

Capital Improvement Project

Lakeville: Middle Creek at Dodd Boulevard Channel Restoration



Figure 1. Aerial map denoting project locations, marked with red-bordered shapes.

An ongoing issue in the Vermillion River's Middle Creek tributary is stream turbidity (water that isn't clear) due to bank and channel erosion. As a result, local aquatic species struggle to stay healthy and thrive. The creek has been historically ditched for agricultural use, which altered the channel's natural form.

A feasibility study by the City of Lakeville identified several recommendations for improving the creek, including a streambank and channel stabilization project. Lakeville, in partnership with the Vermillion River Watershed Joint Powers Organization (VRWJPO), was awarded Minnesota Board of Water and Soil Resources (BWSR) Watershed-Based Implementation Funding (WBIF) for this project. Two reaches of Middle Creek were restored, 2,300 linear feet of streambank and channel in total. This streambank and grade stabilization will result in much less erosion and downcutting of the creek channel, as well as providing better habitat for local wildlife.

Partners:

- Vermillion River Watershed Joint Powers Organization
- City of Lakeville
- Minnesota Board of Water & Soil Resources (BWSR)

Installation:

2023

Location:

Lakeville

Watershed:

Vermillion River

Costs and Contributions (Estimated):

- VRWJPO: In-Kind Grant administration/coordination
- City of Lakeville: \$36,000 cash match for engineering/technical assistance
- BWSR: \$360,000 from Watershed Based Implementation Fund (WBIF) distributed from Clean Water Grant Fund for technical/engineering assistance and streambank protection

Benefits:

- These improvements will result in significantly reduced bank erosion and downcutting of the channel that will lower stream turbidity levels and create conditions for healthier and more diverse aquatic life.
- The project is estimated to reduce total suspended solids pollution by 10.75 tons/year and total phosphorus by 64.5 lbs/year.



Figure 2. Pre-project, northern channel with bank erosion and 3-5 Figure 3. Restored Middle Creek channel, fall 2023. feet of downcutting.





A grant from the Clean Water Fund, one of four funds established by the Clean Water, Land & Legacy Amendment, supported this project. Clean Water Stories can be found on the Minnesota Board of Water and Soil Resources website.