

LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting Wednesday, May 15, 2024

Agenda Item

Item 6. B. – Minnesota River Greenway Trail – Amendment (LMRWD No. 2023-007)

Prepared By

Linda Loomis, Administrator

Summary

The LMRWD conditionally approved a permit for this project April 19, 2023. Since then, the applicant satisfied the conditions for approval and began construction of the project. After the start of construction, the application collected additional information that requires elevation adjustments to two of the proposed boardwalks. The adjustments to the elevation require an amendment to the LMRWD permit. Young Environmental Consulting Group reviewed the additional data on behalf of the LMRWD and recommends that the permit be amended for the changes to two boardwalks with the stipulation that the permit does not include the temporary crossing over Kennaley's Creek.

Attachments

Technical Memorandum – Minnesota River Greenway Trail – Amendment (LMRWD No. 2023-007) dated May 8, 2024

Recommended Action

Motion to an amendment to permit 2023-007 for changes to the two boardwalks (R0894 and R095) with the stipulation that the approved permit does not include temporary construction crossing over Kennaley's Creek

Technical Memorandum



То:	Linda Loomis, Administrator Lower Minnesota River Watershed District (LMRWD)
From:	Erica Bock, Water Resources Scientist Hannah LeClaire, PE, Water Resources Engineer
Date:	May 8, 2024
Re:	Minnesota River Greenway Trail—Amendment (LMRWD No. 2023-007)

Dakota County received an individual project permit from the LMRWD for the Minnesota (MN) River Greenway Trail within the Fort Snelling State Park (see Attachment 1 for the previous rules review memo) on November 6, 2023, after the conditional approval items for the project were received. Construction started at the end of 2023. The contractor collected additional survey data to verify elevations of the proposed trail. Two of the proposed boardwalks (R0894 and R0895) require elevation adjustments because the new existing ground survey differs from the design survey (Figure 1). Young Environmental reviewed the boardwalk elevation changes with regards to Rule C to ensure that the no-rise condition of the permit remains in compliance.

SUMMARY

Project Name:	Minnesota River Greenway Trail				
Purpose:	Bituminous trail construction. Grading, culvert, and boardwalk installation.				
Project Size:	Area Disturbed	Existing Impervious Area	Proposed Impervious Area	Net Increase Impervious Area	
	11.9 acres	0 acres	3.7 acres	3.7 acres	
Location:	3.3 miles from the existing trailhead near the Trunk Highway (TH) 77 Bridge to the existing trailhead at County State Aid Highway (CSAH) 26 in Eagan, Minnesota				
LMRWD Rules:	Rule B – Erosion and Sediment Control Rule C – Floodplain and Drainage Alteration				
Recommended Board Action:	Approval				

DISCUSSION

The LMRWD received the following documents for review to support the permit amendment request:

- MN River Greenway HEC-RAS Model; received April 9, 2024.
- Construction plans for updated boardwalks by SEH; received April 9, 2024.
- MN River Greenway HEC-RAS Model update memo by SEH; received April 16, 2024.

The documents provided are sufficient for the completion of our review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one acre or more under Rule B. The project is not making any changes in relation to the disturbed area. The project meets the requirements of Rule B.

Rule C – Floodplain and Drainage Alteration

The LMRWD requires applicants to provide documentation that the proposed floodplain fill will not cause an increase in the Minnesota River's 100-year water surface elevation. The project is within the Minnesota River floodplain, shown on the Dakota County Flood Insurance Rate Map (FIRM) Panel 27037C0080E (effective December 2, 2011). The effective FIRM from 2011 shows the project in a FEMA Zone AE (or 100-year floodplain). The 100-year water surface elevations range throughout the project from 714.2 to 714.4 feet NGVD29. SEH provided a no-rise certificate and updated hydraulic model based on the FEMA effective model to support the no-rise certificate. The project proposes a 2-foot vertical increase for one of the boardwalk elevations (R0894). An additional cross-section was added at river station 7.6 to represent the revised construction plans. The model shows no change in the 100-year water surface elevation between existing and proposed conditions, meeting the minimum requirements of Rule C.

Additional Considerations

During the initial project review, the Project proposed using an existing crossing over Kennaley's Creek rather than constructing a new bridge or culvert. However, on January 5, 2024, the Minnesota Department of Natural Resources (MnDNR) provided information to the LMRWD that the contractor for the MN River Greenway Project (LMRWD No. 2023-007) installed a temporary bridge to use during construction to cross Kennaley's Creek. This temporary bridge crossing was not permitted by the MnDNR Public Waters Permit or the LMRWD; however, the contractor will now apply for necessary permits to ensure compliance.

A meeting with Dakota County (Permittee), S.M. Henteges (Project Contractor), Taylor Huinker (MnDNR), Young Environmental Staff, and Linda Loomis was held on January 17, 2024. Attendees discussed the temporary bridge over Kennaley's Creek and determined that the temporary bridge would require modeling and additional review by the LMRWD and the MnDNR.

Once the modeling and additional information for the Kennaley's Creek temporary bridge crossing have been provided, a review and recommendation will be provided to the LMRWD Board of Managers for decision. The amended project permit for the MN River Greenway Trail (2023-007) will not include the temporary construction crossing over Kennaley's Creek and this stipulation will be added to the amended permit.

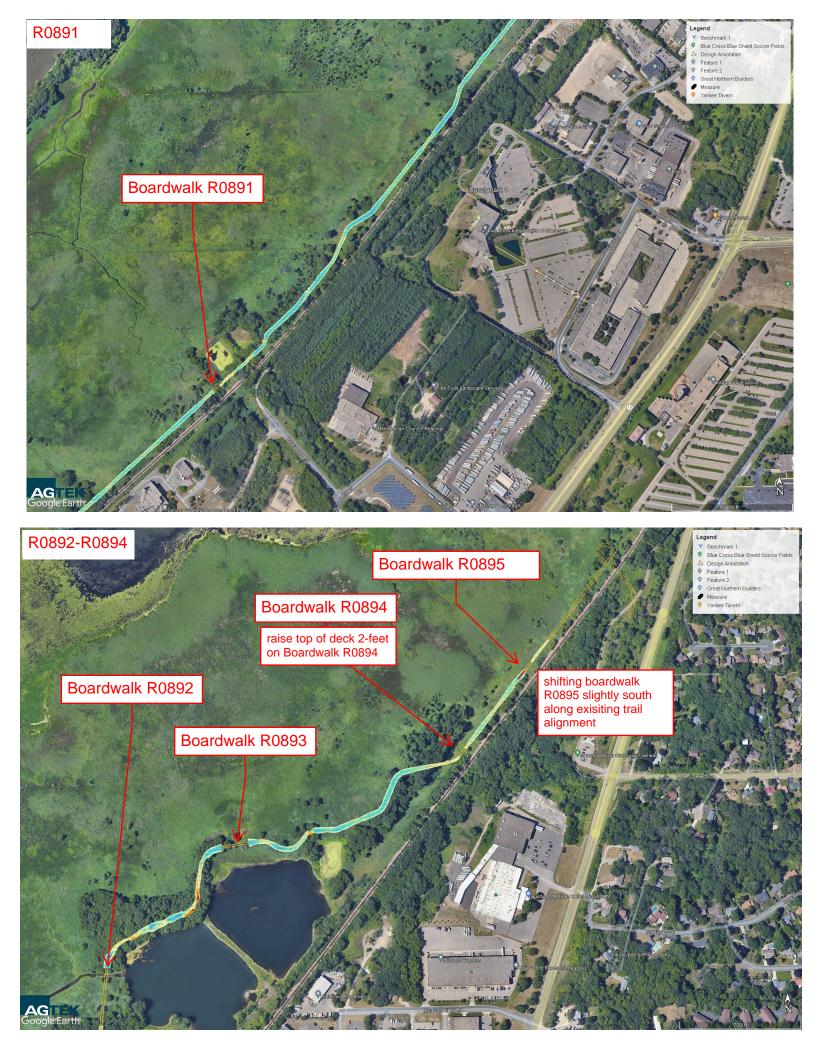
Recommendations

Based on the project review, we recommend approval of the permit amendment for the changes to two boardwalks (R0894 and R0895) with the following stipulation included in the approved permit:

• This permit does not include the temporary construction crossing over Kennaley's Creek.

Attachments

- Figure 1—Proposed Boardwalk Changes
- Attachment 1-MN River Greenway Project Review Memo





Technical Memorandum

То:	Linda Loomis, Administrator Lower Minnesota River Watershed District (LMRWD)
From:	Erica Bock, Water Resources Scientist Hannah LeClaire, PE, Project Manager
Date:	April 12, 2023
Re:	Minnesota River Greenway Trail LMRWD No. 2023-007 (previously LMRWD No. 2021-027)

Dakota County (Applicant) has applied for an individual project permit from the Lower Minnesota River Watershed District for the proposed Minnesota River Greenway Trail Project (Project) within Fort Snelling State Park, as shown in Figure 1. The applicant's engineer, Short Elliott Hendrickson, Inc., (SEH) has provided site plans for the Project along with the permit application. The project was conditionally approved in November of 2021, but conditional approval has expired and reapplication was required.

The proposed Project consists of constructing a 3.3-mile trail that will connect two existing trailheads: Trunk Highway (TH) 77 (Cedar Avenue) Bridge in the City of Burnsville and County Highway 26 (Lone Oak Road) in the City of Eagan. The Greenway Project is divided into two separate projects: (1) the trail and boardwalk and (2) the pedestrian bridge connection over the railroad to the Lone Oak trailhead in Eagan. The trail will consist of a 9.5-foot-wide paved surface with vegetation buffers on either side. Because the trail is less than 10 feet wide with vegetative buffers on each side, the trail portion of the project is exempt from Rule D. The pedestrian bridge project will be permitted separately.

The trail and boardwalk project will disturb approximately 11.9 acres and create 3.7 acres of new impervious surfaces (3.6 acres are exempt from Rule D). The Project is located within the Gun Club Lake and Nicols Meadow High Value Resource Area (HVRA) and Minnesota River floodplain, and crosses Kennaley's creek, a state designated trout stream. The applicant proposes to commence construction in April 2023.

Although the City of Eagan has its approved LMRWD Municipal Permit, this Project has received federal funding, and the LMRWD is requiring an individual permit subject to a permitting review because of the sensitive calcareous fens and trout streams in the area.

Summary

Project Name:	Minnesota River Greenway Trail			
Purpose:	Bituminous trail construction. Grading, culvert, and boardwalk installation.			
<u>Project Size</u> :	Area Disturbed 11.9 acres	Existing Impervious Area 0 acres	Proposed Impervious Area 3.7 acres	Net Increase Impervious Area 3.7 acres
Location:	3.3 miles from existing trail head near the TH 77 Bridge to existing trail head at CSAH 26 in Eagan, Minnesota			
LMRWD Rules:	Rule B – Erosion and Sediment Control Rule C – Floodplain and Drainage Alteration Rule D – Stormwater Management			
Recommended Board Action:	Conditional approval			

Discussion

The LMRWD received the following documents for review:

- LMRWD permit application, received March 2, 2023
- Authorization of Agent form, received March 2, 2023
- Stormwater Management Summary by SEH, revised October 19, 2021; received March 2, 2023
- Preliminary plan sheets by SEH, with no date; received March 2, 2023
- Culvert Analysis Report by SEH, with no date; received March 2, 2023
- No-Rise Certificate by SEH, dated July 7, 2021; received March 2, 2023
- HEC-RAS model; received March 3, 2023
- Construction schedule narrative, dated September 22, 2022; received March 15, 2023
- Wetland Conservation Act (WCA) Notice of Decision, dated October 21, 2021; received March 14, 2023

• Wetland Bank Credit Withdrawal Verification, dated December 14, 2021; received March 14, 2023

The application was deemed complete on March 15, 2023, and the documents received provide the minimum information necessary for permit review.

Rule B – Erosion and Sediment Control

The LMRWD regulates land-disturbing activities that affect one or more acres in general areas or 10,000 square feet or more within the HVRA under Rule B. The proposed Project would disturb approximately 11.9 acres within the LMRWD boundary. The applicant has provided an erosion and sediment control plan and a Stormwater Pollution Prevention Plan (SWPPP). The Project generally complies with Rule B, but a copy of the National Pollutant Discharge Elimination System (NPDES) permit and contact information for the contractor and person(s) responsible for inspection and maintenance of all sediment and erosion control features will be required before the final LMRWD permit can be issued.

Rule C - Floodplain and Drainage Alteration

As discussed, the project is in the Minnesota River floodplain, shown on the Dakota County Flood Insurance Rate Map (FIRM) Panel 27037C0080E (effective December 2, 2011). The effective FIRM from 2011 shows the project in a FEMA Zone AE (or 100-year floodplain). The 100-year water surface elevations range throughout the project from 714.2 to 714.4. The project proposes 50,000 cubic yards of cut and fill below the 100 year-flood elevation and no compensatory storage. SEH provided a No-Rise Certificate and updated hydraulic modeling based on the FEMA effective model to support the No-Rise Certificate. The model shows no change in the 100-year water surface elevation between existing and proposed conditions, meeting the requirements of Rule C.

The proposed trail will also cross Kennaley's Creek (a state-designated trout water) and pass near the Nicols Meadow and Gun Club Lake South calcareous fen complexes. The alignment of the trail has been adjusted to avoid the fen boundaries and to minimize wetland impacts; it will also use the existing crossing over Kennaley's Creek rather than constructing a new bridge or culvert. To preserve the hydraulic connection on both sides of the proposed trail and the Minnesota River, boardwalks and culverts will be constructed at low points to maintain the natural drainage patterns of the area.

Rule D - Stormwater Management

The project creates 3.7 acres of impervious surfaces including 3.6 acres of 9.5-footwide paved surface with vegetated buffers on either side. Because this portion of the trail is less than 10 feet wide with vegetative buffers on each side, it is exempt from Rule D. Turnaround areas and a future pavilion make up the additional 0.1 acres, which is less than one acre of impervious surface, and therefore does not trigger Rule D. Lastly, the project proposes 0.46 acres of proposed boardwalk. Boardwalks are incorporated into the design to span areas where there is open water or existing wetland. Boardwalks avoid excessive fill in wetlands and allow for better conveyance of water through the floodplain. The boardwalks consist of 6-inch concrete planks separated by ¼-inch gaps to allow water to pass through to the underlying pervious ground, and therefore the boardwalks are not considered impervious surface. The impervious surfaces proposed in this project do not trigger Rule D, and therefore no stormwater management has been proposed on-site.

Recommendations

Based on our review of the project, we recommend conditional approval contingent on the receipt of the following:

- Name and contact information for all contractors undertaking land-disturbing activities as part of the proposed project
- Name and contact information for the person(s) responsible for erosion control inspections and maintenance
- Final construction plans signed by a professional engineer
- Copy of permit approval from the MnDNR
- Copy of the NPDES permit

Attachments

• Figure 1 – MN River Greenway Trail Project Location

