

Capital Improvement Project

Lakeville: Hydrodynamic Separator at 205th St. and Hollins Ave.



Figure 1. The hydrodynamic separator in the ground at 205th St. W and Hollins Ave, prior to street repaving.

The City of Lakeville reconstructed several residential streets over the course of 2024. One location provided an opportunity for some stormwater improvement. To reduce sediment loading in the South Creek tributary of the Vermillion River, the City and the Vermillion River Watershed Joint Powers Organization (VRWJPO) installed a hydrodynamic separator (HDS) in October 2024 at the intersection of 205th Street West and Hollins Avenue W.

An HDS is a stormwater device that uses cyclonic forces to remove pollutants in stormwater runoff, namely sediment. It is installed underneath the grassed boulevard area on the south side of 205th Street W, connected to existing stormwater pipes carrying water from storm drains into South Creek.

The project included surface removals and excavation to place the structure(s), installation of the HDS and related piping and accessories, backfill, compaction, and resurfacing. The HDS should reduce sediment loading into South Creek by 1,700 lbs. per year. The system will be owned and maintained by the City of Lakeville.

Partners

- VRWJPO
- City of Lakeville

Installation

• 2024

Location

Lakeville

Subwatershed

• South Creek

Costs and Contributions

- VRWJPO: \$91,940
- City of Lakeville: \$20,000

Benefits:

- The HDS is estimated to reduce sediment loading in South Creek-Vermillion River by 1,700 lbs./year.
- Cleaner water in South Creek will improve aquatic habitat in this trout stream reach and recreational opportunities for local residents.



Figure 2. Project location map screenshot from the City of Lakeville website. HDS is in general area shown in red box.

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