

## Lake Susan

Located in Chanhassen, Lake Susan is a part of the Riley Creek Chain of Lakes. It is the third lake that Riley Creek flows through as it makes its way to the Minnesota River.

From June to September every year, District staff visit the lake every two weeks to collect water samples and take readings. Samples are sent to a laboratory to be tested for nutrients and other compounds. Staff also measure water clarity by lowering a Secchi disk into the water and measuring how deep it goes before it is no longer visible. The data indicates the lake's health based on standards set by the Minnesota Pollution Control Agency (MPCA).

Lake Susan is classified as a "Shallow Lake" by the MPCA. To be considered healthy, the lake must meet standards set for shallow lakes. This includes low average phosphorus and chlorophyll-a levels and average water clarity of 1.0 meter (3.3 feet) or greater.

Lake Susan Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
Total Phosphorus	Less than 0.06 mg/L	0.067 mg/L	No significant trend. In 2025, average phosphorus decreased, but the lake did not meet the standard.
Chlorophyll-a	Less than 20 µg/L	55.3 µg/L	No significant trend. In 2025, average chlorophyll-a was twice the standard.
Water Clarity	Greater than 1.0 meters	0.8 meters	No significant trend. In 2025, the average reading decreased to not meet the standard.

Water quality trends shown on back of page.



**Carp update:** Carp are invasive and harm water quality by destroying aquatic vegetation and stirring up lake bottom sediments. Adult and young of the year carp numbers remain low in Lake Susan, and the district has been removing carp directly upstream of the lake. A temporary barrier was also placed at the outlet to reduce chances of the pond becoming a nursery.



**Plant update:** Lake Susan was treated with herbicide for curly-leaf pondweed in 2025 totaling 5.9 acres.

### Lake & watershed characteristics

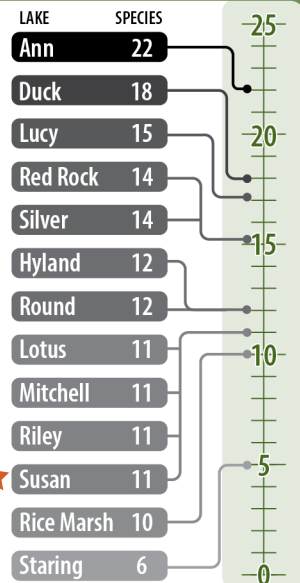
Lake size	88 acres
Average lake depth	10 feet
Maximum lake depth	17 feet
MPCA lake classification	Shallow lake
Watershed size	1,231 acres
Impervious surface	27% of watershed
Impaired Waters listing	Mercury & nutrients
Common fish	Bluegill, Black Crappie, Northern Pike, Black Bullhead, Yellow Bullhead
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Common Carp, Brittle Naiad



### Watershed Boundary



**Native Aquatic Plant Diversity**  
How does **Lake Susan** compare to **other lakes** in the District in **number of native plant species?**



# Lake Susan Water Quality by the Numbers

2025

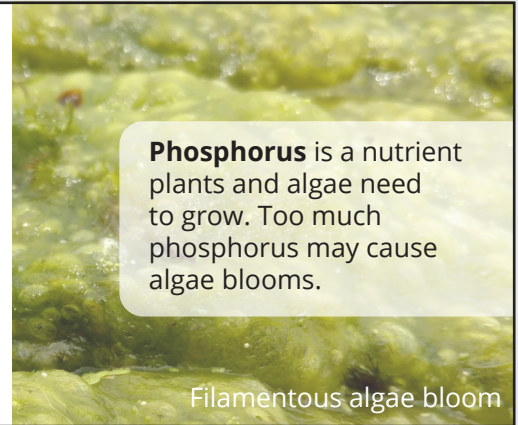
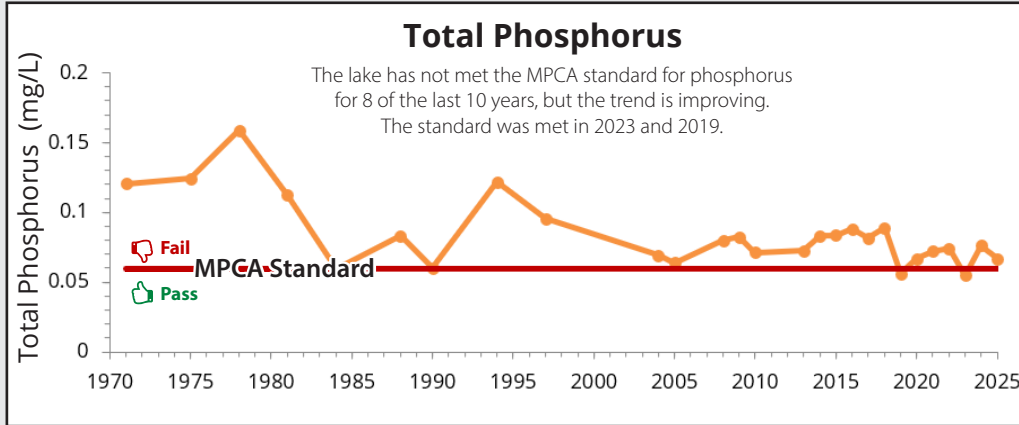
The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes. In 2025, Lake Susan failed to meet three clean water standards set by the MPCA.

Water Quality Report Card

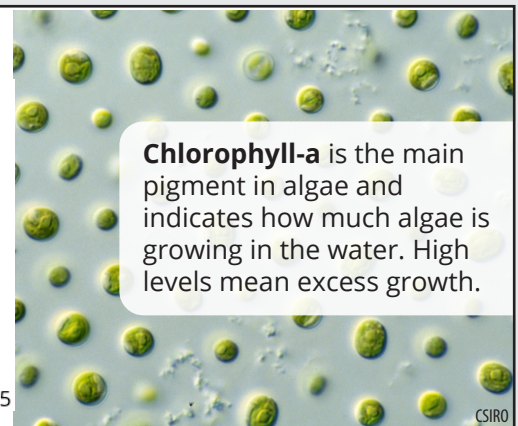
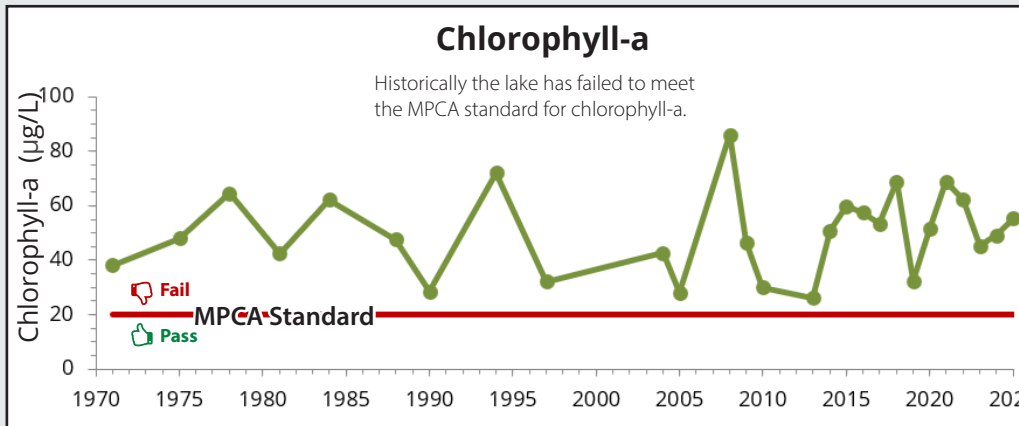
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[rpbcd.org/grades](http://rpbcd.org/grades)

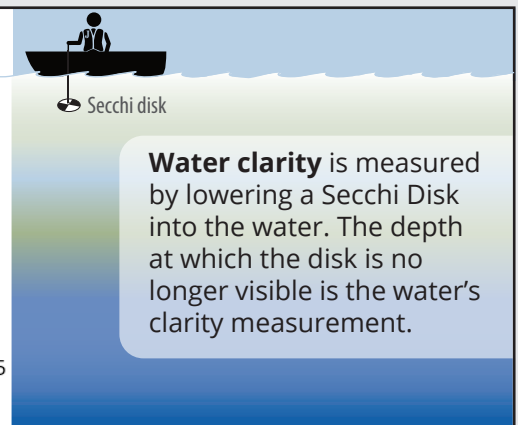
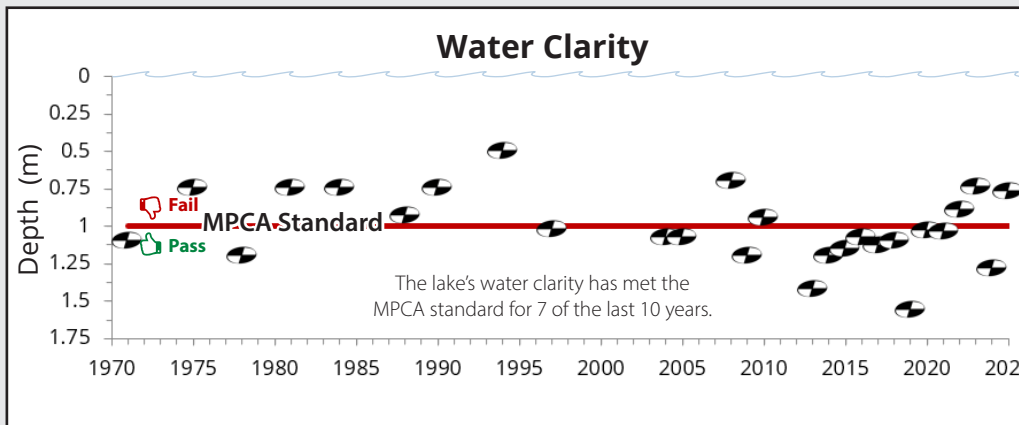
## Trends Over Time: 1972-present



**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.



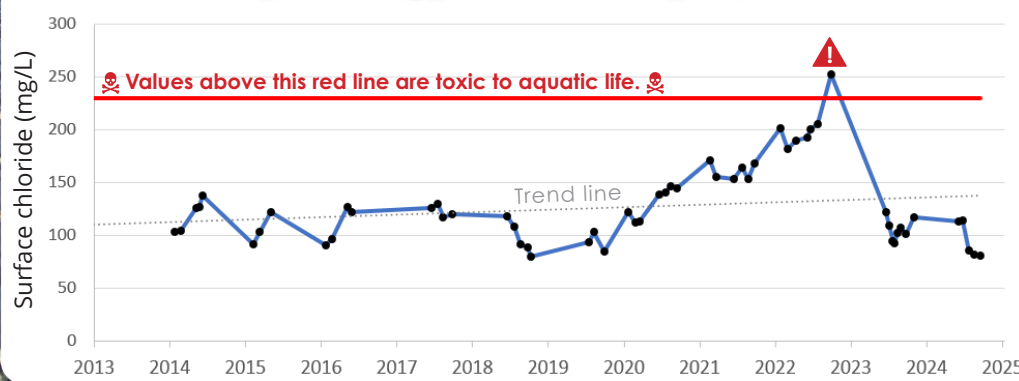
**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



**Water clarity** is measured by lowering a Secchi Disk into the water. The depth at which the disk is no longer visible is the water's clarity measurement.

## Chloride: A Growing Concern

Chloride permanently pollutes our lakes, ponds, and streams!



### What can I use instead of winter de-icers?

All affordable & effective residential de-icing products contain chloride, even those labeled as "eco-friendly" or "pet safe."

Focus instead on reducing build up of ice on your property:

- Shovel early & often
- Prevent ice formation, avoid driving or walking on snow
- Pile snow where it won't melt & refreeze on walkways

ONE TEASPOON of **SALT** POLLUTES 5 GALLONS of **WATER** FOREVER

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