

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

March 20, 2025

Freeborn County  
411 Broadway S  
Albert Lea, MN 56007

**Re: Preliminary Engineer's Report for Improvement of Main Open Ditch, Freeborn-Waseca Judicial Ditch No. 8**

Freeborn County Drainage Authority,

We appreciate the opportunity to review the Preliminary Engineer's Report (PER) for the proposed Judicial Ditch No. 8 Improvement project. This Advisory Report, prepared on behalf of the Commissioner of the Minnesota Department of Natural Resources (DNR), provides expert insights and recommendations in accordance with Minnesota Statutes 103E.255. Our comments are based on a review of Improvement of Main Open Ditch, Freeborn-Waseca Judicial Ditch No. 8 report dated January 2025. We appreciate your consideration of our feedback

**Overview**

Judicial Ditch No. 8 (JD 8) is a nearly five-mile-long open ditch system that drains a 6.3-square-mile watershed spanning northwest Freeborn County and south-central Waseca County, ultimately discharging into Boot Creek near New Richland. A petition has been submitted requesting improvements to the Main open ditch, including adjustments to the flowline, culvert crossings, and a weir control structure between CSAH No. 10 and 335th Street. Field surveys conducted by Bolton & Menk, Inc. in November 2023 confirmed inadequate drainage, primarily due to a high box culvert at 335th Street, which causes extended ponding, crop stress, and ditch bank instability. Petitioners seek improvements to enhance drainage efficiency and reduce agricultural and infrastructure impacts.

**Outlet Adequacy and Regulatory Considerations**

- Please clarify the type of HEC-RAS model used. If it is a steady-state flow model, remove the "Change in Peak Flow" column from Table 6, as peak flow changes cannot be reported under steady-state conditions. Instead, compare the proposed and existing ditch and culvert capacities to illustrate flow rate changes.
- The StreamStat flow data are 107, 224, 326, 477, 607, and 749 cfs for the 2-, 5-, 10-, 25-, 50-, and 100-year storm events, respectively. However, Table 6 reports a flow of 1,140 cfs for the 100-year storm event. Please verify this discrepancy.
- As-built Survey Requirements: Please provide the previous as-built survey showing the legal ditch grade upstream and downstream and elevation for the identified "high-box culvert." This information is required to understand if prior ditch over-digging created this problem.

An as-built survey is also necessary for upstream and downstream, post-construction, to show the legal ditch grade as documentation for the as-built grade, culvert invert, and outlet elevations as part of the proposed drainage system improvements. Both documented items are necessary for our DNR permit decision.

- The PER does not discuss compatibility with local land use plans and does not adequately address alternative measures. The Freeborn County SWCD should have consulted during the development of the PER as required in 103E.015 Subd. 1a. ACPF and PTMApp have also been run for the Boot Creek sub-watershed and should have been considered and referenced in the PER.

While a permit may or may not be required for this project, a final determination will depend on responses to the questions and concerns outlined above and the requested data submitted for further evaluation. For any communication regarding drainage systems, please get in touch with us via [Region4Drainage.dnr@state.mn.us](mailto:Region4Drainage.dnr@state.mn.us).

Best regards,

Todd Kolander, EWR Southern District Manager

CC:

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