

Rice Marsh Lake

Located in both Eden Prairie and Chanhassen, Rice Marsh Lake is aerated in the winter. This management practice helps keep bluegill sunfish alive so that they can feed on invasive carp eggs in the spring.

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).

Rice Marsh Lake 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:** Levels have decreased since monitoring began in 1972. In 2023, the lake met the MPCA shallow lake standard (<0.06 mg/L) with an average total phosphorus level of **0.044 mg/L**.

Chlorophyll-a: Levels have decreased since monitoring began in 1972. In 2023, the average reading met the MPCA shallow lake standard (<20 µg/L) with an average chlorophyll-a reading of **15.1 µg/L**.

Water clarity: Since 1972, average Secchi disk depths have increased, and the lake consistently meets the MPCA shallow lake standard (>1.0 meters). The average reading in 2023 was **2.1 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 the lake. About 300 bluegills were stocked in the spring to ensure a breeding population was established to prevent carp recruitment from occurring.

Lake & watershed characteristics

Lake size	83 acres
Average lake depth	5 feet
Maximum lake depth	11 feet
MPCA lake classification	Shallow lake
Watershed size	966 acres
Impervious surface	32% of watershed
Impaired Waters listing	Nutrients

Great news! Because Rice Marsh Lake's 10-year water quality averages meet shallow lake standards, the District is requesting that the MPCA removes it from the Impaired Waters List.

Common fish Bluegill, Northern Pike, Black Crappie, Yellow Bullhead, Pumpkinseed Sunfish

Invasive species Curly-leaf Pondweed, Purple Loosestrife, Common Carp



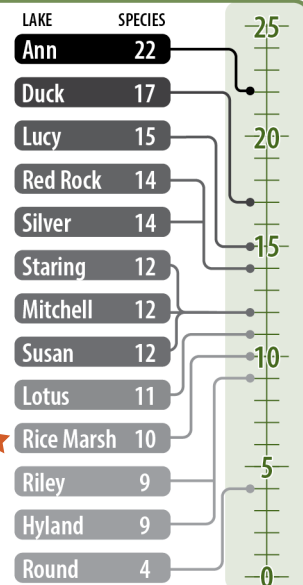
Watershed Boundary



Water that falls anywhere inside the gold boundary drains to Rice Marsh Lake.

Native Aquatic Plant Diversity

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



Rice Marsh Lake Water Quality by the Numbers

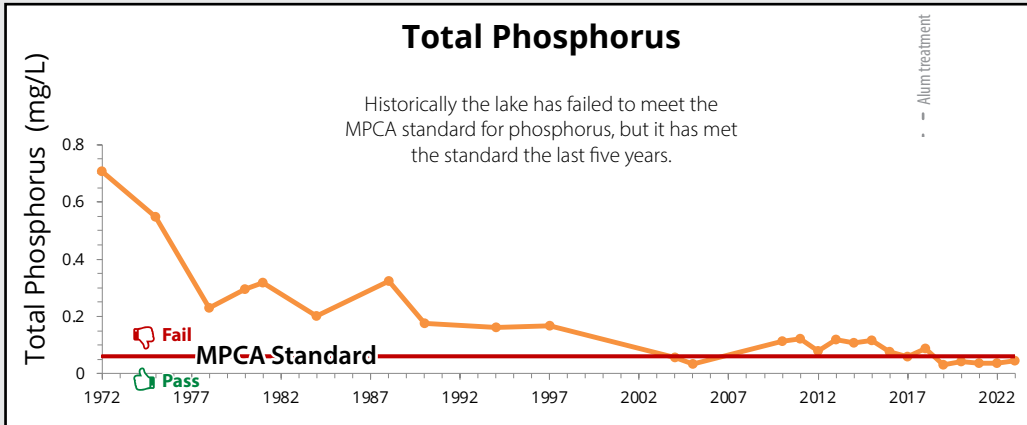
Over the last few years, Rice Marsh Lake has met the clean water standards set by the MPCA. The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes.

Water Quality Report Card



rpbcd.org/grades

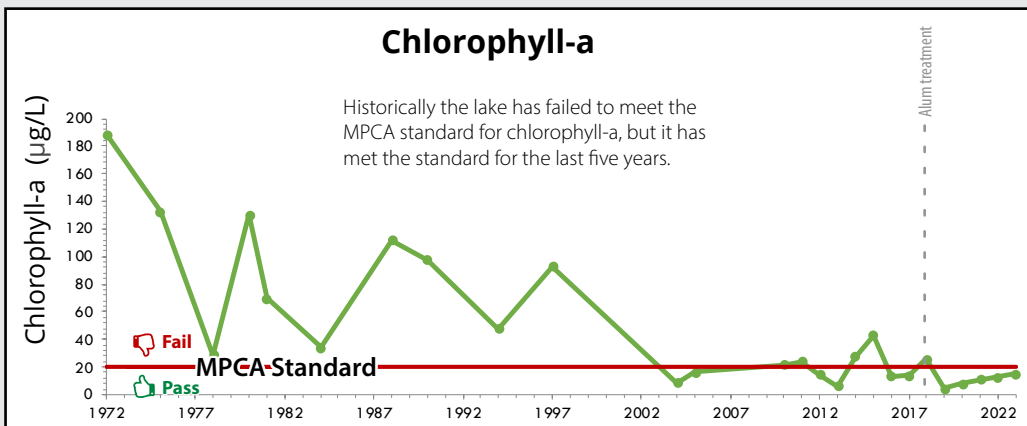
Trends Over Time: 1972-present



Rice Marsh Lake received an alum treatment in 2018. Alum limits the availability of phosphorus in lakes to control algae growth & improve water clarity.

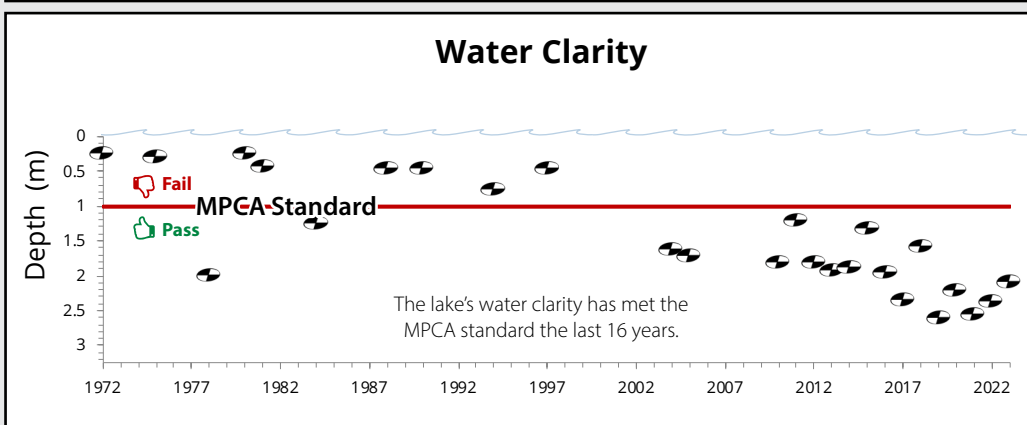
Phosphorus is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

Filamentous algae bloom



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

CSIRO

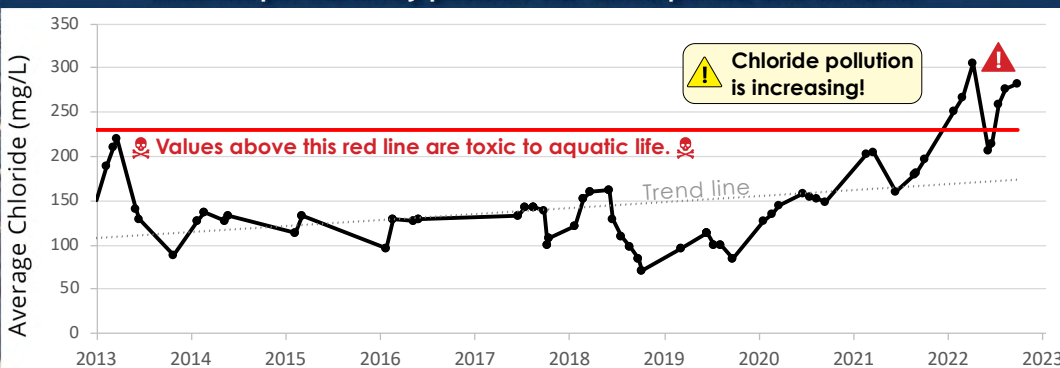


Secchi disk

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 rpbcd.org/salt