tasks is included below.

Project Debriefing

The PMT will facilitate a project closeout meeting at the end of each phase of construction, or, alternatively, at the end of the final construction phase of the project. During the closeout meeting, construction field staff, contract administration staff, and design staff will have the opportunity to freely and openly discuss lessons learned during design and construction of the project.

Important items gained from the debriefing will be captured and included in the Technical Report of Construction for that phase.

Technical Report of Construction

The CSG will be responsible for producing a Technical Report of Construction for each phase of the work, or alternatively, an overall report documenting construction of all phases of the project. CSG responsibilities will include assembling project photos, inspector reports, quality control documentation, as-built drawings, etc. The PMT will be given the opportunity to review the draft report.

Geology Report

The MB-2300 group will be responsible for the final Geology Report. The Geology Report will document the geotechnical conditions of the site including; foundation mapping, and other pertinent information that isn't covered in other reports.

As-Built Drawings

The Contractor will maintain a working set of marked prints at the construction office, documenting changes from original design drawings as they occur. These drawings are reviewed monthly by the CSG. At the completion of the construction phase of the project, the Contractor submits the as-built drawings for review and acceptance. The drawings will be reviewed by the TSC and the CSG and, if accepted, the CSG will approve the submittal. The MB Technical Services Group will then be responsible for incorporating the record drawings into the Reclamation electronic data storage (EDRAWS) system for final signature and record keeping. The CSG will include a set of as-built drawings in the Technical Report of Construction.

Substantial Completion

For the purposes of this PMP, the project will be deemed financially substantially complete once the final walkthrough has been completed and the new diversion dam, headworks, and fish screen facility are available for use. The date of substantial completion will be used by Regional Finance Services to move costs from Assets under Construction to the appropriate plant account. Substantial completion of the construction contract is not considered to be the same as for the PMP as defined above. The term "substantial completion" for the construction contract is when the work is sufficiently complete so that key elements of the asset may be used, operated, or occupied. These similar terms represent different milestones and should not be confused as the same.

Formal Adoption of Project Management Plan

This Project Management Plan may be revised and amended as deemed appropriate by the consensus of the Project Management Team.

This Project Management Plan is hereby adopted by the following PMT members as of June 2022:

JEFFREY BAUMBERGER Digitally signed by JEFFREY BAUMBERGER Date: 2022.06.07 09:25:13 -06'00'

Jeff Baumberger, Resource Management Division Manager, MTAO

KURT ANDERSON Digitally signed by KURT ANDERSON Date: 2022.06.07 09:38:09 -06'00'

Kurt Anderson, P.E., Regional Construction Engineer, MB Regional Office

CHOU CHA Digitally signed by CHOU CHA Date: 2022.06.07 12:04:03 -06'00'

Chou Cha, P.E., Group Manager, Civil Structures Group, TSC

CHRISTOPHER GOMER Digitally signed by CHRISTOPHER GOMER Date: 2022.06.07 12:47:04 -06'00'

Chris Gomer, P.E., Facility O&M Division Manager, MTAO

Jennifer D. Patrick Digitally signed by Jennifer D. Patrick Date: 2022.06.08 10:18:48 -06'00'

Jennifer Patrick, Manager, Milk River Irrigation Project Joint Board of Control

Decision Maker Approval of Project Management Plan

This Project Management Plan has been approved by the project Decision Makers as of June 2022:

RYAN NEWMAN Digitally signed by RYAN NEWMAN
Date: 2022.06.09 07:45:11 -06'00'

Ryan Newman, Area Manager
Montana Area Office

BRENT ESPLIN Digitally signed by BRENT ESPLIN
Date: 2022.06.09 08:04:52 -06'00'

Brent Esplin, Regional Director
Missouri Basin Regional Office

APPENDIX A - COMMUNICATION PLAN

Communication Plan

Project Name	Project Number	Prepared By	Preparer's Initial
St. Mary Diversion Dam Replacement	TBD	Steven Darlinton	SDD
Project Manager	**PM Email**	**PM Phone #**	**Date Prepared**
Steven Darlinton	sdarlinton@usbr.gov	406-247-7322	4/22/2022

Decision Making Management Team:

First Name	Last Name	Telephone No.	E-mail	Role	Preferred Communication Mode
Brent	Esplin	406-247-7600	besplin@usbr.gov	RD	Briefings
Ryan	Newman	406-247-7298	rnewman@usbr.gov	Area Manager	Briefings

Project Management Team Members:

First Name	Last Name	Telephone No.	E-mail	Role	Preferred Communication Mode
Jennifer	Patrick	[redacted]		Joint Board	E-mail
Kurt	Anderson			Construction	E-mail
Jeff	Baumberger			MTAO RMD	E-mail
Chou	Cha			TSC	E-mail
Chris	Gomer			MTAO O&M	E-mail

Design Team/Associated Team Members:

First Name	Last Name	Telephone No.	E-mail	Role	Preferred Communication Mode
Ryan	Kent	[redacted]		Design Lead	E-mail
Lucy	Schurr			Geotechnical	E-mail
Eric	Paquette			Mechanical	E-mail
Christopher	Purdy			Electrical	E-mail
Sara	Putnam			Plant Structures	E-mail
Antonio	Belmar			Cost Estimator	E-mail
Tyler	Chatfield			Materials Engineer	E-mail
Nicole	Bogenschuetz			Dewatering Design	E-mail
Trent	Lewis			Geology	E-mail
Linda	Tilstra			Construction	E-mail
Rob	Carlson			Specifications	E-mail
Tim	Lannen			Civil Structures	E-mail
Cody	Clark			Geology	E-mail
Seth	Joramo			Geology	E-mail
Charlie	Hardes			Survey	E-mail
Toby	Tabor			Facility Manager	E-mail
Thomas	Gervais			Facility Operator	E-mail

Environmental Technical Team/Associated Team Members:

First Name	Last Name	Telephone No.	E-mail	Role	Preferred Communication Mode
Gerald	Lunak	[redacted]		Coordinator, Blackfeet Water Resources	Monthly meetings
Lyle	Meeks			Blackfeet Water Resources Engineer	Monthly meetings
Buzz	Cobell			Director, Blackfeet Nation Fish and Wildlife	Monthly meetings
Gerald	Wagner			Director, Blackfeet Environmental	Monthly meetings

			Office	
David	Spotted Eagle, Jr.	[redacted]	Ordinance 117 Coordinator, Blackfeet Environmental Office	Monthly meetings
John	Murray	[redacted]	Coordinator, Blackfeet Tribal Historic Preservation Office	Monthly meetings
Gheri	Hall	[redacted]	Deputy, Blackfeet Tribal Historic Preservation Office	Monthly meetings
Teola	Bird	[redacted]	Director, Blackfeet TERO	Monthly meetings
Kenny	Bird	[redacted]	(Acting) Superintendent Blackfeet Agency, BIA	Monthly meetings
Kevin	Aceituno	[redacted]	St. Mary ESA, Ecological Services USFWS	Monthly meetings
Lauri	Teig	[redacted]	NEPA/ESA, Reclamation	Monthly meetings
Rick	Hanson	[redacted]	NHPA, Reclamation	Monthly meetings

Required Communications:

Stakeholder Group	Information Type	Mode	Distribution	Frequency	Responsibility
MRJBOC	Project Updates	Meeting	E-mail	Quarterly	Steven Darlinton
BIA/Blackfeet	Project Updates	Meeting	Letter/Email	Quarterly	Steven Darlinton
USFWS	Project Updates	Meeting	E-mail	Quarterly	Steven Darlinton

Meetings/Briefings:

Information Type	What	Who	When	Purpose
Monthly Coordination Meeting	Internal	Steven Darlinton	Monthly	Informational
Environmental/Cultural Technical Team	Internal/External	Steven Darlinton	Monthly	Coordination
Tribal Coordination	External	Ryan Newman	Quarterly	Informational
Environmental Assessment Public Meeting (s)	Public Meeting	Lauri Teig	As Needed	Informational
St. Mary Rehabilitation Working Group Update	Public Meeting	Steven Darlinton	Quarterly	Informational
Project Update for the DMMT	Briefing Paper	Steven Darlinton	Quarterly	Message Consistency
External Project Update	Newsletter	Steven Darlinton	Quarterly	Message Consistency

APPENDIX B - PROJECT SCHEDULE

Current Master Schedule Located at:

[redacted]

Or

Email Project Manager (sdarlinton@usbr.gov) for Schedule

APPENDIX C - ESTIMATED PROJECT BUDGET

Table C1: Estimated Project Budget (will be updated as data becomes available)

Phase	Cost Category	Schedule			Planned Cost ($1,000)
		Start Date	End Date	Duration (in months)	
1	Project Management	02/2022	12/2027	70	$1,000
1	Environmental / NEPA/ Cultural Compliance	02/2022	04/2023	14	$150
1	FER Investigation	04/2022	05/2022	2	$450
2	Final Design	02/2022	03/2023	13	$2,500
2	Procurement	03/2023	12/2026	45	$300
3	Construction Management	01/2024	12/2026	36	$16,000
4	Construction Contract	01/2024	12/2026	36	$65,000
3	Post Construction Activities	01/2026	12/2027	12	$2,100
	TOTAL				$87,500

APPENDIX D – PROJECT RISKS

Will be added once completed

APPENDIX E – WORK BREAKDOWN STRUCTURE

1. **Planning Process**
   - *1.1 Project Management*
     - *1.1.1 Appointment of the Project Management Team*
     - *1.1.2 Project and PMT Charters*
     - *1.1.3 Preparation and Implementation of the Project Management Plan*
     - *1.1.4 Track Scope, Budget, and Schedule*
   - *1.2 Initiate NEPA Process*
     - *1.2.1 Public Involvement*
     - *1.2.2 EA/EIS*
     - *1.2.3 ESA Consultation*
     - *1.2.4 Cultural Resources*
     - *1.2.5 Permits*
   - *1.3 Final Activities to Select Preferred Alternatives*
     - *1.3.1 Collect Geologic Design Data*
     - *1.3.2 Collect Topographical Survey Data*
     - *1.3.3 Prepare Feasibility Designs and Cost Estimates*
     - *1.3.4 Constructability Review*
     - *1.3.5 Team Assessment of Alternatives*
     - *1.3.6 Finalize Supporting and Required Documents*
     - *1.3.7 Selection of Preferred Alternative*
       - *1.3.7.1 Prepare Decision Document*
       - *1.3.7.2 Acquisition Initiation Meeting*
     - *1.3.8 Develop Final Design Project Plan*
   - *1.4 Final Design Process*
     - *1.4.1 Concept C and Design C*
       - *1.4.1.1 Collect Engineering Design Data for Final Design*
       - *1.4.1.2 Identify TMs to be Prepared*
       - *1.4.1.3 Engineering Analysis and Design*
       - *1.4.1.4 Identify Acquisition Type*
       - *1.4.1.5 Prepare 60% Design Drawings and Cost Estimate*
       - *1.4.1.6 Prepare Geological Report with Logs*
       - *1.4.1.7 Prepare Technical Memorandums*

1.4.1.8 Permits, Cultural Resources, and Environmental Coordination

1.4.1.9 Constructability Review and on-site Plan in Hand Review

1.4.1.10 Develop Draft Construction Schedule

1.4.1.11 Design C Briefing and Decision Document

1.4.2 Spec D

1.4.2.1 Complete All Drawings and Draft Specification

1.4.2.2 Complete Final Technical Memorandums

1.4.2.3 Complete Draft Design Summary

1.4.2.4 Submit 90% Draft Specifications and Drawings for Review

1.4.2.5 Draft Specifications to MB-5000

1.4.2.6 Draft Source Selection Announcement and plan for evaluating responses

1.4.3 Review C

1.4.3.1 Internal Review Draft Specifications, Drawings, and Design

1.4.3.2 Stakeholder Review

1.4.3.3 Review C Meeting

1.4.3.4 Prepare Review C Meeting Notes

1.4.4 Spec B

1.4.4.1 Incorporate review comments

1.4.4.1.1 Finalize specs and signature page

1.4.4.1.2 Finalize drawings and sign

1.4.4.1.3 Concurrence from all PMT members that issues have been resolved.

1.4.4.1.4 Submit final specs and drawings to Acquisitions (MB-5000)

1.4.4.1.5 Draft Construction Management Plan

1.4.4.2 Prepare Estimated Funding Requirements cost estimate (Preval)

1.4.4.2.1 Submit EFR and Requisition to Acquisitions (MB-5000)

1.4.4.3 PMT Develops Evaluation Criteria for RFP

1.4.4.4 Finalize Security Requirements

1.4.5 Book C

1.4.5.1 Pre Solicitation Notice Posted on Fed Biz Ops

1.4.5.2 Prepare Solicitation for Issue

1.4.5.3 AAMD/Field Solicitor Review

1.4.6 Bid C

1.4.6.1 Issue Solicitation

1.4.6.2 Pre-Bid Site Visit

1.4.6.3 Amendments

1.4.6.4 Independent Government Cost Estimate

1.4.6.5 Receive Proposals

1.4.6.6 Technical Proposal Evaluation Committee Reviews Proposals makes recommendation for contract award

1.4.6.7 CO performs independent evaluation and proceeds with preparing documentation for award

2. Execution Process (Construction)

2.1 Finalize Construction Management Plan

2.2 Finalize Operation and Maintenance Requirements

2.3 Construction Management of Preferred Alternative

2.3.1 Award Construction Contract

2.3.2 Receipt of Notice to Proceed

2.3.3 Pre-construction Meeting

2.3.4 Submittals and pre-site work

2.3.5 Construction Coordination

2.3.6 Inspection of Construction

2.3.7 Substantial Completion

2.3.8 Final Inspection and Acceptance

2.3.9 Final Seeding and Site Restoration

2.3.10 As-Built Drawings submitted and accepted by Government

2.3.11 Final payment

3. Monitoring and Controlling

3.1 Developing performance metrics

3.1.1 Critical processes and customer requirements

3.2 Developing targets

3.3 Continuous evaluation and response

4. Closing Process (Post Construction, Transfer and Operations)

4.1 As-Built Drawings Entered Into Reclamation Drawing Database

4.2 Cost and Schedule Analysis(as needed)

4.3 Final Construction Report

4.4 Final Geology Report