Interstate Valley Creek
2024 Water Monitoring Report

LMRWMO
LOWER MISSISSIPPI RIVER
WATERSHED MANAGEMENT ORGANIZATION

Watershed

The Interstate Valley Creek watershed is located in the cities of Mendota Heights, West St Paul, and Sunfish Lake within the Lower Mississippi River Watershed Management Organization (LMRWMO). Land use within the watershed is primarily low density residential, with pockets of commercial, institutional, and parkland. Interstate Valley Creek was placed on Minnesota's 303(d) List of Impaired Waters in 2014 for impacts to aquatic life due to excess *E. coli* bacteria.

Stream Details

Mainstem Length: 2.5 miles

Watershed Size (shown): 3,272 acres

Major Watershed: Mississippi River

Impairment: *E. coli* (Miss. River) (2014)

Years Monitored: 5

Monitoring

A volunteer monitor takes water samples from one location (red dot above) from Interstate Valley Creek for lab analysis. The purpose is to identify stream reaches that contribute pollutants and establish baseline stream water quality conditions. Monitoring also helps track the impact of future watershed projects that stabilize banks or treat stormwater in the watershed to reduce the in-stream pollutant load (sediment and phosphorus).

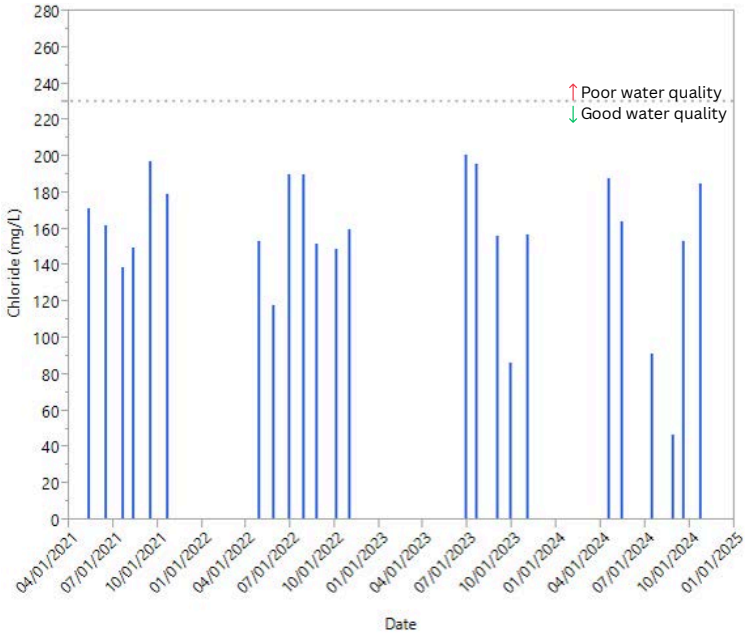
Interstate Valley Creek was monitored six times in 2024 - monthly April through October. The water was tested for the following pollutants: chloride (salt), phosphorus (nutrients), total suspended solids (sediment), *E. coli* (*bacteria*), nitrates, and chlorophyll-a. Field measurements for temperature, dissolved oxygen, pH, and water transparency were also collected for each effort.

Water Quality

Interstate Valley Creek shows low levels of chloride, below the state standard. Phosphorus levels have averaged below the standard since 2020, though individual exceedance due occur throughout the monitoring season. Total suspended solids are consistently below the standard. *E. coli* levels are generally within the state MPCA standard for individual samples though more data is needed in the future.

Water temperature is below 71 degrees Fahrenheit all season and transparency is high during baseflow (low flow) conditions. Chlorophyll-a and nitrate levels are consistently below applicable standards.

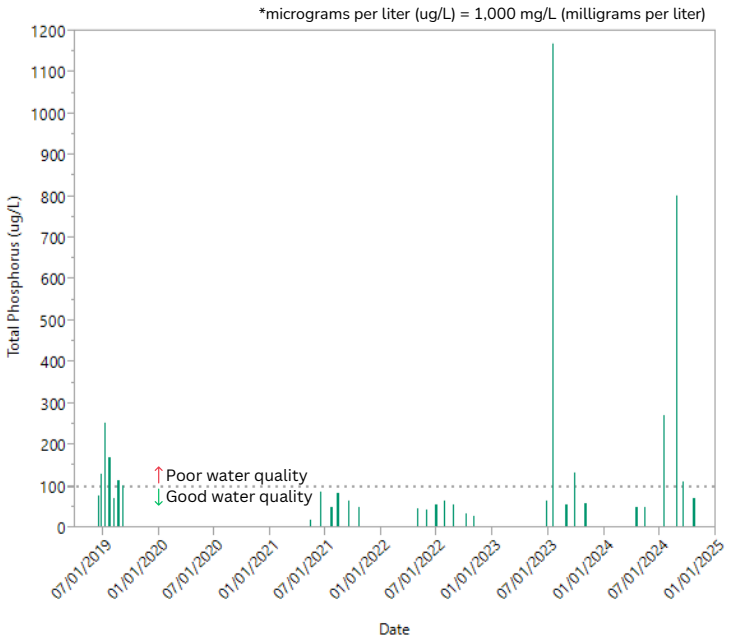
Water Quality Data 2019 - 2024



Chloride

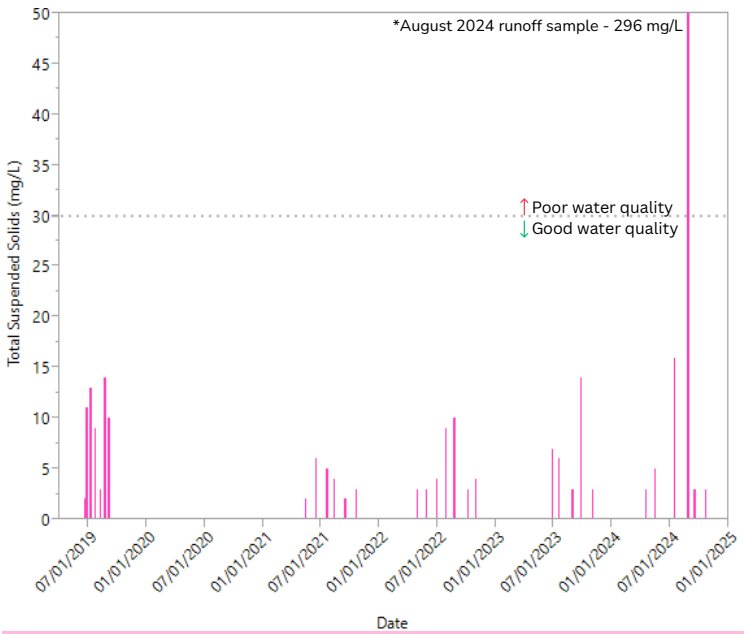
Elevated chloride concentrations can be toxic to some aquatic life – altering community composition, as well as affecting mortality and reproduction capabilities. State standard for acute toxicity is ≤230 ug/L (dashed line).

*micrograms per liter (ug/L) = 1,000 mg/L (milligrams per liter)



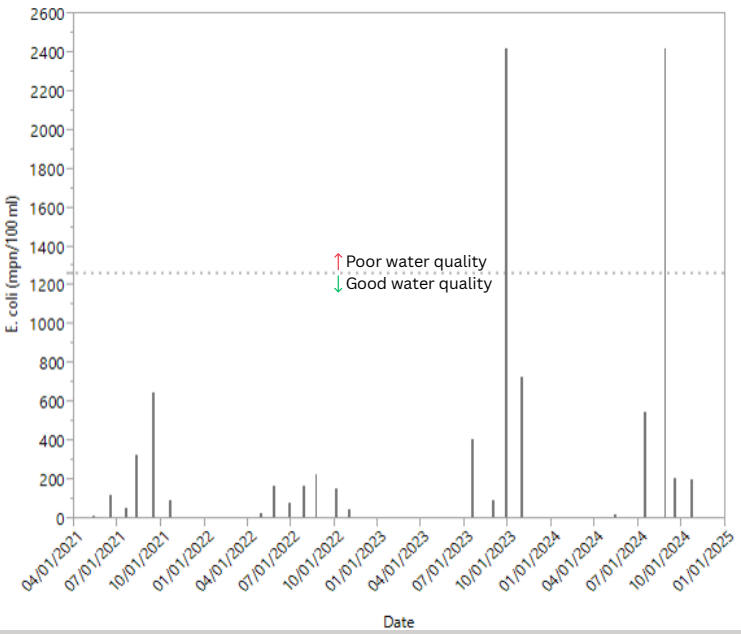
Phosphorus*

Phosphorus is a nutrient required for plant growth. High phosphorus levels can lead to algae blooms, turning water green. Low phosphorus levels indicate good water quality. State standard is 100 ug/L (dashed line).



Total Suspended Solids

A measurement of all suspended particles in the water. Potential sources include field and streambank erosion and stormwater runoff. Excessive levels can impair water quality and usability. State standard is ≤30 ug/L (dashed line).



E. coli

Escherichia coli (*E. coli*) bacteria is a good indicator that disease-causing pathogens may be present in water. A standard of ≤1,260 MPN/100mL (dashed line) has been established (MPN = most probable number of organisms).

How can you get involved?

Anyone can help improve water quality! Installing a raingarden increases water infiltration and reduces pollution runoff that can negatively impact local water quality. The LMRWMO offers grants to residents to install raingardens, native gardens, and native shoreline plantings as part of the Dakota County Soil and Water Conservation District's **Landscaping for Clean Water** program.

Additional Information: MN Impaired Waters Map: https://www.pca.state.mn.us/water/impaired-waters-viewer-iwav
DNR Lake Finder: https://www.dnr.state.mn.us/lakefind/index.html
LMRWMO Contact: Joe Barten, Administrator - joe.barten@co.dakota.mn.us - 651-480-7784
LMRWMO Website: www.LMRWMO.org

DAKOTA COUNTY
SOIL & WATER
CONSERVATION DISTRICT