



## Capital Improvement Project

### Lakeville: North Creek Foxborough Park TSS Reduction

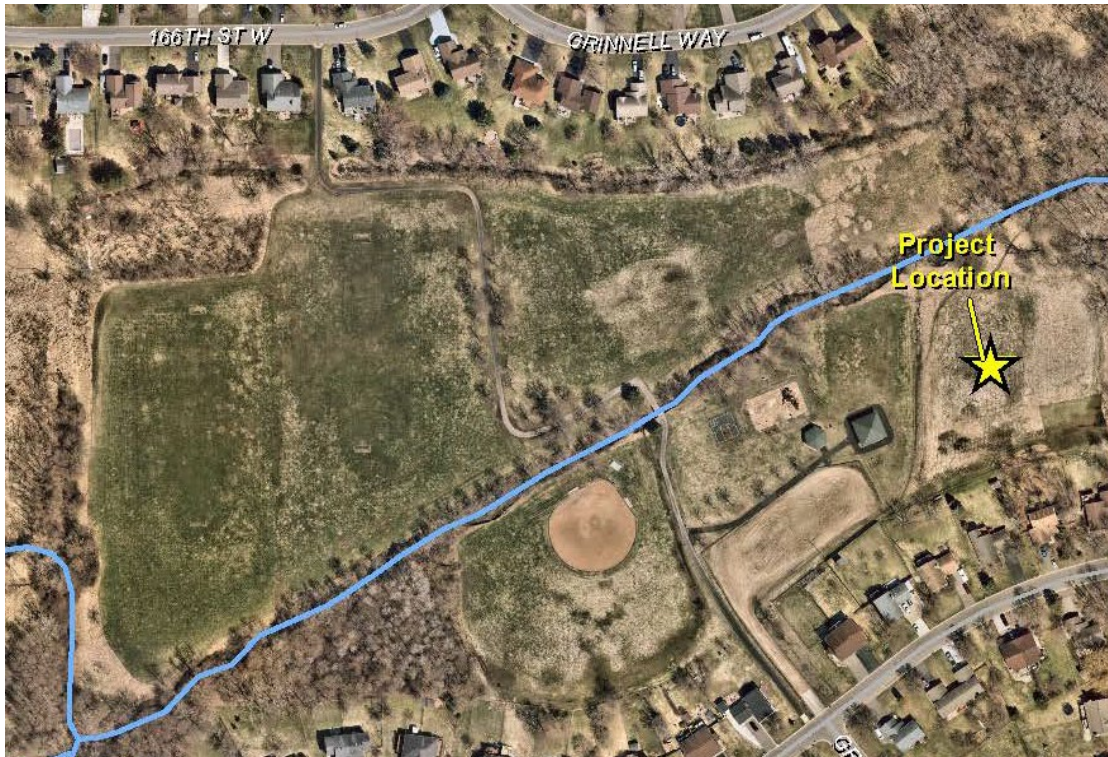


Figure 1. Aerial map of Foxborough Park area, with the TSS reduction project location indicated with a yellow star.

Much of the North Creek Vermillion River subwatershed was developed before stormwater requirements were put in place. Hence, many neighborhoods don't have any stormwater treatment practices that decrease flow rates or improve water quality that would be required in today's construction. Much of the untreated/polluted stormwater runoff in the 220-acre subwatershed drains to a pipe that outlets into North Creek. This lack of stormwater treatment was one of the reasons why North Creek was placed on the Minnesota Impaired Waters list in 2022. North Creek is also the third-highest priority subwatershed (out of eight) for improvements in the 2016-2025 Vermillion River Watershed Plan. This location has the highest estimated pollutant loading area of all those evaluated along this reach of North Creek.

To address these impairments, the Vermillion River Watershed Joint Powers Organization (VRWJPO), Dakota County, and the City of Lakeville constructed a dry pond with a wet sedimentation forebay in Foxborough Park to capture total suspended solids (TSS) and total phosphorus (TP) and prevent them from reaching North Creek. The forebay has a permanent pool to trap large pieces of sediment. A rock gabion wall and sand filter bench were constructed to provide additional treatment by trapping smaller sediments and other pollutants. The project was completed alongside other North Creek channel improvements to reduce TSS and with assistance from a Clean Water Fund grant. This should result in a healthier North Creek and Vermillion River, a regionally significant resource for recreation and public use.

**Partners:**

- Vermillion River Watershed Joint Powers Organization
- Dakota County
- City of Lakeville
- Minnesota Board of Water and Soil Resources

**Installation:**

- 2023, with final stabilization in spring 2024

**Location:**

- Lakeville

**Watershed:**

- Vermillion River

**Costs and Contributions (Estimated):**

- VRWJPO: \$5,000 for In-Kind Grant administration/coordination. \$30,000 cash match for construction.
- Dakota County: \$30,000 cash match for construction.
- City of Lakeville: \$30,000 cash match for engineering, permitting, and construction management.
- Clean Water Fund: \$346,500 in competitive Clean Water Fund for engineering and project construction.

**Benefits:**

- It is estimated that the project will reduce TSS loading by 18.4 tons/year and TP by 31.8 pounds/year.
- By improving this reach of North Creek, downstream reaches of North Creek and the Vermillion River will benefit from reduced impacts of TSS on in-stream habitats, which should result in healthier biological communities.
- Stormwater retention will provide flow rate control and flood relief benefits to the area.



Figure 2. The dry pond and forebay in place as of September 2023.

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.

