Capital Improvement Project
Farmington: North Creek Culvert Improvements at Denali Way



Figure 1. The undersized, elevated culvert on North Creek prior to replacement. The high velocity of water flowing out of the culvert caused erosion, shallow depths, and over-widening of the creek.

The North Creek tributary of the Vermillion River is in rare circumstances. It runs through developed areas in the cities of Lakeville and Farmington – and portions of the creek are Minnesota Department of Natural Resources (DNR)-designated trout stream. Preserving and improving aquatic habitat in this reach is a high priority for the Vermillion River Watershed Joint Powers Organization (VRWJPO).

Nearing its confluence with the Vermillion River Mainstem, North Creek runs through various field road and driveway culverts. One such culvert, near the intersection of Denali Way and Deerbrooke Path in Farmington, was undersized and perched above the stream bed by almost a foot. This created a mini-waterfall impassable to fish and other aquatic organisms. It also increased stream flow velocity even during normal flow conditions. As a result, the creek coming out of the culvert was significantly over-widened, shallow in depth, and limited in aquatic habitat, with severe bank erosion.

The VRWJPO reconnected the stream segments using properly sized concrete box culverts with rock bottoms placed at the correct elevations, while implementing natural bank stabilization techniques. This should reduce stream velocities, provide easier passage for aquatic organisms, help secure eroded stream banks, and improve habitat near the replaced culvert.

A Conservation Partners Legacy (CPL) grant from the DNR funded part of this project.

Updated 10/2026

Partners:

- VRWJPO
- Minnesota DNR

Installation: Summer/Fall 2026

Location: Farmington, MN

Subwatershed: North Creek

Costs and Contributions:

- VRWJPO: $47,000 (cash), $18,625 (in-kind)
- CPL grant from DNR: $364,155

Benefits:

- Replacing the perched culvert will provide access to deeper pools, narrowed channels, and vegetated stream banks well-suited for fish and macroinvertebrate habitats and recreational opportunities.
- The project will complement previous successful work done in the area, such as a re-meandering of North Creek just downstream of the 190th St W. bridge, as well as concurrent culvert improvements at Minnesota Hwy. 3 downstream in Empire.



Figure 2. The new box culvert (bottom center), with erosion control and native seeding in the top left corner.

A Conservation Partners Legacy grant from the Outdoor Heritage Fund, one of four funds established by the Minnesota Clean Water, Land & Legacy Amendment approved by voters in 2008, supported this project.