Lake Riley: Poised for delisting, prepping for more improvements







CLEAN WATER LAND & LEGACY AMENDMENT

YOUR Clean Water Fund AT WORK

Clean Water Funds from BWSR directly tied to water quality improvements leading to Lake Riley's proposed delisting include a $233,400 competitive 2015 grant for stormwater reuse enhancements within the Lake Susan watershed, and $63,865 from a 2021 Metro Area Watershed-Based Implementation Funding award for a stormwater retrofit affecting Rice Marsh Lake.

EDEN PRAIRIE — Water quality improvements over the past decade have extended the summer recreation season on Lake Riley, the largest and busiest lake within the Eden Prairie Parks system, and its only swimming beach staffed with lifeguards.

"We see water as life, and recreation intertwined with that. It's really important to people's quality of life," said Amy Markle, Eden Prairie Parks and Recreation director.

The beach, public water access, ballfields, bike trails and historic barn draw thousands of visitors a year to Riley Lake Park, situated on the shores of its 297-acre namesake lake. (Lifeguards are present because that beach closes less frequently due to unsafe algae or E. coli levels.)

"It's something to celebrate," Markle said of Lake Riley's proposed removal from the state's impaired waters list. "The watershed district has been a great partner, working alongside golf courses and homeowners to help improve water quality. I think it also showcases a lot of great partnership and collaboration on projects. Putting in the work and giving it the time it needs and then seeing this outcome is really awesome."



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— Amy Markle, Eden Prairie Parks and Recreation director

The Riley Purgatory Bluff Creek Watershed District (RPBCWD) led water quality improvement efforts, which included upstream work supported by Clean Water Fund grants from the Minnesota Board of Water and Soil Resources (BWSR).

Lake Riley, which straddles the Eden Prairie-Chanhassen border, is among seven proposed delistings in the state tied to BWSR Clean Water Fund-backed work that significantly contributed to water quality improvements. The list of seven includes another lake within the RPBCWD: Rice Marsh Lake, a shallow lake where common carp from Lake Riley

Lake Riley is seen in early September from Lake Riley Park. From June to September, Eden Prairie Parks and Recreation interns collect water samples — a monitoring effort that involves the watershed district, county and state partners. A St. Paul lab tests the samples. During the summer, parks and recreation staff inspect the beach and public water access daily. An exceptionally warm spring fueled a Lake Riley algae bloom in 2025, the first since the first of two alum treatments — in 2016 and 2020 — took effect. No hazardous algae blooms were detected in 2026. **Photos Courtesy of Riley Purgatory Bluff Creek Watershed District**

went to spawn until a barrier was installed.

RPBCWD Administrator Terry Jeffery said the proposed delisting generated more involvement and trust among partners, some of whom had previously viewed the watershed only as a rule-making, anti-development obstacle.

"It just opened up a line of dialogue that wasn't there before with our communities," Jeffrey said. "It just got us a lot more goodwill within the community. It got people to believe in what we're doing. Hopefully that will translate to more projects and more delisting and better water quality."

U.S. Environmental Protection Agency (EPA) approval finalizes the Minnesota Pollution Control Agency's (MPCA) recommended changes to the impaired waters list. Lake Riley was listed as impaired for aquatic recreation in 2002 because of excess nutrients. It has met the deep-lake standards for phosphorus for 10 years, for clarity for 12 years and for chlorophyll-a for seven of the past 10 years.

"It definitely helps show that the work that we're doing is working, and that it's improving the watershed and the lake," said RPBCWD Board Manager Leslie Stovring, who worked for the city of Eden Prairie for 25 years before she joined the board. As the city's water resources coordinator, her duties included writing and overseeing lake management plans.

"The types of projects and the extent of projects that needed to be done, they cross boundaries. The city can't do it all. Having the watershed district there to work with and to help support these efforts and help pay for these efforts is definitely a benefit," Stovring said. "Getting the funding from the Clean Water Fund obviously helps with that."

The extra funding, she said, made it possible for the city to complete projects sooner, which helped to keep existing problems from exacerbating.

Three lakes within the district are poised for delisting: Lake Riley; Rice Marsh Lake; and Hyland Lake, impaired for aquatic recreation in 2008 because of excess nutrients. Hyland Lake's water quality improvements were not directly tied to BWSR Clean Water Funds.

Even as it celebrates the proposed delistings, the RPBCWD is looking ahead.

"We still keep working toward the goal of improving the water quality of all of our water bodies — including those that have been delisted," said RPBCWD Deputy District Administrator Liz Forbes.

Now, the RPBCWD is focused on Lake Susan, listed as impaired for aquatic recreation in 2010 because of excess nutrients. The most polluted of the lakes within the district that are ringed by houses, Lake Susan sends phosphorus downstream to Rice Marsh Lake and Lake Riley by way of Riley Creek, which flows to the Minnesota River.

Work could begin as early as fall 2027 on a proposed Riley Creek restoration project, extending 1.5 miles upstream from Lake Susan and addressing phosphorus-loading from the eroding creek plus untreated stormwater runoff. Jeffery said the creek is the largest external phosphorus contributor to Lake Susan that could be addressed within the scope of an efficient, well-defined project. The 2021 Upper Riley Creek Ecological Enhancement Plan estimated the Riley Creek channel stabilization would achieve about four times the 58-pound annual reduction goal identified in a 2013 Use Attainability Assessment.

The restoration would draw from Watershed-Based Implementation Funding (WBIF) from BWSR. The Minnesota Department of Natural Resources permit is in place.

The RPBCWD is considering the best approach to reduce a second source of external phosphorus loading: a wetland in Chanhassen created in the late 1980s on a former pasture site.

Also under consideration is an alum treatment, a final step in addressing Lake Susan's internal phosphorus loading. The carp population, once a large issue on Lake Susan, has been kept in check for 10-plus years via barriers restricting access to spawning areas in Rice Marsh Lake, where aeration and panfish stocking bolster that effort. (A carp barrier is also in place between Lake Susan Park Pond and the creek.)

The Riley Creek restoration and Lake Susan alum treatment would help to improve and protect the water quality of Lake Riley downstream. Meanwhile, Markle reflected on the water quality improvements to date:

"One of the joys of being a resident of Minnesota is we have the gift of having so much water. Knowing that our water is improved, so it's healthier and safer to recreate … it makes me happy to know that," Markle said. "I know there's probably a lot of challenges in a busy urban area, and all sorts of impacts on water. So I think it really shows great work and good partnership and collaboration to see these improvements."



"My goal is to keep it off the list and also to continue to improve the water quality of the lake."

— Leslie Stovring,
RPBCWD Board of Managers

Watershed-wide and supporting work

WATERSHED-WIDE PROPOSED DELISTINGS: Three lakes within the Riley Purgatory Bluff Creek Watershed District — Riley, Rice Marsh and Hyland — are proposed for removal from the state's impaired waters list. Two of those, Lake Riley and Rice Marsh Lake, saw water quality improvements directly tied to conservation work supported by Clean Water Funds from BWSR. U.S. Environmental Protection Agency approval finalizes the status.

SUPPORTING WORK FOR LAKE RILEY: The RPBCWD cited two other projects that greatly contributed to water quality improvements leading to Lake Riley's proposed delisting: the watershed's work with the city of Chanhassen to install a spent-lime filtration system, which filters phosphorus from the water before it enters Lake Susan; and the city of Chanhassen's work with Boy Scouts on a Lake Susan shoreline restoration.

BWSR staff members write and produce Snapshots, a monthly newsletter highlighting the work of the agency and its partners.