## 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, however, it is very close. Average phosphorus over the last five years is 42 µg/l, which barely exceeds the standard of 40 µg/l. An implementation plan will be prepared to determine actions to improve water quality and ultimately remove Fish Lake from the State's Impaired Waters List.

## **Improvement Projects**

The District implements projects to improve water quality in Fish Lake. A lakeshore restoration and native prairie planting was installed in 2019 at Spring Lake Town Hall, reducing lakeshore erosion and improving wildlife habitat. Farmers also used Alum Logs and Water Quality Inlets to reduce nutrients and sediment from getting into Fish lake.

Decreasing slope shows improvement over time and vice versa.

Water Quality Indicator	Risk to Water Quality	Grade (2017-2019)	History (2010-2019)	Trend
PHOSPHORUS	Phosphorus is needed by plants and animals to survive, but can cause algae blooms if too much is available. In some cases, algae can contain 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.	C		No Trend
Chlor-a CHL-A	Chlorophyll-a is a measurement of the amount of algae in a lake. Some algae can produce dangerous toxins and the decomposition of algae 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.	D		Declining
Clarity CLARITY	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 allows less sunlight to photosynthesize aquatic plants which are beneficial for wildlife and stabilize the lake bed. Low clarity can also negatively impact a lake user's enjoyment and harm aquatic life.	C		<b>O</b> Improving

Grading Scale				Graph Explanation					
Excellent	Good	Average	Marginal	Poor		The solid blue line is the annual change over the last decade. The lower the line, the better the quality and clarity.			
•	B	C	D	F					
All or most samples meet	Many samples meet or are	Some samples meet or are	Many samples do not meet	Most samples do not meet the		quality standard.			
the desired threshold.	near the desired threshold.	near desired threshold.	the desired threshold.	desired threshold.		The blue dotted-line is the trend line.			