



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting
Wednesday, March 17, 2021

Agenda Item

Item 6. H. - LMRWD Projects

Prepared By

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Summary

i. Eden Prairie Study Area #3

Young Environmental Consulting Group has prepared a work plan for the next phase of work to be completed for this project. This work includes the work proposed by Inter-Fluve and support by Young Environmental. Once this phase is complete a work plan will be prepared for the construction of the project. A kick-off meeting for the next phase has been scheduled for 9:30am on Wednesday, March 17, 2021.

The Board should review the work plan and consider approval of the plan.

Attachments

Area 3 Minnesota Riverbank Stability Project—Design Workplan dated March 2, 2021

Recommended Action

Motion to approve Area 3 Minnesota Riverbank Stability Project—Design Workplan dated March 2, 2021

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Area 3 Minnesota Riverbank Stability Project—Design

WORKPLAN—March 2, 2021

The Lower Minnesota River Watershed District (LMRWD) has been studying and collaborating with the City of Eden Prairie to monitor the erosion occurring along the north bank of the Minnesota River since 2011. In 2020 it was estimated that the continued erosion of the riverbank and subsequent failure of the bluff slope above it have caused approximately 100,000 tons of soil and sediment to enter the river at a rate of 5,000 tons per year. The continued erosion of the riverbank is contributing to the increased turbidity and excess nutrients within the lower Minnesota River.

After 10 years of collecting monitoring data, the District is ready to move forward with a design to stabilize the riverbank and prevent future erosion of the bluff toe and further contributions to the excess sediment and nutrient loadings to the river.

Summary

<i>Outcome:</i>	90 percent construction plans, specifications, and engineer's estimate
<i>Project Stakeholders:</i>	City of Eden Prairie, Hennepin County
<i>Timeline for Completion of Project:</i>	March–October 2021
<i>Total Project Budget¹:</i>	\$183,000–\$188,600

Objective 1. Project Management

This objective consists of managing the project scope, submittals, schedule, and budget and providing periodic communications from Inter-Fluve to the LMRWD staff via email and phone and from staff to the Board. Project coordination meetings to maintain communication with stakeholders will be necessary. The following meetings are planned:

Task 1-1: Kickoff meeting: LMRWD staff and Inter-Fluve will meet virtually to discuss the project scope and schedule.

Task 1-2: Stakeholders' kickoff meeting: LMRWD staff will lead a kickoff meeting with identified stakeholders.

Task 1-3: Design review meetings: Inter-Fluve will present the project design and provide an update at the end of the 60 percent and 90 percent tasks to LMRWD staff and project partners before the comment period for each task begins.

¹ Where referenced, the LMRWD staff consists of the District's administrator and technical consultants' budget.

Task 1-4: Board Updates: LMRWD staff will provide update memos to the Board summarizing the alternatives workshop and again following the 60- and 90-percent design review meetings and will provide project schedule updates, as necessary.

Timeline for Completion: March–September 2021

Deliverables: Invoices, meeting agendas and summaries, board update memos

Estimated Budget: \$24,100–\$25,000 (LMRWD: \$9,296–\$10,196; Inter-Fluve: \$14,804)

Objective 2. Alternatives Review & Validation

Task 2-1: Alternatives Review and Analysis: Inter-Fluve will review the data provided, identify gaps, and supplement or update the data and analysis to confirm the failure drivers of the slope and risks to the site. They will conduct a limited drone survey to support the development of the designs and develop a hydraulic analysis that includes ice analysis, boat wake, and geotechnical considerations. Inter-Fluve will summarize their findings in a technical memorandum with the criteria used, alternatives reviewed, and final recommendation.

Task 2-2: Alternatives Workshop: Inter-Fluve will present the findings of their alternative analysis and discuss the results with LMRWD staff, city, and county stakeholders at a workshop, and they will provide a meeting summary to attendees. LMRWD staff will review the design recommendation memo, attend the alternatives workshop, and provide feedback on the work completed to date.

Task 2-3: Individual Agency Meetings: LMRWD staff will coordinate with individual agencies to provide them with project updates and coordination of any necessary reviews.

Timeline for Completion: March–May 2021

Deliverables: Alternatives review memo, workshop meeting agenda and summary, agency meeting agendas and summaries

Estimated Budget: \$59,400–\$60,300 (LMRWD; \$8,695–\$9,595; Inter-Fluve: \$50,705)

Objective 3. 60 Percent Design

Task 3-1: 60 Percent Design Development: Inter-Fluve will develop 60 percent design plans based on the recommended design selected by stakeholders at the Objective 2 alternatives workshop. They will update the hydraulic analysis to reflect the proposed design, develop a preliminary plan set, and facilitate a design review meeting with LMRWD.

Task 3-2: 60 Percent Design Package Review: Interfluve will provide LMRWD staff with the 60 percent design package, including construction plans, the design memorandum, and the permitting matrix. LMRWD staff will review the package and complete the comment resolution log for the selected consultant. Comments will be returned to Interfluve within two weeks.

Timeline for Completion: May–July 2021

Deliverables: 60 percent design package, design review meeting agenda and summary, completed comment log

Estimated Budget: \$43,700–\$45,100 (LMRWD: \$13,289–\$14,689; Inter-Fluve: \$30,411)

Objective 4. Permitting

Task 4-1: Pre-Permit Meetings: Using the 60 percent plans, LMRWD staff will independently confirm the permit matrix by coordinating with the identified agencies to present the project and confirm specific permit requirements and timelines. Permits will likely be needed from the following agencies: MnDNR, USACE, LMRWD, City of Eden Prairie, US Coast Guard, MPCA, Environmental Quality Board, and the Minnesota State Historic Preservation Office, among others.

Task 4-2: Specialty Permitting: LMRWD Staff will complete a Phase 1 analysis for historic and cultural resources and threatened and endangered species. This information will be used for the joint permit application. Additional work may be necessary depending on the results of the Phase 1 analysis but has not been included in this workplan.

Task 4-3: Permit Applications: LMRWD staff will draft permit applications based on the 60 percent plans provided by Inter-Fluve and apply for applicable permits, including an LMRWD permit, the joint permit application for the MnDNR and USACE, and public waters permitting. Agency review comments will be compiled and provided to the selected consultant in Task 6.

Timeline for Completion: July 2021–September 2021

Deliverables: Permit applications, Phase 1 analysis and summary

Estimated Budget: \$17,900–\$19,700 (LMRWD: \$17,900–\$19,700; Inter-Fluve: \$0)

Objective 5. 90 Percent Design Review

Task 5-1: 90 Percent Design Development: Inter-Fluve will develop 90 percent design plans based on the comments provided at the end of Tasks 4-3 and 5-3. The plan set will be updated to incorporate these comments, develop an engineer's estimate and final permit matrix, and provide draft specifications for review.

Task 5-2: 90 Percent Design Package Review: LMRWD staff will review the 90 percent design package, including revisions to construction plans, the design memorandum, and the permitting matrix. LMRWD staff will conduct a complete review of the draft technical specifications and preliminary engineer's estimate and will finish the comment resolution log for the selected consultant.

Timeline for Completion: June 2021–July 2021

Deliverables: Board update memo

Estimated Budget: \$37,900–\$38,500 (LMRWD: \$6,305–\$6,905; Inter-Fluve: \$31,595)