**What’s happening**

**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**


Wenck Associates Inc. 2015. Lake Lucy Aquatic Plant Management Plan.

**Watershed study**


**Carp management**

Bajer P.G., Headrick,M., Miller B. D. and Sorensen P. W. 2014. Development and implementation of a sustainable strategy to control common carp in Riley Creek Chain of Lakes, U of M.

**Stormwater ponds**

RPBCWD. 2013. Stormwater pond project.

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**GRANTS AVAILABLE FOR PROJECTS THAT HELP PROTECT CLEAN WATER**

Decreasing pollution, beautifying your yard, and creating habitat are all possible through a cost-share grant with the watershed district. The district’s cost-share grant program was created to help community members implement clean water projects. These could be projects that conserve water, like rainwater reuse systems, or projects that clean water, like raingardens.

**Awards:** up to $5000
(25% homeowner match)

**Technical help available**

**Interested? Contact:**
952-607-6481
mjordan@rpbcwd.org

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**Lake Lucy**

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

**WATERSHED BOUNDARIES**

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

**CHARACTERISTICS**

| Size       | 88 acres |
| Volume     | 558 acre-ft |
| Average depth | 6.5 ft |
| Max depth  | 20 ft |
| Watershed size | 997 acres |
| Land draining directly into | 111 acres |
| MPCA lake classification | Shallow |
| Impairment listing | Mercury |
| Trophic status | Eutrophic |
| Common fish | Bluegill, Northern Pike, Yellow Bullhead |
| Invasive species | Curlyleaf Pondweed, Eurasian Watermilfoil, Common Carp |

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

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

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

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

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twitter

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**LAND USE in the Lake Lucy Watershed**

| Commercial | 2% |
| Residential | 45% |
| Open Space | 39% |
| Open Water | 14% |
How healthy is Lake Lucy?

Water quality in Lake Lucy decreased slightly from 2017 to 2018. Still, the lake meets two of the 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 average values (the dots) to be below the red line.

During the growing season (June - September), district staff visit Lake Lucy every other week to collect water samples and take measurements. The samples are sent to a lab and 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. These parameters help indicate whether the water is clean.

Lucy 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 Lake Lucy.

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.

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

Summary table

<table>
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<th>Parameter</th>
<th>MPCA standard</th>
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<th>2018</th>
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<td></td>
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