银湖

2019

所发生的事情

MN GREENCORPS AND SILVER LAKE

加入流域管理区今年是MN GreenCorps成员Amy Bakkum。Amy的工作是致力于改进银湖流域内的水体管理实践。为了开始，Amy利用现有的报告来获得对银湖流域的了解——其资源、水质量挑战和社区。在参观银湖地区时，她做了关于现有水体管理实践及其对水体质量产生负面影响的记录。利用这些观察，Amy已经制定了目标行动。

Amy正在协调一个由MN GreenCorps成员Amy Bakkum组成的银湖社区绿队。她的服务工作的一部分是改善银湖流域的水体管理实践。为了开始，Amy利用现有的报告来了解银湖流域的资源、水质量挑战和社区。她记录了现有水体管理实践及其对水体质量产生负面影响的实践。利用这些观察，Amy已经制定了目标行动。

WE WANT TO SUPPORT YOUR WORK

我们想要支持你的工作

我们的三个资助项目旨在帮助你实现你的清洁水项目或教育理念。访问rpbcwd.org/grants以获取更多信息。

Watershed Stewardship Grants提供资金和技术支持，以保护和改善水体资源。申请人可获最多$5,000用于非营利性项目，或$50,000用于非营利性项目。

Action grants

These small, simple grants are available to teams, projects, and activities that protect clean water. Applicants can receive up to $250.

Educator Grants

These grants support educators in integrating water resources into their teaching. Applicants can receive up to $250.

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

DIVE DEEPER

AQUATIC PLANTS


WATERSHED STUDY


CHARACTERISTICS

- Size: 71 acres
- Volume: 190 acre-ft
- Average depth: 5 ft
- Max depth: 14 ft
- Watershed size: 407 acres
- MPCA lake classification: Shallow
- Impairment listing: Not Listed
- Trophic status: Hypereutrophic
- Common fish: Unknown
- Invasive species: Curlyleaf Pondweed, Purple Loosestrife

银湖位于Shorewood，是银湖流域的唯一湖泊，也是该地区唯一有野生水稻的地方，这是一种在城市地区湖泊中很少见的植物！

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How healthy is Silver Lake?

Water quality in Silver Lake has increased since 2016, now at or near all three clean water standards set by the Minnesota Pollution Control Agency (MPCA). 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 averages (the dots) to fall below the red line.

During the growing season (June - September), district staff visit Silver 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 phosphorus (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.

Silver 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. 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 Silver Lake.

**Help keep Silver healthy**

<table>
<thead>
<tr>
<th><strong>Keep the curb clean</strong></th>
<th><strong>Water with care</strong></th>
<th><strong>Salt smart</strong></th>
<th><strong>Reuse the rain</strong></th>
<th><strong>Build a raingarden</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweep up leaves, grass clippings, and fertilizer from driveways and streets.</td>
<td>Grass requires 1 inch of water per week: about one hour of sprinkling per week if it has not rained.</td>
<td>The salt we use to melt ice can pollute our lakes and creeks. Use salt sparingly and always shovel first.</td>
<td>Collect and reuse rainwater with a rain barrel.</td>
<td>Raingardens soak up water and filter out pollution. Visit our website for help.</td>
</tr>
</tbody>
</table>

**Water quality graphs 1996 - 2019**

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

**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.

**Water clarity** 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.

**Summary table**

<table>
<thead>
<tr>
<th></th>
<th>MPCA standard</th>
<th>1996 - 2018</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td><strong>TP</strong></td>
<td>&lt;0.06 mg/l</td>
<td>0.27</td>
<td>0.128</td>
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<td></td>
<td></td>
<td>0.027</td>
<td>0.033</td>
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<tr>
<td></td>
<td></td>
<td>0.1024</td>
<td>0.063</td>
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<tr>
<td><strong>Chl-a</strong></td>
<td>&lt;20 ug/l</td>
<td>36.3</td>
<td>20.534</td>
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<tr>
<td></td>
<td></td>
<td>300</td>
<td>7.63</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.5</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Secchi</strong></td>
<td>&gt;1 m</td>
<td>2.35</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.9</td>
<td>1.7</td>
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</table>