

District water resources staff collect data throughout the year. The primary sampling season for lakes is May through October and for streams is April through September. In addition to monitoring, staff implement projects and programs that help protect and improve lake and stream health. This summary provides an overview of that work. For a deeper dive, check out the water quality fact sheets in the appendix or the water resources report at [rpbcwd.org](http://rpbcwd.org).

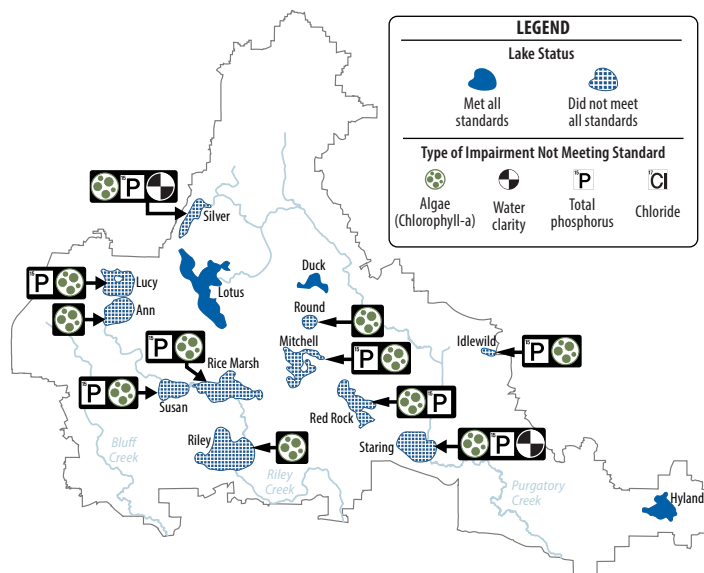
## LAKES

### Water Quality Summary

RPBCWD and its partners monitor 13 lakes and one open water wetland for over a dozen parameters. Parameters of particular interest include total phosphorus, chlorophyll-a (an indicator of algae growth), water clarity, and chloride. The results from the growing season (June-September) are compared to parameter standards set by the Minnesota Pollution Control Agency (MPCA).

Figure 1 provides an overview of 2025 lake impairments. Having an impairment means that the lake did not meet the MPCA standard for a parameter. Heavy rains in spring 2025 likely contributed to higher lake nutrient levels (e.g., phosphorus), which resulted in abundant algae growth as indicated by high chlorophyll-a levels in summer. Despite high average chlorophyll-a levels, most lakes met the clarity standard for their lake type (deep or shallow).

Figure 1. Summary of 2025 lake water quality impairments



Overuse of winter salt resulting in chloride pollution of waterbodies is a growing concern. In 2025, staff visited lakes monthly to collect samples for chloride testing. All lakes met the MPCA average chloride standard in 2025 with no short-term spikes above the standard. However, the chloride levels of some lakes are trending up. During icier winters such as winter 2022-23, chloride spikes have occurred that exceed the chloride standard.

See Table 1 for a summary of whether or not lakes met water quality standards for total phosphorus, chlorophyll-a, clarity, and chloride. More detail, including chloride trends, can be found in the 2025 water quality fact sheets and water resources report.

Table 1. In 2025, did the lake meet the MPCA standard?

Lake Name	Total Phosphorus	Chlorophyll-a	Clarity	Chloride
<b>DEEP LAKE STANDARD</b> →	Less than 0.04 mg/L	Less than 14 µg/L	Greater than 1.4 meters	230 mg/L
Ann	Yes	No	Yes	Yes
Lotus	Yes	Yes	Yes	Yes
Riley	Yes	No	Yes	Yes
Round	Yes	No	Yes	Yes
<b>SHALLOW LAKE STANDARD</b> →	Less than 0.06 mg/L	Less than 20 µg/L	Greater than 1.0 meters	230 mg/L
Duck	Yes	Yes	Yes	Yes
Hyland	Yes	Yes	Yes	Yes
Idlewild*	No	No	Yes	Yes
Lucy	No	No	No	Yes
Mitchell	No	No	Yes	Yes
Red Rock	No	No	Yes	Yes
Rice Marsh	No	No	Yes	Yes
Silver	No	No	Yes	Yes
Staring	No	No	No	Yes
Susan	No	No	Yes	Yes

\*Open water wetland

## Alum Treatments

An aluminum sulfate (alum) treatment is an effective way to reduce phosphorus in a lake resulting in less algae growth and improved water clarity. An alum treatment is considered to be a capital improvement project because of the large expense, where a single lake treatment can cost upward of \$100,000.

The decision to do an alum treatment takes into account internal phosphorus loading (determined by analysis of lake sediment testing), carp abundance, aquatic invasive plant abundance, water quality trends, and how long the alum treatment would be effective. In 2025, the District and its partners proceeded with alum treatments on Rice Marsh Lake and Round Lake. Table 2 provides an overview of all alum treatments over time.

Table 2. An overview of aluminum sulfate treatments over time.

LAKE	ALUM TREATMENT YEAR	PARTNERS
Hyland	2019, 2022	Three Rivers Park District
Lotus	2018, 2024	--
Rice Marsh	2018, 2025	--
Riley	2016, 2020	--
Round	2012, 2018, 2025	City of Eden Prairie

## Aquatic Vegetation Management

The primary activities in the District's aquatic vegetation management program is population monitoring and control of invasive aquatic plants to benefit native populations. Monitoring is done through point intercept (PI) surveys, which are performed on a rotational basis on major lakes. In 2025, PI surveys were conducted on eight lakes by RPBCWD and other organizations. See Table 3 for a summary.

**Table 3. An overview of point intercept surveys and lead organizations on district lakes in 2025.**

LAKE	2025 POINT INTERCEPT SURVEY	LEAD ORGANIZATION
Ann	No	RPBCWD
Duck	No	RPBCWD
Hyland	Yes	Three Rivers Park District
Lotus	Yes	RPBCWD
Lucy	No	RPBCWD
Mitchell	Yes	City of Eden Prairie
Red Rock	Yes	City of Eden Prairie
Rice Marsh	No	RPBCWD
Riley	Yes	RPBCWD
Round	Yes	City of Eden Prairie
Silver	No	RPBCWD
Staring	Yes	RPBCWD
Susan	No	RPBCWD
PCRA wetland	No	RPBCWD



## Invasive Plant Surveys and Treatments

Staff use separate delineation surveys in spring to assess the distribution and density of Curly-leaf Pondweed (CLP) and Eurasian Watermilfoil (EWM). If warranted, a permit for herbicide treatment is sought from the MN DNR. CLP is challenging to manage because it begins growing under lake ice in late winter/early spring. Snow cover on ice can reduce CLP growth and a cold spring can delay CLP growth, making it tricky for staff to schedule delineation surveys. Staff must also consider MN DNR regulations regarding aquatic herbicide use on public lakes:

- A permit application to the MN DNR is required for all aquatic herbicide use on all public lakes.
- The size of the herbicide treatment area may not exceed 15% of a lake's littoral zone. The DNR will consider a variance, such as a whole-lake treatment, under special conditions.
- Herbicide treatment for CLP control must occur no later than May 15th or a few weeks after ice-out, whichever comes later.

In 2025, six lakes were delineated for CLP and EWM. At the time of the surveys, four lakes had significant enough CLP levels to warrant chemical treatment, and three lakes were determined to need treatment to control EWM. See Table 4 for a summary.

**Table 4. An overview of aquatic invasive plant treatments on district lakes in 2025.**

Lake	Curly-leaf Pondweed Treatment: Timing, Size, Herbicide	Eurasian Watermilfoil Treatment: Timing, Size, Herbicide
Duck	None	July 2025, 5.1 acres, ProcellaCOR
Lotus	None	None
Mitchell	May 2025, 15.99 acres, Flumioxazin	None
Red Rock	May 2025, 12.84 acres, Flumioxazin	None
Riley	May 2025, 22 acres, Flumioxazin	July 2025, 10.93 acres, ProcellaCOR
Staring	None	July 2025, 5.88 acres, ProcellaCOR
Susan	May 2025, 5.89 acres, Flumioxazin	None

In addition to spring delineation surveys, staff perform surveys for turions, which are the primary reproductive structures of CLP, on an as-needed basis. Turions break off from adult plants and sprout to form new plants. Some turions germinate their first year while others overwinter in lake sediments to sprout the following year. Sampling for turions in the fall helps predict CLP growth the following year. In 2025, district staff did not perform any CLP turion surveys.



## Zebra Mussels

Zebra mussels are an invasive species that fundamentally change the food web of lakes by out-competing native species for food, which is primarily phytoplankton. They also negatively impact recreation and structures such as docks. District staff continue to monitor for adult zebra mussels through visual surveys and monitoring plates. The Adopt a Dock program also enlists volunteers to monitor with plates hung from residential docks. Staff additionally monitor zebra mussel veligers (larvae) by examining filtered water samples under a microscope. Carver County tests for eDNA in select lakes. The eDNA test is a very sensitive test that can detect zebra mussel DNA, with or without live zebra mussels present, within the lake environment.

Treatments to control zebra mussels are considered experimental and there is no practical way to control an established population. Lakes within the district that have confirmed zebra mussel infestations include Riley (2018), Lotus (2019), and Ann (2023). In 2020, a single zebra mussel was

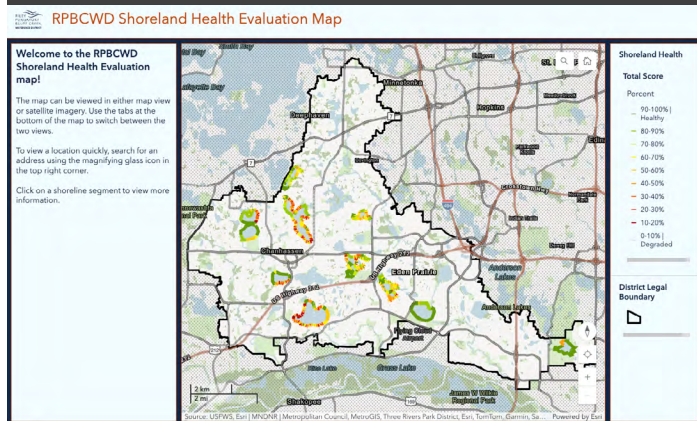


found on a buoy on the south shore of Lake Ann. In 2023, four zebra mussels were found on woody debris near the same area, which resulted in a rapid response effort from RPBCWD and Carver County. Visual searches around the lake via snorkeling, diving, and wading resulted in the discovery of five more zebra mussels in the same area. Because the area in which the mussels were found was near-shore, a copper sulfate treatment was applied in an attempt to eliminate or at least slow down the infestation. In 2024, Lake Ann was monitored with monthly visual scans, eDNA testing, veliger sampling, and passive plate sampling, but all techniques resulted in no additional evidence of zebra mussels. No additional scans occurred in 2025.

## Shoreland Health Evaluation

An interactive Shoreland Health Evaluation Map was released in 2024 that allows lake residents to view their shoreland health scores. The web map is housed on a webpage with ways to improve a shoreland health scores and frequently asked questions. Beginning in 2025, residents could apply for a shoreland health cost share through our Stewardship Cost Share program. The cost share allows lake residents to be reimbursed for adding native vegetation to their shoreland zone, which will improve their shoreland health score.

Released in 2024, the interactive Shoreland Health Evaluation Map can be found at [rpbcwd.org/shoreland-health](http://rpbcwd.org/shoreland-health).



## Carp Management

Common carp are invasive fish that degrade water quality. When feeding, carp root in lake bottom sediments, uprooting aquatic plants and releasing nutrients into the water column. Because they are able to move between lakes using streams, District staff manage carp with the whole stream system (chain of lakes) in mind. See Figure 2 on the next page for an overview of carp management activities and locations in the District.

Management of carp in the district began in earnest in 2009. Winter seining was used 2009 to 2013 to remove carp and reduce their populations. Since then, a multi-pronged approach to carp management has kept carp populations well under control and below the recommend biomass level of 100 kilograms of carp per lake hectare.

In the Riley Creek chain of lakes, all lakes except Rice Marsh Lake have low recruitment potential. Low recruitment potential means that staff have observed little to no evidence of carp reproduction or young carp survival. On low recruitment lakes, boat electrofishing and small mesh trap netting are performed on a three-year rotation. Because of its high susceptibility to winterkill,

Rice Marsh Lake is considered to have moderate recruitment potential and is aerated every winter to help maintain the bluegill population to control carp.

In the Purgatory Creek chain of lakes, Staring Lake and the upper and lower wetlands in the Purgatory Creek Recreation Area (PCRA) have moderate to high carp recruitment potential and, therefore, electrofishing and small mesh trap netting are performed every year. See Table 5 for a summary of carp management methods, purpose, and frequency.

**Table 5. Methods used in the district carp management program.**

METHOD	PURPOSE	FREQUENCY
<b>Electrofishing by boat</b>	Monitor adult carp population; opportunistic carp removal if fish is netted	Low recruitment lake & Rice Marsh Lake: every 3 years; High/moderate recruitment lake: yearly
<b>Electrofishing by backpack</b>	Remove carp	Opportunistic as fish gather in springtime at inlet or outlet
<b>Small mesh trap netting</b>	Remove young-of-year carp; collect data on all species	Low recruitment lake & Rice Marsh Lake: every 3 years; High/moderate recruitment lake: yearly
<b>Carp barrier</b>	Prevent carp migration between lakes (four are water control structures that incidentally prevent migration; fifth is a gate installed to prevent carp movement at lower PCRA wetland)	Water control structures are permanent. Gate at PCRA lower wetland is adjustable.
<b>Winter aeration</b>	Prevent winterkill of bluegill that eat carp eggs & hatchlings (RPBCWD operates one unit located on Rice Marsh Lake)	December-March
<b>Bluegill stocking</b>	Increase bluegill that eat carp eggs and hatchlings	Occurs as warranted due to low bluegill population or winterkill event.

## CARP MIGRATION BARRIERS

Every spring, the natural instinct of carp kicks in, driving them to migrate upstream to spawn. Unfortunately this behavior encourages the spread of carp into new waterbodies. However, in the District, carp migration is somewhat restricted by four water structures (outlets and weirs) and one adjustable carp gate at the south side of the lower PCRA wetland. See barrier locations in Figure 2.



Staff Hein holds an adult carp captured while boat electrofishing on Staring Lake.

## CARP MONITORING AND REMOVALS

On lakes deep enough to accommodate equipment, district staff use electrofishing by boat to monitor carp populations. If staff observe carp, they make an effort to remove them by hand net. Electrofishing by boat occurs on a three-year rotation on low recruitment lakes and yearly on high and medium recruitment lakes.

Electrofishing by backpack targets carp opportunistically during the spring spawning run. When staff observe carp gathered at lake outlet and inlet points, they use backpack electrofishing units to temporarily stun fish and remove carp with hand nets.

Small mesh trap netting is used to monitor fish populations and carp reproduction. Five nets are set per lake for 24 hours and capture any fish that enters. Staff record data on all fish species captured, release non-carp species, and remove carp. Like boat electrofishing, this method occurs on a three-year rotation on low recruitment lakes and yearly on high and medium recruitment lakes.

In 2025, 645 carp (1,564 pounds) were removed from waterbodies within the District. The majority of removals (85 percent) occurred in the Purgatory Creek chain of lakes.

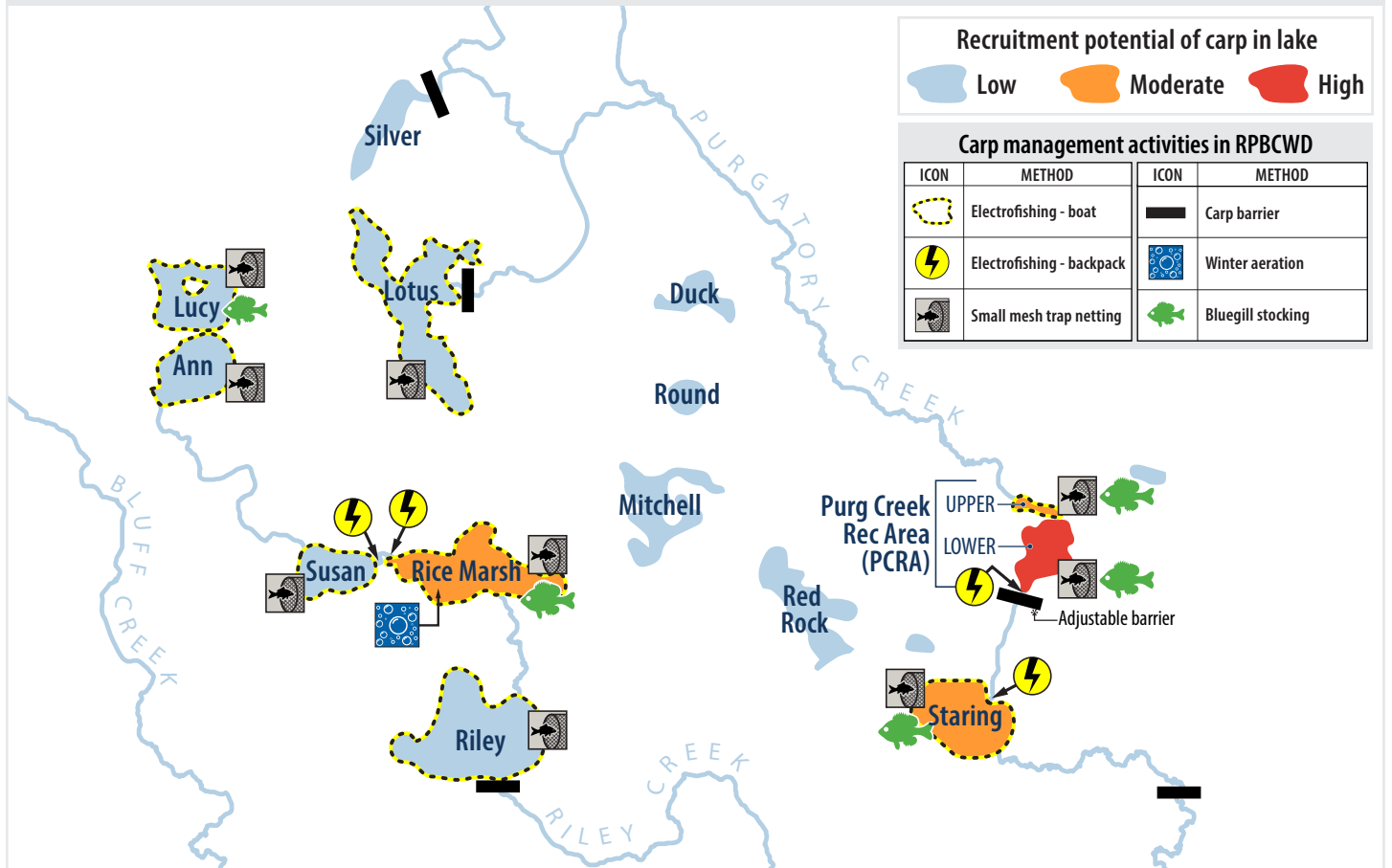
### BLUEGILL POPULATION SUPPORT

Bluegill prey on carp eggs and hatchlings and are essential in reducing carp recruitment. Because Rice Marsh Lake frequently winterkills, district staff install an aerator that runs December through March to oxygenate the water and reduce die-off of bluegill and other native fish.

If fish population data collected through small mesh trap netting indicates a low bluegill population, district staff arrange for bluegill stocking. Because stocking occurred in 2024, no bluegill stocking took place in 2025.



Figure 2. Overview of carp recruitment potential in lakes and district carp management activities.



# STREAMS

## Water Quality Summary

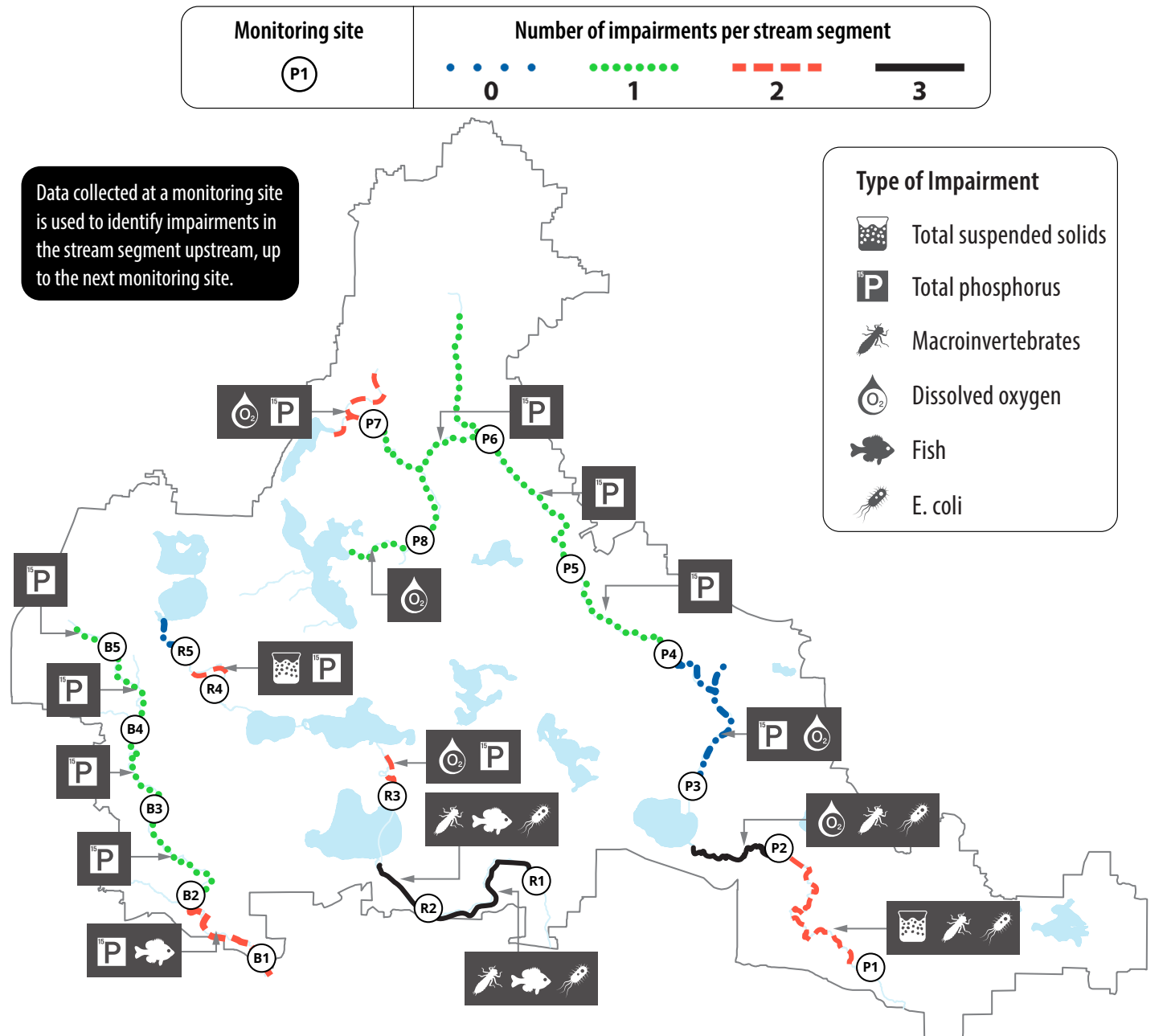
RPBCWD staff monitor Riley, Purgatory, and Bluff creeks twice a month during the April-September field season. The largest stream, Purgatory, has eight regular monitoring sites (P1-P8). Riley and Bluff creeks each have five regular monitoring sites (R1-R5 and B1-B5). All three creeks flow south-southeast, eventually draining into the Minnesota River.

In addition to the regular monitoring sites, the District partners with the Met Council to collect data from continuous monitoring stations, one located on each creek near the southern boundary of the watershed district. Staff also install auto sampling units on a short-term basis at other sites of interest including project sites where before/after project installation data is collected. See Figure 3 for a map for the number of impairments per stream segment in 2025.



District staff use a flowtracker to collect water quality data in Bluff Creek at monitoring site B3 located at the Lyman Boulevard bridge.

Figure 3. Number of impairments per stream segment in 2025 based on data collected from the 18 regular stream monitoring sites.



## Creek Restoration Action Strategy

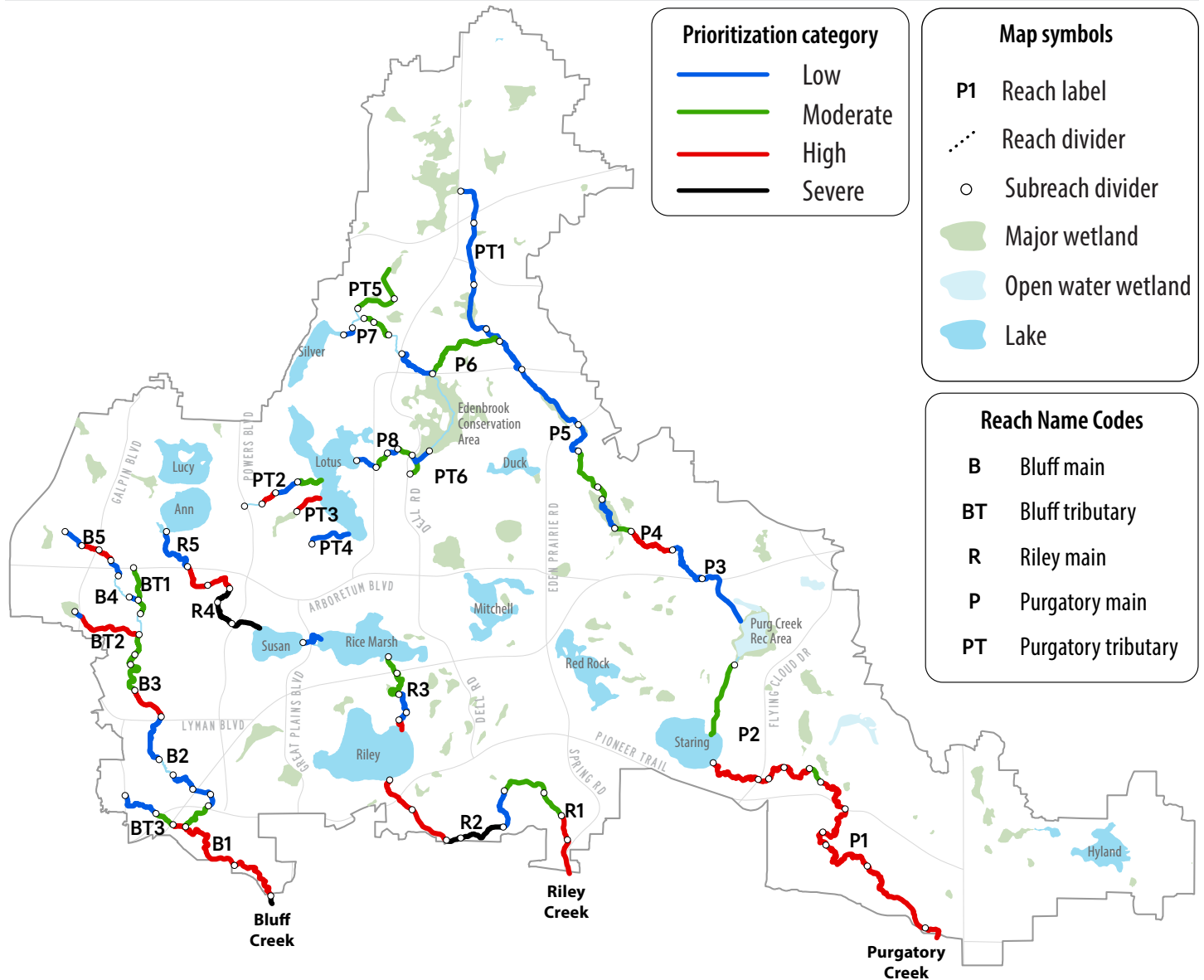
In addition to collecting bi-weekly water quality data, district staff inspect stretches of streams on a rotational once-a-year basis to evaluate changes over time. However, no inspections (“creek walks”) occurred in 2025. During the walks, staff assess variables including stream stability, stream habitat, and water quality. Staff also take photos and detailed notes during assessment.

Stream walks also include staff checking the status of bank pins (rebar) located near regular stream monitoring sites. The three-pin sets are measured to quantify estimates of lateral bank recession rates and total annual loss. This data is incorporated into the CRAS scores for each stretch of stream. See Figure 4 for a map of the most recent CRAS stream restoration prioritization scores.

A set of three bank pins, painted bright orange, near monitoring site B4 on Bluff Creek. The pins are used to monitor streambank erosion and deposition.



**Figure 4. The current Creek Restoration Action Strategy (CRAS) map to prioritize stream restoration based on condition. A combination of creek walk and water quality monitoring data is evaluated to determine the CRAS Tier I score for each stream substretch.**



Staff collected stream water quality data in 2025 but did not walk any stream segments to update physical characteristics. Six subreach scores have improved and one has worsened since 2015. After assessments were completed in 2024, the list of the most degraded subreaches was re-evaluated. Table 7 shows the scores and rankings of the subreaches with the worst scores. Tier II variables (Figure 5) are used secondarily to sort subreaches identified as the most degraded. Restoration status of a subreach, if known, is also shown in the table.

Table 6 shows the current list of severe stream subreaches based on CRAS scores. Any stream with a Tier I score of 22 is considered a severe site.

**Figure 5. CRAS scores are assessed using variables within two different tiers.**

<u>Tier I (measurable variables)</u>	<u>Tier II (socio-economic variables)</u>
Infrastructure risk	Project cost
Erosion and channel stability	Partnership opportunities
Ecological benefits	Watershed benefits
Water quality	Public education

Visit [rpbcwd.org/CRAS](http://rpbcwd.org/CRAS) for more information about the Creek Restoration Action Plan.

**Table 6. Updated 2025 Creek Restoration Action Strategy (CRAS) severe sites list.**

When re-assessments are completed, the CRAS list of most degraded creek subreaches is updated.

Reach Name	Subreach Name*	Location	Tier I Score	Tier I Rank	Tier II Score	Tier II Rank	Restoration Status
R4	R4E	Powers Blvd to Lake Susan	22	5	26	1	Planning stage
R4	R4D	Railroad Bridge to Powers Blvd	22	8	22	2	Planning stage
R4	R4C	Park Road to Railroad Bridge	24	2	20	3	Planning stage
B5	B5C	Galpin Blvd to West 78th Street	22	7	18	4	Planning stage
B1	B1D	475 ft US of Great Plains Blvd to Great Plains Blvd	22	6	16	5	Access Issue
R2	R2C	720 ft US of Dell Trail to Dell Road	24	1	14	6	--
R2	R2D	Upper Third between Dell Road and Eden Prairie Road	22	3	10	7	--

\* Name codes: R=Riley Creek, P=Purgatory Creek, B=Bluff Creek; number=stretch designation; second letter=subreach designation (A-G)

## WATER QUALITY FACT SHEETS

Staff summarize water quality data for some waterbodies. The water quality fact sheets are available online at [rpbcwd.org/factsheets](http://rpbcwd.org/factsheets) and on their respective individual lake and stream webpages. Below is a list of the most recent fact sheets.

### 2025 Creeks Water Quality Update

- Single fact sheet for Riley, Purgatory and Bluff creeks

### 2025 Lake Water Quality Updates

- Ann
- Duck
- Hyland
- Lotus
- Lucy
- Mitchell
- Rice Marsh
- Riley
- Red Rock
- Round
- Silver
- Staring
- Susan



# Riley Creek | Purgatory Creek | Bluff Creek 2025 CREEK UPDATE

## Creek Stats

Keeping creeks healthy requires several tools and strategies. Conducting projects to stabilize streambanks and restore stretches of stream is one strategy. Cleaning and slowing rainwater runoff before it reaches the creek is another. Before either of these can be done, we need to understand how the creek is doing and where it needs the most help.

District staff began stream monitoring in the 1970s. The District developed a tool to assess creeks: the Creek Restoration Action Strategy (CRAS) in 2017. CRAS uses water quality data, as well as information on erosion and habitat, to rank which creek stretches (sections) are doing the best and which are doing the poorest. CRAS scores for each stretch of stream are located on the next page.



ATTRIBUTE	Bluff Creek	Riley Creek	Purgatory Creek
Length	6.8 miles	9.6 miles	12 miles
Elevation change	232 feet	230 feet	178 feet
Watershed size	5.6 square miles	11 square miles	30 square miles
Cities	Chanhassen, Chaska	Chanhassen, Eden Prairie	Minnetonka, Eden Prairie, Deephaven, Bloomington, Shorewood
Lakes in watershed	None	Lucy, Ann, Susan, Rice Marsh, and Riley lakes	Silver, Lotus, Duck, Mitchell, Red Rock, and Staring lakes
Impaired Waters listing	Turbidity, fish	Fish, macroinvertebrates, turbidity, E. coli	Macroinvertebrates, E. coli
Common fish	Brook Stickleback, Northern Fathead Minnow	Green Sunfish, Fathead Minnow, Bluntnose Minnow	Bluegill, Northern Pike, Largemouth Bass, Yellow Perch, Pumpkinseed Sunfish

## The Three Creeks of the Watershed District

**Bluff Creek**

does not flow through any lakes on its way to the Minnesota River. However, it does connect many wetlands, and you can explore almost its entire length by trail.

**Riley Creek**

begins at lakes Lucy and Ann in Chanhassen and flows through three lakes before a steep descent into the river valley.

**Purgatory Creek**

has three headwaters: Lotus Lake in Chanhassen, Silver Lake in Shorewood, and wetlands in Minnetonka. On its way to the Minnesota River, the creek flows through the Purgatory Creek Rec Area and Staring Lake.

**Creek Assessment Factors**

**Water quality:** District staff take samples at multiple sites during the summer and collect info about nutrients, sediment, pH, and dissolved oxygen. The data shows how healthy the creek is for plants, animals, and people.

**Erosion:** Eroded soil is considered a pollutant. On a rotating schedule, staff walk sections of a creek. They look for erosion levels and whether any structures are at risk.

**Habitat:** Creeks provide habitat for insects, fish, birds, and other animals. Staff score sections of creek on habitat quality to see if restoration is needed.

*The RPBCWD boundary does not include the sections of the creeks that drain into the Minnesota River. These sections are located in the Lower Minnesota River Watershed District.*

# 2025 Stream Monitoring Overview

## Stream Water Quality Monitoring

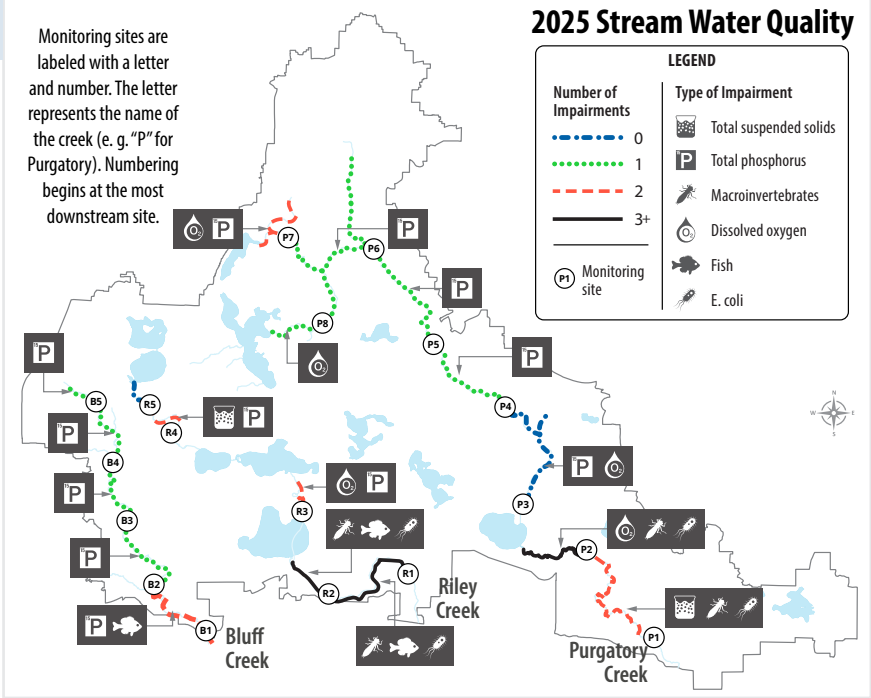
In 2025, RPBCWD and its partners collected water quality samples and performed data analysis on 28 sampling sites in total along Riley Creek, Bluff Creek, and Purgatory Creek. Eighteen of these were regular water quality monitoring sites visited biweekly April to September. The District monitors six impairment categories based upon standards set by the Minnesota Pollution Control Agency.

Stream water quality improved in 2025 from the previous year. In 2025:

- Bluff Creek had 6 impairments
- Riley Creek had 10 impairments
- Purgatory Creek had 14 impairments

None of the regular creek sampling sites met all water quality standards. Phosphorus was the most frequent impairment (12 of 18 regular sites). Two sites failed to meet the total suspended solids standard, and five sites fell below the dissolved oxygen standard. The lower reaches of both Riley and Purgatory creeks had macroinvertebrate and *E. coli* impairments, and the lower reaches of Riley and Bluff creeks had fish impairments.

## 2025 Stream Water Quality

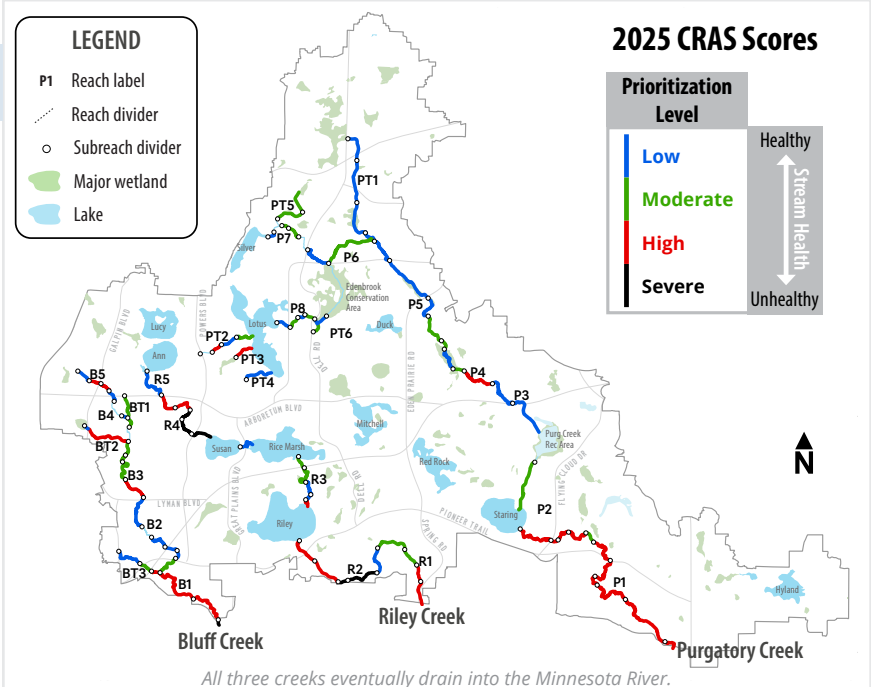


## CRAS Scores for Stream Restoration Planning

The District developed the Creek Restoration Action Strategy (CRAS) to prioritize creek reaches, sub-reaches, or sites, in need of stabilization and/or restoration. The District identified eight categories of importance for project prioritization:

- Infrastructure risk
- Erosion and channel stability
- Public education
- Ecological benefits
- Water quality
- Project cost
- Partnerships
- Watershed benefits

These categories were scored using methods developed for each category based on a combination of published studies and reports, erosion inventories, field visits, and scoring sheets from specific methodologies. Final tallies of scores for each category, using a two-tiered ranking system, were used to prioritize sites for restoration/remediation. Learn more at [rpbcwd.org/CRAS](http://rpbcwd.org/CRAS).



## Severe Sites List

District staff use CRAS scores to identify the most degraded [creek sub-reaches](#) for restoration prioritization.

Reach Name	Subreach Name*	Location	Tier I Score	Tier I Rank	Tier II Score	Tier II Rank	Restoration Status
R4	R4E	Powers Blvd to Lake Susan	22	5	26	1	Planning stage
R4	R4D	Railroad Bridge to Powers Blvd	22	8	22	2	Planning stage
R4	R4C	Park Road to Railroad Bridge	24	2	20	3	Planning stage
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\* Name codes: R=Riley Creek, P=Purgatory Creek, B=Bluff Creek; number=stretch designation; second letter=subreach designation (A-G)

## Lake Ann

Located in Chanhassen, Lake Ann is at the headwaters of Riley Creek. Over the past 40 years, Lake Ann has consistently met the Minnesota Pollution Control Agency clean water standards.

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).

Lake Ann is classified as a "Deep Lake" by the MPCA. To be considered healthy, the lake must meet the standards set for deep lakes. This includes low phosphorus and chlorophyll-a levels and average water clarity of 1.4 meters (4.6 feet) or greater.

Lake Ann Water Quality Snapshot			
Parameter	Deep lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.04 mg/L	0.031 mg/L	Lake consistently meets standard. Slightly up from 2024 average.
<b>Chlorophyll-a</b>	Less than 14 µg/L	17.425 µg/L	Lake did not meet standard. Higher average in 2025 likely due to heavy early spring rains flushing nutrients & sediments into the lake.
<b>Water Clarity</b>	Greater than 1.4 meters	1.706 meters	Lake consistently meets standard. Down from historical average of 2.6 meters.

Water quality trends shown on back of page.



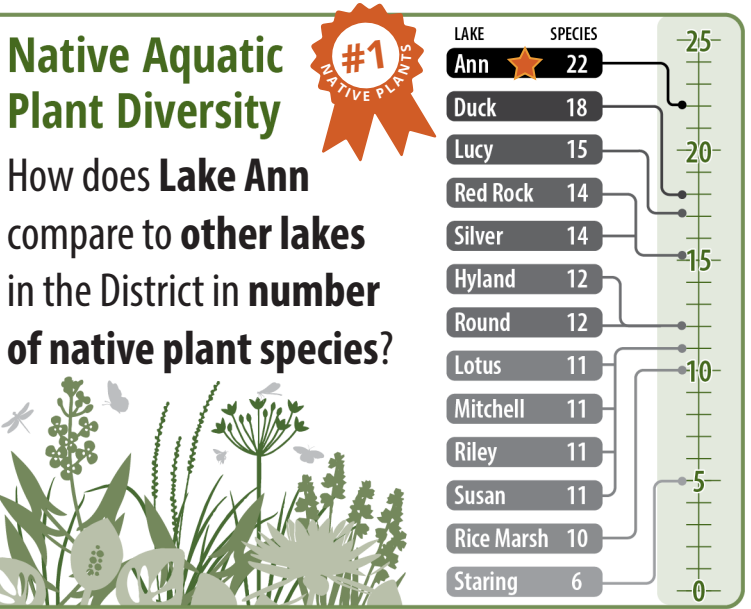
**Carp update:** Staff continue to monitor Common Carp, an invasive species that harms water quality by destroying aquatic vegetation and stirring up lake bottom sediments. Carp biomass estimates have always been very low in Lake Ann and young of the year fish were not captured in 2025, indicating carp are not a significant issue in this lake.

### Lake & watershed characteristics

Lake size	119 acres
Average lake depth	16.8 feet
Maximum lake depth	40 feet
MPCA lake classification	Deep lake
Watershed size	257 acres
Impervious surface	2% of watershed
Impaired Waters listing	Mercury
Common fish	Bluegill, Northern Pike, Largemouth Bass, Yellow Perch, Pumpkinseed Sunfish
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Common Carp, Brittle Naiad, Zebra Mussel



### Watershed Boundary



# Lake Ann Water Quality by the Numbers

2025

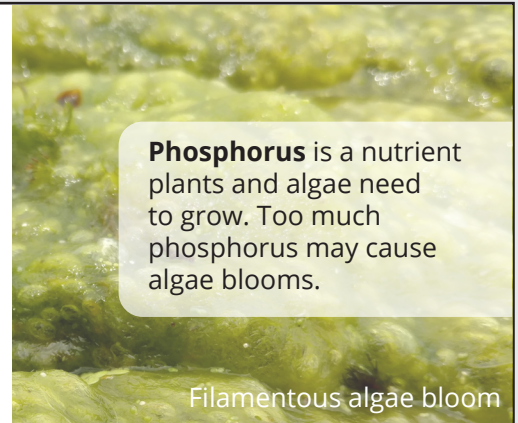
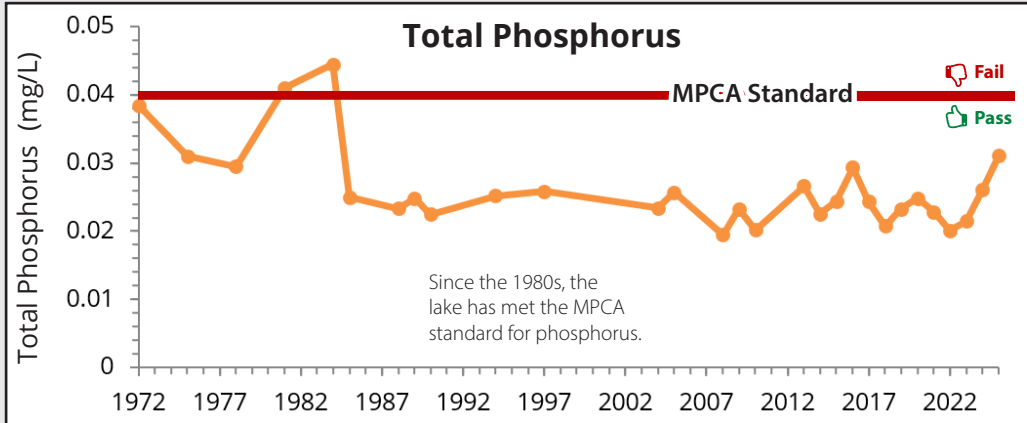
Water Quality Report Card

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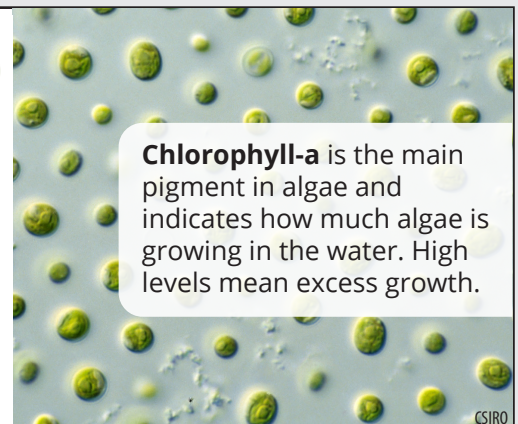
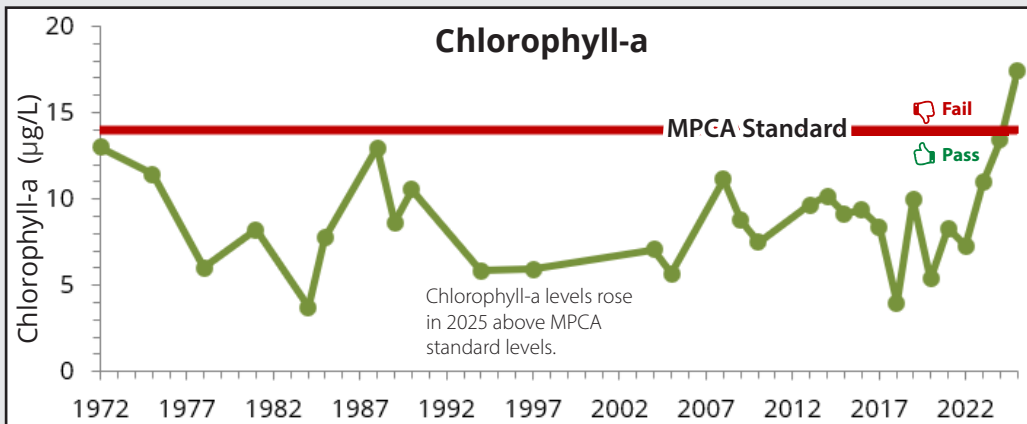
rpbcd.org/grades

For the past 40 years, Lake Ann has consistently 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 deep lakes.

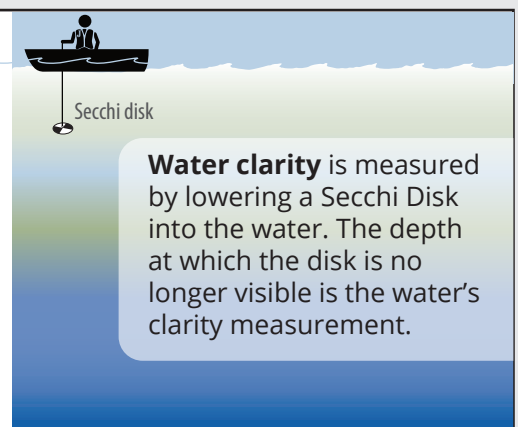
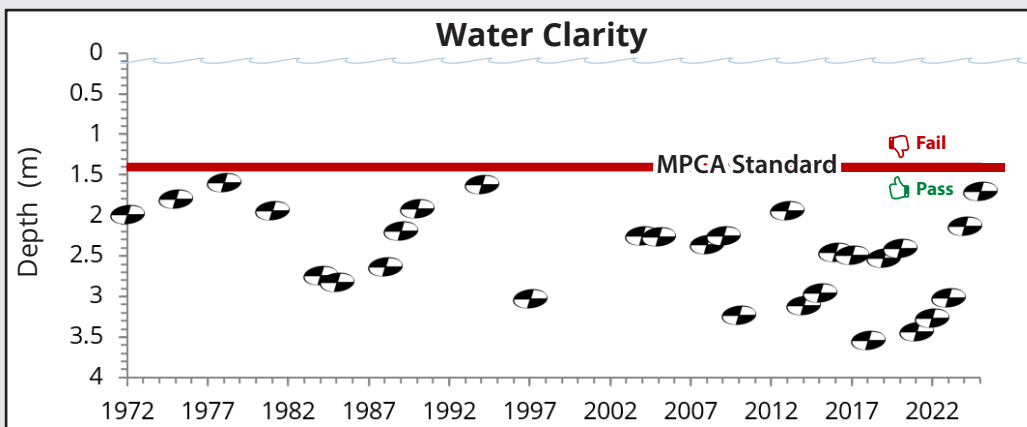
## Trends Over Time: 1972-present



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



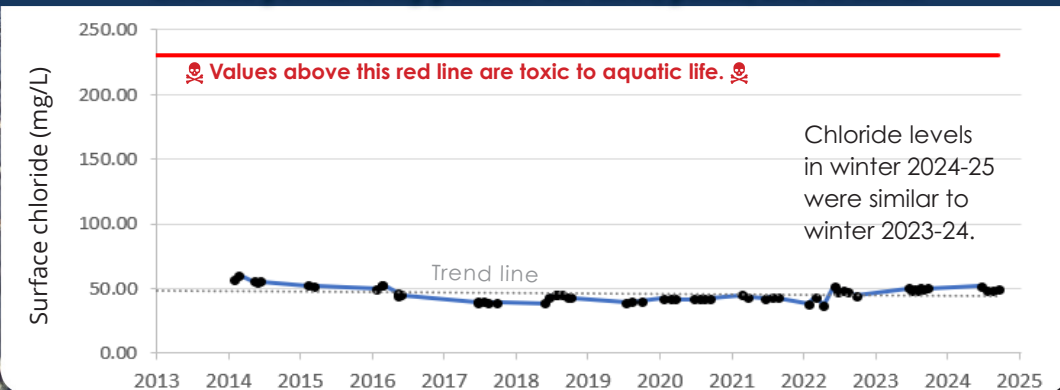
**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



**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.

## 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:

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ONE TEASPOON of SALT POLLUTES 5 GALLONS of WATER FOREVER

Learn more [rpbcd.org/salt](http://rpbcd.org/salt)

## Duck Lake

Located in Eden Prairie, Duck Lake is one of the District's shallow lakes. Since 2011, it has seen improvement in water quality and met the Minnesota Pollution Control Agency's clean water standards for several years.

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).

Duck 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.



### Watershed Boundary



Duck Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.060 mg/L	No significant trend. Phosphorus has increased in 2025 and did not meet the standard.
<b>Chlorophyll-a</b>	Less than 20 µg/L	19.700 µg/L	No significant trend. Chlorophyll-a has increased in 2025, but remains below the MPCA standard.
<b>Water Clarity</b>	Greater than 1.0 meters	1.836 meters	No significant trend. Lake has met clarity standard for 12 years.

Water quality trends shown on back of page.



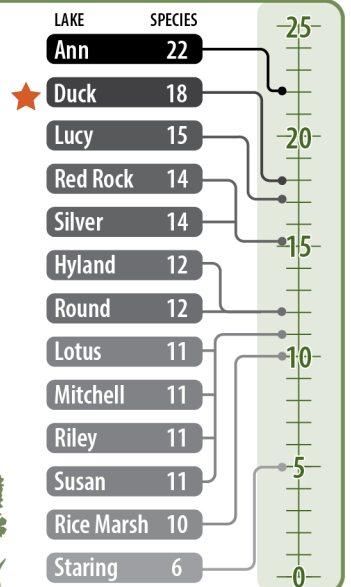
**Plant update:** Duck Lake was treated with herbicide for Eurasian watermilfoil in 2025, with a treatment area totaling 5.1 acres. The amount of vegetation present in Duck Lake may have impacted water clarity readings to be lower than actual measurement.

### Lake & watershed characteristics

Lake size	41 acres
Average lake depth	3.4 feet
Maximum lake depth	8 feet
MPCA lake classification	Shallow lake
Watershed size	233 acres
Impervious surface	20% of watershed
Impaired Waters listing	Not listed
Common fish	Bluegill, Black Crappie, Largemouth Bass, Green Sunfish
Invasive species	Curly-leaf Pondweed, Purple Loosestrife, Eurasian Watermilfoil, Goldfish

### Native Aquatic Plant Diversity

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



# Duck Lake Water Quality by the Numbers

2025

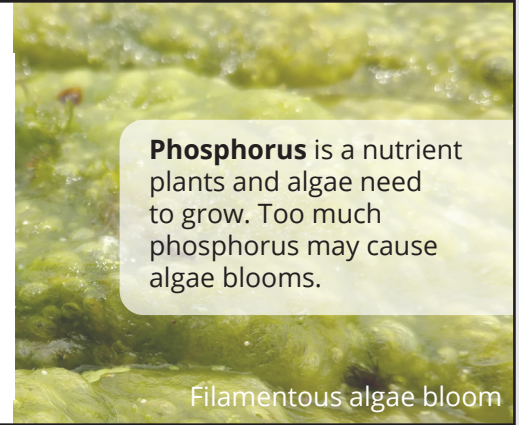
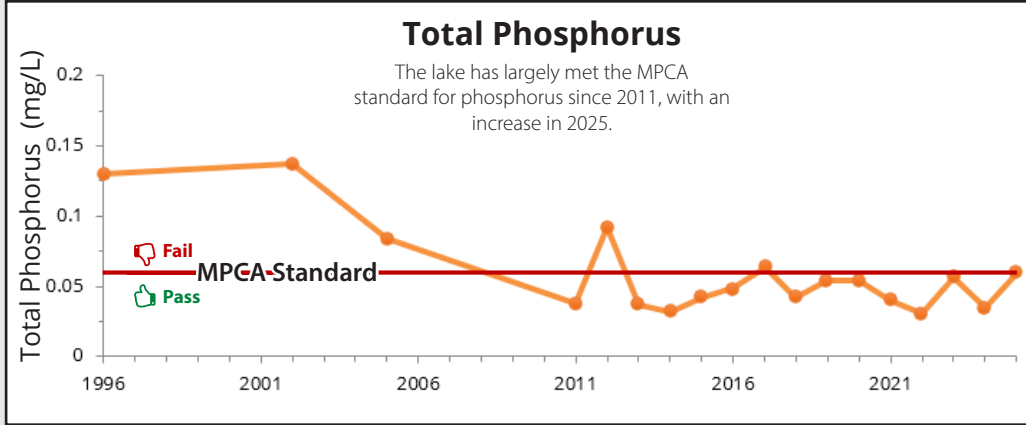
Water Quality Report Card

rpbcwd.org/grades

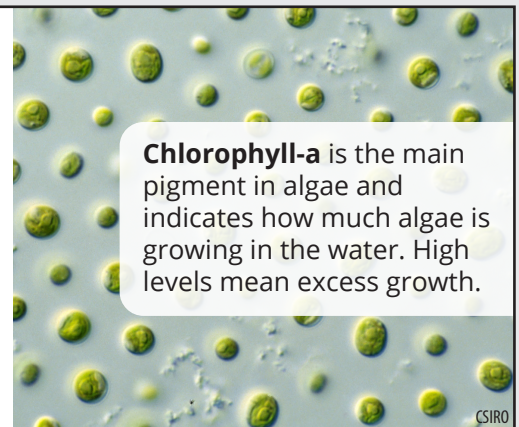
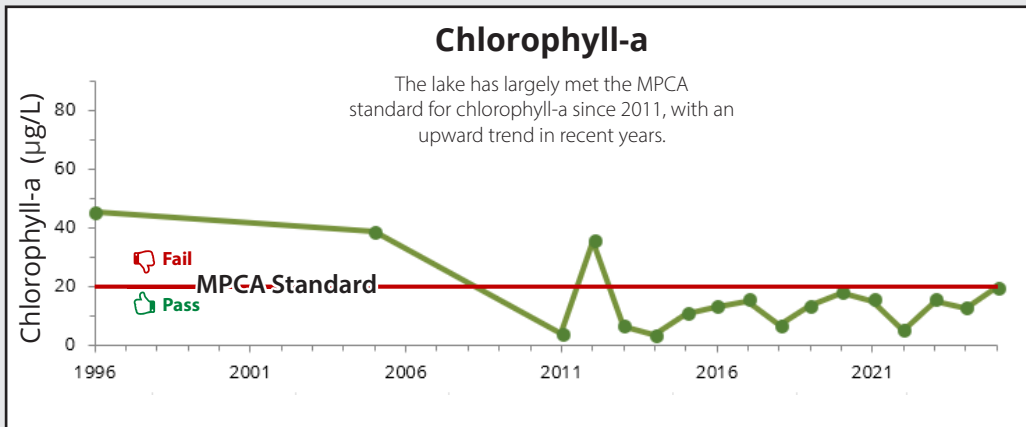


The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes. Over the last decade, Duck Lake has typically met the clean water standards set by the MPCA.

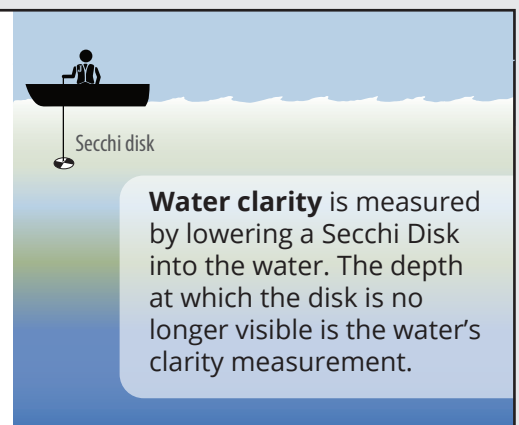
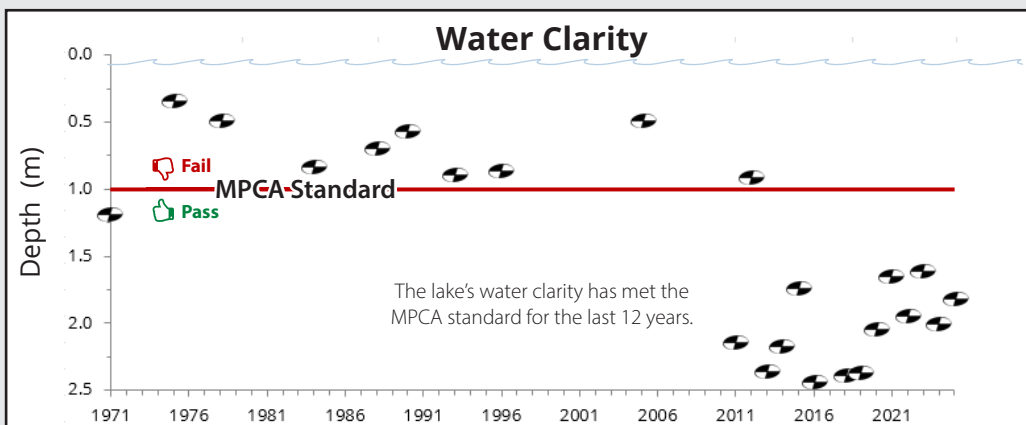
## Trends Over Time: 1972-present



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



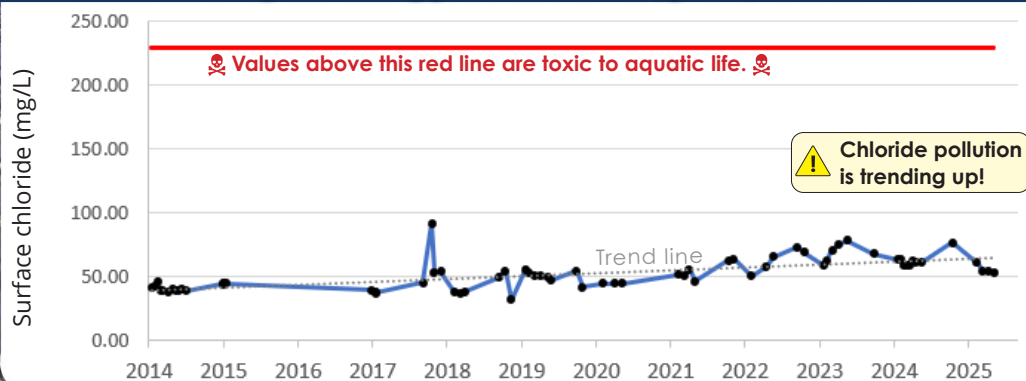
**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



**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.

## 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."

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Learn more [rpbcwd.org/salt](http://rpbcwd.org/salt)

## Hyland Lake

Located in Bloomington, Hyland Lake is surrounded by Hyland Lake Park Reserve, a Three Rivers Park District facility. Visitors can paddle the lake in the summer, hike nearby trails, and ski in the winter.

During June through September of each year, Three Rivers Park 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).

Hyland 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.

Hyland Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.035 mg/L	The lake has consistently met the standard since first alum dose in 2019. Three Rivers Park District applied a second alum dose in 2022.
<b>Chlorophyll-a</b>	Less than 20 µg/L	5.446 µg/L	Since the 2019 alum treatment, levels have been decreasing.
<b>Water Clarity</b>	Greater than 1.0 meters	2.234 meters	Clarity has improved since the 2019 alum treatment.

Water quality trends shown on back of page.



**Plant update:** After four consecutive years of herbicide treatment, Hyland Lake was not treated in 2025. Native plants have expanded to 94% of the littoral areas on Hyland Land, with a significant reduction seen in invasive Curly-leaf pondweed. The number of native species increased to 12 compared to 9 in 2024.

### Lake & watershed characteristics

Lake size	84 acres
Average lake depth	7.5 feet
Maximum lake depth	12 feet
MPCA lake classification	Shallow lake
Watershed size	922 acres
Impervious surface	17% of watershed
Impaired Waters listing	Nutrients
Common fish	Bluegill, Black Crappie, Walleye, Black Bullhead, Largemouth Bass
Invasive species	Curly-leaf Pondweed

**Great news!** Hyland Lake's 10-year water quality average is meeting standards, so the lake is in process of removal from the nutrient category of the MPCA Impaired Waters List.

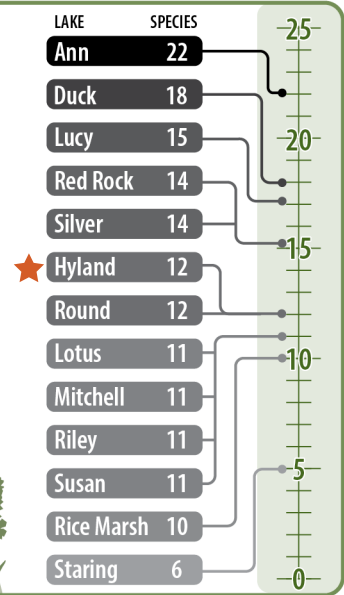


### Watershed Boundary



### Native Aquatic Plant Diversity

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



# Hyland Lake Water Quality by the Numbers

2025

Water Quality Report Card

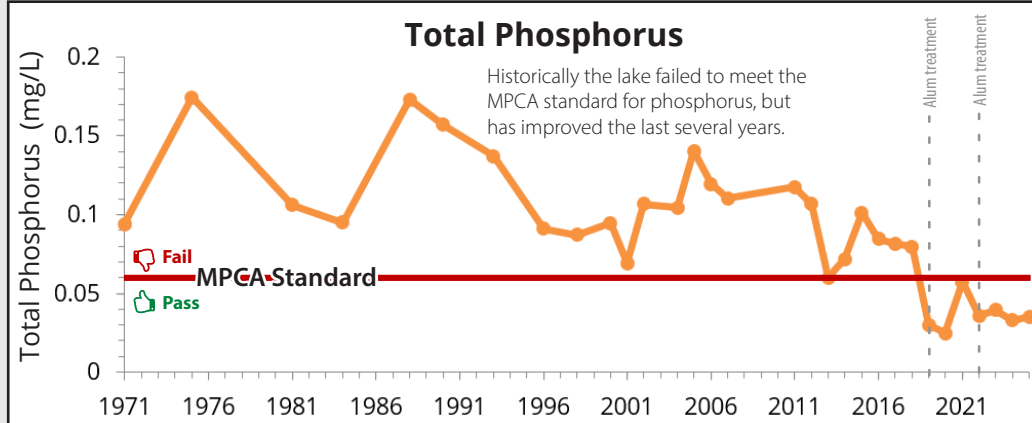
**B**

rpbcd.org/grades



The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes. Three Rivers Park District provides most of the water quality and plant survey data for Hyland Lake.

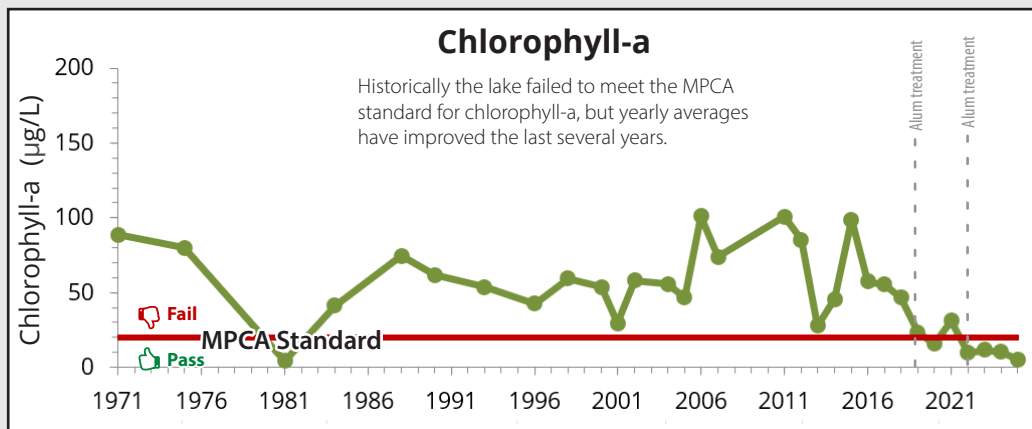
## Trends Over Time: 1972-present



Hyland Lake received alum treatments in 2019 & 2022. Alum limits the availability of phosphorus in lakes to control algae growth & improve water clarity.

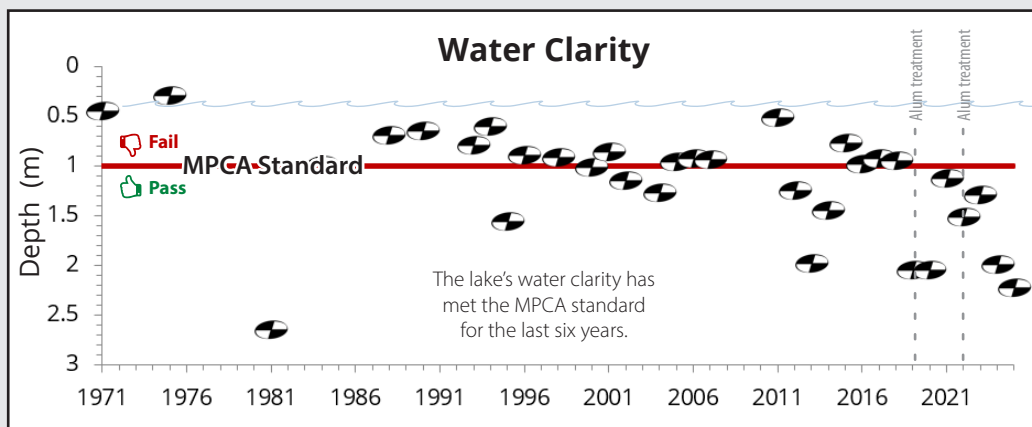
**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

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

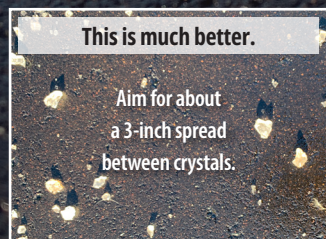


**Water clarity** is measured by lowering a Secchi Disk into the water. The depth at which the disk is no longer visible is the water's clarity measurement.

## Chloride: A Growing Concern

Chloride permanently pollutes lakes, ponds, & streams!

Using excess winter salt does not equal greater safety. It does mean higher cost for you and more water pollution.



## 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:

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## Lotus Lake

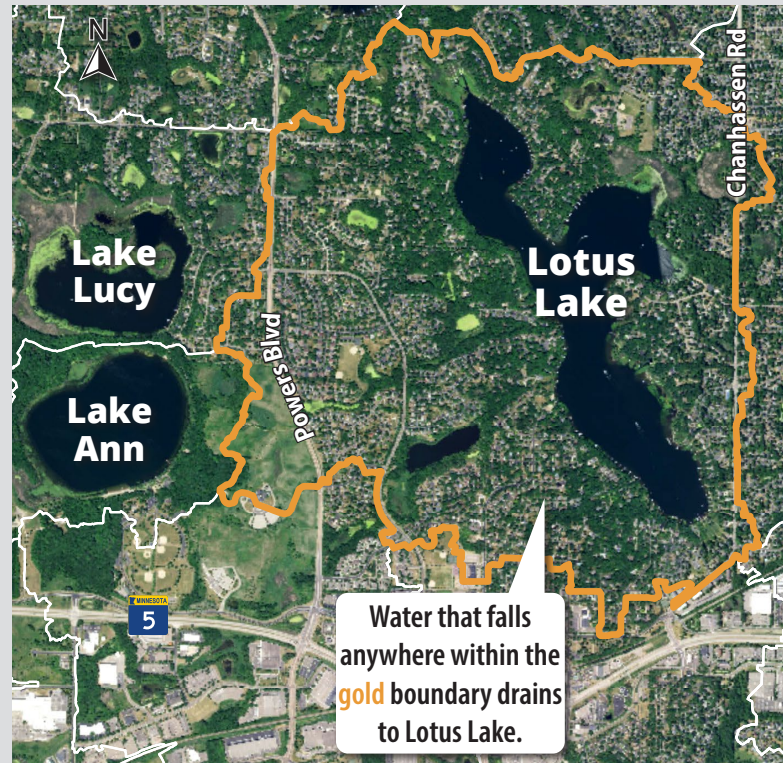
Located in eastern Chanhassen, Lotus Lake is one of three headwaters of Purgatory Creek. Water flows out of Lotus into the south fork of Purgatory Creek, which eventually meets up with the two other forks of the creek.

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).

Lotus 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.



### Watershed Boundary



Lotus Lake Water Quality Snapshot			
Parameter	Deep lake standard	2025 average	Note
Total Phosphorus	Less than 0.04 mg/L	0.025 mg/L	Phosphorous decreased to meet MPCA standard in 2025. Alum treatment in Fall 2024 likely caused this decrease.
Chlorophyll-a	Less than 14 µg/L	14.125 µg/L	Lake has <u>not</u> met the standard since monitoring began in 1972, but decreased in 2025.
Water Clarity	Greater than 1.4 meters	2.081 meters	Lake has consistently met standard since 2013 except in 2020.

Water quality trends shown on the back page.



**Carp update:** Staff continue to monitor Common Carp, an invasive species that harms water quality by destroying aquatic vegetation and stirring up lake bottom sediments. No carp were caught while electrofishing in 2025, indicating carp are not an issue currently.



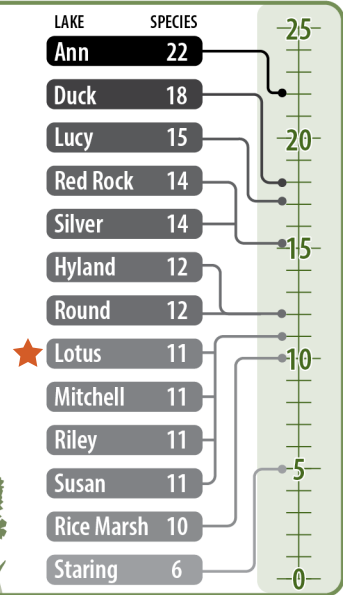
**Plant update:** Because Eurasian Watermilfoil (EWM) had become a dominant species, a whole-lake treatment was applied in 2024 to control this invasive plant. Post-treatment survey indicated no presence of EWM and that native White Water Lily and native Yellow Water Lily had become the most common aquatic plants.

### Lake & watershed characteristics

Lake size	248 acres
Average lake depth	10.1 feet
Maximum lake depth	31 feet
MPCA lake classification	Deep lake
Watershed size	1,408 acres
Impervious surface	16% of watershed
Impaired Waters listing	Mercury, nutrients, fish
Common fish	Bluegill, Yellow Bullhead, Walleye, Black Crappie, Largemouth Bass
Invasive species	Eurasian Watermilfoil, Common Carp, Curly-leaf Pondweed, Brittle Naiad, Zebra mussel

### Native Aquatic Plant Diversity

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



# Lotus Lake Water Quality by the Numbers

For the last few years, Lotus Lake has consistently met the clean water standards set by the MPCA, except for Chlorophyll-a. The graphs below show water quality trends over time with the red line representing the MPCA standard for deep lakes.

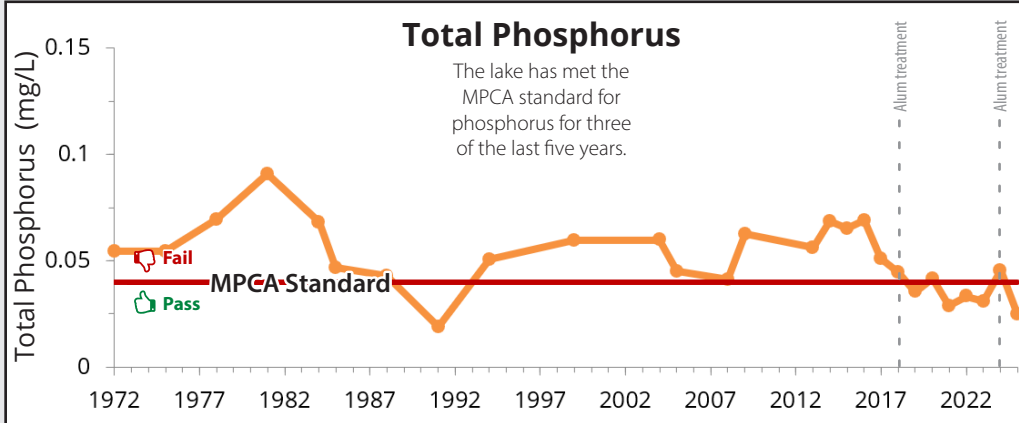
2025

Water Quality Report Card

**B**

[rpbcd.org/grades](http://rpbcd.org/grades)

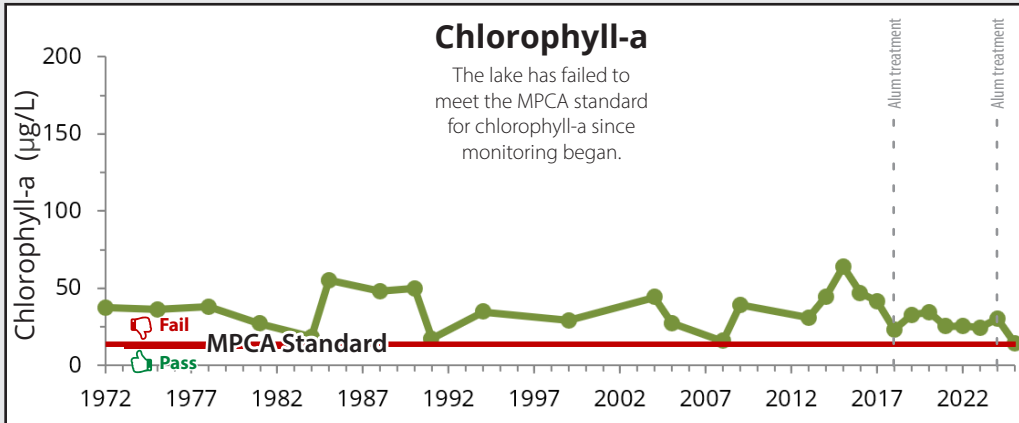
## Trends Over Time: 1972-present



Lotus Lake received alum treatments in 2018 & fall 2024. Alum limits the availability of phosphorus in lakes to control algae growth & improve water clarity.

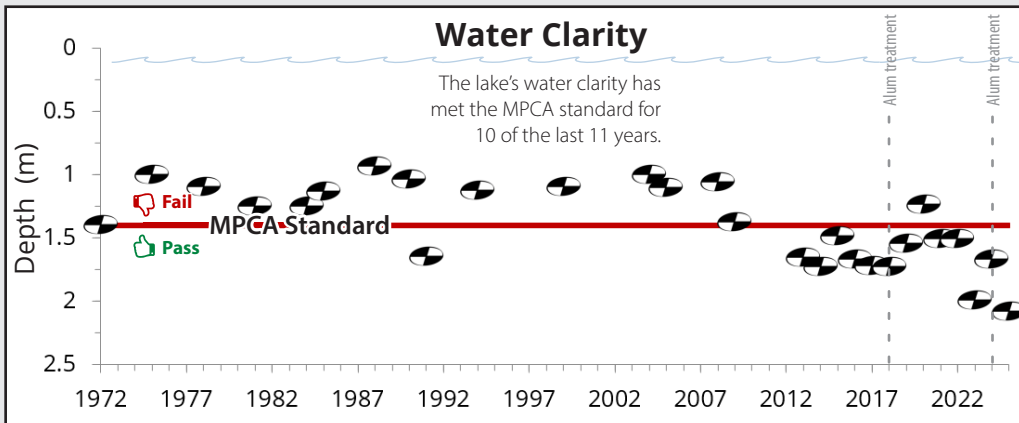
**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

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

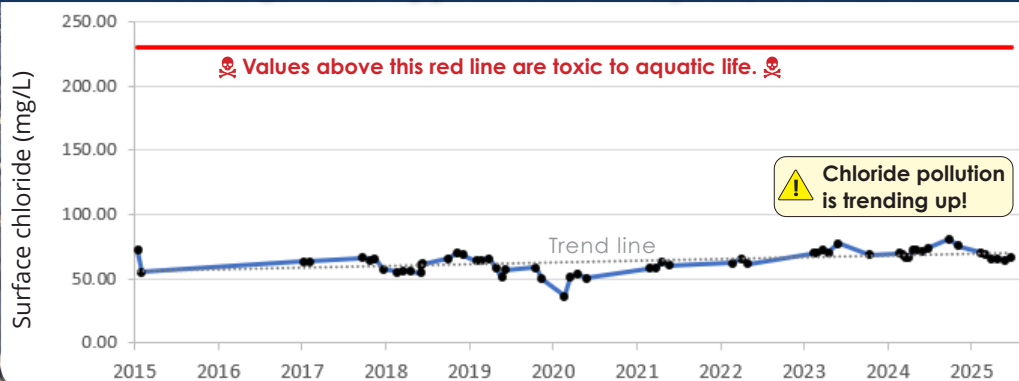


Secchi disk

**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.

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## Lake Lucy

Lake Lucy is the headwaters to Riley Creek. Water flows out of Lucy to Lake Ann and then to Riley Creek. On its way south to the Minnesota River, Riley Creek passes through Susan, Rice Marsh, and Riley 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).

Lake Lucy 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.

### Lake Lucy Water Quality Snapshot

Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.086 mg/L	The average total phosphorus level continued to rise in 2025, and the lake did not meet the standard.
<b>Chlorophyll-a</b>	Less than 20 µg/L	50.275 µg/L	After a few years of declining levels, chlorophyll-a returned to the level seen in 2015. This may be due to 2025 precipitation patterns.
<b>Water Clarity</b>	Greater than 1.0 meters	0.933 meters	Clarity is directly related to algae growth. Average clarity decreased and did not meet the standard.

Water quality trends shown on back of page.



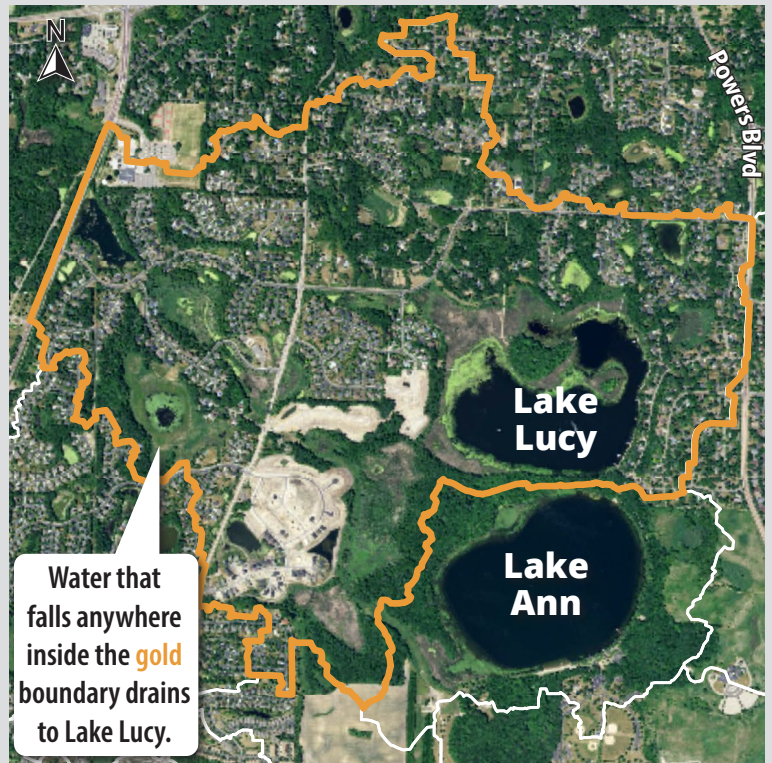
**Carp update:** Staff continue to monitor Common Carp, an invasive species that harms water quality by destroying aquatic vegetation and stirring up lake bottom sediments. In 2025, no carp were captured electrofishing in Lake Lucy, indicating carp are not currently a significant issue in this lake.

### Lake & watershed characteristics

Lake size	88 acres
Average lake depth	6.5 feet
Maximum lake depth	20 feet
MPCA lake classification	Shallow lake
Watershed size	988 acres
Impervious surface	14% of watershed
Impaired Waters listing	Mercury
Common fish	Bluegill, Northern Pike, Yellow Bullhead, Black Crappie, Pumpkinseed Sunfish
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Common Carp

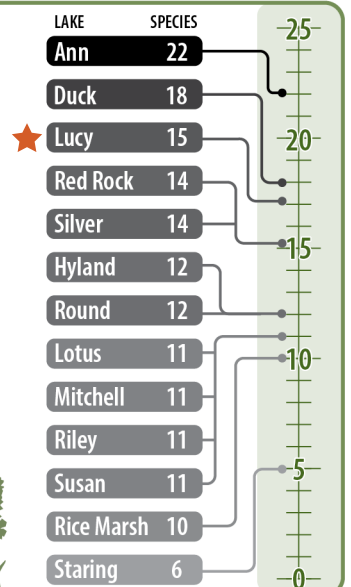


### Watershed Boundary



### Native Aquatic Plant Diversity

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



# Lake Lucy Water Quality by the Numbers

2025

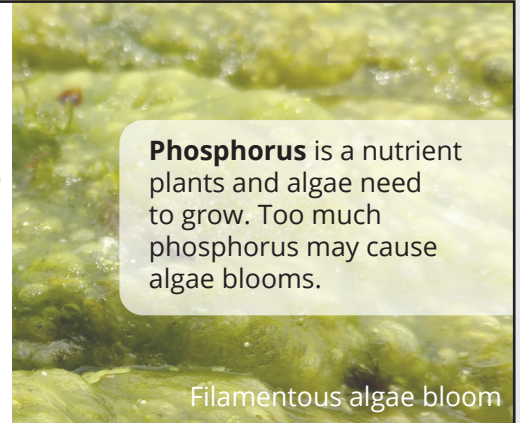
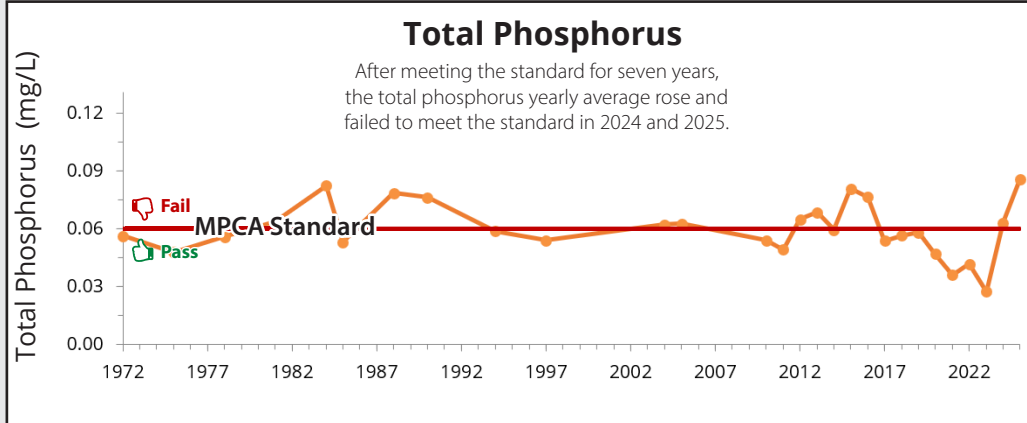
Water Quality Report Card

**D**

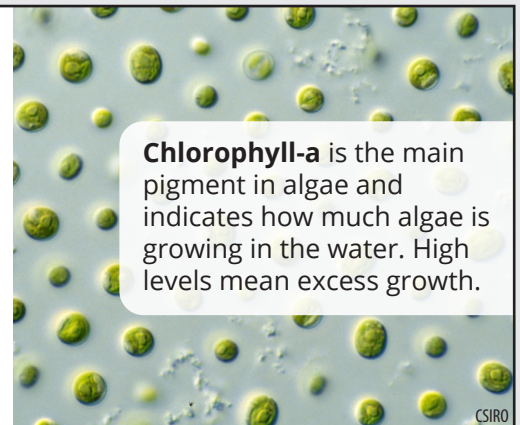
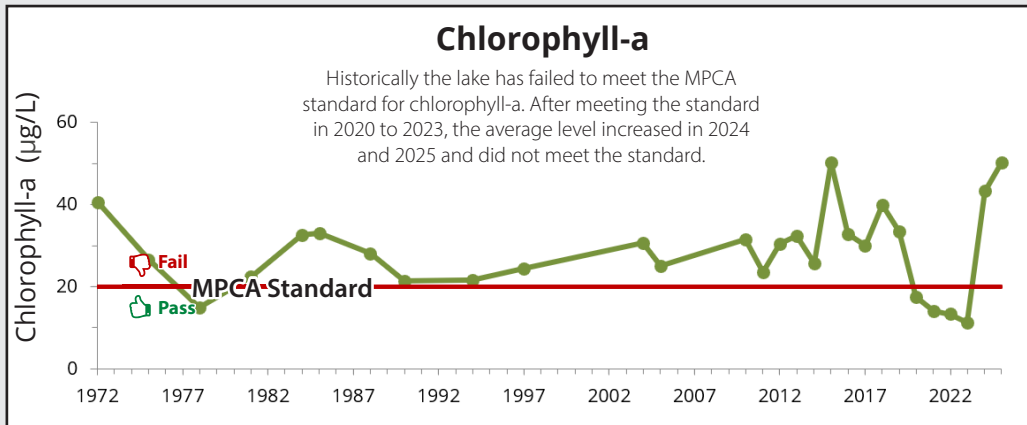
[rpbcwd.org/grades](http://rpbcwd.org/grades)

Over the last few years, **Lake Lucy** has not 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.

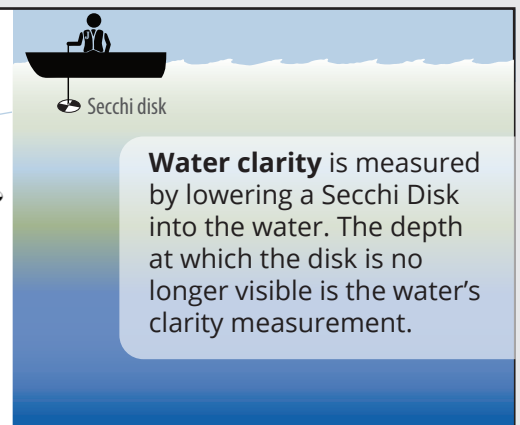
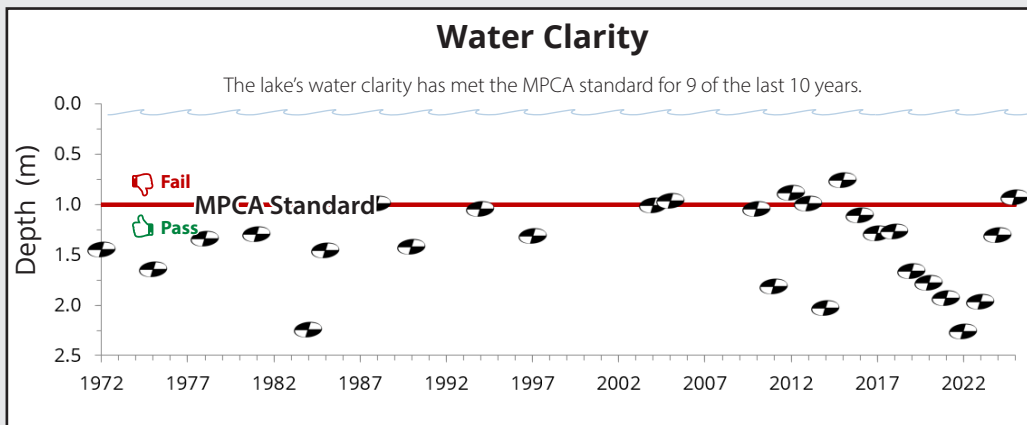
## Trends Over Time: 1972-present



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



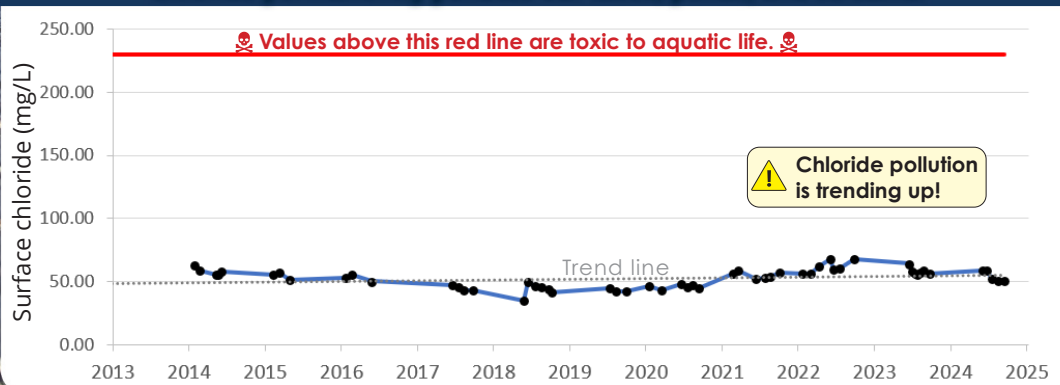
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## Mitchell Lake

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

From June to September every year, City of Eden Prairie consultants 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).

Mitchell 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.

Mitchell Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.068 mg/L	In 2025, the lake did not meet the standard but improved from the 2024 average (0.072 mg/L).
<b>Chlorophyll-a</b>	Less than 20 µg/L	33.4 µg/L	The lake has not met the standard since 2014, but the 2025 average improved from 2024 (62.0 µg/L).
<b>Water Clarity</b>	1.0 meter and greater	1.1 meters	Same average as 2024. No significant trend. The lake has frequently met the standard for the last 15 years.

Water quality trends shown on back of page.



**Plant update:** In 2025, an RPBCWD consultant conducted a point intercept survey to evaluate plant diversity and density. Dominant species were coontail, yellow water lily, and Eurasian watermilfoil. In spring of 2025, RPBCWD treated 15.9 acres of the lake to control invasive curly-leaf pondweed.

### Lake & watershed characteristics

Lake size	124 acres
Average lake depth	5.3 feet
Maximum lake depth	19 feet
MPCA lake classification	Shallow lake
Watershed size	937 acres
Impervious surface	30% of watershed
Impaired Waters listing	Mercury
Common fish	Bluegill, Black Bullhead, Black Crappie, Northern Pike, Pumpkinseed
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Purple Loosestrife, Brittle Naiad

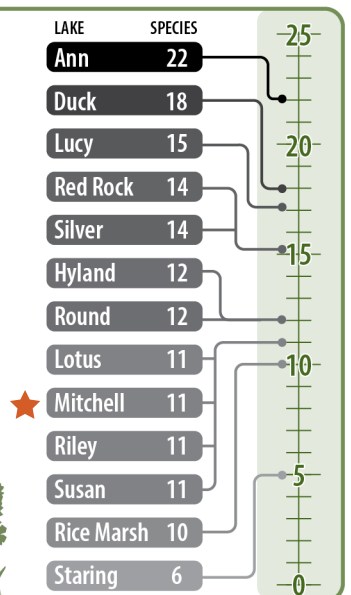


### Watershed Boundary



### Native Aquatic Plant Diversity

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



# Mitchell Lake Water Quality by the Numbers

2025

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

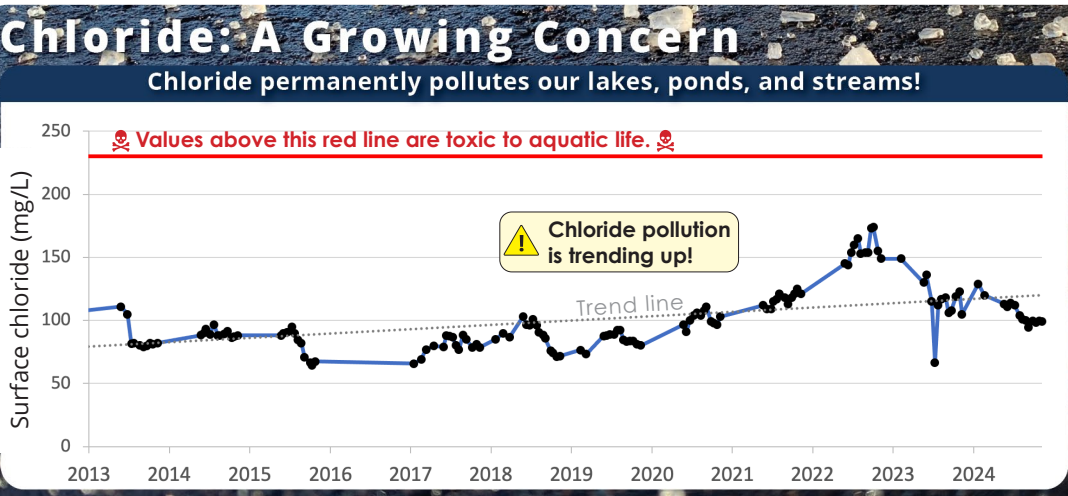
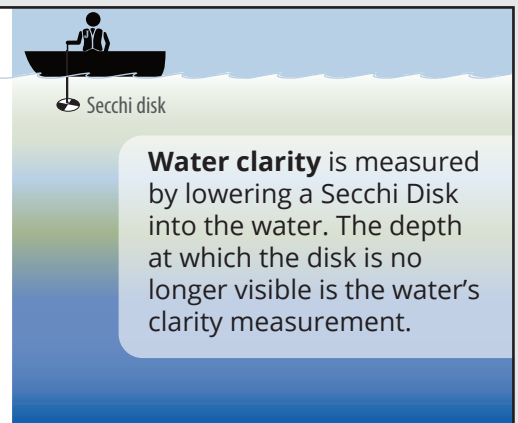
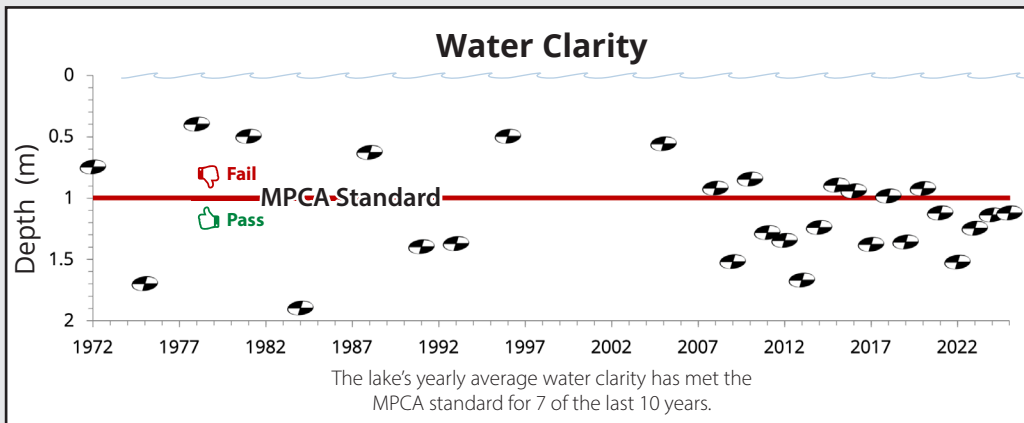
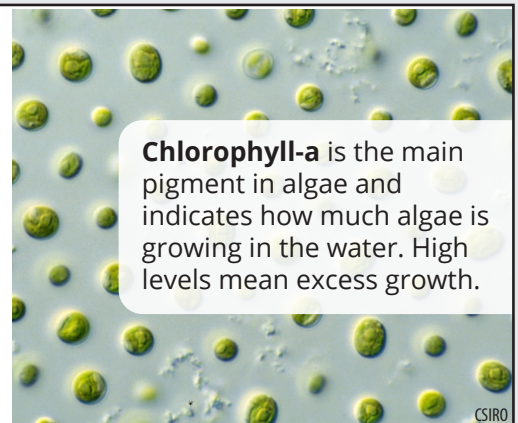
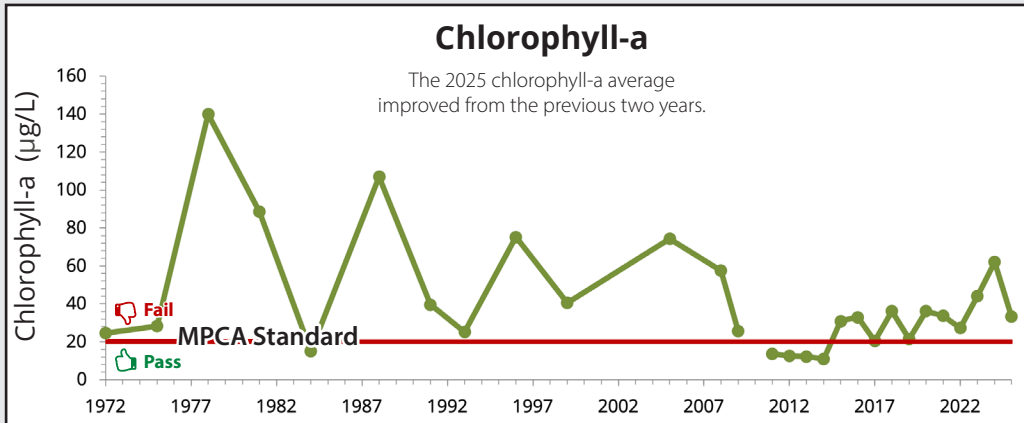
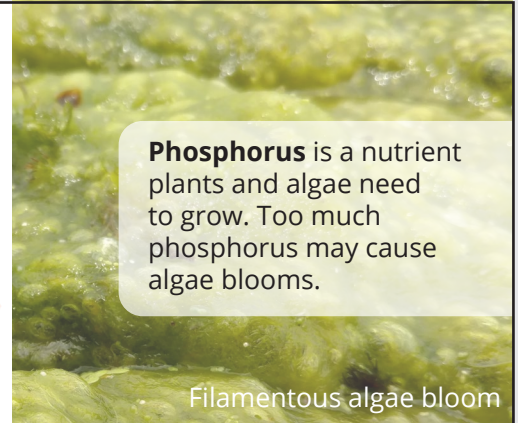
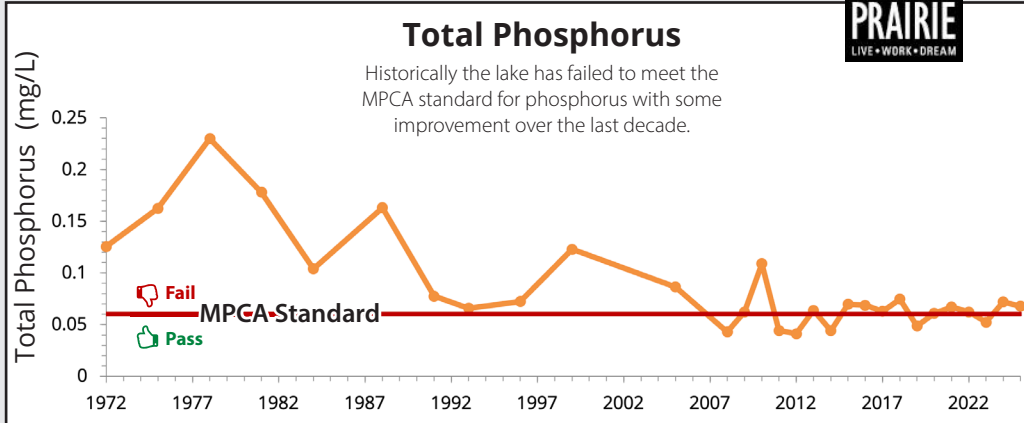


**Water Quality Report Card**

[rpbcwd.org/grades](http://rpbcwd.org/grades)



## Trends Over Time: 1972-present



### 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."

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ONE TEASPOON of **SALT** POLLUTES 5 GALLONS of **WATER** FOREVER

Learn more [rpbcwd.org/salt](http://rpbcwd.org/salt)

## 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.

From June to September every year, City of Eden Prairie consultants 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 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.

Red Rock Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.077 mg/L	The 2025 average improved from 2024 (0.082 mg/L) but still did not meet the standard. Early spring rains likely flushed TP-laden nutrients and sediments into the lake.
<b>Chlorophyll-a</b>	Less than 20 µg/L	65.9 µg/L	The 2025 average improved from 2024 (75.2 µg/L). The lake has not met the standard for the last 8 years.
<b>Water Clarity</b>	Greater than 1.0 meters	1.1 meters	The 2025 average improved from 2024 (0.9 m). The lake has met the standard 9 out of the last 10 years.

Water quality trends shown on back of page.



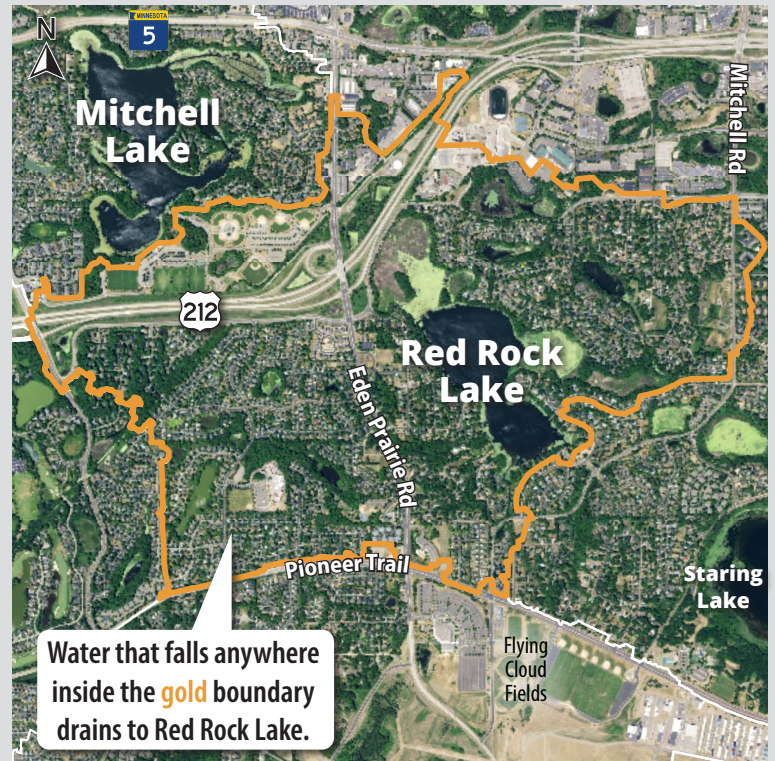
**Plant update:** In 2025, an RPBCWD consultant conducted a point intercept survey to evaluate plant diversity and density. Dominant species were coontail, yellow water lily, and leafy pondweed. In spring of 2025, RPBCWD treated 12.8 lake acres to control invasive curly-leaf pondweed.

### 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
Impaired Waters listing	Mercury
Common fish	Bluegill, Northern Pike, Pumpkinseed, Black Crappie, Largemouth Bass
Invasive species	Curly-leaf Pondweed



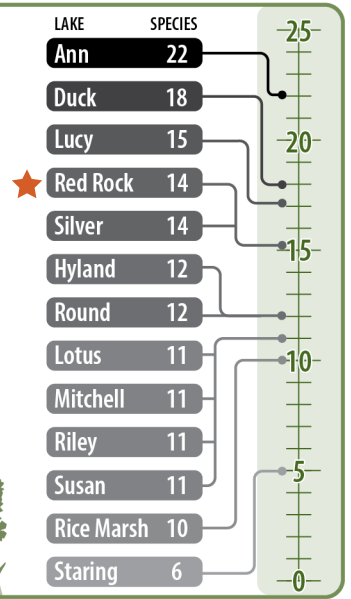
### Watershed Boundary



Water that falls anywhere inside the gold boundary drains to Red Rock Lake.

### Native Aquatic Plant Diversity

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



# Red Rock Lake Water Quality by the Numbers 2025

The graphs below show water quality trends over time with the red line representing 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.

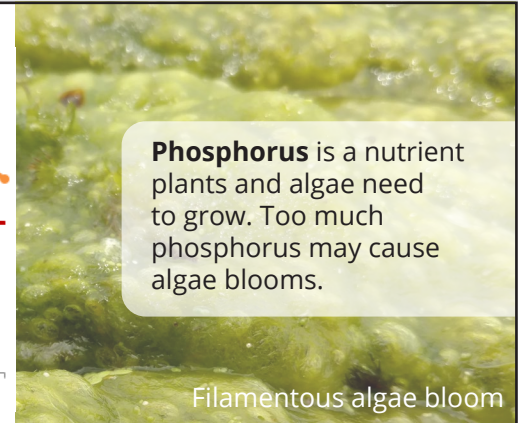
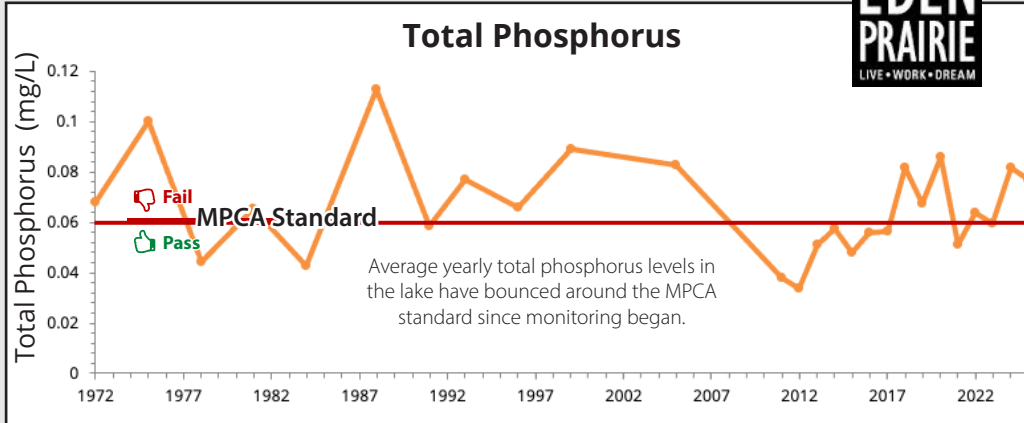
**Water Quality Report Card**

**D**

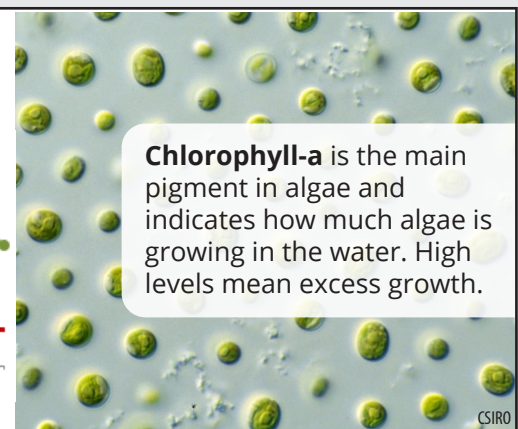
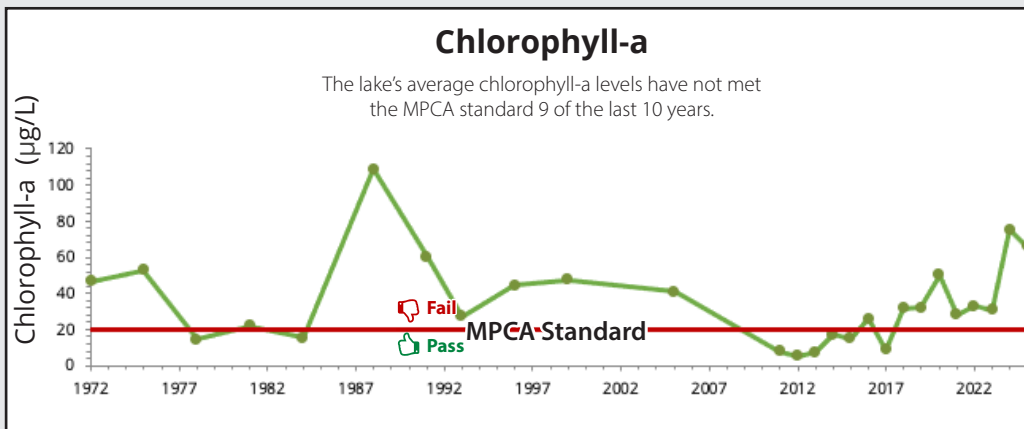
[rpbcd.org/grades](http://rpbcd.org/grades)



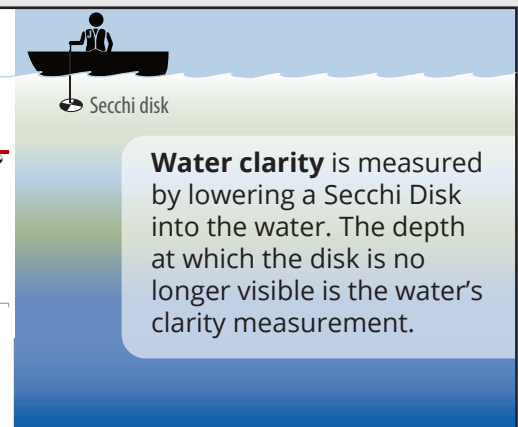
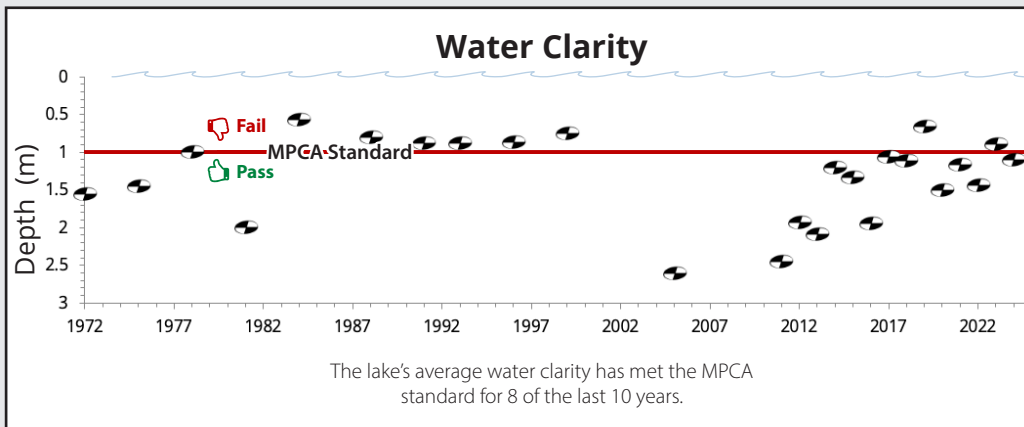
## Trends Over Time: 1972-present



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



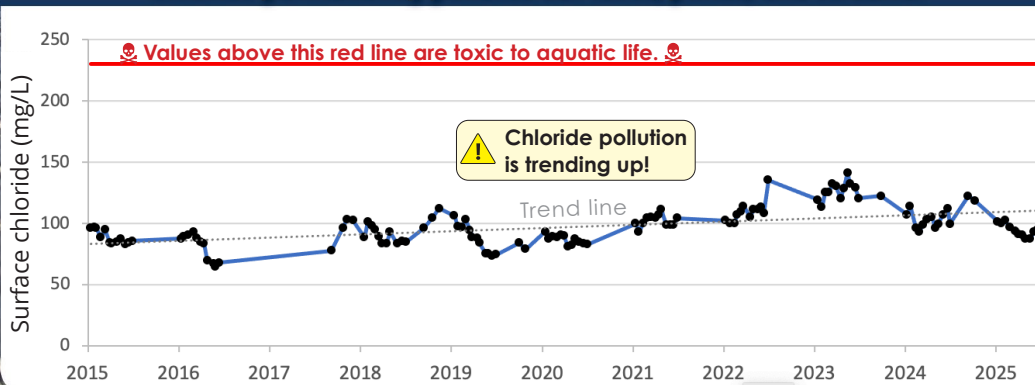
**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



**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.

## Chloride: A Growing Concern

Chloride permanently pollutes our lakes, ponds, and streams!



### What can I use instead of winter de-icers?

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of **SALT**  
**POLLUTES**  
**5 GALLONS**  
of **WATER**  
**FOREVER**

Learn more [rpbcd.org/salt](http://rpbcd.org/salt)

## 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 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.

Rice Marsh Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
Total Phosphorus	Less than 0.06 mg/L	0.100 mg/L	In 2025, the lake continued to not meet the MPCA standard. The lake has met the standard for 5 of the last 8 years.
Chlorophyll-a	Less than 20 µg/L	25.08 µg/L	Chlorophyll-a levels tripled in 2025 and did not meet the standard.
Water Clarity	Greater than 1.0 meters	1.76 meters	The lake has consistently met the clarity standard since the early 2000s.

Water quality trends shown on back of page.



**Carp update:** Electrofishing surveys occurred on Rice Marsh Lake in 2025 to assess adult biomass. Very low numbers of large adult carp were captured indicating carp are not currently impacting the lake. The aeration unit is operated every winter to prevent a winterkill and carp reproduction which has been successful.

### 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



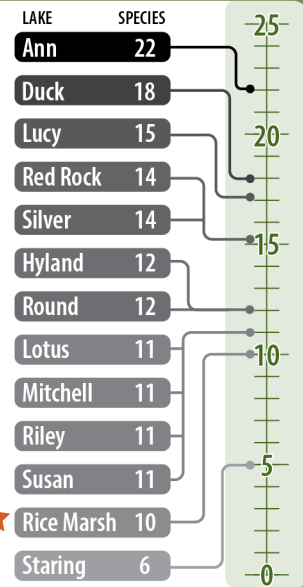
### Watershed Boundary



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 2025

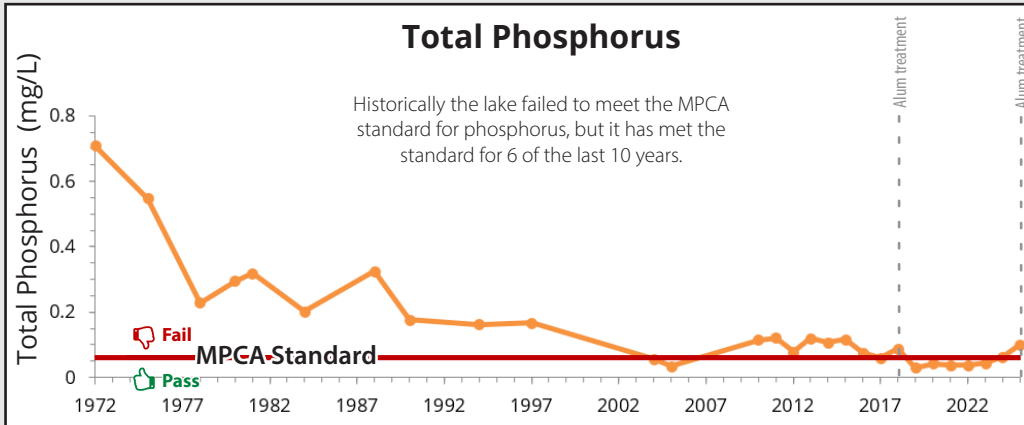
Over the last few years, Rice Marsh Lake has met the clean water standards set by the MPCA, with some changes in 2025. The graphs below show water quality trends over time with the red line representing the

**Water Quality Report Card**



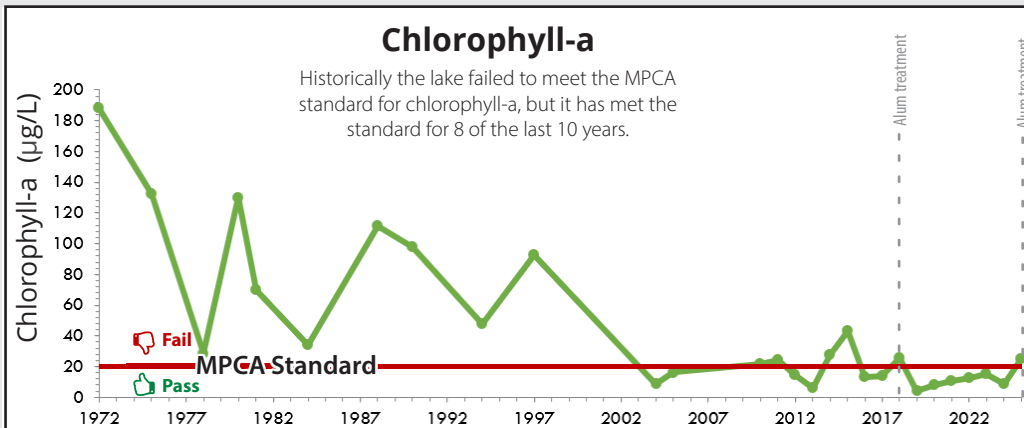
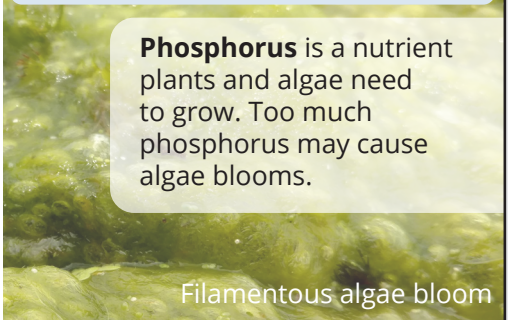
[rpbcbwd.org/grades](http://rpbcbwd.org/grades)

## Trends Over Time: 1972-present

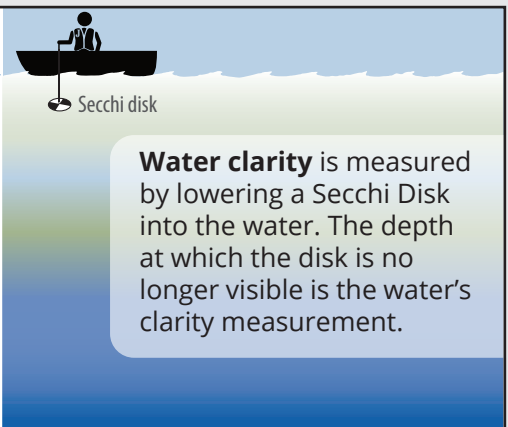
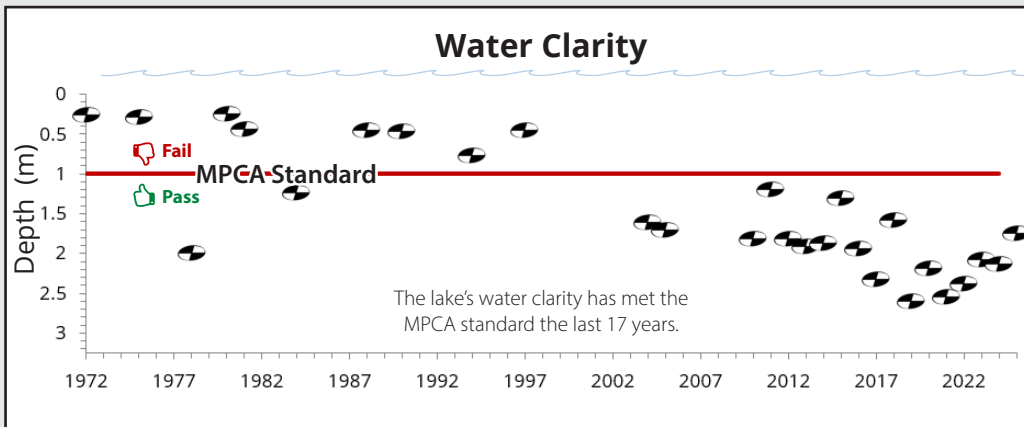
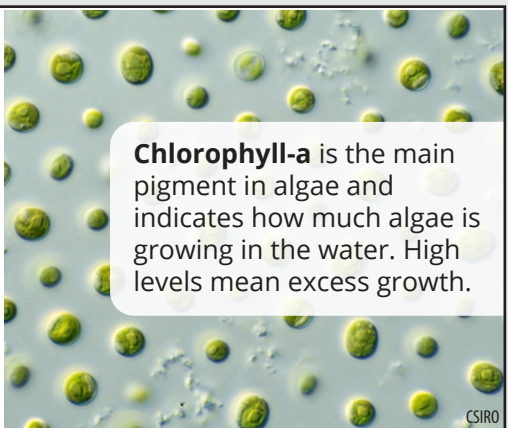


Rice Marsh Lake was treated with alum in 2018. Alum reduces phosphorus to control algae & improve clarity. A 2nd treatment occurred in fall 2025.

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

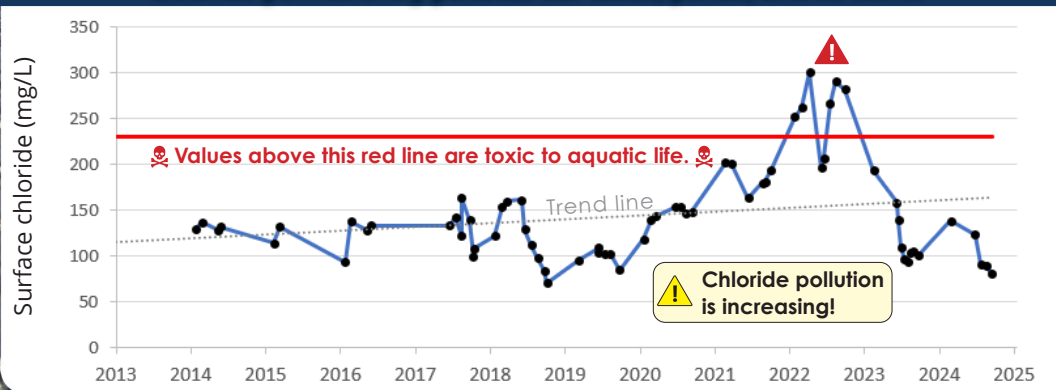


**Chlorophyll-a** is the main pigment in algae and indicates how much algae is growing in the water. High levels mean excess growth.



## Chloride: A Growing Concern

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Learn more [rpbcbwd.org/salt](http://rpbcbwd.org/salt)

# Lake Riley

At 297 acres and average depth of 23 ft, Lake Riley is the largest lake in the Watershed District. It is located on the boundary of Chanhassen and Eden Prairie and is a popular summer 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).

Lake Riley 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.



## Watershed Boundary



Lake Riley Water Quality Snapshot			
Parameter	Deep lake standard	2025 average	Note
Total Phosphorus	Less than 0.04 mg/L	0.033 mg/L	Since its first alum treatment in 2016, the lake has consistently met the standard.
Chlorophyll-a	Less than 14 µg/L	31.1 µg/L	Since its first alum treatment in 2016, the lake has consistently met the standard. The 2025 chlorophyll-a average doubled and did not meet standard.
Water Clarity	Greater than 1.4 meters	2.0 meters	The lake has consistently met the clarity standard since 2014.

Water quality trends shown on back of page.



**Plant update:** In 2025 a treatment was applied to control Curly-leaf Pondweed. A survey in late summer identified 13 species, 11 of which were native. 2024 treatments resulted in an increased of plant density, plant depth, and littoral coverage. In 2024 Eurasian Watermilfoil had increased in 2024 and was treated in 2025. The most abundant species in 2025 were coontail and water star grass

## Lake & watershed characteristics

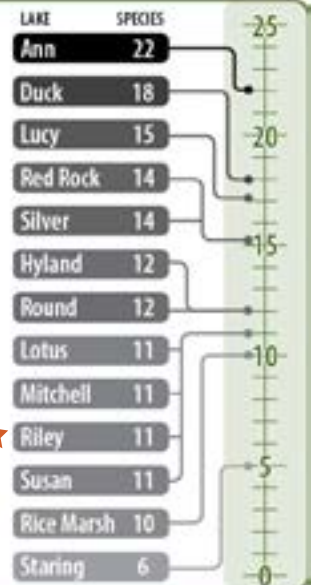
Lake size	297 acres
Average lake depth	23 feet
Maximum lake depth	49 feet
MPCA lake classification	Deep lake
Watershed size	1,776 acres
Impervious surface	18% of watershed
Impaired Waters listing	Mercury, fish, nutrients
Common fish	Bluegill, Northern Pike, Yellow Perch, Yellow Bullhead, Black Crappie
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Zebra Mussels

### Great news!

Because Lake Riley's 10-year water quality averages meet deep lake standards, the District is requesting that the MPCA removes it from the Impaired Waters List for nutrients.

## Native Aquatic Plant Diversity

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



# Lake Riley Water Quality by the Numbers

2025

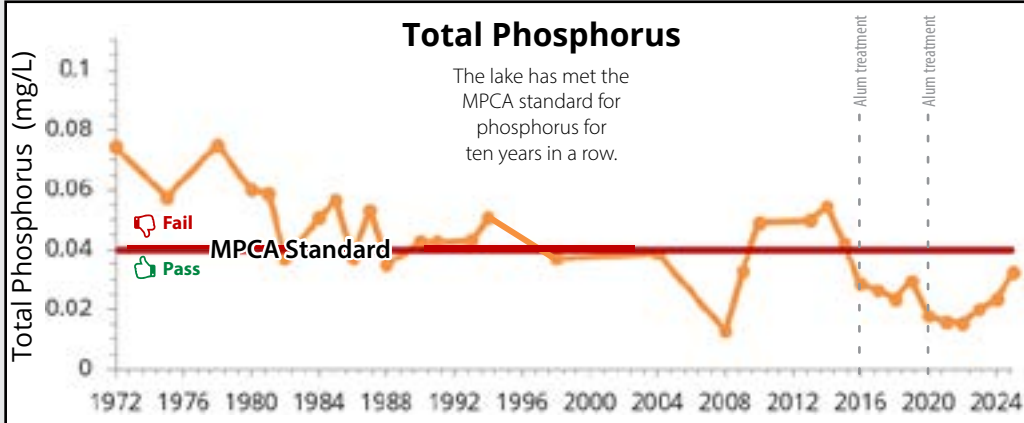
For the last few years, Lake Riley has consistently met the clean water standards set by the MPCA. The graphs below show water quality trends over time with the red line representing the MPCA standard for deep lakes.

**Water Quality Report Card**

[rpbcwd.org/grades](http://rpbcwd.org/grades)

**C**

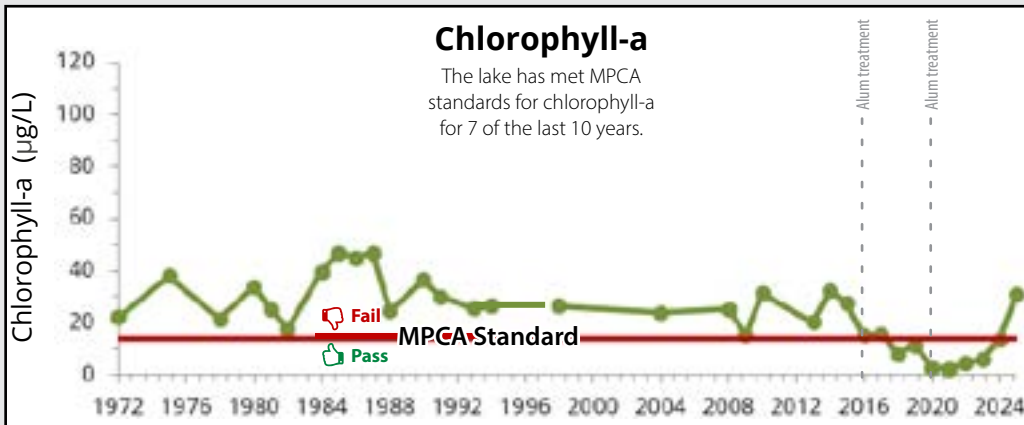
## Trends Over Time: 1972-present



Riley Lake received an alum treatment in 2016 and 2020. Alum limits the availability of phosphorus in lakes to control algae growth & improve water clarity.

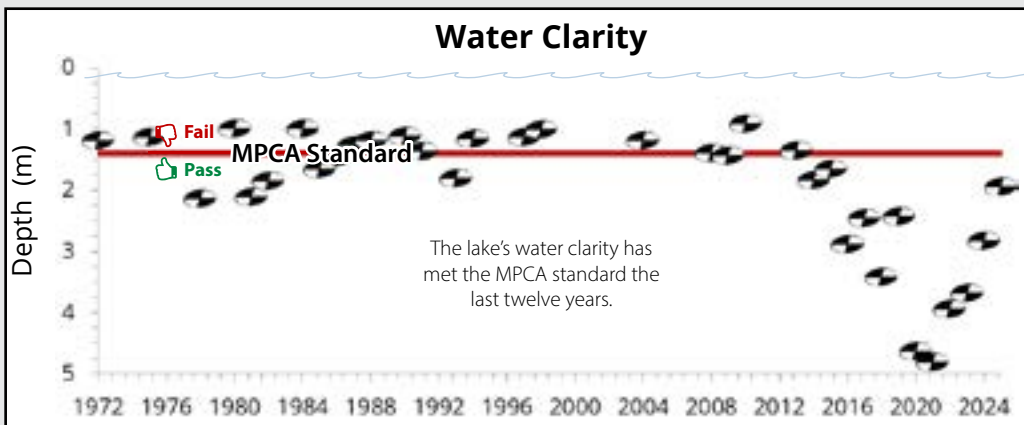
**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

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

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Learn more [rpbcwd.org/salt](http://rpbcwd.org/salt)

## 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.

Round Lake Water Quality Snapshot			
Parameter	Deep lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.04 mg/L	0.036 mg/L	Since the alum treatment in 2012, the lake has consistently met the standard.
<b>Chlorophyll-a</b>	Less than 14 µg/L	14.4 µg/L	The lake has consistently met the standard, however the 2025 average was above the standard, though still a decrease from 2024.
<b>Water Clarity</b>	Greater than 1.4 meters	2.3 meters	The lake has consistently met the clarity standard since the 2012 alum treatment.

Water quality trends shown on the back page.



**Plant update:** In 2025, the City of Eden Prairie conducted a point intercept survey to evaluate plant diversity and density. This is a method used to assess the current plant community and compare year-to-year plant variation. The survey found 12 native species, which is higher than previous years. Coontail and yellow water lily were the most abundant species.

### 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

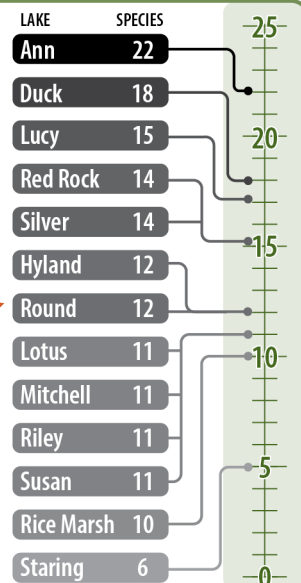


### Watershed Boundary



### 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

2025

Water Quality Report Card

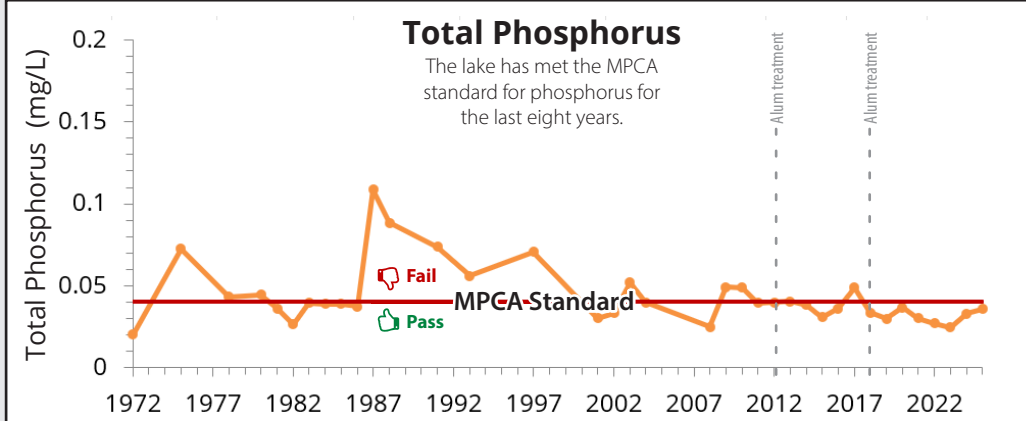
**B**

[rpbcd.org/grades](http://rpbcd.org/grades)



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.

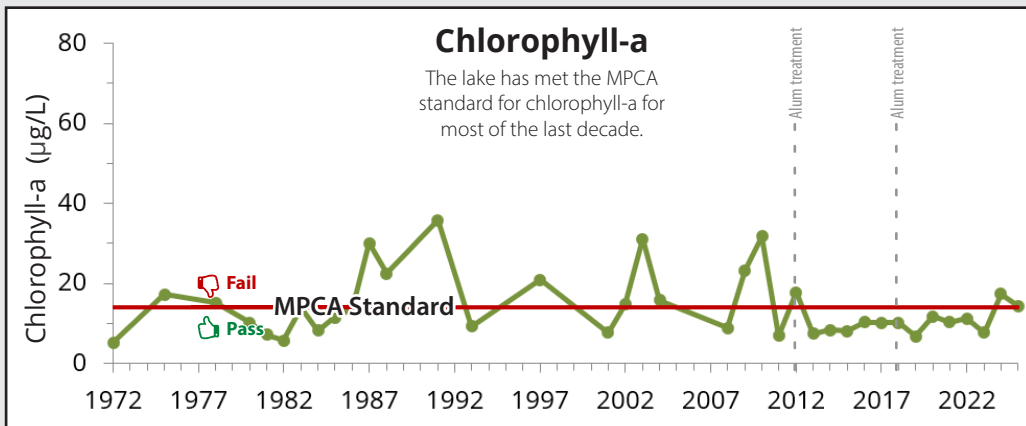
## Water Quality Graphs, 1972-present



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.

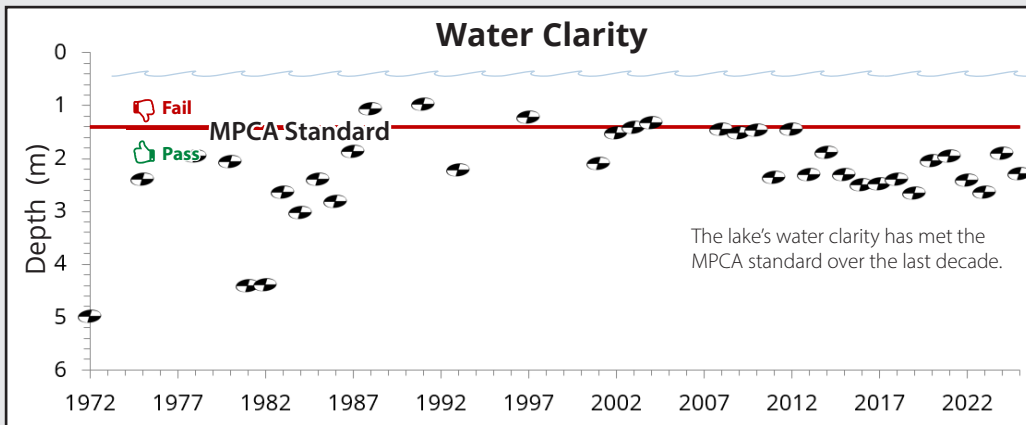
**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

Filamentous algae bloom



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CSIRO



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ONE TEASPOON of SALT POLLUTES 5 GALLONS of WATER FOREVER

Learn more [rpbcd.org/salt](http://rpbcd.org/salt)

## 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.



### Watershed Boundary



Silver Lake Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.092 mg/L	No significant trend. For the last three years, the lake has failed to meet the MPCA standard for total phosphorus.
<b>Chlorophyll-a</b>	Less than 20 µg/L	40.0 µg/L	No significant trend. In 2025, the lake failed to meet the standard and average chlorophyll-a increased to 40.0 ug/L from 30.1 µg/L in 2024.
<b>Water Clarity</b>	Greater than 1.0 meters	1.4 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.

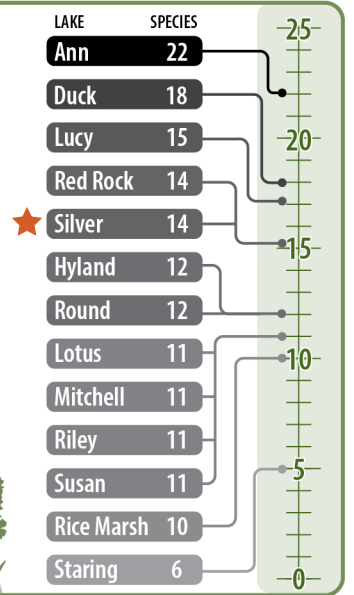
Water quality trends shown on back of page.

### 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

### 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

2025

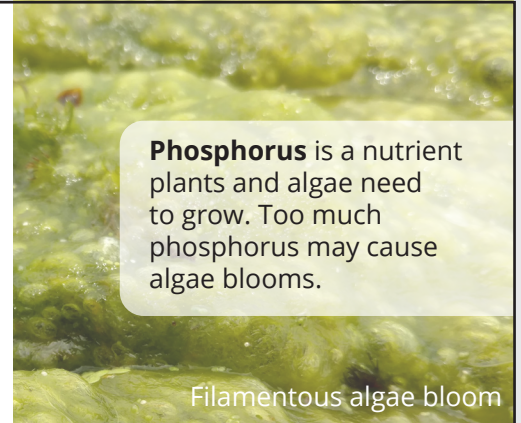
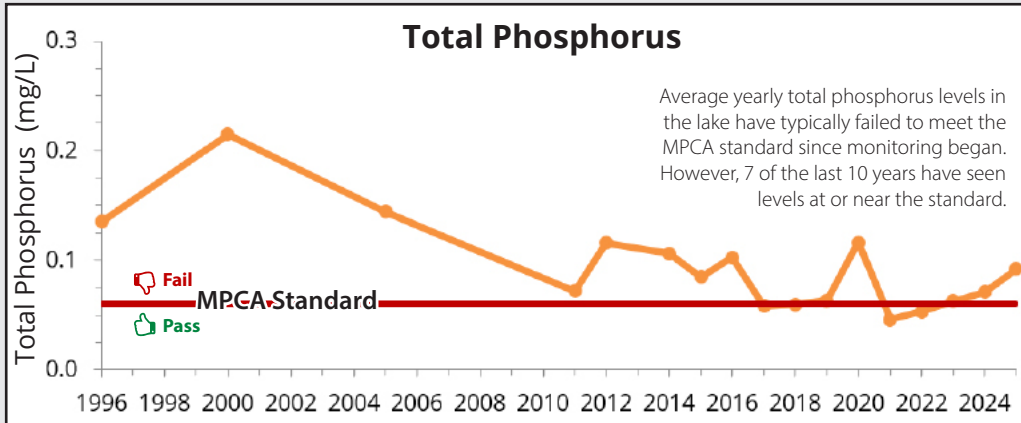
Water Quality  
Report Card

C

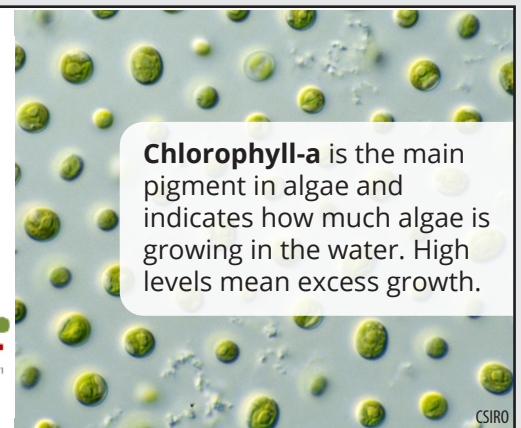
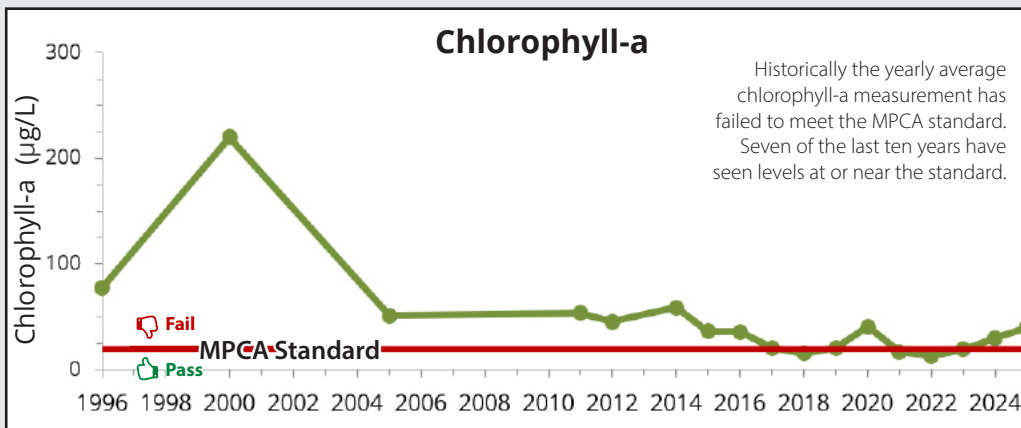
rpbcwd.org/grades

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

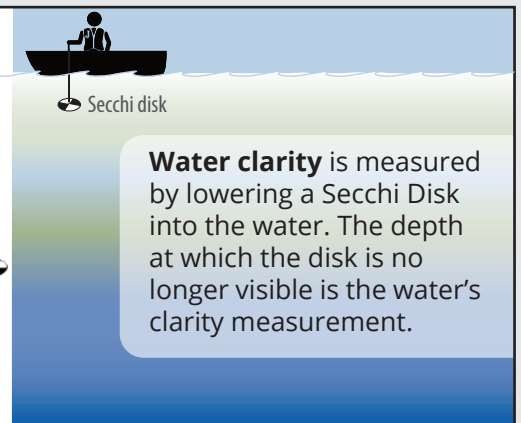
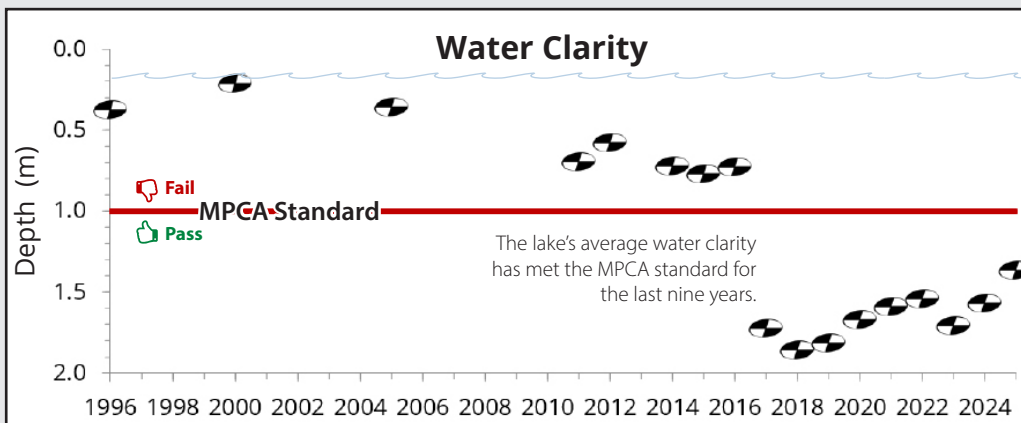
## Trends Over Time: 1972-present



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**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.

## Chloride: A Growing Concern

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## What can I use instead of winter de-icers?

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Focus instead on reducing build up of ice on your property:

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## 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.

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).

Staring 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.

### Staring Lake Water Quality Snapshot

Parameter	Shallow lake standard	2025 average	Note
<b>Total Phosphorus</b>	Less than 0.06 mg/L	0.063 mg/L	Levels have decreased since carp control began in 2011. In 2025, the lake just failed to meet the standard.
<b>Chlorophyll-a</b>	Less than 20 µg/L	41.7 µg/L	No significant trend. The lake failed to meet the standard but chlorophyll-a levels remained steady from previous year.
<b>Water Clarity</b>	Greater than 1.0 meters	0.8 meters	The lake has failed to meet the standard the last three years.

Water quality trends shown on back of page.



**Carp update:** A winterkill in 2022-23 of bluegill and other fish that prey on invasive carp eggs and young resulted in carp recruitment in 2023. No recruitment was observed in 2024 or 2025, but staff will continue to monitor and control carp in the lake.



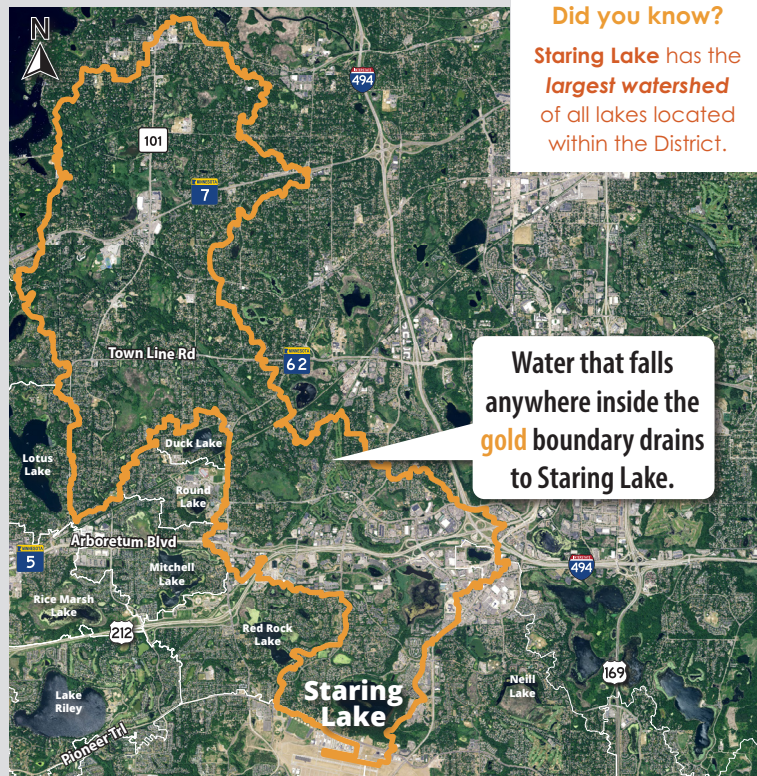
**Plant update:** Treatments were used to control invasive Eurasian Watermilfoil in 2022 and 2025, and Curly-leaf Pondweed in early 2024. In 2025, a survey showed presence of 6 native species, with Eurasian Watermilfoil and Curly-leaf Pondweed at low abundance.

### 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
Impaired Waters listing	Mercury & nutrients
Common fish	Bluegill, Black Crappie, Black Bullhead
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Brittle Naiad, Common Carp



### Watershed Boundary



### Native Aquatic Plant Diversity

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



# Staring Lake Water Quality by the Numbers

2025

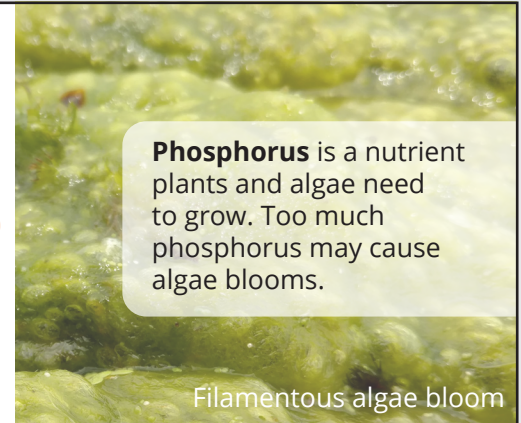
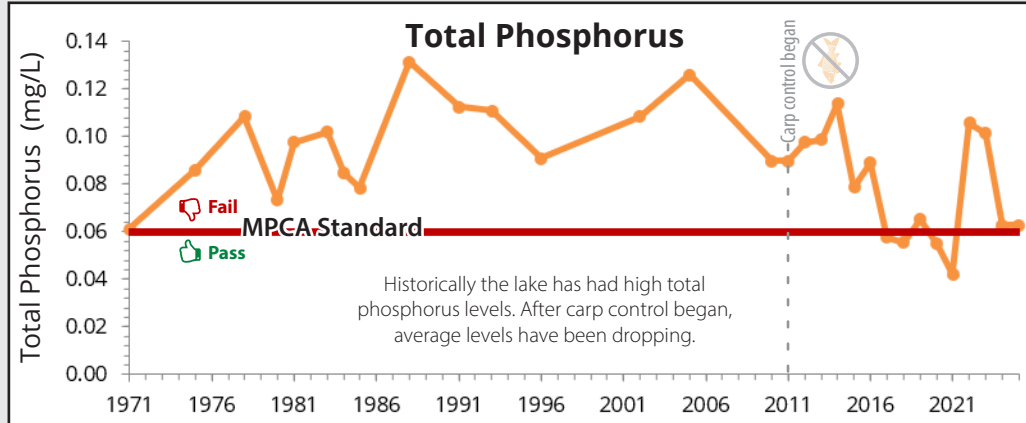
Water Quality  
Report Card

rpbcwd.org/grades



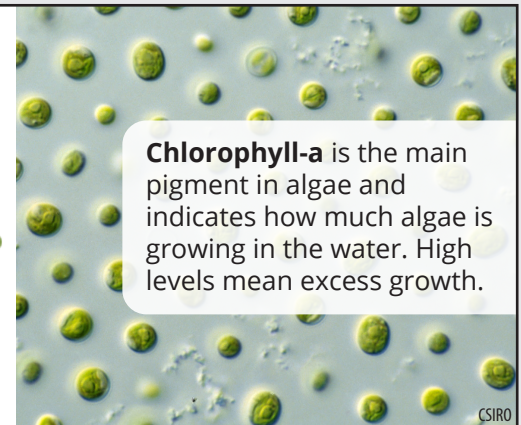
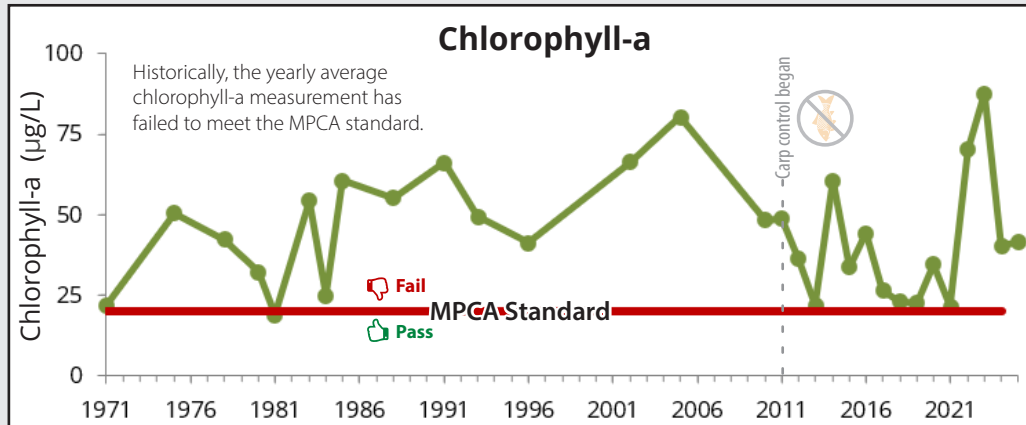
The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes. Over the last decade, **Staring Lake** has failed to consistently meet clean water standards set by the MPCA.

## Trends Over Time: 1972-present



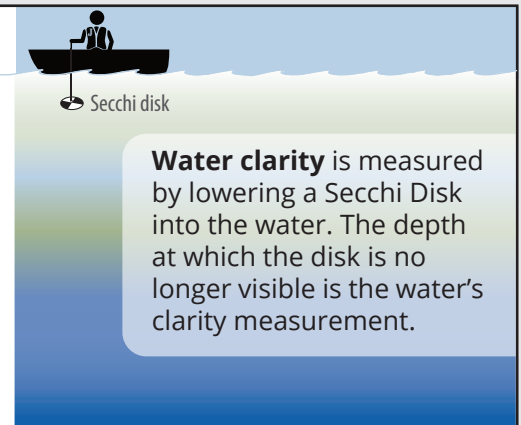
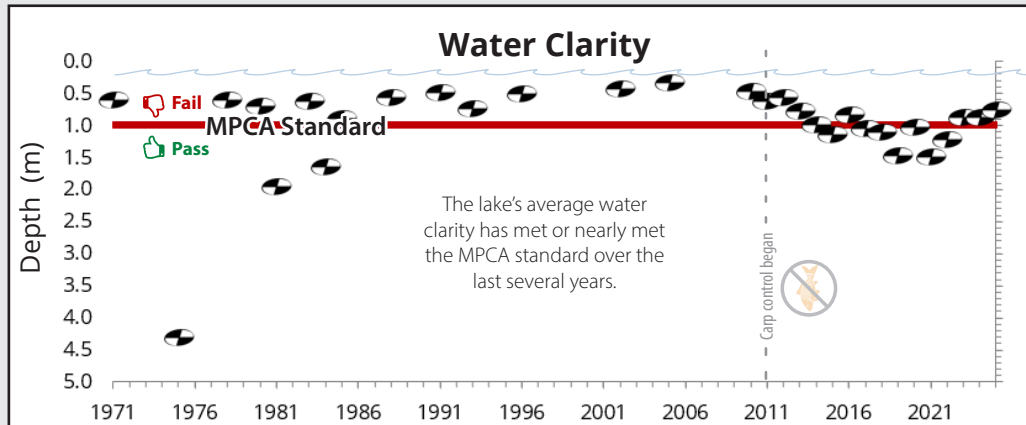
**Phosphorus** is a nutrient plants and algae need to grow. Too much phosphorus may cause algae blooms.

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

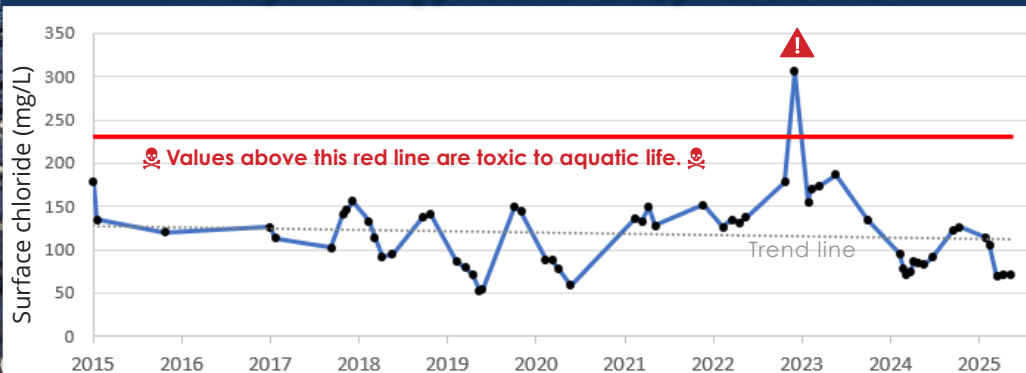


Secchi disk

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## Lake Susan

Located in Chanhassen, Lake Susan is a part of the Riley Creek Chain of Lakes. It is the third lake that Riley Creek flows through as it makes its way to the Minnesota River.

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).

Lake Susan 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.

Lake Susan Water Quality Snapshot			
Parameter	Shallow lake standard	2025 average	Note
Total Phosphorus	Less than 0.06 mg/L	0.067 mg/L	No significant trend. In 2025, average phosphorus decreased, but the lake did not meet the standard.
Chlorophyll-a	Less than 20 µg/L	55.3 µg/L	No significant trend. In 2025, average chlorophyll-a was twice the standard.
Water Clarity	Greater than 1.0 meters	0.8 meters	No significant trend. In 2025, the average reading decreased to not meet the standard.

Water quality trends shown on back of page.



**Carp update:** Carp are invasive and harm water quality by destroying aquatic vegetation and stirring up lake bottom sediments. Adult and young of the year carp numbers remain low in Lake Susan, and the district has been removing carp directly upstream of the lake. A temporary barrier was also placed at the outlet to reduce chances of the pond becoming a nursery.



**Plant update:** Lake Susan was treated with herbicide for curly-leaf pondweed in 2025 totaling 5.9 acres.

### Lake & watershed characteristics

Lake size	88 acres
Average lake depth	10 feet
Maximum lake depth	17 feet
MPCA lake classification	Shallow lake
Watershed size	1,231 acres
Impervious surface	27% of watershed
Impaired Waters listing	Mercury & nutrients
Common fish	Bluegill, Black Crappie, Northern Pike, Black Bullhead, Yellow Bullhead
Invasive species	Curly-leaf Pondweed, Eurasian Watermilfoil, Common Carp, Brittle Naiad

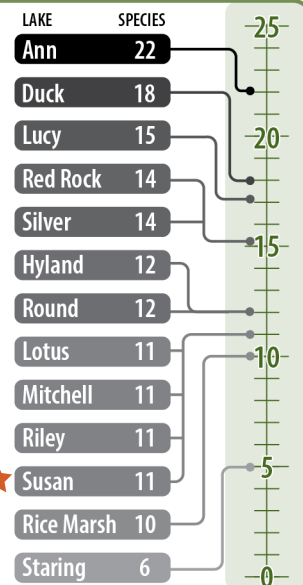


### Watershed Boundary



### Native Aquatic Plant Diversity

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



# Lake Susan Water Quality by the Numbers

2025

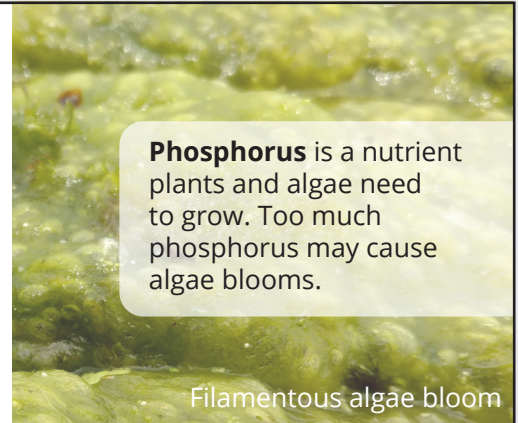
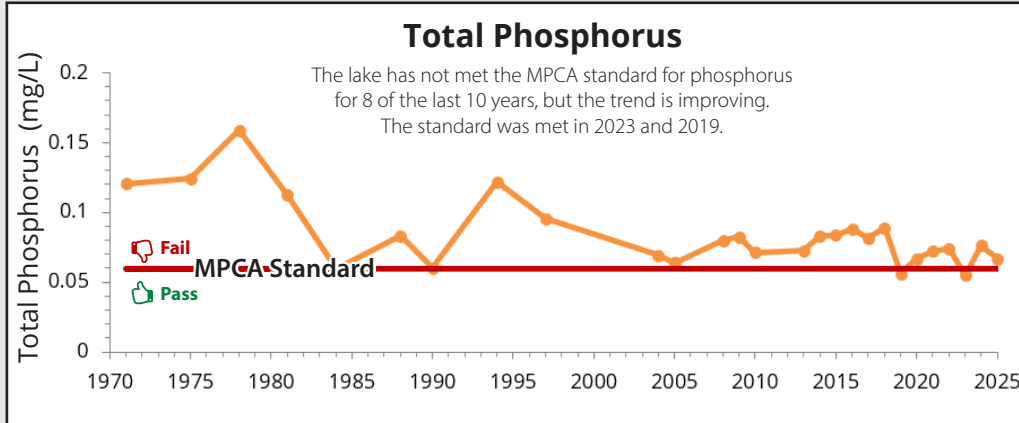
The graphs below show water quality trends over time with the red line representing the MPCA standard for shallow lakes. In 2025, Lake Susan failed to meet three clean water standards set by the MPCA.

Water Quality Report Card

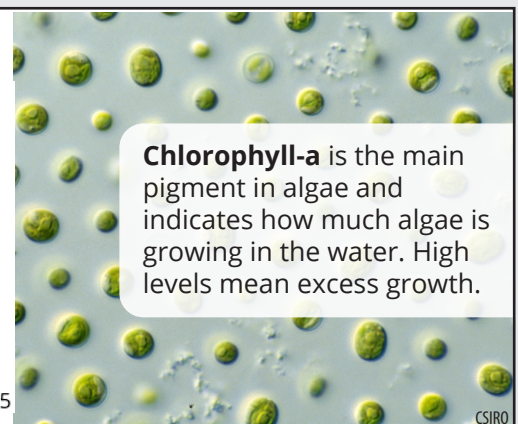
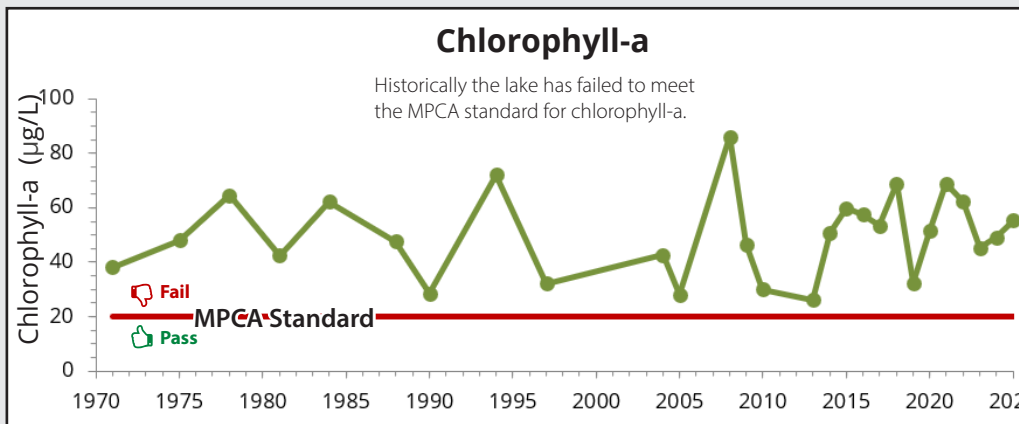
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[rpbcd.org/grades](http://rpbcd.org/grades)

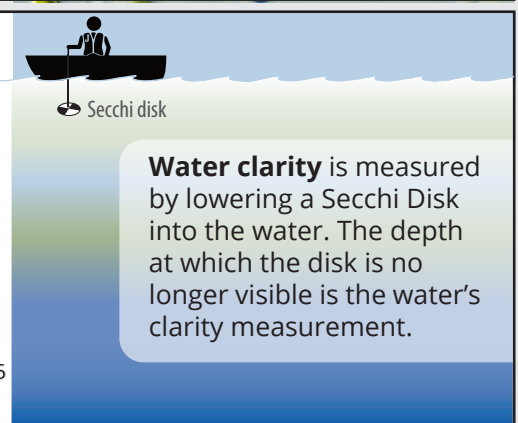
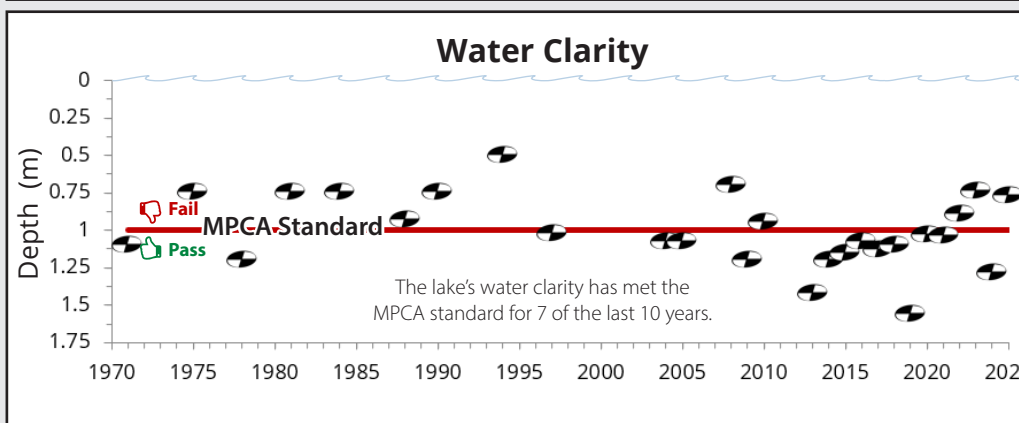
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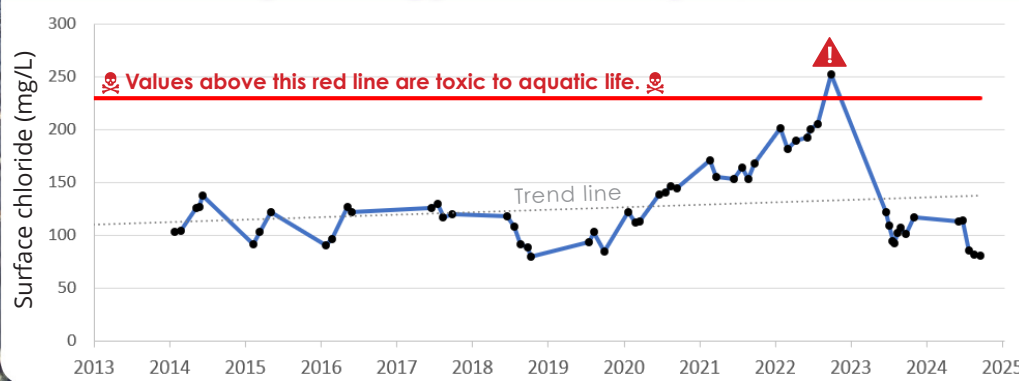
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