

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



Figure 1. A culvert on North Creek-Vermillion River slated for replacement as part of the VRWJPO project.

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

Upstream of its confluence with the Vermillion River main stem, North Creek runs through field road and driveway culverts. One such culvert, near the intersection of Denali Way and Deerbrooke Path in Farmington, is undersized and perched above the stream bed by almost 12 inches. This has created a mini-waterfall impassable to fish and other aquatic organisms. The creek is significantly over-widened in the project area due to erosion, with shallow depths and limited habitat, because the undersized culvert increases stream flow velocities even during normal flow conditions and exacerbates erosion of the creek banks just downstream.

The VRWJPO plans to reconnect the stream segments using properly sized concrete box culverts with rock bottoms placed at the correct elevations, which should reduce stream velocities and provide easier passage for aquatic organisms. Combined with natural bank stabilization techniques, this can help secure eroded stream banks and improve habitat near the replaced culvert. A Conservation Partners Legacy (CPL) grant from the DNR will support this project.

Partners

- Vermillion River Watershed Joint Powers Organization
- Minnesota Department of Natural Resources

Installation (anticipated)

2026

Location

Farmington

Subwatershed

North Creek

Costs and Contributions (anticipated)

- VRWJPO: \$47,000 (cash), \$18,625 (in-kind)
- Conservation Partners Legacy grant from DNR: \$364,155

Benefits:

- Replacing the perched culvert will provide access to deeper pools, narrowed channels, and vegetated stream banks wellsuited for fish and macroinvertebrate habitats and recreational opportunities.
- The project will complement previous successful work done in the area, such as a remeandering of North Creek just downstream of the 190th St W. bridge.



Figure 2. View of shallow, over-widened creek immediately downstream from the culvert to be replaced.

A Conservation Partners Legacy grant from the Outdoor Heritage Fund, one of four funds established by the Clean Water, Land & Legacy Amendment, supports this project.

