



Division of Ecological & Water Resources
Region 4 (Southern Region)
21371 Highway 15 South
New Ulm, MN 56073

July 30, 2026

Renville County Drainage Authority
Renville County Courthouse
500 E. DePue Ave. Ste 202
Olivia, MN 56277

Subject: Final Engineer's Report for Improvement of Renville County Ditch No. 59 Branches B, 203, and 194

Thank you for the opportunity to review the Final Engineer's Report (FER) for the proposed County Ditch No. 59 Branches B, 203 & 194 improvement project located in Renville County. This letter constitutes the Commissioner's Final Advisory Report in accordance with Minnesota Statutes §103E.301 on behalf of the Commissioner of the Minnesota Department of Natural Resources (DNR).

As required under Minnesota Statutes 103E.301, the DNR finds:

1. The detailed survey report is complete, and the plan appears to conform to the general requirements of Minnesota Statutes §103E;
2. The detailed survey report is an acceptable plan to drain the property affected.
3. The Commissioner does not approve or disapprove the plan. We do recommend that the Drainage Authority ensure the project is consistent with the Hawk Creek – Middle Minnesota River Watershed Comprehensive Watershed Management Plan (approved in 2022).
4. The proposed drainage appears to be of public benefit or utility under the environmental, land use, and multipurpose water management criteria in section 103E.015, Subd. 1.
5. The commissioner determines that a soil survey is not required for this project.

Discussion on the Improvement

- Within the FER, the narrative under section I states the proposed improvement represents 2.9 square miles (1,856 acres); however, tables 1-3 (Existing) and 4-6 (Proposed) sum to 1,867 acres and 1,886 acres, respectively. Furthermore, there is a discrepancy in the contributing drainage area to the hydrograph analysis point at County Road 59 when comparing Proposed, Proposed Without Storage, and Existing conditions. Please clarify the drainage area size for the proposed improvement.

- The FER proposes two flow diversions, resulting in reducing the contributing drainage area to Branch B by 482 acres, Branch 194 by 324 acres, increasing the contributing drainage area to Branch 203 by 825 acres, and increasing tile sizes to exceed the stated ½" drainage coefficient for Branch 203, without an explanation. Please justify these changes in the FER report.
- The improvement information and scope of work details replacing existing tile with new tile installation; however, limited information was provided within the Technical Specifications stipulating what is to be done with the existing infrastructure. Please include detailed information explaining the method(s) proposed to render the existing infrastructure inoperable, and therefore not providing additional capacity not reflected in the FER.
- The FER included event-based peak discharge changes within Table 9 (Report page 17) and graphics of the discharge hydrographs at County Road 59. However, no additional information or analysis regarding changes in discharge volume timing, or duration was submitted. Please note that analysis of these calculations and model outputs is vital in determining whether the model reasonably represents the existing and proposed project conditions and cannot be assessed without further model information. For the DNR to provide accurate and relevant reviews of improvement reports, future reports should include the following information:
 - o Detailed modeling information such as existing and proposed system routing schematics with subcatchments, conveyances, storage nodes, outlets, and identifying locations of overland flow.
 - o Flow/volume/velocity summaries at critical locations, and representative upstream/downstream hydrographs.
 - o Description of modeling assumptions including but not limited to runoff routing methods, overflow discharge definition, storage definition, roughness values, and any simplifying assumptions built into the model.
- The FER identifies a 5 cfs (approximately 1.2%) increase in peak flow for the 2-year event, representing a minor change in hydraulic behavior for the types of frequent events that most influence channel form and stability. Although this change is small relative to the size of the downstream watershed, the DNR is increasingly attentive to how incremental increases from individual projects may accumulate within a system over time. As agricultural drainage improvements continue across the landscape, even modest alterations to hydrograph shape and flow duration can collectively contribute to measurable stress on downstream public waters. Accordingly, the DNR is evaluating these incremental changes more closely to ensure that long-term cumulative impacts are not overlooked.

Alternative Solutions

Wetland Restoration

- We appreciate the evaluation of wetland restorations in this report and encourage the continued inclusion of robust analysis, including incorporating varying wetland depths and types based on site-specific conditions, particularly in the upper portion of the watershed. As noted in the FER, with a greater design depth, to 4.5 feet, the footprint could be substantially reduced as well as the corresponding land cost. Oftentimes, created wetlands do not require matching acre ratios to account for surrounding marginal damp soils. Restricting the analysis to these assumptions artificially inflates the acreage required for wetland restoration, consequently driving up land

acquisition costs. Additionally, it is recommended that wetland restoration not be viewed solely as an all-or-none alternative, as this does not evaluate scenarios where partial and/or smaller wetland restorations may be utilized to accept drainage water and attenuate flows. Utilizing multiple wetland restorations could significantly reduce land acquisition costs by decreasing the wetland footprint, therefore making restoration a more competitive and feasible option than an improvement. Evaluation of these scenarios may potentially show wetland restoration is a viable option and alleviate the need to increase the size of the tile system. While we understand that this option is also dependent on willing landowner participation, the reduction in size resulting from varying wetland characteristics and depth may provide a palatable alternative option for the improvement of the tile system.

Other Considerations

Water Quality

- The FER does not satisfy Minnesota Statute 103E.015, subdivision 1(3), which requires a substantive evaluation of the project's compatibility with local land-use plans and measurable hydrologic outcomes. Although the report identifies a potential annual sediment reduction of 6.4 tons from the proposed pond and WASCOBs, it does not relate this estimate to the specific water-quality and hydrology goals established in the [Hawk Creek – Middle Minnesota Comprehensive Watershed Management Plan \(2022\)](#). CD 59 lies within the Beaver Creek subwatershed, a Tier 1 High Priority Area, where the plan identifies key short-term goals, including a 7% reduction in TSS at the outlet of Beaver Creek, a reduction of average annual runoff by 0.25 inches (2,642 acre-feet), and expanded multipurpose drainage management practices that increase storage and improve water quality. The FER does not include an annual runoff-volume analysis, nor does it demonstrate how the proposed storage features contribute to achieving these Tier 1 goals. While hydrographs for the 2-, 5-, 10-, 25-, and 50-year events were provided, they show increased maximum water storage at the County Road 59 crossing, caused by the substantially higher drainage coefficient (280% increase), up to 0.62 inches per day, which accelerates downstream delivery without demonstrating any reduction in runoff volume. While this does not necessarily confirm an increase in total volume discharged, it also does not demonstrate that the proposed pond and WASCOBs reduce runoff volume in a manner consistent with watershed goals and suggests that the 24 acre-feet of detention storage is overwhelmed by even the smaller, more frequent storm events. As submitted, the FER fails to provide the required volume-based assessment needed to determine whether the project advances the CWMP's hydrologic objectives or meets the statutory obligation to evaluate downstream hydrology and outlet adequacy.

Please send the response to this letter and/or revised FER, meeting minutes, Finding of Fact, and any Order issued by the Drainage Authority regarding this proposed improvement to the DNR when they become available. In addition, please note that our agency continues to support the use of off-channel storage solutions, such as wetland restoration or similar water retention basins or impoundments, to help reduce flooding and erosion, and, in some cases, provide natural resource and ecological enhancements. The Drainage Authority should continue to pursue opportunities to retain surface water runoff within its existing drainage systems whenever and wherever possible.

Thank you for consideration of this report. Please submit the above-noted documents or any questions about this letter to the Regional Drainage email: Region4Drainage.dnr@state.mn.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Katie Wigen".

Katie Wigen, EWR R4 North District Manager (acting)

EC:

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DNR Region 4 Drainage