



Capital Improvement Project

Lakeville: North Creek at Highview Ave Channel Improvements

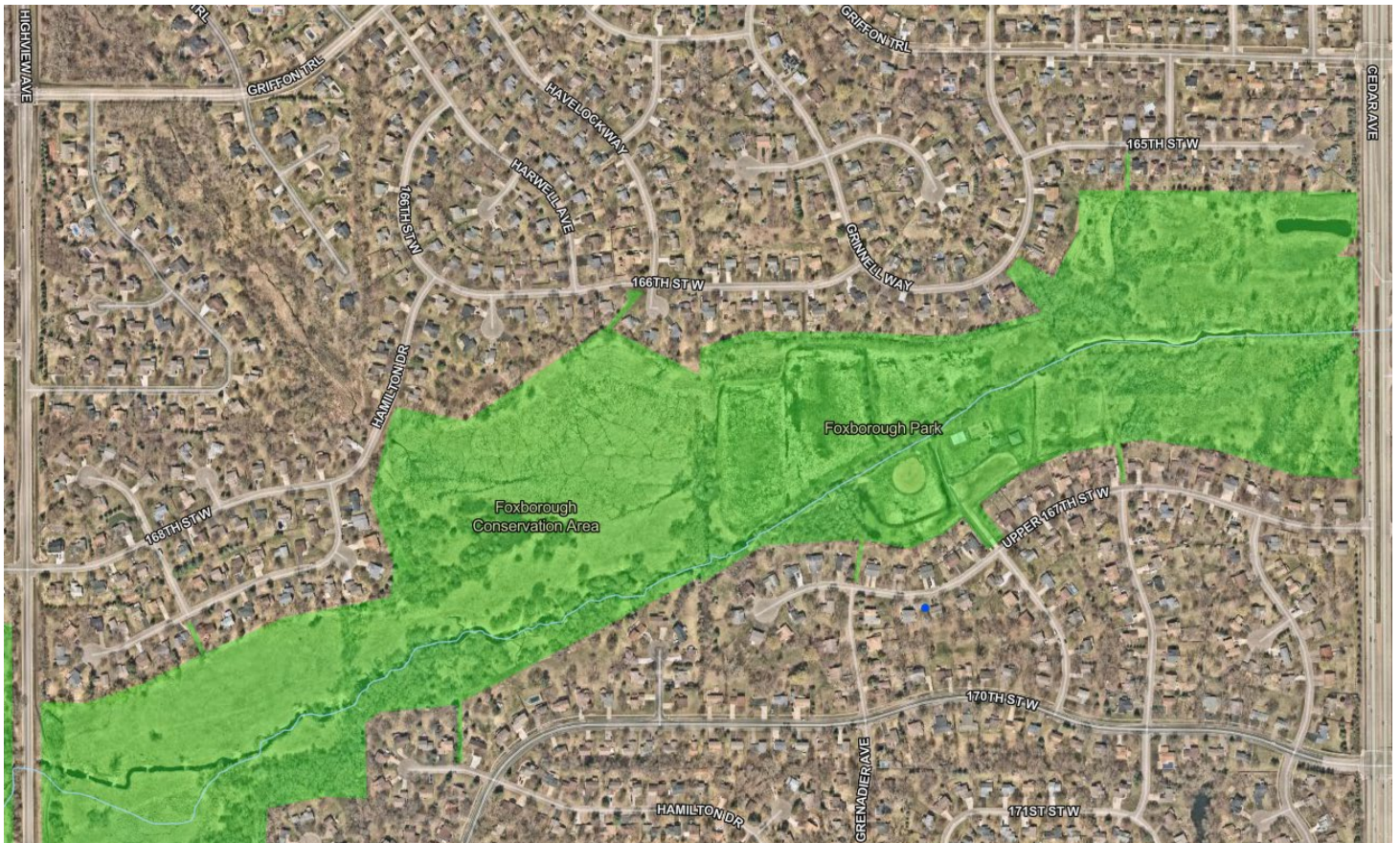


Figure 1. An aerial map of the North Creek channel improved during this project.

The North Creek Vermillion River subwatershed has undergone a lot of development over several decades, and unfortunately significant erosion of North Creek has come with it. The erosion resulted in the formation of vertical banks (head cuts) along the creek that reached six to eight feet height in areas. This section of the channel runs through a wetland where dark organic soils are present, which exacerbates the channel degradation because organic wetland soils are easily eroded and therefore deliver excessive sediment and nutrients downstream during storm events.

To address the problem, the Vermillion River Watershed Joint Powers Organization (VRWJPO) and the City of Lakeville collaborated to repair this eroded reach of North Creek between Highview Ave. and Cedar Ave. The project consisted of rock check dams, streambank stabilization grading, and removal of accumulated sediment that had deposited downstream over time. All the efforts will result in a healthier North Creek and Vermillion River, which are regionally significant resources for recreation and public use for the community.

Partners:

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

Project Completed:

- 2023

Location:

- Lakeville

Watershed:

- Vermillion River

Costs and Contributions (Actual):

- Watershed-Based Implementation Grant Funding: \$299,448 for construction
- VRWJPO: \$29,120 for In-Kind Grant administration/coordination and engineering/technical assistance.
- City of Lakeville: \$10,500 for, Engineering, permitting, and construction management

Benefits:

- The channel improvements are estimated to reduce total suspended solids (TSS) pollution by 147 tons/year and TP by 89 pounds/year.
- The project reconnected the creek to nearby wetland floodplain, which would restore wetland hydrology, and reduce downstream flooding.



Figure 2. Overlooking the North Creek head cut before project.



Figure 3. North Creek with rock checks installed.

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

