

FISH LAKE: Water Quality Report Card



Quick Facts

Surface Area: 171 acres
Watershed Area: 699 acres

Average Depth: 14 feet
Maximum Depth: 28 feet

Fish Lake is located in the southern part of the watershed near Spring Lake Town Hall. The outlet of Fish Lake flows north through Buck Lake and into Spring Lake. Fish Lake has a small watershed that consists mostly of large acre lots and a couple farms.

Water Quality

Fish Lake does not meet state water quality standards for nutrients, but it is very close. Nutrient levels are slowly declining and show an improving trend with a 90% confidence interval. An implementation plan was prepared in 2020 to determine actions to improve water quality and ultimately remove Fish Lake from the State's Impaired Waters List.

Improvement Projects

In 2019, the District implemented a shoreline and native prairie planting to improve water quality of Fish Lake at Spring Lake Town Hall. This project aims to reduce lakeshore erosion and improve wildlife habitat. Farmers have also used Alum Logs and Water Quality Inlets to reduce nutrients and sediment from getting into Fish Lake.

Water Quality Indicator	Risk to Water Quality	Grade (2019-2021)	10-Year Water Quality Avg (2012-2021)	10-Year 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.	B		<i>Improving</i>
CHL-A	Chlorophyll-a is a measurement of the amount of algae in a lake. Some algae can produce dangerous toxins, and when it 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.	F		<i>No Trend</i>
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.	D		<i>No Trend</i>

Grading Scale					Graph Explanation	
A	B	C	D	F		<p>The solid blue line shows the annual change in water quality from 2010-2019. 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.		