

Clean Water Fund delisting sampler







BWSR-backed water quality work with landowners, SWCDs and watersheds across Minnesota contributed to some of the proposed removals from the state's impaired waters list

lean Water
Funds from the
Minnesota Board
of Water and
Soil Resources (BWSR)
supported conservation
work that contributed to
some lakes, rivers and
streams earning a spot on
the list of waters slated to
be removed from the state's
impaired waters list in 2022.

The Minnesota Pollution Control Agency's (MPCA) proposed list of removals and additions includes 53 lakes, and segments of rivers and streams, slated for delisting.

U.S. Environmental

Protection Agency approval finalizes that status. The MPCA's initial draft noted 13 of the 53 could be directly tied to a particular restoration effort. The number directly attributed to restoration efforts likely will change as conservation staff respond to the draft.

Following are a few examples where Clean Water Funds from BWSR played a direct role in restoration work. Clean Water Fund grants require a match. Total project costs may draw from local, state and federal funding sources.

Pope Soil & Water Conservation District (SWCD) Manager Holly Kovarik, who serves on the Clean Water Council, considered the bigger picture that might unfold as more projects targeting impaired waters are implemented across the state: "The goal is to move that needle of progress towards improvement in our resources, and this is what we may see in the future, on a grander scale."

In Chisago County, the proposed delisting of School Lake, one of 20 in the Chisago Lakes Chain of Lakes, reflects increased communitywide awareness and lake stewardship — a cumulative effect of yearslong outreach on the part of Chisago SWCD and its partners, including the USDA's Natural Resources Conservation Service (NRCS), cities and lake associations.

School Lake's proposed delisting is not tied to a specific restoration effort.

Chisago SWCD Water Resource Specialist Casey Thiel said few grant-funded projects were completed directly on School Lake.



Top, from left: Birch Lake's water quality has improved as a result of Clean Water Fund-backed stormwater retrofits. **Photo Credit: Sherburne SWCD** An angler fished from the pier at Lily Lake in Stillwater. **Photo Credit:** Ann Wessel, BWSR A kayaker paddled on Sunfish Lake. **Photo Credit:** Lower Mississippi River WMO **Above:** Pelican Creek flows through Grant County to the Pomme de Terre River. **Photo Credit:** Grant SWCD

Communitywide projects included increased street sweeping and improved stormwater control.

"It's more mindset and behavior changes is what I think is happening there," Thiel said. "All of the lakes that we're actively working in are seeing improved water quality. That's kind of as good as it gets. It's a little bit better each year."

Sherburne County

Birch Lake, a 150-acre lake with a township boat launch and swimming beach, saw water quality improve as a result of five targeted stormwater retrofits installed from 2016 through 2018. A \$70,005 Clean Water Fund grant Sherburne SWCD received from BWSR in 2016 supported the Big Lake Township project, which keeps an estimated 10 pounds of phosphorus and 3,000 pounds of sediment out of the lake annually.

A 2013 accelerated implementation grant from BWSR allowed Sherburne SWCD staff to identify projects with the highest per-dollar pollutant reductions. Listed in 2006 as nutrient-impaired for aquatic recreation, Birch Lake had seen occasional late-summer algae blooms. But it was close to meeting water quality standards. The SWCD used local capacity dollars from BWSR to fund additional shoreline restorations.

"We realized meeting water quality standards was very much an achievable, feasible goal for us to work towards," said Dan Cibulka, Sherburne SWCD senior water resource specialist.

Sherburne SWCD detailed



Outlet Creek flows from Lake Minnewaska to Lake Emily in Pope County. **Photo Credit:** Pope SWCD

As more projects are being targeted in areas where these impaired waters are, this is a little bit of what is to come in the future as things get ramped up and implementation (continues) across the state.

— Holly Kovarik, Pope SWCD manager

its efforts in <u>an update</u>, released when four of the five grant-funded projects were complete.

Pope County

Outlet Creek, which flows from Lake Minnewaska across rolling farmland to Lake Emily southwest of Starbuck, was listed in 2012 as impaired for aquatic life. The creek lies within the Lake Emily watershed, the focus of four BWSR Clean Water Fund grants.

"As more projects are being targeted in areas where these impaired waters are, this is a little bit of what is to come in the future as things get ramped up and implementation (continues) across the state. There are a fair number that were on this list that are being delisted. That's the goal,"

Kovarik said.

A \$38,160 Clean Water Fund grant award in 2015 supported assessment and prioritization.

Implementation grants followed. Thirty-four of the 54 erosion control practices backed by a \$287,500 grant in 2016 directly affected Outlet Creek. All 27 water and sediment control basins backed by a \$162,500 grant in 2017 affect Outlet Creek. Those projects combined keep an estimated 2,237 tons of sediment and 2,565 pounds of phosphorus out of the creek annually.

The third phase of the Lake Emily watershed targeted implementation project is funded by a \$182,500 grant awarded in 2018. Three more projects are planned before that grant closes in April.

"You get a project accomplished that worked well, and it builds upon the next project," Kovarik said.

Washington County

Lily Lake, a picturesque 41-acre lake bordered by a Stillwater city park with a fishing pier and boat launch, achieved the phosphorus reductions necessary for delisting after a regional filtration basin was installed and a subsequent alum treatment completed in fall 2021.

The Middle St. Croix Watershed Management Organization (WMO) project drew from a \$513,500 Clean Water Fund grant — the fifth BWSR has awarded to the WMO since 2011. Previous projects achieved by working closely with the city of Stillwater — included commercial and residential stormwater retrofits, gully stabilizations and residential rain gardens. Combined, they'll reduce annual phosphorus-loading to the lake by about 145 pounds. Throughout the subwatershed Clean Water Funds have supported 19 rain gardens, three regional filtration basins, a gully stabilization, irrigation reuse project and the alum treatment.

"The Lily Lake delisting was a massive multi-year, multi-stakeholder project — both public and private — that took thousands of hours of collaboration and outreach to reach this point," said Bryan Pynn, Washington Conservation District watershed restoration specialist.

Lily Lake was listed as impaired for aquatic recreation in 2002. The WMO and city started work on water quality improvements in 2008.
MSCWMO Administrator
Matt Downing explained the final project.

Stearns County

Situated in downtown St. Cloud, surrounded by a park and encircled by a paved walking path, 8.5-acre Lake George draws paddlers and ice skaters. A free weekly summer music series attracts thousands. For two decades, the Stearns County SWCD and city of St. Cloud have worked together to improve water quality and clarity of the nutrient-impaired lake.

Early projects included 2002's shoreline naturalization and stabilization.

The most recent, backed by a \$697,000 Clean Water Fund grant the SWCD received in 2019, constructed an underground regional stormwater management structure in 2020. Designed to trap and remove sediment and nutrients from runoff before it enters the lake, it targets a 47-acre drainage area and will reduce phosphorus by an estimated 27 pounds and sediment by 7 tons a year.

Cumulative work by the SWCD and city of St. Cloud contributed to improved water clarity, from 5.8 feet in 2010 to nearly 10 feet in 2021. Find details in an MPCA article and on the city of St. Cloud's website.



The regional stormwater management structure supported by a Clean Water Fund grant is buried under this parking lot near Lake George in St. Cloud. The Stearns County SWCD project contributed to improved water quality.

Photo Credit: Stearns County SWCD

Dakota County

Sunfish Lake, a 47-acre water body in the small city of the same name. saw an estimated 80% reduction in internal phosphorus-loading, the result of an in-lake alum treatment supported by a \$196,000 Clean Water Fund grant. Treatment took place in 2017. BWSR awarded the grant to the Lower Mississippi River Watershed Management Organization (WMO) in 2016. The grant also covered a Lake Augusta alum treatment.

"This project is a really great example from start to finish of how state and local agencies can work together to get results," said Joe Barten, Lower Mississippi River WMO administrator.

The MPCA's Watershed Restoration and Protection Strategies (WRAPS) identified internal loading as the No. 1 source of phosphorus-loading, and identified the treatment. The WMO hired a contractor and kept residents informed. A few residents went doorto-door to contact fellow lakeshore property owners.

"The residents that lived on the lake provided the matching funds," Barten said.

Read more in an MPCA article.

Grant County

From the Grant County line near Ashby, the delisted segment of Pelican Creek flows southwest, skirting Pelican Lake and meandering across farmland to the Pomme de Terre River.

Grant SWCD's conservation work in the area dates to the 1970s. The Pelican Creek subwatershed is a focus of the current Pomme de Terre River Comprehensive Watershed Management Plan.

A fenced cattle exclusion on 10 acres adjacent to the creek, and another landowner's five water and sediment control basins directly affecting the creek drew from Clean Water Fund grants awarded to the Pomme de Terre River Association Joint Powers Organization (JPO) in 2012 and 2014. The JPO is the fiscal agent; SWCDs approve grantfunded projects.

In 2012 the creek was listed as impaired for aquatic life.

"Essentially that is an indicator of everything upstream, and some of our biggest recreational lakes in the county are there, Pelican Lake being one. That's an indicator of what's going on in that lake," said Jared House, Grant SWCD administrative manager. "Additionally, this creek is a conduit to the Pomme de Terre River, which is a huge recreational river for fishing and kayaking."

