In 2018, the RPBCWD and the City of Chanhassen teamed up to fund a water filtering and conservation project at Lake Susan Park Pond. This project implemented an iron-enhanced sand filter at the edge of Lake Susan Pond Park, in order to clean the water before it flows into Lake Susan. The filter traps pollutants like phosphorus that wash off of nearby streets, yards, and parking lots, and filter them out of the water before it enters Lake Susan. Keeping this phosphorus out of the lake will mean fewer algae blooms, better recreation opportunities, and better habitat for aquatic animals and plants!

A second part of this project includes the implementation of a system that captures stormwater from Lake Susan Park Pond and reuses it to water nearby fields. This stormwater reuse system means that good clean water will not be wasted on watering grass at the park.

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.

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.

### CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>88 acres</td>
</tr>
<tr>
<td>Volume</td>
<td>885 acre-ft</td>
</tr>
<tr>
<td>Average depth</td>
<td>10 ft</td>
</tr>
<tr>
<td>Max depth</td>
<td>17 ft</td>
</tr>
<tr>
<td>Watershed size</td>
<td>1281 acres</td>
</tr>
<tr>
<td>Land draining directly into</td>
<td>66 acres</td>
</tr>
<tr>
<td>MPCA lake classification</td>
<td>Shallow</td>
</tr>
<tr>
<td>Impairment listing</td>
<td>Mercury &amp; Nutrients</td>
</tr>
<tr>
<td>Trophic status</td>
<td>Eutrophic</td>
</tr>
<tr>
<td>Common fish</td>
<td>Bluegill, Black Crappie, Northern Pike, Black Bullhead</td>
</tr>
<tr>
<td>Invasive species</td>
<td>Curlyleaf Pondweed, Eurasian Watermilfoil, Common Carp</td>
</tr>
</tbody>
</table>

### Land Use

- 21% Commercial
- 4% Farmland
- 26% Residential
- 36% Open Space
- 6% Roads
- 7% Open Water

**Celebrating our 50th Anniversary in 2019. Learn more at www.rpbcd.org/50years**

*Contact us and find out how you can get involved*

*Watershed boundaries*
How healthy is Lake Susan?

For the past 40 years, Lake Susan water quality has consistently failed to meet the clean water standards set by the Minnesota Pollution Control Agency (MPCA). In 2018, the highest chlorophyll a (algae) levels ever were detected.

During the growing season (June - September), district staff visit Lake Susan 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. Find out more about each on the next page.

Susan 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. These shallow lake standards are listed in the summary table.

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 Lake Susan.

Keep the curb clean
Sweep up leaves, grass clippings, and fertilizers 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.

Help Keep Lake Susan healthy

A college intern collects data from water level sensors on Lake Susan.

A high school intern records conditions at the lake.

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.