

Capital Improvement Project

Lakeville: Middle Creek at Dodd Boulevard Channel Restoration



Figure 1. One of the two restored Middle Creek channels, May 2024.

An ongoing issue in the Middle Creek tributary of the Vermillion River is streambank and channel erosion. As a result, local aquatic organisms struggle to stay healthy and thrive and the water is turbid (cloudy). 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. The City, in partnership with the Vermillion River Watershed Joint Powers Organization (VRWJPO), was awarded a Minnesota Board of Water and Soil Resources (BWSR) Watershed-Based Implementation Funding (WBIF) grant for this project. Two reaches of Middle Creek between Dodd Blvd. and Highview Ave. were restored, totaling 1,700 linear feet of streambank and channel. 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:

- VRWJPO
- City of Lakeville
- BWSR

Installation:

2025

Location:

Lakeville

Subwatershed:

Middle Creek

Costs and Contributions (to date):

- VRWJPO: In-kind grant administration/coordination
- City of Lakeville: \$16,987 cash match for engineering/technical assistance
- BWSR: \$236,805 from WBIF, distributed from the Clean Water 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, southern channel with bank erosion and downcutting.



Figure 3. Restored Middle Creek channel, fall 2024.



A grant from the Clean Water Fund, one of four funds established by the Clean Water, Land & Legacy Amendment, supported this project.

<u>Clean Water Stories</u> can be found on the Minnesota Board of Water and Soil Resources website.