

2022 Update

Red Rock Lake

Located in Eden Prairie, Red Rock Lake is a part of the Purgatory Creek chain of lakes. During high water events it outflows through an overflow pipe to Staring Lake.

During June through September of each year, City of Eden Prairie 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).

Red Rock 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: No significant trend. In 2022, the lake met the MPCA standard with an average total phosphorus level of 0.057 mg/L.



Chlorophyll-a: Over the last decade, the yearly average chlorophyll-a measurements have improved. In 2022, the average reading for chlorophyll-a was 26.9 µg/L.

Water clarity: No significant trend. The lake consistently meets the standard for water clarity. The average reading in 2022 was 1.5 meters.



Plants: A point-intercept plant survey was conducted by the City of Eden Prairie in 2022 to track aquatic plant populations.

Lake & watershed characteristics

Size	121 acres		
Average depth	4.7 feet		
Max depth	19 feet		
MPCA lake classification	Shallow lake		
Watershed size	1,286 acres		
Impervious surface	25% of watershed		
Impairment listing	Mercury		
Common fish	Bluegill, Northern Pike, Pumpkinseed, Yellow Perch		
Invasive species	Curly-leaf Pondweed		



Watershed Boundary



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.

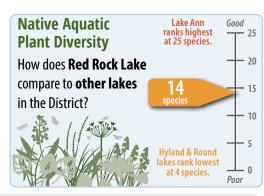
Red Rock Lake Water Quality by the Numbers

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

For the last few years, the City of Eden Prairie has collected water quality data for Red Rock Lake.

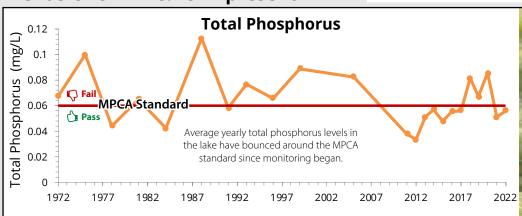


Averages ★= Standard m				
Water Quality Parameter	Historical Average	2022 Average	MPCA Standard: Shallow Lakes	
Total Phosphorus (mg/L)	0.064	0.057 ★	< 0.060	
Chlorophyll-a (μg/L)	29.7	26.9	< 20	
Water Clarity (meter)	1.4 ★	1.5 ★	> 1.0	

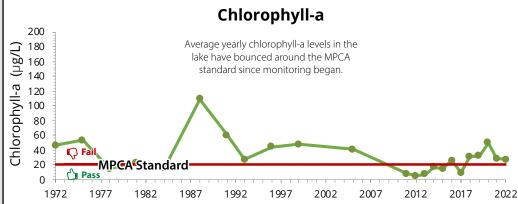


Trends Over Time: 1972-present

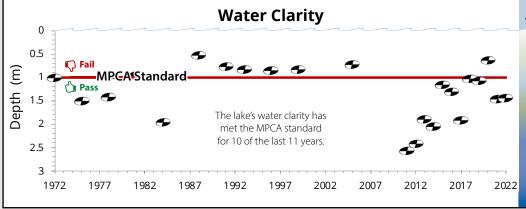
Read the Water Resources Report at rpbcwd.org/annualreport



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.





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.



Grants for Shoreline Restoration

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



Contact us





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Tfo @rpbcwd