Capital Improvement Project
Farmington: 4th St. and Willow St. TSS Reduction

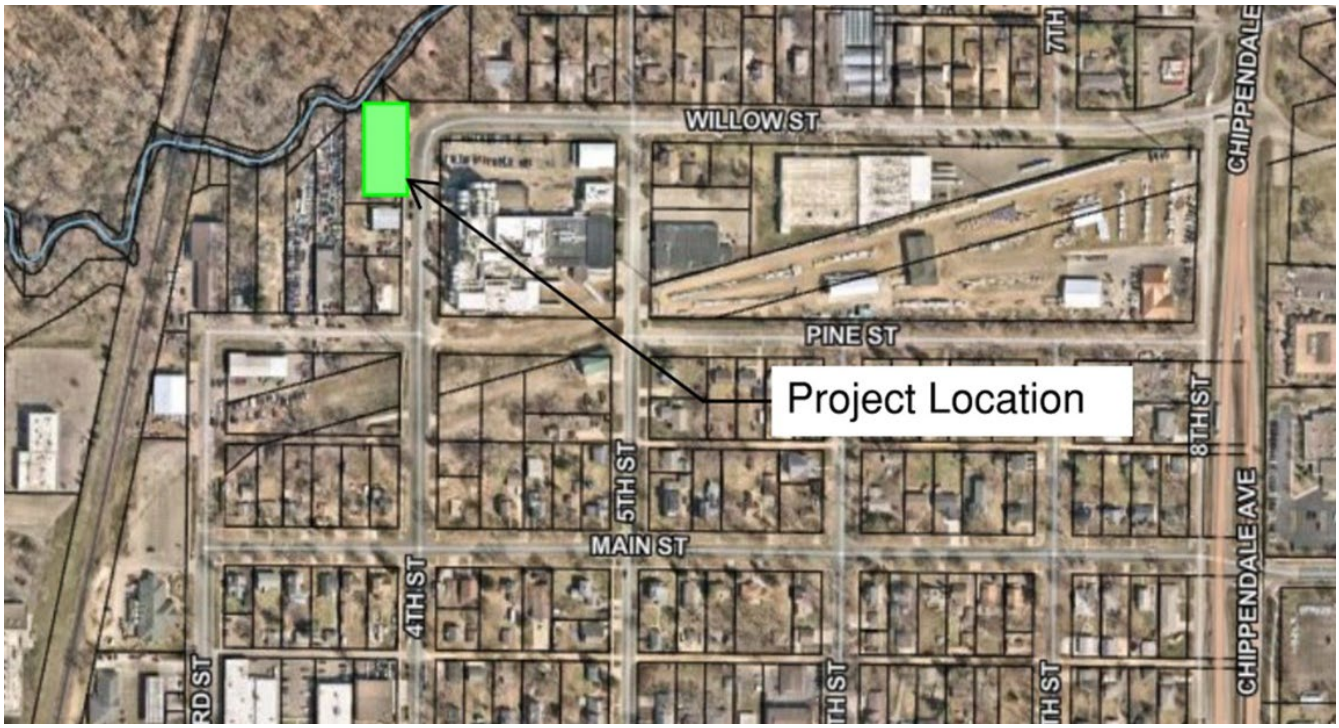


Figure 1. Screengrab of a map of the intersection of 4th St. and Willow St. in Farmington. The approximate location for a hydrodynamic separator is demarcated in green and is next to the Vermillion River.

The Vermillion River Watershed Joint Powers Organization (VRWJPO), in partnership with the City of Farmington and Dakota County, is working to systematically address sources of total suspended solids (TSS) contributing to the Vermillion River Mainstem. The intersection of 4th St. and Willow St. in Farmington is an older area with little to no stormwater treatment, since the drainage area was developed before stormwater treatment requirements were implemented. This area discharges stormwater runoff directly into the Vermillion River, in a reach designated as a trout stream by the Minnesota Department of Natural Resources, making it a significant issue to address.

During the 2024-25 Watershed-Based Implementation Funding (WBIF) planning process, the VRWJPO and the City proposed installing a continuous deflection separator (CDS) at this intersection. A CDS is a manufactured treatment device that uses cyclonic forces to remove pollutants in stormwater runoff, namely TSS. It will be connected to the existing storm sewer system, which outlets into the river and can remove an average of 0.50 tons/year of TSS from stormwater. The project will be funded in part by a WBIF grant, money distributed to the Vermillion River Watershed from the Minnesota Clean Water Fund by the Minnesota Board of Water and Soil Resources (BWSR).

3/2026

Partners:

- VRWJPO
- City of Farmington
- Dakota County
- BWSR

Installation: Summer/Fall 2026

Location: Farmington

Subwatershed: Middle Mainstem

Costs and Contributions (anticipated):

- VRWJPO: $39,207
- City of Farmington: $1,900
- Dakota County: $5,000
- BWSR: $71,013 in WBIF grant funds

Benefits:

- The CDS is projected to remove an average of 0.50 tons/year of TSS from stormwater flowing into the Vermillion River from the contributing 161-acre drainage area.
- According to recent studies, TSS is the primary stressor to aquatic organisms in the Vermillion River. Reducing TSS from stormwater runoff would address the impairments for fish and macroinvertebrates as well.



Figure 2. Example of CDS installation



Figure 3. Construction work on road above a CDS

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.

CLEAN WATER LAND & LEGACY AMENDMENT

YOUR Clean Water Fund AT WORK

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