What’s happening

WE WANT TO SUPPORT YOUR GOOD WORK

Our three grant programs aim to help you make your clean water project or education idea a reality. Visit rpbcwd.org/grants for more information.

Watershed Stewardship Grants provide funding and technical help for projects that protect and improve water resources. Applicants can receive up to $5,000 for homeowners, $20,000 for non-profits, or $50,000 for governments and businesses.

Action grants are small, simple grants for team projects and activities that protect clean water. Applicants can receive up to $250.

Educator Grants are designed to support educators in incorporating water resources into their teaching. Applicants can receive up to $250.

DIVE DEEPER

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

Aquatic plants

Carp management

SALT THREATENS LAKES

Lake Idlewild and other local lakes are facing an increased threat of 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. 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
Select: Sodium chloride (rock salt) doesn’t work below 15 degrees F. When it is colder than that select a different deicer or use sand for traction.
Scatter: Spread your salt so it can be most effective. More salt does not always mean better melting.
Sweep: Collect excess salt for future use.
Sand: Most salts do not work below 15 degrees F. Use sand for traction.

Paleolimnology

Stormwater ponds
RPBCWD. 2013. Stormwater pond project.

Watershed study

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.

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Size</td>
<td>83 acres</td>
</tr>
<tr>
<td>Volume</td>
<td>375 acre-ft</td>
</tr>
<tr>
<td>Average depth</td>
<td>5 ft</td>
</tr>
<tr>
<td>Max depth</td>
<td>11 ft</td>
</tr>
<tr>
<td>Watershed size</td>
<td>966 acres</td>
</tr>
<tr>
<td>Land draining directly into</td>
<td>280 acres</td>
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<tr>
<td>MPCA lake classification</td>
<td>Shallow</td>
</tr>
<tr>
<td>Impairment listing</td>
<td>Not listed</td>
</tr>
<tr>
<td>Trophic status</td>
<td>Hypereutrophic</td>
</tr>
<tr>
<td>Common fish</td>
<td>Bluegill, White Sucker, Northern Pike</td>
</tr>
<tr>
<td>Invasive species</td>
<td>Curlyleaf Pondweed, Purple Loosestrife, Common Carp</td>
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</table>

LAND USE in the Rice Marsh Lake Watershed

20% Commercial
34% Residential
27% Open Space
8% Roads
11% Open Water

WATERSHED BOUNDARIES

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

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
How healthy is Rice Marsh Lake?

Water quality in Rice Marsh Lake improved from 2018 to 2019, meeting all three parameters for clean water standards set by the Minnesota Pollution Control Agency (MPCA). Water quality in the lake is on a path that is much improved compared to historical trends. The graphs on the next page show the trends over time. The red line on each graph marks the MPCA standard. The goal is for the average values (the dots) to be below the red line.

During the growing season (June - September), district staff visit Rice Marsh Lake every other week to collect water samples and take measurements. The water 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.

Rice Marsh is classified as a “shallow lake”, which means that it is generally less than 15 feet deep and light can reach the bottom in most of the lake. This ample light means that shallow lakes often have a lot of aquatic plants, and are habitat to many types of fish and birds. To be considered healthy by the MPCA, shallow lakes need to be clear enough to see one meter down, and have low TP and Chl-a levels.

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 Rice Marsh 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.

**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.

**Secchi disk depth** is measured using a Secchi Disk, a black and white disk the size of a dinner plate. It is lowered into the water, and the depth at which it is no 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 phosphorus can cause algae blooms.

**Water quality graphs 1972 - 2019**
Points are growing season (Jun-Sep) averages. Thin lines are the min and max values for each year.

**Summary table**

<table>
<thead>
<tr>
<th></th>
<th>MPCA standard</th>
<th>1972 - 2018</th>
<th>2019</th>
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<tr>
<td></td>
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<td>TP</td>
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</tr>
<tr>
<td>CHL-a</td>
<td>&lt;20 ug/l</td>
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<td>Secchi</td>
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