Round Lake

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

**WATERSHED BOUNDARIES**
Water that falls anywhere within the white border drains to Round Lake.

**CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>30 acres</td>
</tr>
<tr>
<td>Volume</td>
<td>327 acre-ft</td>
</tr>
<tr>
<td>Average depth</td>
<td>11 ft</td>
</tr>
<tr>
<td>Max depth</td>
<td>37 ft</td>
</tr>
<tr>
<td>Watershed size</td>
<td>475 acres</td>
</tr>
<tr>
<td>Land draining directly</td>
<td>105 acres</td>
</tr>
<tr>
<td>MPCA lake classification</td>
<td>Deep</td>
</tr>
<tr>
<td>Impairment listing</td>
<td>Mercury &amp; Perfluorooctane</td>
</tr>
<tr>
<td>Trophic status</td>
<td>Eutrophic</td>
</tr>
<tr>
<td>Common fish</td>
<td>Bluegill, N. Pike, Yellow Bullhead, Yellow Perch</td>
</tr>
<tr>
<td>Invasive species</td>
<td>Curlyleaf Pondweed, Eurasian Watermilfoil, Common Carp</td>
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</table>

**ZEBRA MUSSELS FOUND IN LAKE RILEY**

Zebra mussels, an aquatic invasive species (AIS) were discovered in Lake Riley in October 2018. This is the first lake within the Riley Purgatory Bluff Creek Watershed District where they have been spotted. Zebra mussels live in dense clusters and can spread quickly. They attach to docks, boats, rocks, logs, and other surfaces in the lake, and can threaten recreation and the underwater ecosystem.

The District will continue to monitor the zebra mussel population in Lake Riley, and work with our partners to try to prevent this species from spreading to other lakes.

**You can help!**
Remember to always clean, drain, and dry any watercraft and equipment when leaving a lake.

**DIVE DEEPER**
Interested in learning more? Explore the following reports on our website.

- **Aquatic plants**
  Blue Water Science. 2013 Aquatic plant surveys and water quality for Round Lake and two tributary ponds.

- **Watershed study**

- **Invasive Species**
  Sorensen, Bajer, & Headrick. 2015. Development of Carp Control in the Purgatory Creek Chain of Lakes.

- **Alum Fact Sheet**
  RPBCWD. 2016. Alum Fact Sheet.

**SALT IN LOCAL LAKES**
Round Lake and other local lakes are facing an increased threat from salt. Each winter, people apply nearly 365,000 tons of road salt in the Twin Cities Metro Area. When this sodium chloride washes into local streams and lakes, it pollutes waterways and harms native fish and plants. Salt also affects the groundwater we rely on for drinking, and water with high salinity can create health concerns for vulnerable groups. Did you know that it takes only one teaspoon of salt to permanently pollute five gallons of water?

What can you do?
- **Shovel**: removing snow manually is effective and does not pollute waterways
- **Sweep**: Collect excess salt for future use
- **Scatter**: Spread out your salt so it can be most effective. More salt does not always mean better melting.
- **Sand**: Most salts do not work below 15 degrees. Use sand for traction.

**LAND USE** in the Round Lake Watershed

- **DIVE DEEPER**
  Contact us and find out how you can get involved.

- **DISTRICT OFFICE**
  18681 Lake Drive East
  Chanhassen, MN 55317

- **CONTACT INFO**
  952.607.6512
  info@rpbcwd.org
  rpbcwd.org

- **FIND US ON**
  instagram
  facebook
twitter

Celebrating 50 years in 2019. Visit rpbcwd.org/50years to learn more.

Water that falls anywhere within the white border drains to Round Lake.

- **Invasive Species**
  Curlyleaf Pondweed, Eurasian Watermilfoil, Common Carp

**Invasive species**

- **Common fish**
  Bluegill, N. Pike, Yellow Bullhead, Yellow Perch

**Size**
30 acres

**Volume**
327 acre-ft

**Average depth**
11 ft

**Max depth**
37 ft

**Watershed size**
475 acres

**Land draining directly into**
105 acres

**MPCA lake classification**
Deep

**Impairment listing**
Mercury & Perfluorooctane

**Trophic status**
Eutrophic

**Common fish**
Bluegill, N. Pike, Yellow Bullhead, Yellow Perch

**Invasive species**
Curlyleaf Pondweed, Eurasian Watermilfoil, Common Carp
How healthy is Round Lake?

Round Lake has been monitored for over 40 years. In that time, it has often failed to meet the clean water standards set by the Minnesota Pollution Control Agency (MPCA). However, there have been significant improvements since 2012 when the city of Eden Prairie conducted an alum treatment, and in 2018 it met all standards. Read more about alum on our District website.

During the growing season (June - September), the city of Eden Prairie visits Round Lake every other week to collect water samples and take measurements. The samples are sent to a lab where they are tested for several compounds including total phosphorous (TP) and chlorophyll a (Chl-a). Staff also measure how clear the water is using a disk that is lowered into the water until it can no longer be seen. All three of these parameters help indicate whether the water is clean.

Round is classified as a “Deep Lake”, which means that it is over 15 feet deep and light cannot reach the bottom in most of the lake. To be considered healthy by the MPCA, deep lakes need to be clear enough to see 1.4 meters down, and have very low TP and Chl-a.

Rainwater runoff, the water that flows across yards, parking lots, and streets into stormdrains, is one of the main causes of pollution in urban areas. You can take simple actions to help protect Round Lake.

Keep the curb clean
Sweep up leaves, grass clippings and fertilizer from driveways and streets.

Water with care
Grass requires 1-inch of water per week, about one hour of sprinkling per week if it has not rained.

Salt smart
The salt we use to melt ice can pollute our lakes and creeks. Use salt sparingly and always shovel first.

Reuse the rain
Collect and reuse rainwater with a rain barrel.

Build a raingarden
Raingardens soak up water and filter out pollution. Visit our website for help.

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Water clarity is measured using a Secchi Disk, a black and white disk the size of a dinner plate. It is lowered longer visible is recorded.

Phosphorus is a nutrient that plants and algae need for growth. It is often measured as total phosphorus (TP). Too much phosphorous can cause algae blooms.

Chlorophyll a is the main pigment in algae, so measuring chl-a can tell us how much algae there is. Too much chl-a means that there are too many nutrients in the water.

Summary table

<table>
<thead>
<tr>
<th></th>
<th>MPCA standard</th>
<th>1972 - 2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>max</td>
<td>min</td>
<td>average</td>
</tr>
<tr>
<td>TP</td>
<td>&lt;0.04 mg/l</td>
<td>0.154</td>
<td>0.01</td>
</tr>
<tr>
<td>Chl-a</td>
<td>&lt;14 ug/l</td>
<td>83</td>
<td>0.2</td>
</tr>
<tr>
<td>Secchi</td>
<td>&gt;1.4 m</td>
<td>6.2</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Water quality graphs 1972 - 2018
Points are growing season (Jun-Sep) averages. Thin lines are the min and max values for each year.