

## Lake Lucy

Lake Lucy is the headwaters to Riley Creek. Water flows out of Lucy to Lake Ann and then to Riley Creek. On its way south to the Minnesota River, Riley Creek passes through Susan, Rice Marsh, and Riley lakes.

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 Lucy 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 Lucy Water Quality Snapshot

Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.086 mg/L	The average total phosphorus level continued to rise in 2025, and the lake did not meet the standard.
<b>Chlorophyll-a</b>	Less than 20 µg/L	50.275 µg/L	After a few years of declining levels, chlorophyll-a returned to the level seen in 2015. This may be due to 2025 precipitation patterns.
<b>Water Clarity</b>	Greater than 1.0 meters	0.933 meters	Clarity is directly related to algae growth. Average clarity decreased and did not meet the standard.

Water quality trends shown on back of page.



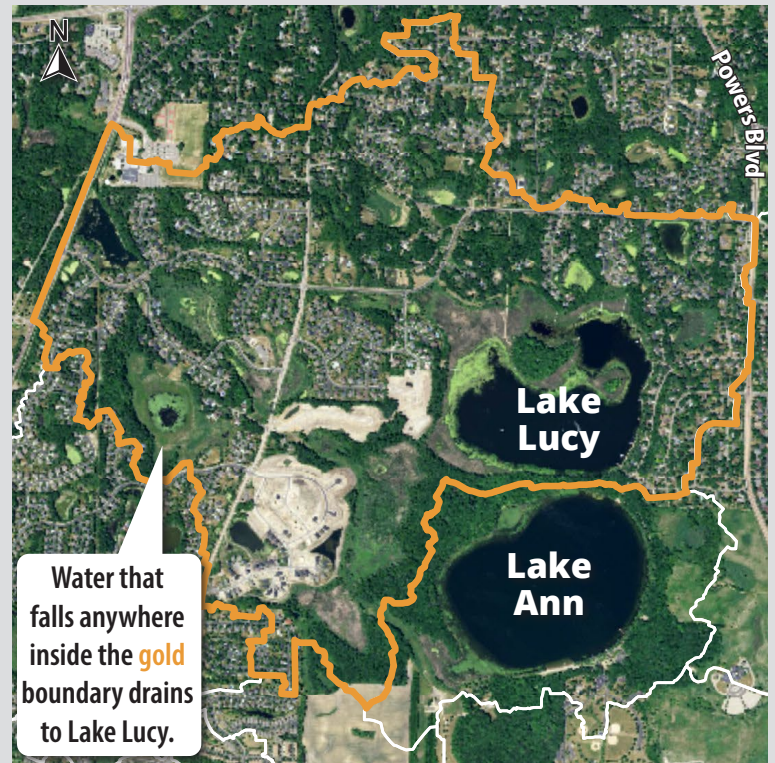
**Carp update:** Staff continue to monitor Common Carp, an invasive species that harms water quality by destroying aquatic vegetation and stirring up lake bottom sediments. In 2025, no carp were captured electrofishing in Lake Lucy, indicating carp are not currently a significant issue in this lake.

### Lake & watershed characteristics

Lake size	88 acres
Average lake depth	6.5 feet
Maximum lake depth	20 feet
MPCA lake classification	Shallow lake
Watershed size	988 acres
Impervious surface	14% of watershed
Impaired Waters listing	Mercury
Common fish	Bluegill, Northern Pike, Yellow Bullhead, Black Crappie, Pumpkinseed Sunfish
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Common Carp

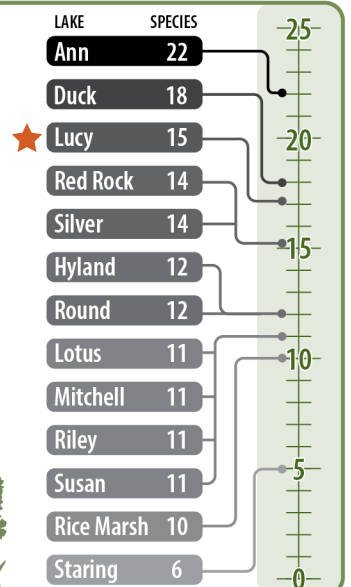


### Watershed Boundary



### Native Aquatic Plant Diversity

How does **Lake Lucy** compare to **other lakes** in the District in **number of native plant species?**



# Lake Lucy Water Quality by the Numbers

2025

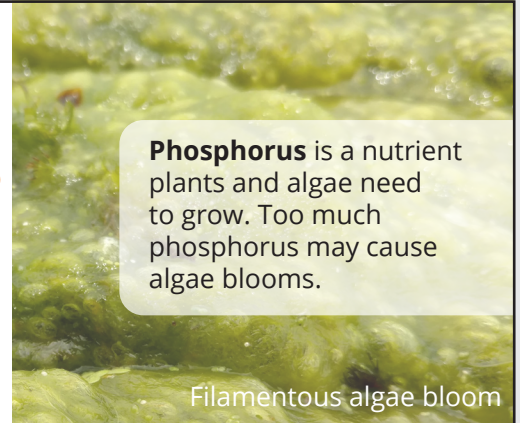
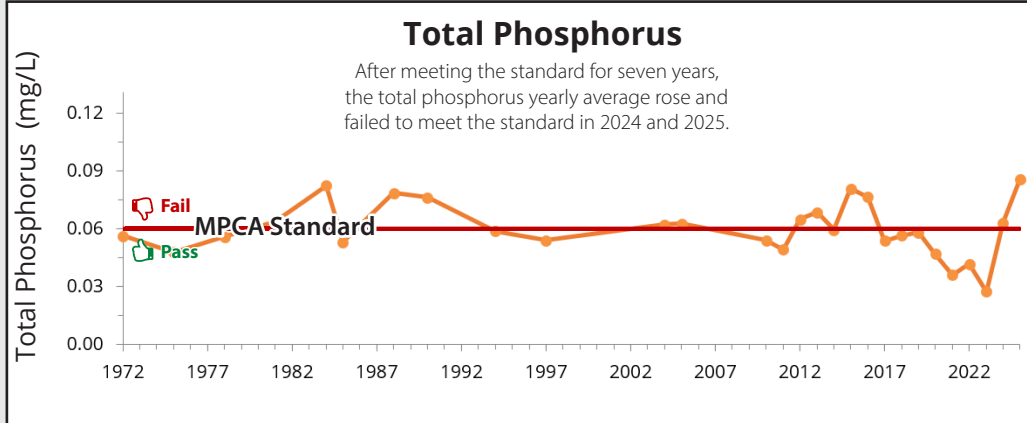
**Water Quality Report Card**

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

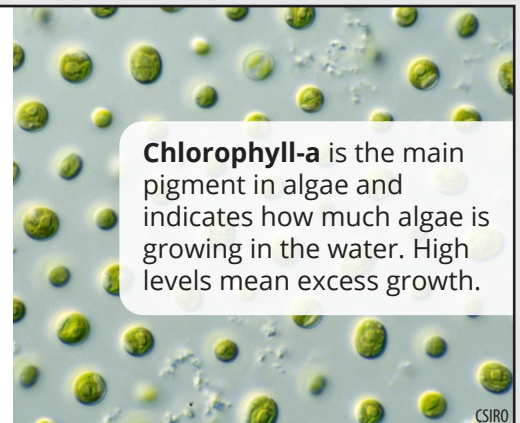
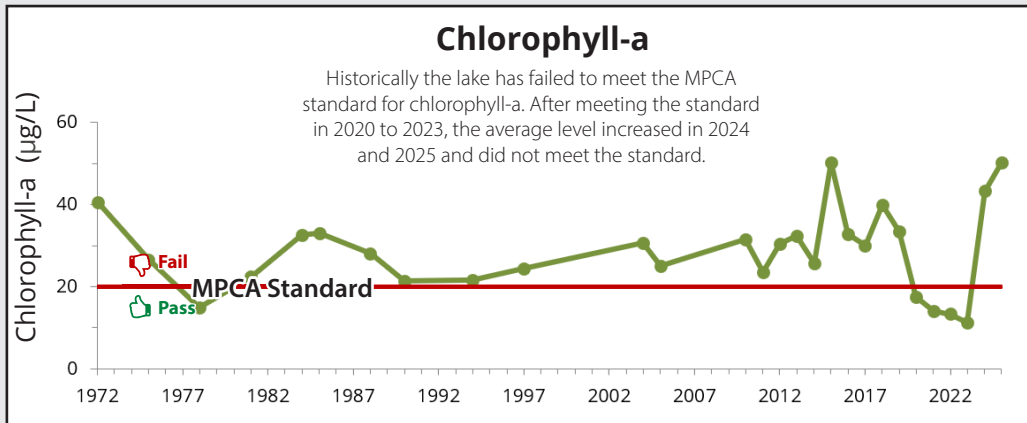
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Over the last few years, **Lake Lucy** has not met the clean water standards set by the MPCA. The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes.

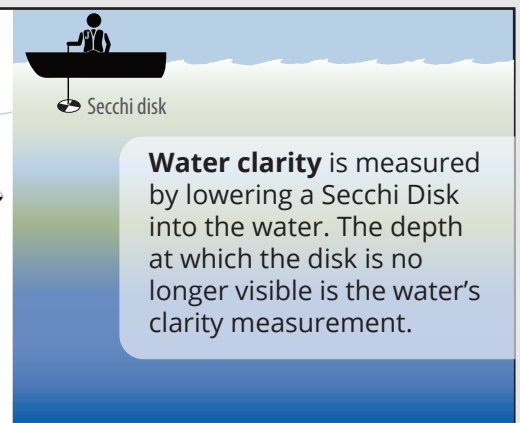
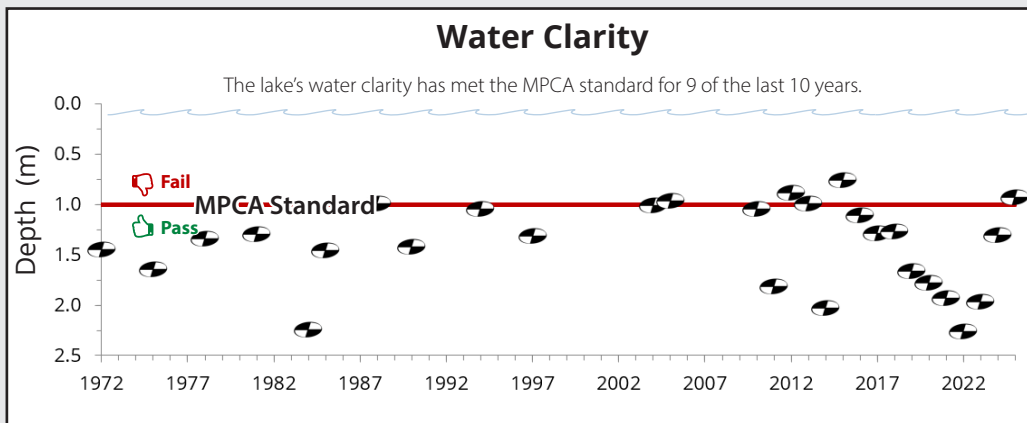
## Trends Over Time: 1972-present



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



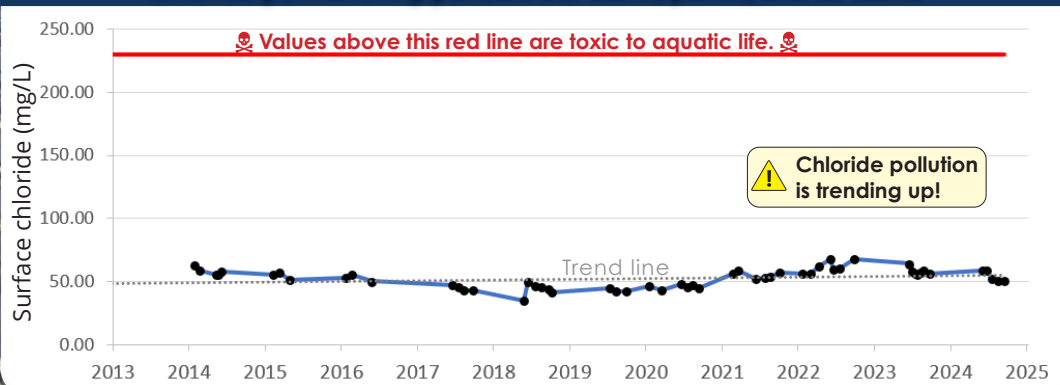
**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



**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

Learn more [rpbcwd.org/salt](http://rpbcwd.org/salt)