

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 have very low average phosphorus and chlorophyll-a levels and average water clarity of 1.0 meter (3.3 feet) or greater. See summary below. Additional details are located on the next page.

P **Total Phosphorus:** No significant trend since monitoring began. In 2023, the lake met the MPCA shallow lake standard (<0.06 mg/L) with average level of **0.028 mg/L**.

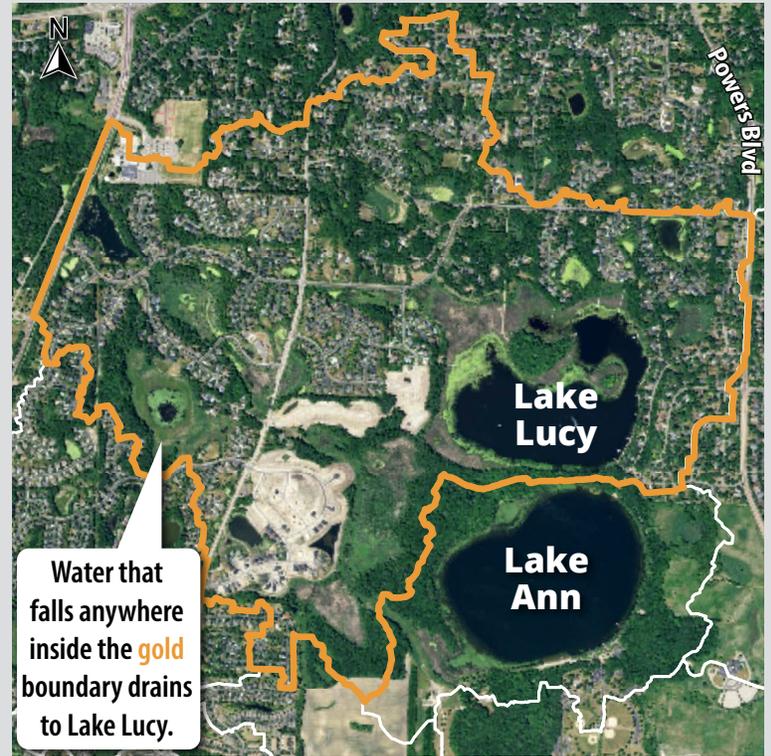
Chlorophyll-a: Levels have declined the last few years, which is likely linked to a winterkill events in 2018/2019 and 2022/2023. In 2023, the average reading for chlorophyll-a was **11.3 µg/L**, well within the MPCA standard (<20 µg/L).

Water clarity: Lake clarity has improved since 2019, and the lake consistently meets the MPCA standard (>1.0 meters). The average reading in 2023 was **2.0 meters**.

Fish: Small mesh trap netting was conducted in 2023 to see if successful reproduction of Common Carp occurred following the partial winterkill. No young of year carp were captured during the survey indicating carp are not a problem in Lucy. About 300 bluegills were stocked in the spring to ensure a breeding population was established to prevent carp recruitment from occurring.



Watershed Boundary

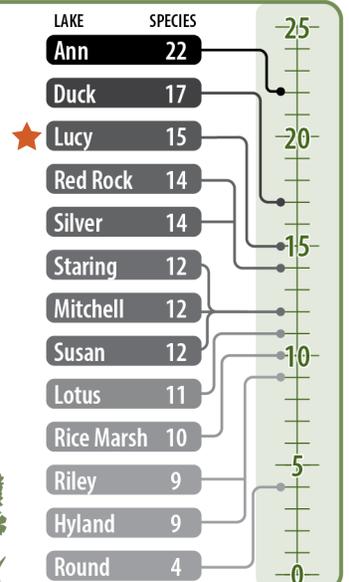


Lake & watershed characteristics

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

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

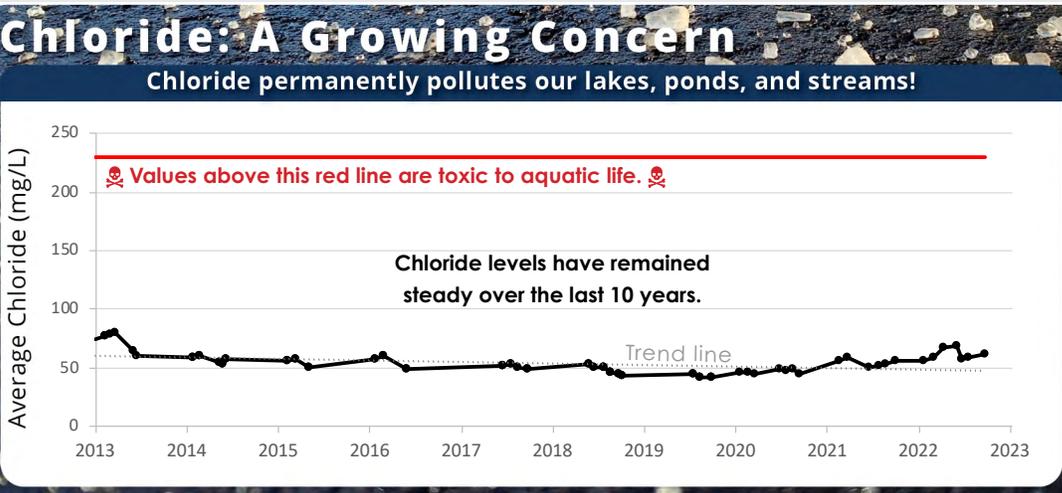
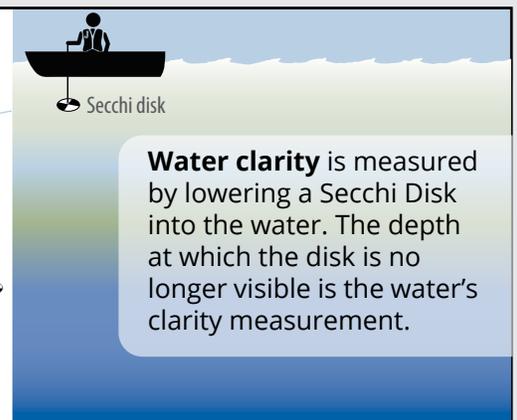
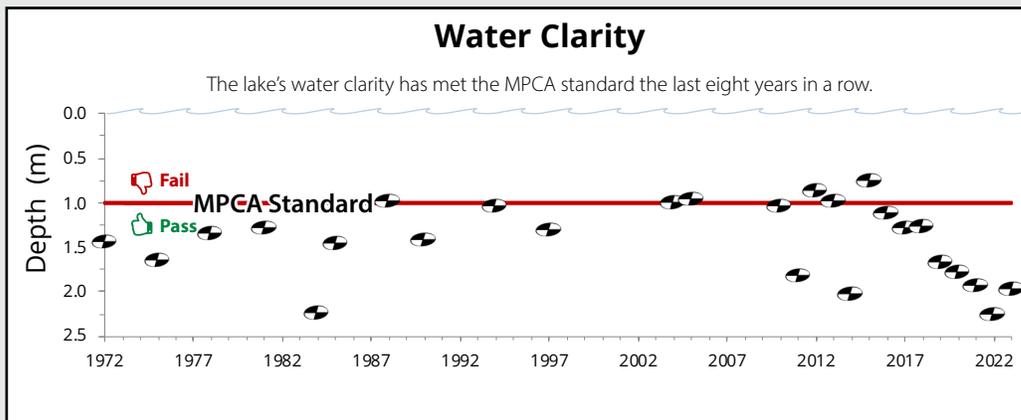
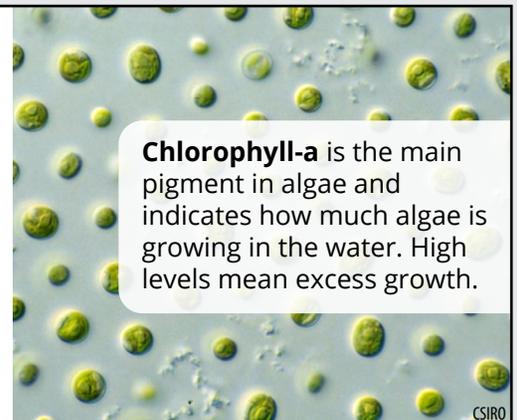
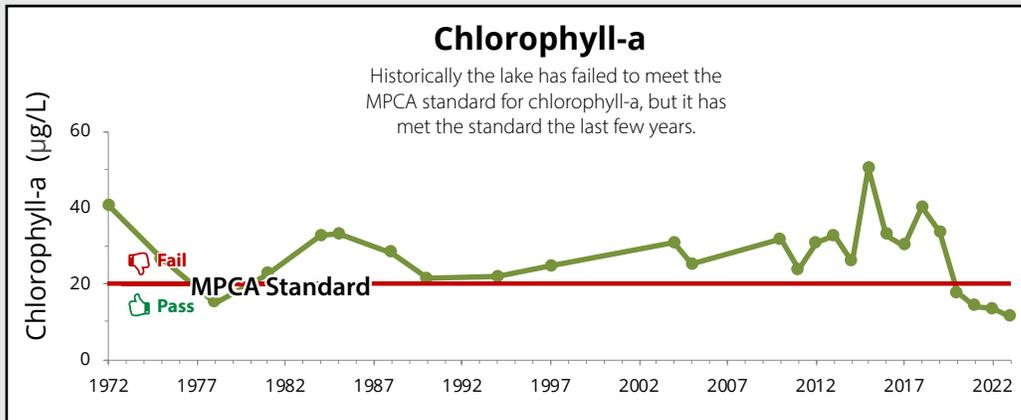
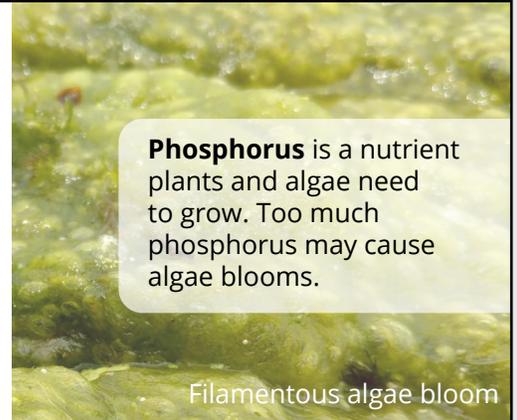
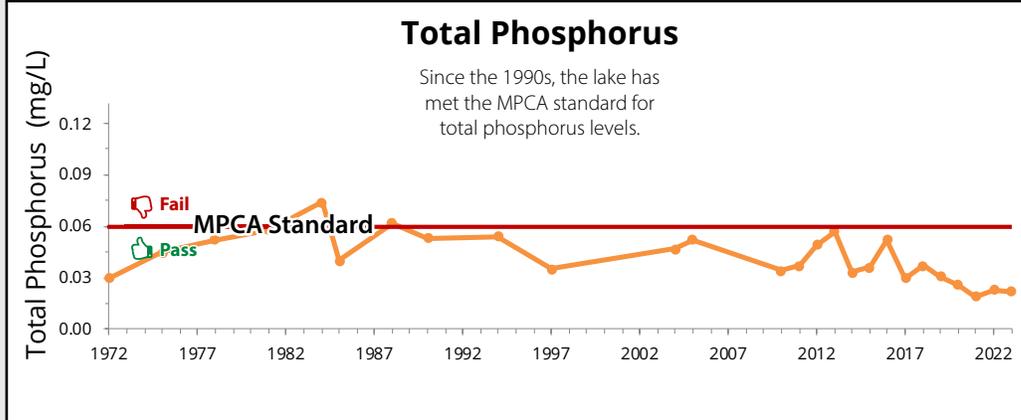
Over the last few years, **Lake Lucy** has met the clean water standards set by the MPCA. The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes.

Water Quality Report Card

rpbcdw.org/grades

B

Trends Over Time: 1972-present



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 rpbcdw.org/salt