

## Silver Lake

Located in Shorewood, Silver Lake sits at the edge of the watershed district. It is the only lake in the District with a native wild rice population, a rarity in metro area 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).

Silver Lake 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.

| Silver Lake Water Quality Snapshot |                         |              |   |
|------------------------------------|-------------------------|--------------|---|
| Parameter                          | Shallow lake standard   | 2024 average | Note  |
| <b>Total Phosphorus</b>            | Less than 0.06 mg/L     | 0.071 mg/L   | No significant trend. For the last two years the lake has failed to meet the MPCA standard for total phosphorus.  |
| <b>Chlorophyll-a</b>               | Less than 20 µg/L       | 30.1 µg/L    | No significant trend. In 2024, the lake failed to meet the standard and average chlorophyll-a increased to 30.1 ug/L from 19.1 µg/L in 2023.                              |
| <b>Water Clarity</b>               | Greater than 1.0 meters | 1.6 meters   | Since 2017, the lake has consistently met the standard for water clarity. This is correlated with the reduced water levels that occurred after the outlet became cleared. |

Water quality trends shown on back of page.

### Lake & watershed characteristics

|                          |   |
|--------------------------|---|
| Lake size                | 71 acres  |
| Average lake depth       | 5 feet  |
| Maximum lake depth       | 14 feet   |
| MPCA lake classification | Shallow lake                                      |
| Watershed size           | 391 acres   |
| Impervious surface       | 14% of watershed                                  |
| Impaired Waters listing  | Nutrients   |
| Common fish              | Black Bullhead, Fathead Minnow, Central Mudminnow |
| Invasive species         | Curly-leaf Pondweed, Purple Loosestrife           |

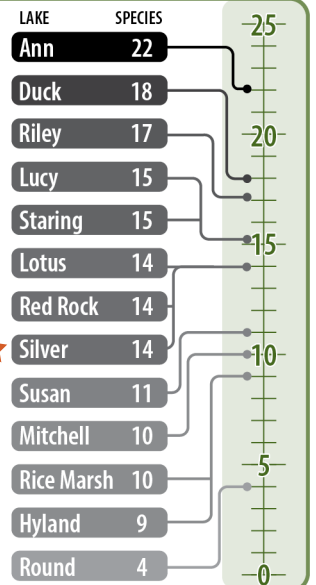


### Watershed Boundary



### Native Aquatic Plant Diversity

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





# Silver Lake Water Quality by the Numbers

2024

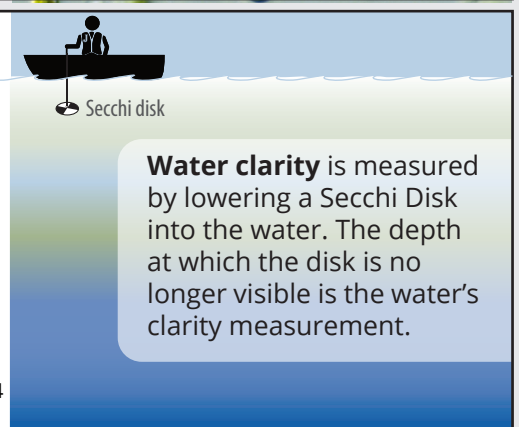
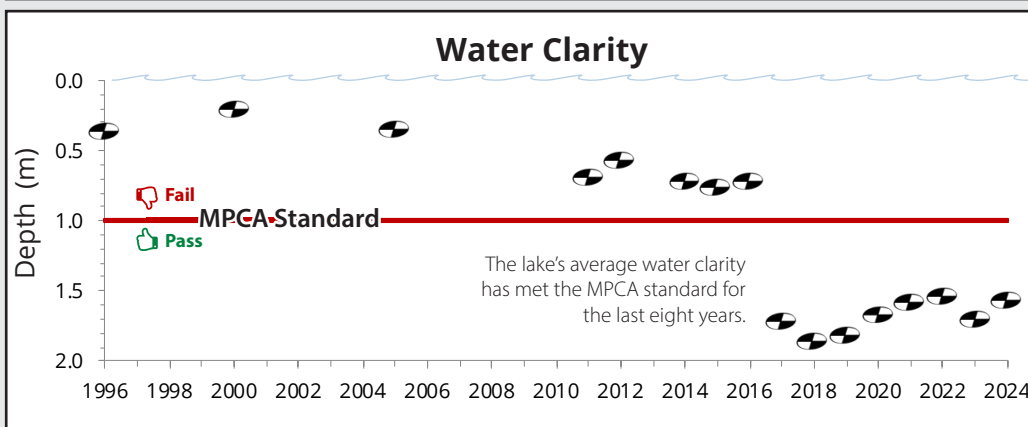
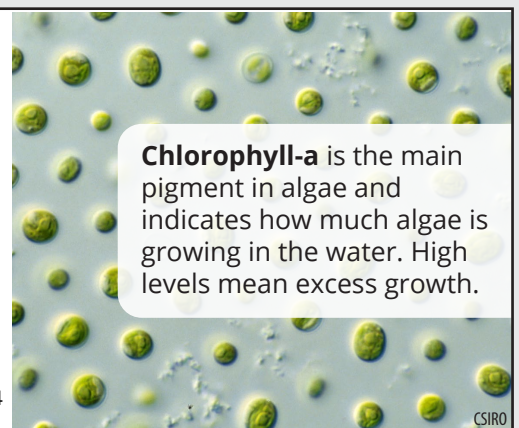
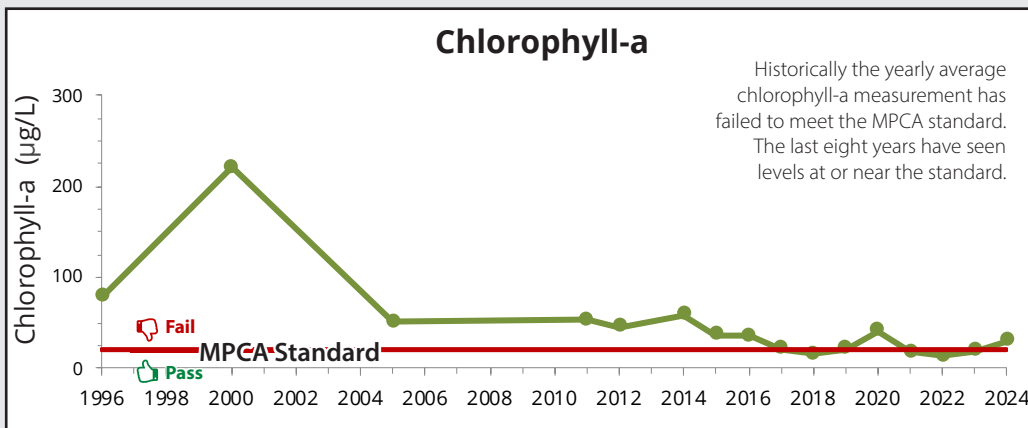
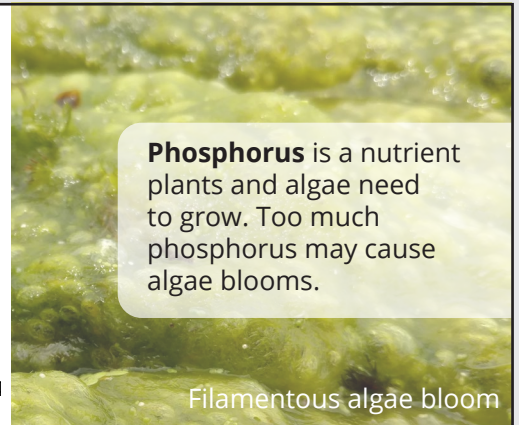
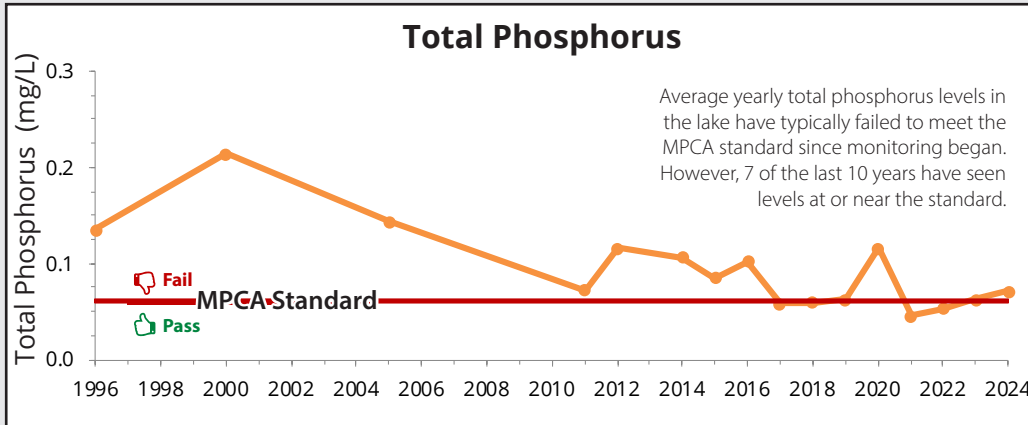
Water Quality Report Card

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rpbcwd.org/grades

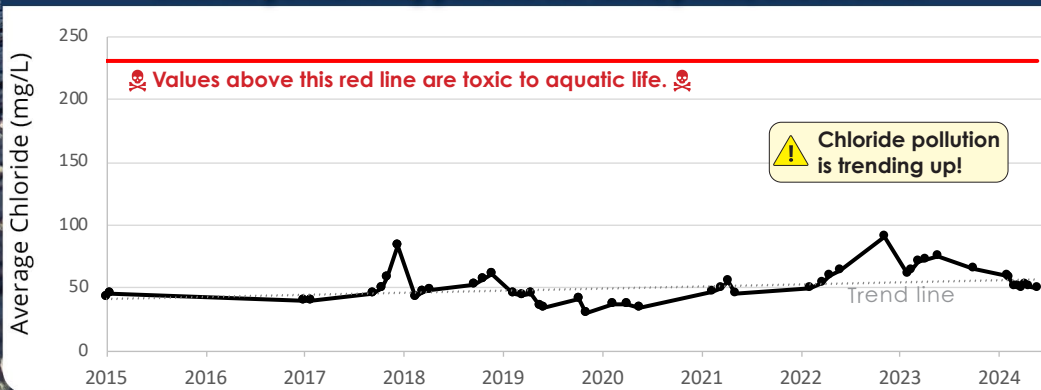
The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes.

## Trends Over Time: 1972-present



## 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](https://rpbcwd.org/salt)