Ivy Falls Creek

2024 Water Monitoring Report

LMRWMO
LOWER MISSISSIPPI RIVER
WATERSHED MANAGEMENT ORGANIZATION

Watershed

The Ivy Falls Creek watershed is in the cities of Mendota Heights and West St. Paul within the Lower Mississippi River Watershed Management Organization (LMRWMO). The watershed consists of the mainstem of Ivy Falls Creek and a small tributary that joins just above the falls. Land use within the watershed is primarily residential with some parkland golf course property.

Stream Details

Mainstem Length: 1.2 miles

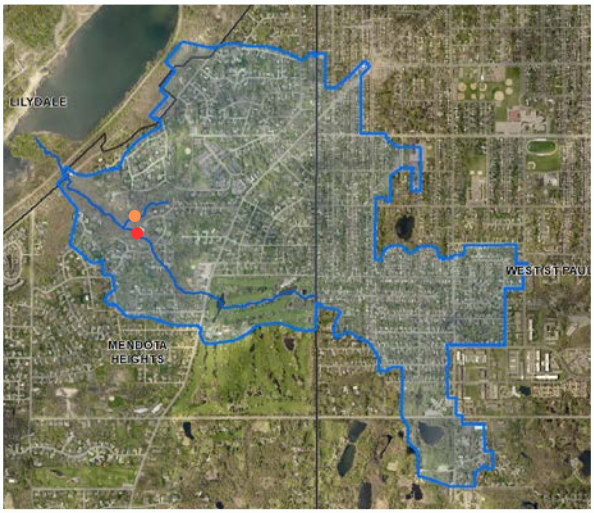
Unnamed Tributary Length: 0.2 miles

Watershed Size (shown): 746 acres

Major Watershed: Mississippi River

Impairment: None

Years Monitored: 4



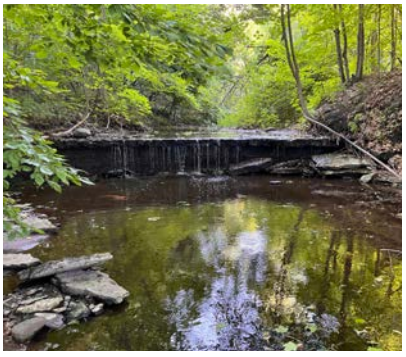
Monitoring

A volunteer water monitor takes water samples from Ivy Falls Creek (red dot) and an unnamed tributary (orange dot) 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).

Ivy Falls Creek and the tributary were monitored seven 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 visit.

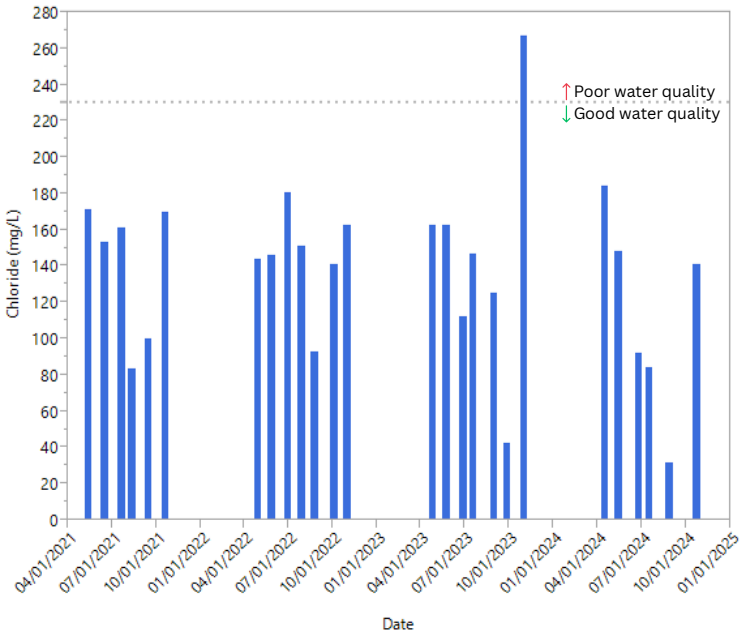
Water Quality

Ivy Falls Creek and the unnamed tributary show low levels of chloride. Phosphorus levels continue to exceed the standard with some seasonal variability. Total suspended solids are consistently below the standard, though like phosphorus, individual samples exceed it. *E. coli* levels are generally below the standard with occasional individual sample exceedances.

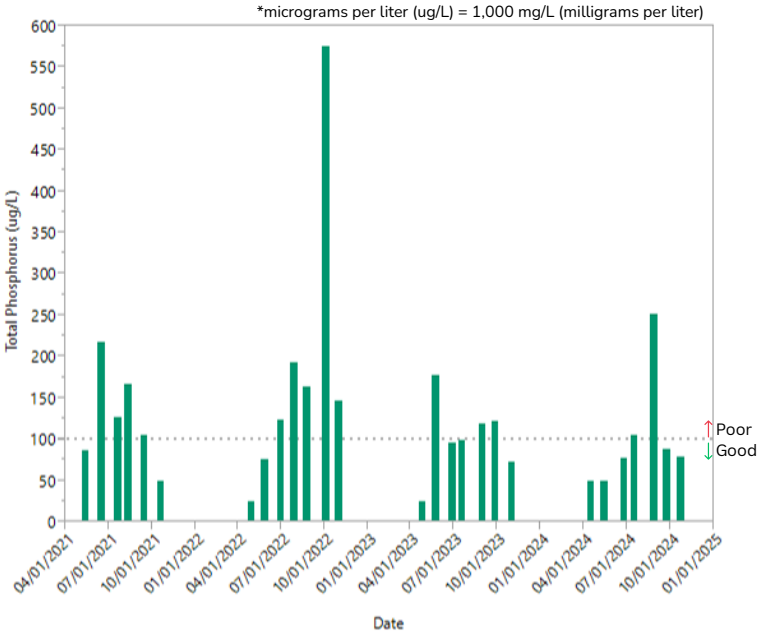


Water temperature is below 73 degrees Fahrenheit all season and transparency is high during baseflow (low flow) conditions. Chlorophyll-a and nitrate levels are consistently below applicable standards.

Ivy Falls Creek Mainstem Water Quality Data 2021 - 2024



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

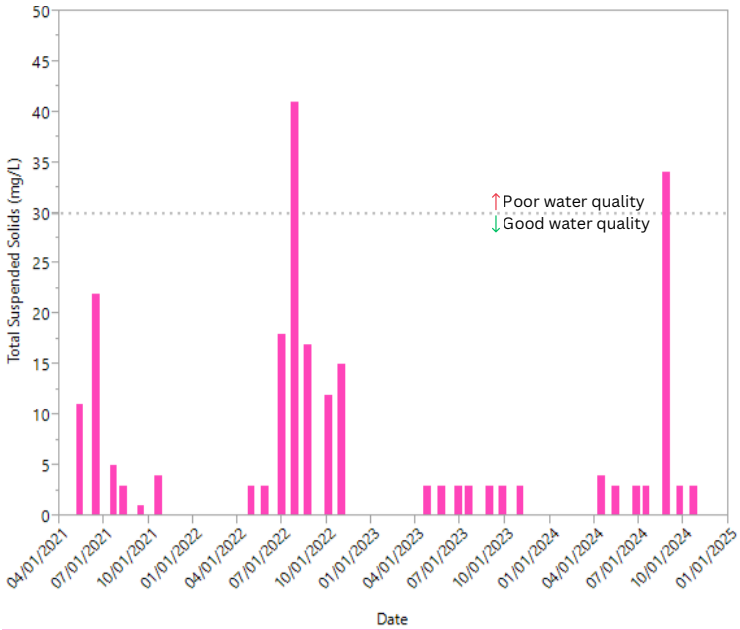


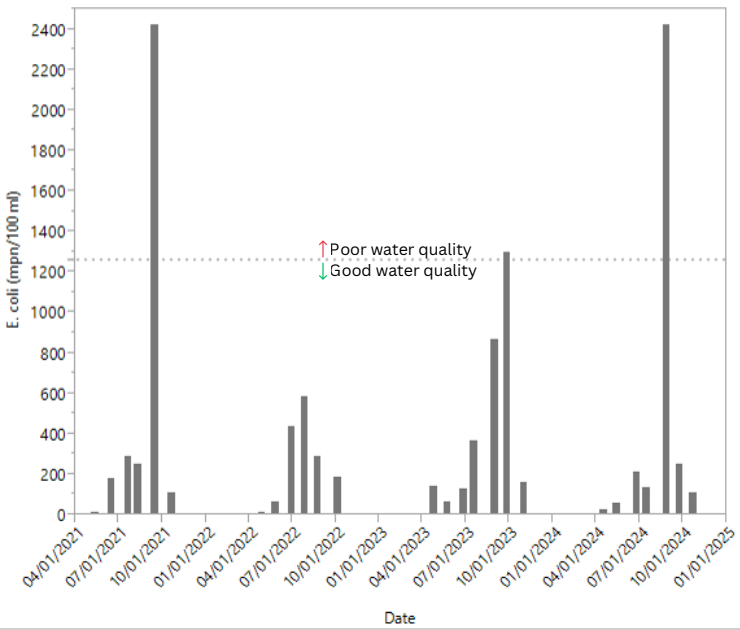
Chloride

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).

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).

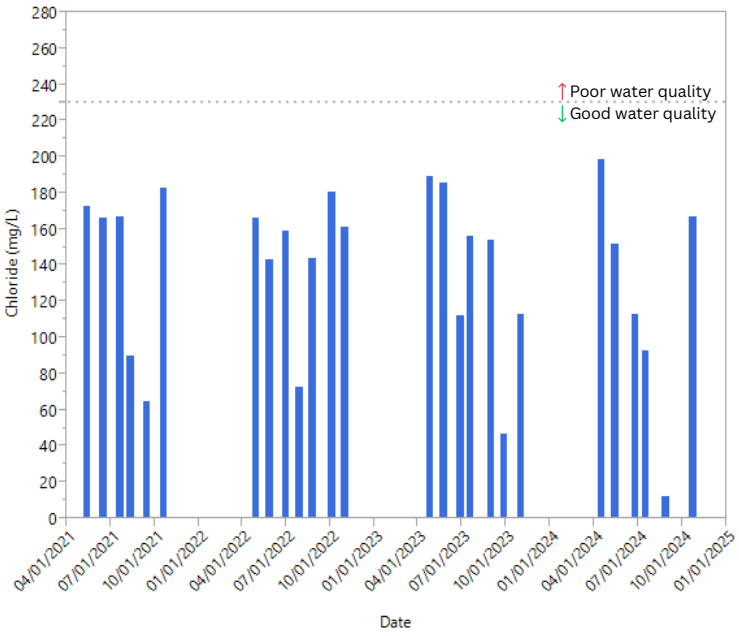
E. coli

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?

You don't have to live on a lake to help improve water quality, **anyone can be part of the solution**! **Installing a raingarden increases water infiltration**, **decreases lawn maintenance**, 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.

Unnamed Tributary Water Quality Data 2021 - 2024



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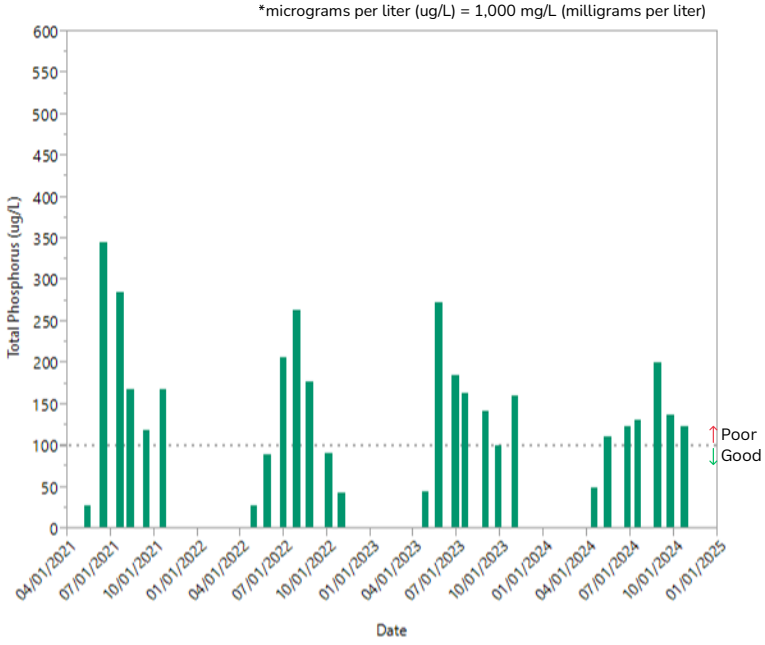

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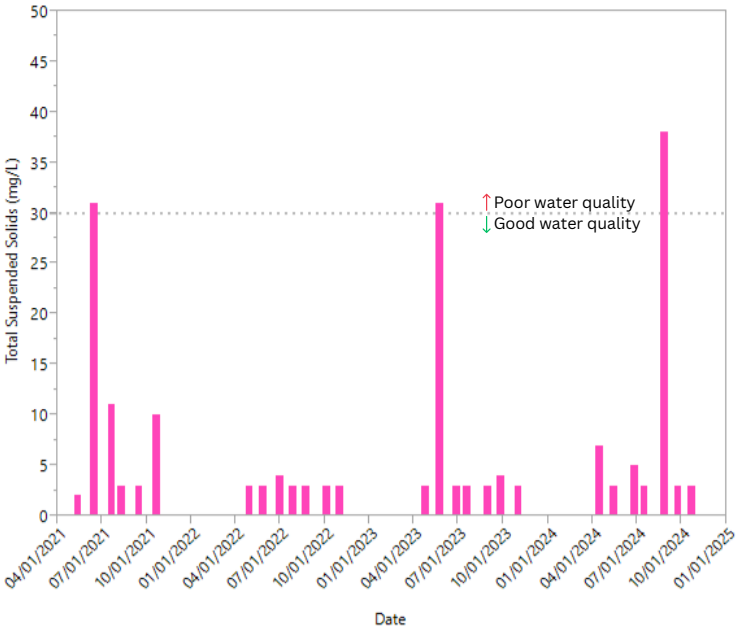

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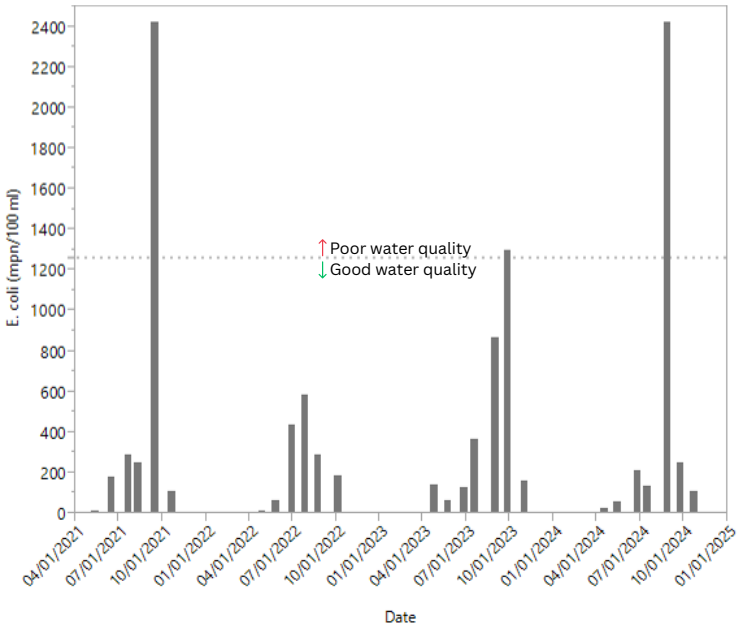

E. coli

Escherichia coli (*E. coli*) bacteria is a good indicator that disease-causing pathogens may be present in water. A standard of ≤126 MPN/100mL (dashed line) has been established (MPN = most probable number of organisms).

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