



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, July 17, 2024

Agenda Item

Item 4. B. – LMRWD Work Plan Quarterly Report (Q2 2024)

Prepared By

Linda Loomis, Administrator

Summary

In September 2023, when the Board of Managers approved the 2024 Work Plan, the Board requested quarterly updates. The 2024 Work Plan update for the second quarter of 2024 is attached for the Board's information.

Young Environmental Consulting Group will present the update to the Board at the July Board of Managers meeting and answer questions from Board members.

Attachments

Technical Memorandum – Lower Minnesota River Watershed District – Project and Programs Quarter 2 Progress Report

Recommended Action

Motion to receive and file progress report

Technical Memorandum



To: Linda Loomis, Administrator
Lower Minnesota River Watershed District (LMRWD)

From: Della Schall Young, CPESC, PMP, Principal Scientist
Jennifer Mocol-Johnson, Land and Natural Resources Manager

Date: July 12, 2024

Re: Lower Minnesota River Watershed District—Projects and Programs Quarter 2
Progress Report

This report presents the Q2 outcomes of LMRWD projects and programs in 2024. The board requested performance metrics or key performance indicators (KPIs) in the previous quarter update. This report includes performance metrics or KPIs, which show the effectiveness of programs and the progress of projects against budget and timeline.

PROGRAMS

Individual Project Permit Program

The LMRWD reviews permit applications for individual projects in cities without their local government unit (LGU) permits, Minnesota Department of Transportation (MnDOT) projects, and LGUs that have opted to have the LMRWD maintain specific rules through 2024. The LMRWD has reviewed eighteen permit applications and inquiries and issued one permit in Quarter 1 of 2024 (January–March). The LMRWD has reviewed five additional permit applications and inquiries and issued four permits in Quarter 2 of 2024 (April–June). Projects under review or permitted in 2024 are shown in Table 1.

Table 1. Projects that are under review, conditionally approved, or permitted in 2024. Updates since Quarter 1 are highlighted in light blue.

Permit Number	Project Name	Status	Date Received	Conditional Approval	Permit Issued
2022-031	RSI Marine Storage	Conditional Approval	9/20/2023	2/21/2024	-
2022-037	Peterson Wetland Bank	Active	5/23/2023	7/19/2023	1/9/2024
2023-010	MN River Greenway Bridge	Under Review	5/17/2024	-	-
2023-013	Merriam Junction Trail	Conditional Approval	3/20/2024	6/20/2024	-

Permit Number	Project Name	Status	Date Received	Conditional Approval	Permit Issued
2023-017	MN Bluffs Regional Trail	Conditional Approval	12/28/2023	3/20/2024	-
2023-020	Tramore Heights Addition*	Conditional Approval	8/21/2023	2/21/2024	5/2/2024
2023-022	MAC SSC Phase 2	Active	10/2/2023	5/15/2024	5/25/2024
2023-025	TH35W SP1981-140	Under Review	1/24/2024	-	-
2023-026	CP Pipeline Abandonment	Conditional Approval	1/5/2024	2/21/2024	5/29/2024
2023-027	TH41 ORF Relocation	Active	12/12/2023	6/20/2024	6/20/2024
2024-001	Saint John's Church	No Permit Required	1/15/2024	-	-
2024-002	MnDOT Pond Maintenance	Conditional Approval	3/20/2024	5/15/2024	-
2024-003	Port Cargill Savage	Upcoming	-	-	-
2024-004	35W Early Release	Conditional Approval	2/20/2024	4/17/2024	-
2024-005	Fort Snelling Cemetery	Upcoming	-	-	-
2024-006	T2 North Expansion*	Conditional Approval Rule B/Under Review Rule D	2/28/2024	6/20/2024	-
2024-007	Chalet Driving Range	No Permit Required	2/18/2024	-	-
2024-008	CD Terminal Storage Pad	Under Review	3/22/2024	-	-
2024-009	FWTEC	Under Review	3/28/2024	-	-
2024-010	Lyndale Road	Under Review	3/29/2024	6/20/2024	-
2024-011	Opus Marsh	No Permit Required	4/30/2024	-	-
2024-012	Concourse G Infill Pods Phase 2	Under Review	5/29/2024	-	-
2024-013	Mn DNR Trail 1B	Upcoming	-	-	-

Permit Number	Project Name	Status	Date Received	Conditional Approval	Permit Issued
2024-014	LTS Lateral 2	Under Review	6/3/2024	-	-
2024-015	Boiling Springs Drainage Improvements	Under Review	6/21/2024	-	-

In addition to the application and inquiry reviews, the LMRWD also tracks expiration dates, renewals, and inquires for currently active or conditionally approved projects. The LMRWD has renewed nine permits in Quarter 1 2024 and seven permits in Quarter 2 2024.

The LMRWD has begun conducting inspections for the construction season, having inspected six completed construction projects and closed out three permits. Inspections will continue throughout the construction season.

Performance metric and assessment: Young Environmental has two criteria for measuring its work: 1) finishing and suggesting the next step for permit applications that are complete within the legally mandated time frame; and 2) performing a yearly inspection of the project. Young Environmental is completing reviews within the mandated time frame, and project site inspections are underway, with the bulk expected to be completed by the interns during the third quarter.

Information for board consideration: Young Environmental anticipates reviews to take 20 to 40 hours, depending on the complexity of the project. However, we have been experiencing significant delays due to inadequate documentation that requires multiple rounds of review. We ask the board to instruct staff on presenting a new permit fee schedule to adjust permit fees to recover the costs related to these expensive reviews.

Municipal Permits

The LMRWD acknowledges that LGUs are responsible for land use decisions and regulations. The municipal permit allows municipalities to grant permits and monitor activities as the primary permitting authority if they have adopted official controls needed to conform local water management with the LMRWD plan. The LGU must adopt official controls and request a municipal permit from the LMRWD. Municipal permits are valid for five years from the date of approval.

Performance metric and assessment: Young Environmental has one criterion for measuring its work: 1) permitting all LGUs or quasi-governmental organizations. Of the ten entities eligible for LGU permits, Young Environmental has completed the permitting process for all but three. The Metropolitan Airport Commission (MAC) submitted an LGU permit to the LMRWD in Quarter 2. The LMRWD has finished its initial review and provided MAC with initial comments. The City of Chanhassen is updating its codes and plans to work on municipal permits early in 2025, while the City of Savage stated it is in the process of code updates and intends to send ordinances to the LMRWD for review in mid-August.

Education and Outreach (E&O) Program

In 2024, work continues to engage the community through the E&O Program service areas:

- Board of managers coordination
- Management of the Citizen Advisory Committee (CAC)

- Social media activities
- Signage design and placement
- School engagement efforts
- Partnerships for community outreach and engagement activities

The E&O program aims to increase public awareness and involvement in water quality and natural resource protection in the LMRWD. The program consists of several components, including:

- Signage design and placement: Interpretive signs have been installed at Courthouse Lake and Quarry Lake to inform visitors about the ecological and recreational values of these sites. Resource signs are being planned for the Ike's Creek headwaters and Bass Ponds area of the Minnesota Valley Wildlife Refuge to discourage dumping and educate hikers about the importance of this water source.
- School engagement efforts: Five educators were awarded mini-grants in March 2024 to implement water-related projects in their classrooms. The program provides funding and technical assistance to teachers who want to engage their students in hands-on learning about water quality and conservation.
- Partnerships for community outreach and engagement activities: The program collaborates with local organizations and events to promote water stewardship and engage with residents. The program also supports the CAC, which is composed of four active members who volunteer at tabling events and recruit new members.
- Board of Managers Coordination: The program held a workshop in January 2024 with the LMRWD board, the CAC, and staff to talk about the vision, goals, and challenges of the E&O program. The workshop produced a draft action plan and an updated social media strategy. However, the board has not given directions because these items have been tabled.

Performance metric and assessment: The budget and timeline are the criteria for evaluating performance. Performance will be measured by how well the approved activities are completed after the comprehensive action plan is accepted. We have gone through half of the year and used up around 54 percent of the budget.

Fen Stewardship Program

We have completed stewardship plans for four fens and identified actions to protect and improve them: collecting more groundwater data, surveying vegetation, removing invasive plants, educating and reaching out to the public, and working with MnDNR to acquire land around the fens. We met with MnDNR staff in March to discuss our plans and priorities. We are combining the plans into one matrix that shows the priority actions for each fen.

We held a board workshop on May 15, 2024 to update the board and stakeholders on our actions. The board members asked us to work more with universities and stakeholders, find more funding opportunities, and form "friends of the fens" groups or partnerships. We are planning a workshop in September or October 2024 to share information, discuss priorities, and collaborate with various stakeholders to help find funding, research, and future actions.

For Ground and Surface Water Resources, we are upgrading the equipment at Seminary Fen wells to get better groundwater-level data. We are working with Carver County and MnDNR to ensure the equipment meets the needs and to decide who will do what. We also visited Seminary Fen in May to

check the drain tile locations and record where they are. Some areas had a lot of buckthorn and were hard to get through. We found two places with drain tile; one was flowing and draining part of the fen, and the other one was crushed and not flowing. We informed MnDNR staff about this and will discuss how to stop the drain tiles from affecting the fen. We are also making maps to show where the groundwater that feeds the fens comes from. We expect to finish the maps in August 2024.

For vegetation, we are planning to control buckthorn and purple loosestrife with MnDNR staff and map more native and invasive plants in the fens. MnDNR will start a project in Seminary Fen in late 2024 or early 2025 to remove and treat buckthorn for four to five years inside the Scientific and Natural Area boundary. We are working with MnDNR and the county staff to plan more buckthorn removal in fall 2024 in Savage Fen and in parts of Seminary Fen High Value Resource Area that are outside the SNA boundary.

For property acquisition, we will talk more with MnDNR about buying private properties around the fens. We will hire a consultant to research the properties and determine their values and how to buy them.

Performance metric and assessment: As mentioned earlier, we plan to do most of the work for this program in the last two quarters of 2024. We have finished about 35 percent of the project budget and tasks, leaving 65 percent for the remainder of the year.

CAPITAL IMPROVEMENT PROJECTS (CIPS)

Area 3 Minnesota Riverbank and Bluff Stabilization Project

Young Environmental submitted permit applications for the Area 3 project and coordinated with the regulating agencies. We also facilitated the completion of two soil borings and piezometers to assess soil and groundwater conditions. We assisted with the completion of the property acquisition and completed the no-rise analysis required for the project's permitting. We are waiting for approval from the US Army Corps of Engineers (USACE) and the MnDNR to continue with the 90 percent design.

Performance metric and assessment: We have used about 28 percent of the project budget for 20 percent of the project tasks. This is mainly because of complex permitting and helping with the property acquisitions process, which we did not anticipate.

Floodplain Modeling Project

We completed a literature search to investigate methods for estimating future peak discharges on the Minnesota River, which will inform future conditions' floodplain modeling and mapping. Based on the literature review and feedback from the MnDNR floodplain managers, we refined the modeling approach for this project. The approach uses a combination of the 2004 Federal Emergency Management Agency of FEMA effective model and the 2017 Corp Water Management System model. The next step is to present the approach to the LMRWD municipal partners and request feedback. Model updates will commence after concurrence is obtained from municipal partners.

We presented the refined modeling approach to the MnDNR floodplain coordinator. He was supportive of the approach and provided some suggestions for improving the model calibration and validation. We incorporated his feedback and prepared a presentation for the LMRWD municipal partners. We are awaiting their response and approval before proceeding with the model updates.

Performance metric and assessment: About 24 percent of the project budget has been spent on a quarter of the tasks. This seems to be in line with the plan, but this project was supposed to be

finished a year ago, and it has been postponed by working with USACE and the availability of resources.

Gully Feasibility Study

For the 2023 Gully Inventory project, four gullies that need further study in 2024 were selected to evaluate the causes of erosion and find ways to stabilize, restore, or reduce further erosion. Three gullies are located in Shakopee, and one is in Burnsville. The City of Shakopee has a planned riverbank stabilization project near Huber Park that will likely address two of the Shakopee gullies.

This spring, we conducted fieldwork to gather detailed site information and assess possible stabilization methods for the third Shakopee gully and the Burnsville gully. After a closer look at the Burnsville gully, we found out that it is part of the Unnamed Creek #4/5. This creek would need more extensive restoration than what the gully feasibility assessment project can cover. The Shakopee gully is eroding a MnDNR trail along the Minnesota River, and we talked to MnDNR staff after our initial field assessment to update them on the project and inform them of our plan to assess feasible alternatives to stabilize the gully. We have developed a hydrologic model for the small watershed that flows to the gully and are assessing the feasibility of potential stabilization techniques. We will keep coordinating with the MnDNR as the project progresses.

The following tasks have been completed or are underway:

- We have received information from many of the municipalities in the LMRWD about public pipe outfalls and are finishing an assessment of how public pipe outfalls connect to gullies on private properties.
- We have used new light detection and ranging data to conduct a desktop analysis to identify gullies that were not in the previous inventory. We have found several potential gully locations within the LMRWD where there were no gullies inventoried before. Some of the project funding that we will not use on gully assessment will be used to do fieldwork to confirm whether gullies are present at these locations, assess existing gullies, and enter assessment and location data into the gully database.
- We have completed a desktop and GIS assessment of gullies that were previously labeled as inaccessible, and we will conduct fieldwork this fall to try to access these gullies. In some cases, we may be able to access the inaccessible gullies through different routes on land.

Performance metric and assessment: The project is progressing well and will meet the deadline of year's end. We have finished 20 percent of our tasks with 85 percent of the budget left. Most of the remaining tasks are scheduled for the third quarter.

Spring Creek Site Stabilizations

The LMRWD received authorization from the USACE under the Bank Stabilization & Habitat Improvement Regional General Permit shortly after the project initiation. We submitted the wetland conservation act (WCA) application, and comments are expected to go back to the City of Carver (the LGU for WCA) within a month. The City of Carver anticipates approval of the project through the WCA Wildlife Habitat Exemption. ISG, Inc submitted 90 percent construction plans, which are currently under review by Young Environmental.

Performance metric and assessment: The project is progressing as planned, with the goal of finishing the bids by the end of autumn and starting construction in the winter. The project is three-quarters done with about 38 percent of the project budget left.

Trout Stream Geomorphic Assessment

This project follows the recommendations from the initial trout stream evaluation conducted in 2019. Eight trout streams will be resurveyed to see changes in stream alignment, cross-sectional shape, and base flow. Stream width-to-depth ratios, stream bed slope, meander pattern, habitat quality, and other features will be examined to evaluate stream health and stability. Interns started stream surveys in late May and have been gathering and analyzing data to classify streams and evaluate habitat quality. The interns will report on their fieldwork and evaluation progress at the July board meeting and will finish a draft report by the end of July that will be reviewed by the LMRWD board for review. A final report will be ready in September 2024.

Performance metric and assessment: We are on track to complete the project in September. We have finished 70 percent of the project, and we still have about 30 percent of the budget remaining.

Vernon Avenue Road Improvement

The 100 percent construction plans were finalized by Bolton & Menk, Inc., and the Bid Package and Engineer's Opinion of Probable Cost were prepared. The next step in the project is to advertise for bids; however, LMRWD is determining a funding strategy for construction costs.

Performance metric and assessment: The project is on hold pending the funding resolution. Nevertheless, the project is in a good position at 90 percent finished with 10 percent of the budget left.