

CATE'S LAKE: Water Quality Report Card



Quick Facts

Surface Area: 30 acres

Ordinary High Water Level: 930.4'

Average Depth: 3 feet

Maximum Depth: 11 feet

Cate's Lake flows to the Credit River watershed, which makes it the only lake within the Prior Lake-Spring Lake Watershed District political boundaries that does not lie within the hydrologic boundaries. All other lakes in the District flow to Prior Lake or the Prior Lake Outlet Channel. Even though Cate's Lake is located just south of Highway 13 in the middle of a residential neighborhood, it is home to a wide range of wildlife, including loons and otters!

Water Quality

Of all the lakes in the District, Cate's Lake has some of the best water quality. The water is very clear with little algae and low phosphorus levels. All water quality indicators are well below the state water quality standard. Plant life is diverse and abundant, which protect water quality and creates great habitat for wildlife. The invasive curlyleaf pondweed and Eurasian water milfoil plants are both present in light to moderate amounts, however the rare and endangered American lotus plant has also been observed at numerous locations around the lake!

Water Quality Indicator	Risk to Water Quality	Grade (2017-2019)	History (2010-2013, 2017-2019)	Trend
PHOSPHORUS	Phosphorus is needed by plants and animals to survive, but can cause algae blooms if there is too much phosphorus available. In some cases, algae can produce a toxin which could cause illness or death in animals if ingested. Some sources of high phosphorus are fertilizer, human and animal waste, and soil erosion.	A		 No Trend
CHL-A	Chlorophyll-a is a measurement of the amount of algae in a lake. Some algae can produce dangerous toxins and when algae dies and decomposes it consumes oxygen that would otherwise be used by fish and beneficial organisms. High algal concentrations threaten aquatic life and can impede recreation and enjoyment of the lake.	A		 No Trend
CLARITY	Water clarity is affected by the abundance of algae or sediment in the water column. It is dependent on many factors including nutrients, temperature, wind, rain, and boat traffic. Low clarity means less sunlight to power photosynthesis in aquatic plants. These plants are beneficial for wildlife and stabilize the lake bed. Low clarity can also negatively impact a lake user's enjoyment and harm aquatic life.	A		 No Trend

Grading Scale					Graph Explanation	
A	B	C	D	F		<p>The solid blue line shows the annual change in water quality from 2010-2013 and 2017-2019 (no monitoring data 2014-2016). The lower the line, the healthier the lake.</p> <p>The District's goal is for the blue line to be below the red line, which is the water quality standard and the point at which the waterbody is not considered polluted.</p> <p>The blue dotted-line is the trend line. A decreasing trend line shows improvement in the health of the lake over time.</p>
All or most samples meet the desired threshold.	Many samples meet or are near the desired threshold.	Some samples meet or are near desired threshold.	Many samples do not meet the desired threshold.	Most samples do not meet the desired threshold.		