RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

2022 Update

Staring Lake

Staring Lake is located in Eden Prairie, west of Flying Cloud Drive and north of Pioneer Trail. Staring has a public boat ramp and a fishing pier. The Eden Prairie Outdoor Center is also located on its shores, off of Staring Lake Parkway.

During June through September of each 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).

Staring 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.

Total Phosphorus: Since carp management began in 2011, TP levels have decreased. In 2022, total phosphorus levels peaked (0.106 mg/L) following the Fluridone herbicide treatment combined with low water levels.

Chlorophyll-a: No significant trend. In 2022, the average reading for chlorophyll-a was 70.4 µg/L, which is significantly higher than recent years.

Water clarity: Since carp management began in 2011, clarity has improved. The average reading in 2022 was 1.2 meters, which exceeded the MPCA standard.

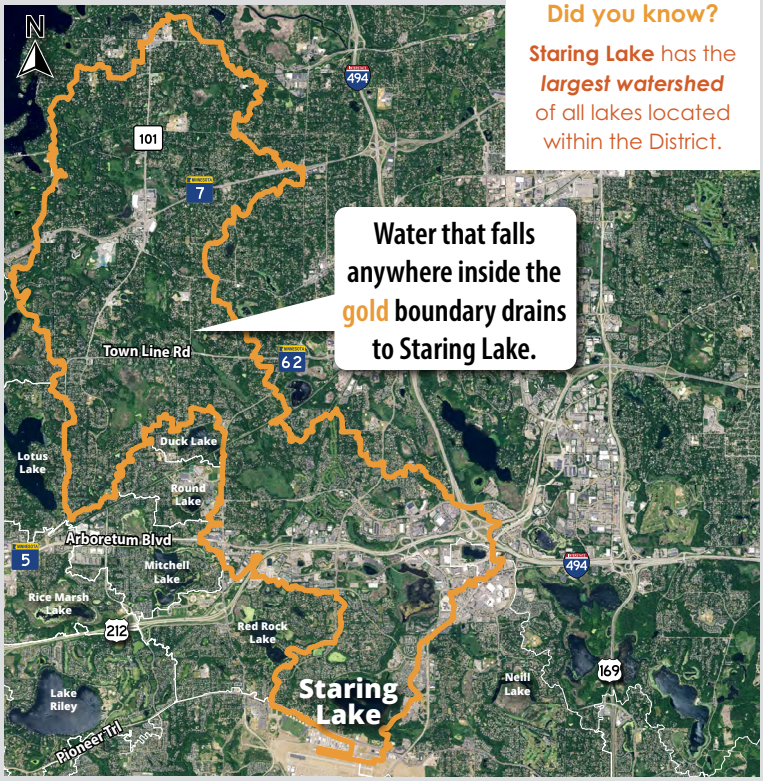
Fish: Electrofishing was used to monitor Common Carp, an invasive species that harms water quality by stirring up lake bottom sediments. Carp biomass is decreasing in the lake with little to no reproduction detected the last six seasons.

Plants: In 2022, the herbicide Fluridone was used to successfully treat Eurasian Watermilfoil. Unfortunately, the reduced vegetation combined with low water levels led to reduced water quality. Nutrient levels should decline as native vegetation expands across the lake. A Curly-lead Pondweed turion survey in 2022 yielded no turions indicating the herbicide treatment was effective.

Lake & watershed characteristics

Lake size	166 acres
Average lake depth	7 feet
Maximum lake depth	16 feet
MPCA lake classification	Shallow lake
Watershed size	10,158 acres
Impervious surface	21% of watershed
Impairment listing	Mercury & nutrients
Common fish	Bluegill, Black Crappie, Black Bullhead
Invasive species	Curly-leaf Pondweed, Eurasian Watermil-foil, Brittle Naiad, Common Carp

Watershed Boundary



Did you know?

Staring Lake has the ***largest watershed*** of all lakes located within the District.

Top 3 *things you can do at HOME to protect the LAKE*

Protect storm drains.

Prevent grass clippings, lawn fertilizer and debris from entering storm drains so they don't end up in the lake.

Pick up dog waste.

Did you know that pet waste pollutes water? It's full of nutrients and bacteria. Bag it and toss it in a trash can.

Reduce stormwater runoff.

Reduce the flow of stormwater off your property by installing a rain garden, native planting, or rain barrel.

Staring Lake Water Quality by the Numbers

The graphs below show water quality trends over time with the red line showing the MPCA standard for **shallow lakes**. Over the last decade, **Staring Lake** has met the clean water standards set by the MPCA about half the time.

Averages

★ = Standard met

Water Quality Parameter	Historical Average	2022 Average	MPCA Standard: Shallow Lakes
Total Phosphorus (mg/L)	0.085	0.106 ★	< 0.060
Chlorophyll-a (µg/L)	40.7	70.4	< 20
Water Clarity (meter)	1.0	1.2 ★	> 1.0

Native Aquatic Plant Diversity

How does **Staring Lake** compare to **other lakes** in the District?

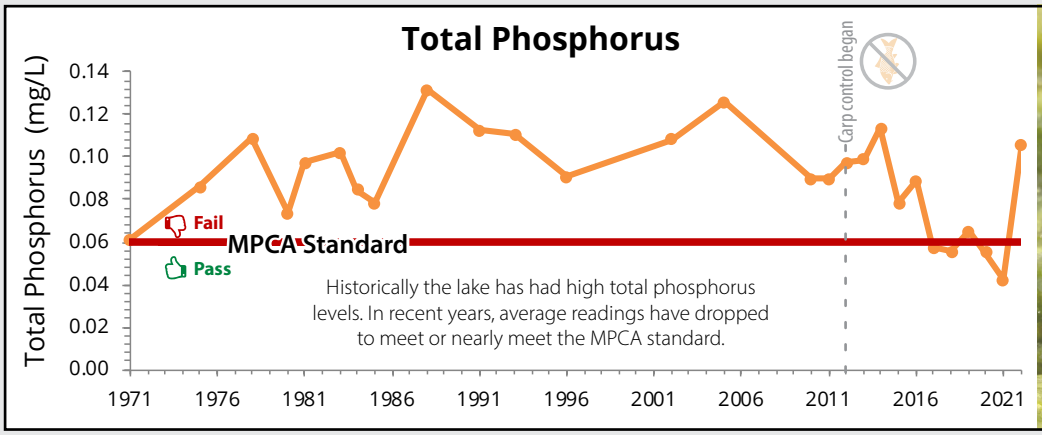
Lake Ann ranks highest at 25 species.

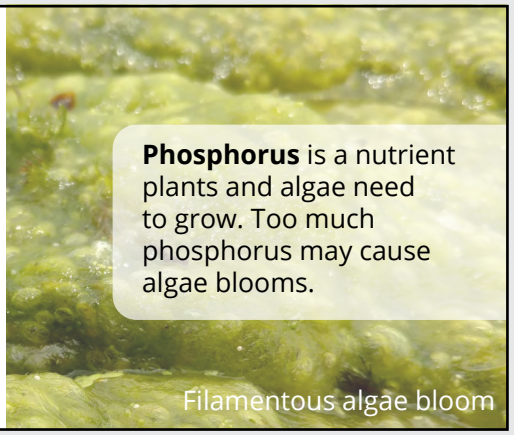
13 species

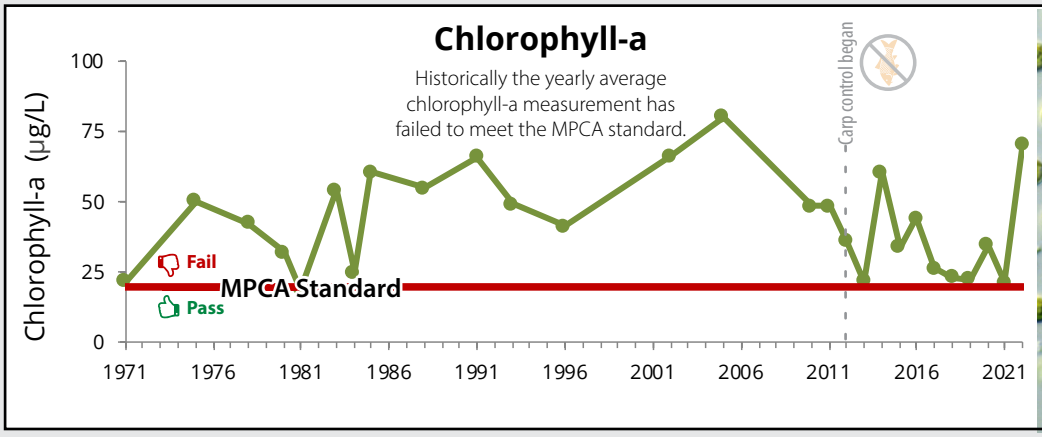
Hyland & Round lakes rank lowest at 4 species.

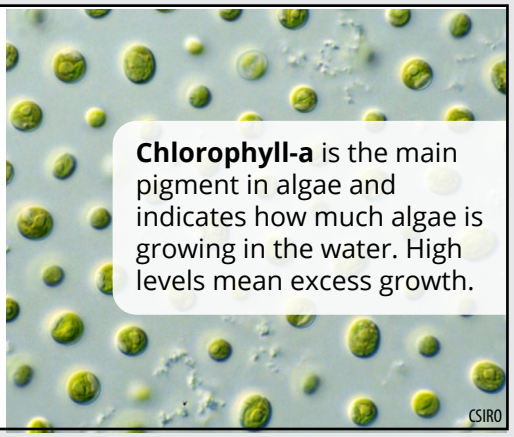
Trends Over Time: 1972-present

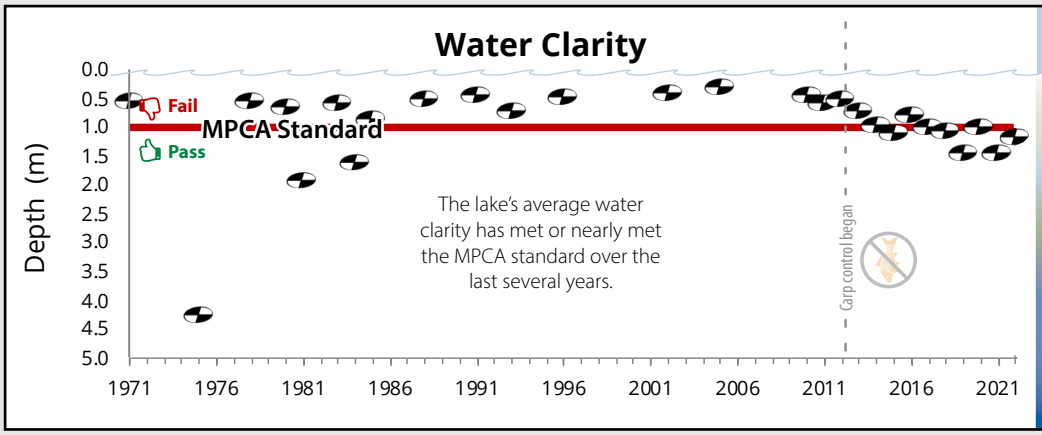
Read the *Water Resources Report* at rpbcwd.org/annualreport

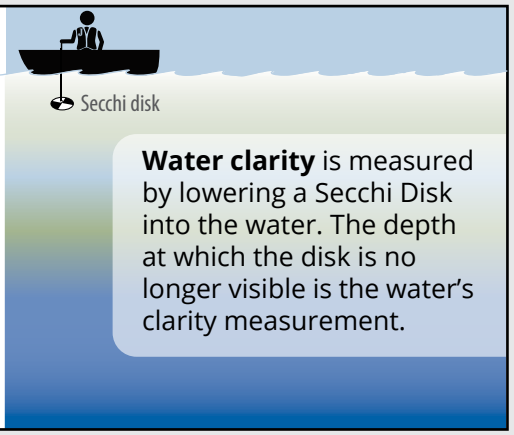












Grants for Shoreline Restoration

The watershed district offers up to **75% cost share** assistance for restoring your shoreline! Learn more: rpbcwd.org/grants

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Contact us

18681 Lake Drive East
Chanhassen, MN 55317

www.rpbcwd.org

info@rpbcwd.org

952-607-6512

@rpbcwd