

Round Lake

Located in Eden Prairie, Round Lake is a part of the Purgatory Creek Chain of Lakes. With a park and trail system around the lake, it is a popular recreation spot.

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).

Round Lake is classified as a "Deep 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 1.4 meters (4.6 feet) or greater. See summary below. Additional details are located on the next page.

P **Total Phosphorus:** Since the alum treatment in 2012, average TP concentrations have been consistently below the MPCA deep lake standard (<0.04 mg/L). In 2023, Round Lake had an average TP concentration of **0.025 mg/L**.

Chlorophyll-a: Lake averages have consistently met the MPCA deep lake standard (<14 µg/L). In 2023, the average chlorophyll-a concentration was **7.7 µg/L**.

Water clarity: Since the alum treatment in 2012, the average water clarity has stabilized below the MPCA deep lake standard (>1.4 meters). In 2023, the average Secchi disk depth was **2.7 meters**.



Watershed Boundary



Lake & watershed characteristics

Lake size	30 acres
Average lake depth	11 feet
Maximum lake depth	37 feet
MPCA lake classification	Deep lake
Watershed size	440 acres
Impervious surface	32% of watershed
Impaired Waters listing	Mercury
Common fish	Bluegill, Yellow Bullhead, Black Bullhead, Black Crappie
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Brittle Naiad

Native Aquatic Plant Diversity

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



Round Lake Water Quality by the Numbers

The graphs below show water quality trends over time with the red line representing the MPCA standard for deep lakes. For the last few years, the City of Eden Prairie has collected water quality data for Round Lake.

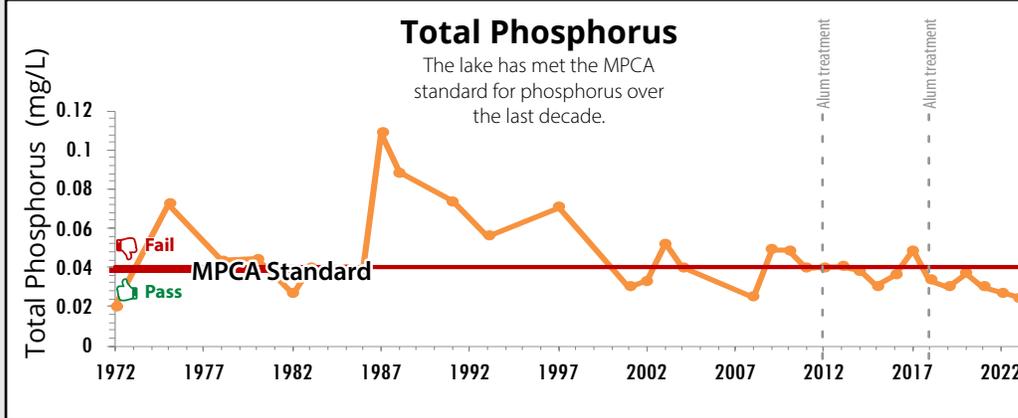


Water Quality Report Card

rpbcwd.org/grades

B

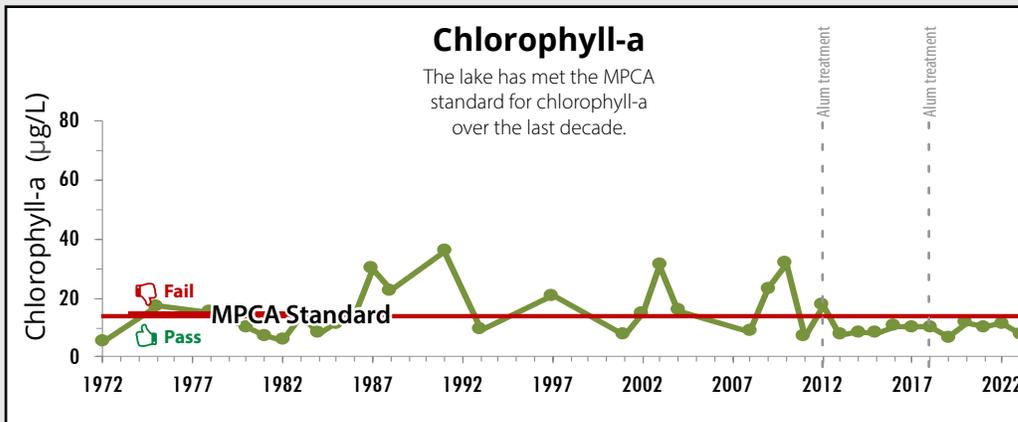
Water Quality Graphs, 1972-present



Round Lake received an alum treatment in 2012 and 2018. Alum limits the availability of phosphorus in lakes to control algae growth & improve water clarity.

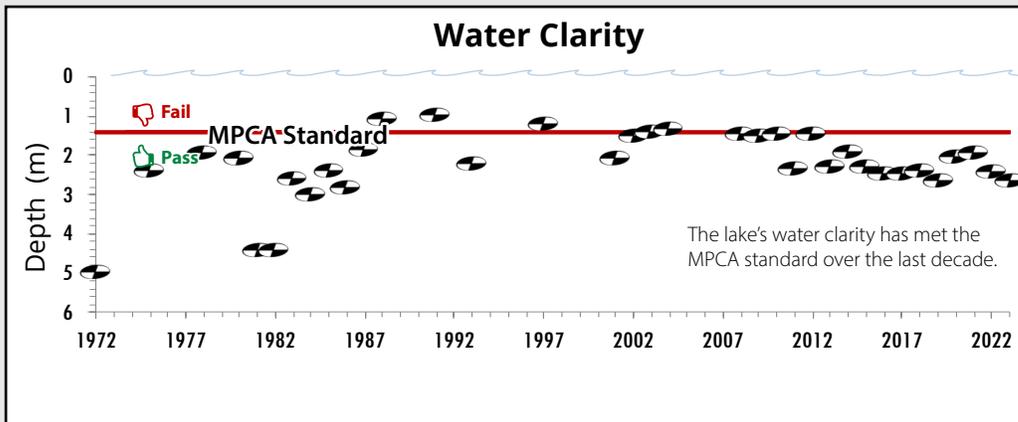
Phosphorus is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

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 rpbcwd.org/salt