Capital Improvement Project
Hastings: 15th St. and Bailey St. TSS Reduction



Figure 1. Aerial map of the land where an infiltration basin will be installed in Hastings near Bailey St., demarcated in yellow. The Lower Vermillion River is just east of here.

The Vermillion River Watershed Joint Powers Organization (VRWJPO), in partnership with the City of Hastings and Dakota County, is working to systematically reduce discharge of total suspended solids (TSS) and total phosphorus (TP) from reaching the Vermillion River. The intersection of 15th St. E. and Bailey St. is an older area near downtown Hastings with little to no stormwater treatment for its impervious surfaces, as it was developed before modern stormwater treatment requirements. This area discharges stormwater runoff into the lower Vermillion River, listed by the Minnesota Pollution Control Agency as an impaired stream segment for TSS.

The partners will install a surface infiltration basin on City-owned property from its 43.4-acre drainage area, which is approximately 43 percent impervious surface, to remove TSS and TP from stormwater before it discharges into the Vermillion River. An infiltration basin is an engineered sump or earthen depression which can improve stormwater quality by filtering runoff using vegetation, filter soil media, and, if applicable, imported amended soils, into the underlying soils. This project will be funded in part by a FY24-25 Watershed-Based Implementation Fund (WBIF) grant from the Minnesota Board of Water & Soil Resources (BWSR), distributed from the Minnesota Clean Water Fund.

3/2026

Partners:

- VRWJPO
- City of Hastings
- Dakota County
- BWSR

Installation (anticipated): Spring 2026

Location: Hastings

Subwatershed: Mississippi Direct

Costs and Contributions (anticipated):

- VRWJPO: $120,445
- City of Hastings: $2,500
- Dakota County: $5,000
- BWSR: $197,055 in WBIF grant funds

Benefits

- The project will reduce an estimated 3.8 tons/year of TSS and 15.2 lbs./year of TP from flowing into the Vermillion River.
- Continued improvements to the Vermillion River support recreation in the area, including fishing, kayaking, and biking on the developing Vermillion River Greenway.



Figure 2. A previous infiltration basin project completed by the VRWJPO.

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.

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