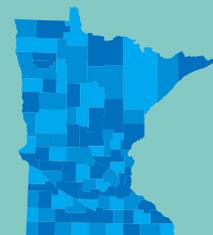


September 2022

# Watershed Achievements Report Fiscal Year 2021

A description of the projects funded by federal Clean Water Act Section 319 grants and Clean Water Partnership loans.



## **Authors**

Chris Lundeen  
Bryan Spindler  
Ashley Ignatius  
Celine Lyman  
Cindy Osborn

## **Contributors/acknowledgements**

Kristin Dieterman  
Emily Zanon

## **Cover photo**

Gully inspections from the FFY 2015 Section 319  
St. Croix Implementation Project final report

## **Minnesota Pollution Control Agency**

520 Lafayette Road North | Saint Paul, MN 55155-4194 |

651-296-6300 | 800-657-3864 | Or use your preferred relay service. | [Info.pca@state.mn.us](mailto:Info.pca@state.mn.us)

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**Document number:** wq-cwp8-25

# Contents

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<b>Contents</b> .....	<b>ii</b>
<b>Executive summary</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>1</b>
Clean Water Partnership and Section 319 Programs .....	1
Watershed Program Accomplishments –2021.....	2
Protecting and restoring Minnesota’s waters for generations to come .....	3
Additional values applied to watershed work.....	4
<b>Successes: A year in review</b> .....	<b>5</b>
Snake River Watershed is resilient, allowing sensitive species to thrive .....	5
Farmers are getting down to earth about soil health .....	7
What is healthy soil? .....	8
Farm-city collaboration helps Waverly Lake .....	9
<b>NPS pollutant reductions and best management practices</b> .....	<b>10</b>
Healthier watersheds .....	10
<b>NPS pollution implementation funding at MPCA</b> .....	<b>14</b>
Section 319 Program .....	14
CWP loans.....	16
<b>Lower Mississippi River Basin</b> .....	<b>17</b>
Newly awarded projects in the Lower Mississippi River Basin .....	17
Completed projects in the Lower Mississippi River Basin .....	18
Active projects in the Lower Mississippi River Basin.....	18
<b>Minnesota River Basin</b> .....	<b>19</b>
Newly awarded projects in the Minnesota River Basin .....	20
Completed projects in the Minnesota River Basin.....	22
Active projects in the Minnesota River Basin.....	25
<b>Des Moines and Missouri River Basins</b> .....	<b>28</b>
Newly awarded projects in the Des Moines and Missouri River Basins .....	28
Completed projects in the Des Moines and Missouri River Basins .....	29
Active projects in the Des Moines and Missouri River Basins.....	29
<b>Lake Superior Basin</b> .....	<b>31</b>
Newly awarded projects in the Lake Superior Basin .....	31
Completed projects in the Lake Superior Basin .....	32
Active projects in the Lake Superior Basin .....	32
<b>Rainy River Basin</b> .....	<b>33</b>

Newly awarded projects in the Rainy River Basin .....	34
Completed projects in the Rainy River Basin .....	34
Active projects in the Rainy River Basin .....	34
<b>Red River Basin .....</b>	<b>35</b>
Newly awarded projects in the Red River Basin.....	36
Completed projects in the Red River Basin .....	37
Active projects in the Red River Basin.....	37
<b>Saint Croix River Basin .....</b>	<b>38</b>
Newly awarded projects in the Saint Croix River Basin.....	39
Completed projects in the Saint Croix River Basin .....	39
Active projects in the Saint Croix River Basin.....	40
<b>Upper Mississippi River Basin.....</b>	<b>43</b>
Newly awarded projects in the Upper Mississippi River Basin .....	43
Completed projects in the Upper Mississippi River Basin.....	45
Active projects in the Upper Mississippi River Basin.....	45
<b>Cedar River Basin .....</b>	<b>48</b>
Newly awarded projects in the Cedar River Basin .....	48
Completed projects in the Cedar River Basin.....	48
Active projects in the Cedar River Basin .....	48
<b>Projects spanning multiple basins .....</b>	<b>49</b>
Newly awarded projects in multiple basins .....	49
Completed projects in multiple basins.....	50
Active projects in multiple basins.....	50
<b>Appendix A. Goals, milestones and strategies .....</b>	<b>52</b>
<b>Appendix B. Minnesota Water PPG Work Plan • FFY 2021 Report .....</b>	<b>61</b>

# Executive summary

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The Minnesota Pollution Control Agency (MPCA) has two funding sources for local governments for implementation of best management practices (BMPs) to restore and protect Minnesota's waters. There are the federal Clean Water Act Section 319 (Section 319) funds and the Clean Water Partnership (CWP) funds. The governing statute for the CWP is [Minn. Stat. 103F.700](#) and the rules governing the disbursement are in [Minn. R. 7076](#). Further prioritization and Minnesota's goals are described in the [Nonpoint Source Management Program Plan](#) (NSPMP).

The projects reported in the fiscal year (FY) 2021 Watershed Achievement Report were awarded between 2016 and 2021. The state FY 2021 began July 1, 2020 and ended June 30, 2021. This report will describe the projects completed, newly awarded, and underway and funded with Section 319 and CWP loans by river basin. Each of the projects will contribute to the reduction of pollution loading in an effort to improve Minnesota's water quality. Section 319 projects awarded in federal fiscal year (FFY) 2021 (the FFY 2021 began October 1, 2020 and ended September 30, 2021) are not included due to the timing of this report and the execution of the grant agreements. Until all grant agreements for funds awarded under a request for proposal are fully executed, much of the information is considered not public. Grant agreements for the federal fiscal year are usually fully executed late in the year.

The Section 319 grant program is a federally funded program to address nonpoint source (NPS) pollution. Until 2020, the projects were awarded on a project-by-project, competitive basis. The grant award gave local governments the ability to work over four-years to complete the project. Each grantee is required to provide a match of at least 40% of the total project cost using state or local funds. In addition to providing pass through grant dollars, the U.S. Environmental Protection Agency (EPA) provides Minnesota with an equal amount of program dollars which fund program activities to address NPS pollution. These funds pay for staff to monitor, research, and develop products such as total maximum daily loads (TMDL) and watershed restoration and protection strategies (WRAPS). Beginning in FFY 2022, the Section 319 grants will be awarded to the prioritized watersheds in each group by sole-source awarding process.

The Section 319 grant program began the transition to the Section 319 Small Watershed Program in 2017. The EPA requirements changed in 2014 to include a more focused and detailed approach. The MPCA approaches watershed planning on a hydrological unit code (HUC) 8 scale. This allows the local governments to target their own priorities and develop implementation plans specific to their locality. The EPA requirements are a formalized version of this narrowing and focusing that is being done on the local level. The EPA requires that these plans are formalized with very detailed plans called nine key element (NKE) plans, which are described fully in the [Handbook for Developing Watershed Plans to Restore and Protect our Waters](#). The Focus Watersheds will be prioritized for funding in FFY 2020 and will be included in the 2021 Watersheds Achievement Report.

FFY 2016 319 projects experienced delays due to Covid-19. EPA allowed extensions to 2021 to support watershed organizations an opportunity to complete their work.

The Clean Water Partnership program was originally a loan and grant program. In 2015, the Minnesota legislature stopped funding the grant program, but the loan program remained active. CWP funds are loaned to local units of government (LGU) at zero interest. The LGUs can apply for funding at any point throughout the year and use the funding to implement projects, create a loan or grant program for their residents, purchase equipment or easements, or educate and engage the citizens in taking action to protect and improve water quality. The loan funds are initially available for a three-year implementation period, with an optional extension to a fourth year. The CWP Loan funds are then paid back over a 10-

year period. At no point do the funds accrue interest. Matching the funds is optional for borrowers. Although many entities do provide match activities for the loans, such as administration of their programs and outreach, not all organizations choose to report matching funds. It is important to note that whether or not reported, some match and investment occurs with all program participants.

The estimated reductions associated with Section 319 and CWP loan projects are summarized in Table 1. It is important to note, no newly awarded projects or projects that are currently under way are included in this estimate. Some projects do not directly yield reductions but may include civic engagement or demonstration elements to help further the NPS work in Minnesota.

**Table 1. Summary of estimated reductions achieved with Section 319 grant and CWP loan projects completed in FY 2021**

<b>Basin</b>	<b>Total</b>
<b>P (lbs/yr)</b>	1,959
<b>TSS (t/yr)</b>	1,192
<b>N (lbs/yr)</b>	487
<b>Soil loss (t/yr)</b>	NA
<b>BOD (lbs/yr)</b>	6,367
<b>Bacteria (cfu/yr)</b>	8.28E+14
<b>Debris (t/yr)</b>	NA
<b>Biomass (t/yr)</b>	NA

# Introduction

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Minnesota's water resources are treasured by its citizens for the beneficial uses they provide including recreation, drinking water, aquatic life, industrial and agricultural uses. With more than 10,000 lakes, 100,000 river and stream miles, and extensive groundwater systems, water is a major part of Minnesota's culture, economy, and natural ecosystems.

Two programs provide local governments with resources to restore and protect surface water, with a special focus on NPS pollution. The MPCA relies on the Section 319 to provide funding for efforts to reduce nonpoint sources of pollution. The second source, the CWP loan program provides low interest loans to local units of government for BMPs, which reduce nonpoint source water pollution in local areas. The Watershed Achievements Report is an annual report on the efforts supported by these funding resources and the state's progress for reducing NPS pollution. This report describes the newly awarded, active and final nonpoint source projects for statewide and watershed-based projects.

Some watershed work by the agency and our state and local partners was delayed in 2020 and 2021 due to the challenges of the pandemic. Project monitoring work was curtailed and the Intensive Watershed Monitoring (IWM) schedule was delayed. This report is for activities through June 30, 2021.

## Clean Water Partnership and Section 319 Programs

The MPCA provides financial and technical assistance to local government and other water resource managers to address nonpoint-source water pollution through the state CWP and Section 319 programs.

### Section 319 Grant Program Small Watersheds Focus

MPCA developed a [Section 319 Small Watersheds Focus Program](#) in partnership with local governments to support comprehensive nonpoint source implementation on small-scale watersheds for WRAPS. The EPA shifted their focus to geographically smaller and longer-term watershed projects, based on watershed-based plans meeting the requirements of the [EPA Handbook for Developing Watershed Based Plans](#). These watershed-based plans called nine element (NKE) plans build upon existing local water plans and state reports.

**Small Watersheds program:** The Clean Water Act Section 319 program shift to focus on small watersheds was done in order to prioritize and target specific areas of the state to increase the benefits of implementation and affect measurable differences in water quality.

**Focus Watersheds:** Watersheds are selected to participate in the 319 Small Watersheds Focus Program and receive priority funding from the Section 319 grant program. These watersheds will meet state and local priorities.

The MPCA passes through approximately \$2.8 million in Section 319 grants annually to local governments and organizations to implement BMPs and adopt strategies to mitigate NPS pollution. Funding for the selected Focus Watersheds will continue in subsequent years for implementation projects. The goal of the Small Watersheds Program is to achieve the water quality objectives in the selected watersheds.

### Clean Water Partnership loan program

The [CWP loan program](#) helps restore water quality in lakes and streams across Minnesota. Administered by the MPCA, the zero-interest loans go to local partners and tribal nations for projects that reduce nonpoint source pollution from diffuse sources such as failing septic systems and cropland runoff.

**Figure 1. Clean Water Partnership loans reducing water pollution, one project at a time**



Some examples:

Improving on-site sewer systems in Itasca County to reduce sources of bacteria.

Removing water softeners — which are sources of chloride pollution — in the city of Lakefield.

Reducing nitrogen risks to drinking water wells in Rock County.

## Flexible loan options

First tier loans are provided for local governments to build projects.

Second tier loans allow local entities to make loans to landowners and other stakeholders.

The funds can be used for any non-point BMPs, including wellhead protection, inflow and infiltration (residential laterals), green infrastructure, SSTS upgrade/replacements, wetland or stream restorations, and many more!

## Celebrating successes

As of August 2020, 332 CWP loan projects have constructed \$84.7M of BMPs.

## Watershed Program accomplishments –2021

### Clean water accountability reporting

Minnesota’s Clean Water Legacy Act requires that MPCA report actions taken in Minnesota’s watersheds to meet water-quality goals and milestones (Minn. Stat. 114D.26, subd. 2). This accountability reporting is required every two years, though updates to these reports will occur annually by July of each year.

[Healthier watersheds: Tracking the actions taken](#)

### What is in the reports?



WRAPS approval status

TMDLs approved

Wastewater treatment plant pollution reduction progress

Nonpoint BMPs in all subwatersheds

Funding (federal, state, local, point/nonpoint) by watershed

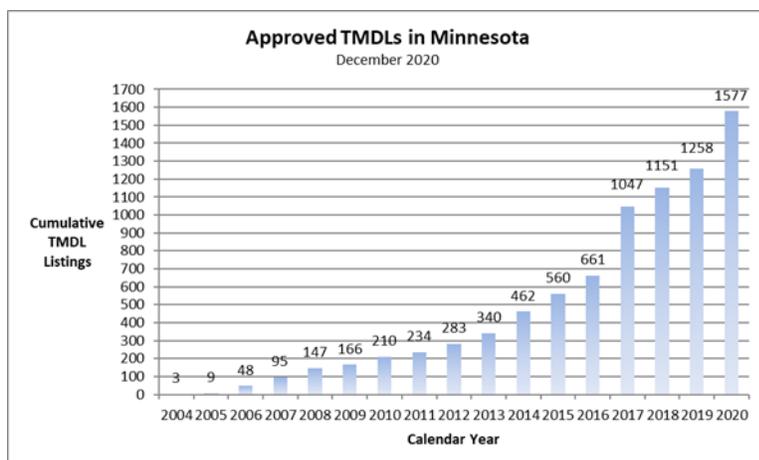
## Minnesota's Watershed approach

All 80 watersheds in Minnesota have restoration and protection strategy projects underway. Strategy plans have been completed for 69 of the 80 watersheds (86%) and more are on track for completion this year. More information is on this web page [MPCA watershed approach](#).

## Approved TMDLs

Minnesota continues to make progress in completing Total Maximum Daily Load (TMDL) studies for impaired waters in the state as part of our watershed approach. EPA approved TMDLs for 319 impairments on Minnesota's Section 303(d) List in the year 2020. An additional 137 TMDLs have been approved as of August 2021. Minnesota is meeting the priority goals for EPA's Long-term Vision process, with 98% of our TMDL priorities completed so far and the remaining impairments scheduled to be done in the next year. We are beginning discussions on TMDL priorities for EPA's Vision 2.0 and meeting with our state and local partners for their input.

Figure 2. Cumulative approved TMDL listings in Minnesota for the years 2004-2020



## 2021 Clean water fund performance report

Minnesota agencies released their fifth collaborative [report](#) in February 2020 to help Minnesotans clarify connections between Clean Water funds invested, actions taken and outcomes achieved. Measures in the report provide a snapshot of how Clean Water Fund dollars are being spent and what progress has been made. The measures are organized into four categories: investment, surface water quality, drinking water protection, and external drivers and social measures. Each measure has detailed status ranking and trend information.

## Protecting and restoring Minnesota's waters for generations to come

Minnesotans value clean, safe, and abundant water. In 2008, Minnesota residents voted for the Clean Water Land and Legacy Amendment, increasing their own sales tax and making a strong commitment to clean water in Minnesota. Here are some accomplishments since the amendment passed:

All major watersheds in Minnesota have been assessed. We now know the clean water challenges we face.

We have restored water quality in 50 lakes and streams. We are beginning to turn the tide.

Vulnerable municipal water systems are engaged in protecting their source water.

Over 30,000 private wells in 50 counties have been tested for nitrate.

500,000 acres on almost 800 farms now meet agricultural water quality certification standards.

The average use of water per person in Minnesota is down by 20% over the last eight years. Municipal wastewater treatment upgrades have reduced phosphorus discharges by over 139,000 pounds per year.

**Additional values applied to watershed work**

[Climate resiliency](#) is an important consideration for our watershed work, along with promoting [environmental justice](#) and equity. Minnesota’s approach to climate change that spans all state agencies is found at <https://climate.state.mn.us/>. The MPCA is focusing on both resiliency and equity as part of the agency’s overall goals. We will include these considerations in the future as watershed projects are selected and funded.

# Successes: A year in review

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## Snake River Watershed is resilient, allowing sensitive species to thrive

Figure 3. MPCA monitoring crews take water samples in the Snake River to test water quality in the second round of monitoring for this watershed



Stakeholders in the Snake River Watershed north of the Twin Cities have preserved several natural areas that provide built-in resiliency to climate change, allowing sensitive species of fish to thrive, according to a recent report by the Minnesota Pollution Control Agency (MPCA).

Heavy rain events often mean bad news for lakes, rivers, and streams as storms can easily lead to flooding and erosion that negatively impact water quality and aquatic life. A body of water is considered “impaired” if it fails to meet one or more water quality standards. The MPCA determines how much of a pollutant, such as bacteria or nutrients, can be in water before it is no longer drinkable, swimmable, fishable, or useable in other, designated ways. But when a watershed's natural area remain intact, where land hasn't been developed for agriculture or urban purposes, it can better handle major rain events. The landscape can absorb water with little to no impact on water quality or aquatic life.

Scientists consider this “resiliency,” and what’s happening in the Snake River Watershed as a great example of how to protect Minnesota waters from climate change. Climate change has led to unprecedented rainfalls, hailstorms, tornadoes, and droughts causing billions of dollars of damage. As the climate continues to warm, spring rainfall and annual precipitation are expected to increase, and rainstorms are likely to intensify and occur more frequently. These factors further increase the risk of flooding in Minnesota.

**Figure 4. MPCA monitoring crews found northern hogsucker, a species sensitive to pollution, while sampling the Snake River**



In 2017 and 2018, the Snake River Watershed-St. Croix River Basin, which covers more than 1,000 square miles stretching across six counties, several intense rain events led to flooding in the area. But intact wetlands, access to floodplains, and intact riparian land all helped preserve this watershed from erosion and soil runoff. Despite changes in land use and increased urban development,

many of this watershed's natural areas remain untouched and stable, helping to prevent additional impairments.

The MPCA first studied the Snake River Watershed in 2006. Scientists conducted a second cycle of intensive water monitoring in 2017-2018, which found that generally lakes and streams in this watershed remain in good condition, though there is some room for improvement and these waters must be preserved and protected to prevent future impairments.

Good water quality allows fish species that are sensitive to contaminants to thrive. During the latest round of monitoring, MPCA's crew captured a lake sturgeon, a sensitive species of concern in Minnesota — a good indication that the population is reproducing and well established in the river. Monitoring crews found a variety of other sensitive species in the watershed, including northern hogsuckers and southern brook lamprey.

Learn more about this watershed, the MPCA's water quality findings, and the continued work to preserve these waters on the [Snake River Watershed-St. Croix River Basin](#) webpage and our latest water quality report.

## Farmers are getting down to earth about soil health

Figure 5. Inaugural soil health team meeting in Morris, Minnesota (Photo: Andy Albertsen, Swift County Soil and Water Conservation District)



With all the talk about health these days, if you really want to get down to earth about it, consider the health of the soil beneath your feet.

Increasing numbers of farmers are doing just that, improving soil health to help keep cropland productive, providing environmental benefits for water quality, and even addressing climate change.

In the Morris and Appleton areas of western Minnesota, about a dozen farmers have teamed up to learn about improving

soil health, and finding ways to do it. Their effort fits in with recent scientific studies about water quality in the [Pomme de Terre River Watershed](#), and cooperation among the six counties it touches.

Figure 6. Soil health team field day, Sept. 9, 2020 north of Appleton. Examining a strip till machine. (Photo: Micayla Lakey, Pomme de Terre River Association)



An MPCA report on the last half of more than 20 years of water quality monitoring in the Pomme de Terre Watershed notes little change in water quality. However, climate change portends rising temperature and flows, which could detract from water quality.

“Increased rainfall and temperature can worsen existing water quality problems. More precipitation and reduced snow cover can increase soil erosion, pollutant runoff, and streamflows,” says the MPCA report.

Flows in the Pomme de Terre River and its tributaries are increasing as a result of both

artificial drainage and increased precipitation. Increasing streamflow can create more channel erosion and possibly more pollutant loading, even if pollutant concentrations are stable. Nitrate-nitrogen showed a statistically significant change, increasing about 11% each year.

That’s where conservation practices and improving soil health come in.

“Landowners have installed hundreds of best management practices to improve water quality, but many more are needed,” according to the [Pomme de Terre River Watershed water assessment and trend update](#). The report feeds into a watershed plan generated by the six counties working with their Soil and Water Conservation Districts and the Minnesota Board of Soil and Water Resources.

This past year, the [Pomme de Terre River Association](#) Soil Health Team has met three times, and held a field day to share information about soil health, techniques, view equipment, and funding. Almost as important, they find support to take risks in a field facing many challenges, from equipment costs to social acceptance.

“It’s a slow process,” says Paul Groneberg, a farmer, crop consultant, and soil health team member. “Change comes hard, and mentoring is a big thing. One of the biggest benefits of the team is the interchange of ideas.”

“We are encouraged by the initiative shown by these farmers, to address the issue on their own,” says Andy Albertsen, manager of the Swift County Soil and Water Conservation District. “We are there to help with technical and financial resources.” What is healthy soil?

**Figure 7. Soil health team field day, Sept. 9, 2020 north of Appleton. At a soil pit discovering the difference in smell of soil with high vs. low microbial activity. Photo: Andy Albertsen, Swift County Soil and Water Conservation District**



“Soil is like any living thing, the more you feed, protect and nurture it, the more productive it can become,” says Wayne Cords, MPCA South Section Watershed Manager and also a farmer. “Fail to do these things and it withers and dies, much like a plant that does not receive water and nutrients.”

The real ‘dirt’ on soil is that it’s alive with countless microbes essential for a healthy, productive landscape. One teaspoon of healthy soil is said to contain more than a billion microbes – bacteria, fungi, and protozoa, not to mention earthworms and other nematodes.

“One of our main objectives is to get more education and more farmers involved,” Groneberg says. Later this fall or winter a video from a Sept. 9 field day will be posted on the University of Minnesota-Extension web page.

With climate change clearly occurring, Groneberg says reduced-tillage practices, cover crops, and other soil health practices will help by improving infiltration. More vegetation can help sequester carbon.

“These soil health practices that are already being implemented have a positive cascading effect,” says Albertsen. “Every acre matters, and these producers continue to learn and adapt to changing conditions each spring and fall. They are creative, persistent and amazing problem solvers.”

An [MPCA report](#) estimates the impact of 21 different agriculture best practices on greenhouse gas emissions. For example, grass buffers can reduce greenhouse gas emission by as much as 0.77 tons per acre, according to the report.

Along with education and support, financial incentives can help make the change from conventional to a soil health conservation system. Initially, the change-over involves two sets of equipment, Groneberg says, and “cost-share does help.” However, once the new system is established there could be less cost. “It’s important to measure net return per acre, and not just yield.”

## Farm-city collaboration helps Waverly Lake

Figure 8. Earth movers were used to build a berm for a water and sediment control basin



Water quality in Waverly Lake, 35 miles west of the Twin Cities in Wright County, has improved due to a collaborative effort of lake shore residents, the City of Waverly, the Wright Soil and Water Conservation District (SWCD), and surrounding rural landowners. They worked together on water quality projects that helped remove the lake from the state's impaired waters list.

The 485-acre Waverly Lake borders the city of Waverly to the south and is surrounded by farms, cabins, and homes. In 2008, it was added to the impaired waters list due to excessive nutrients, primarily phosphorus, which feeds algae growth and degrades water quality. Minnesota waters are considered "impaired" if they fail to meet water quality standards.

Several years ago, the Waverly Lake Association approached the Wright SWCD for help addressing the nutrient pollution. "The Lake Association was organized, farmers were willing to help, and the city was on board," says Dan Nadeau of the Wright SWCD. "This is a good city and farm partnership."

The city maintains a recently updated wastewater treatment system that protects water quality. In addition, lake residents addressed shoreland issues and farmers installed projects to limit soil erosion. Other projects included upgrading a lake-wide sewer system and restoring shoreline at city-owned Legion Memorial Park.

Ten years of monitoring since 2008 show improvements that coincided with septic-system updates and erosion control efforts in the area. Two farmers on the north side of the lake installed seven water and sediment control basins.

The cost of erosion control projects were covered primarily by funds from the Minnesota Board of Water and Soil Resources, through the SWCD and Wright County, and a local match from Waverly Lake Association and the City of Waverly.

Lake Association President Mary Ellen Nichols, says "We are thankful for our many partners, including lakeshore owners, farmers, the city of Waverly, and Wright SWCD. We share a common goal to preserve, protect, and improve our beautiful Waverly Lake for current and future generations."

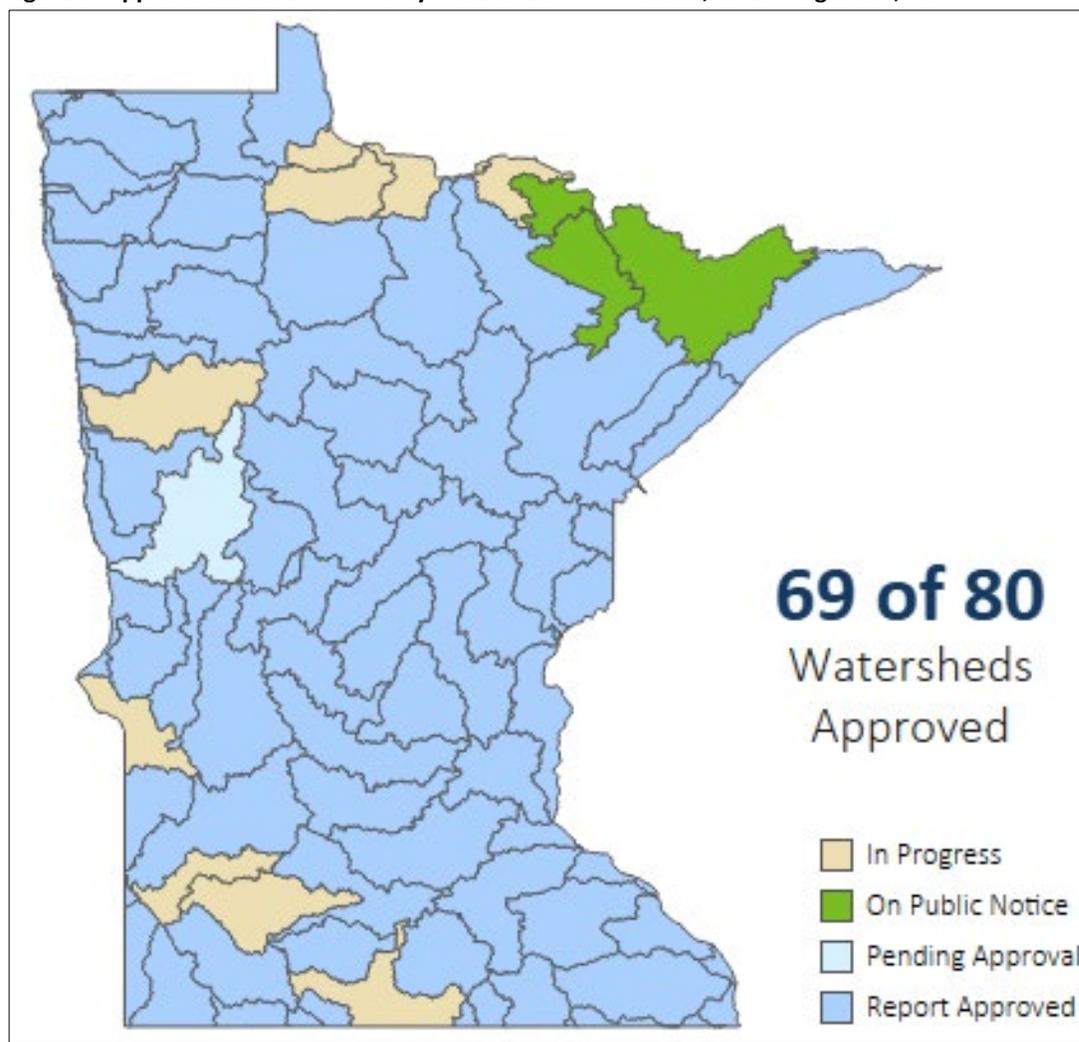
# NPS pollutant reductions and best management practices

The healthier watersheds webpage (<https://www.pca.state.mn.us/water/healthier-watersheds>) was developed to track the spending of Clean Water Funds in Minnesota. Not all of the information tracked has to do with NPS pollution; however, the WRAPS, TMDL status, and BMPs implemented by watershed are related to NPS work. Data for the BMPs is collected by self-reported reporting of implementation of those receiving NPS funds. This information is provided by various government agencies, including NRCS (EQIP, CSP, ACEP, WRP) and FSA (CRP) at the federal level, and BWSR (easements and CWF grants), MDA (AgBMP, MAWQCP), and MPCA (319, CWP) reporting state administered NPS programs.

## Healthier watersheds

Progress toward approving WRAPS (Figure 9) can be tracked at <https://www.pca.state.mn.us/water/watershed-restoration-and-protection-strategy-status>.

Figure 9. Approval status of WRAPS by watershed in Minnesota, taken August 31, 2021



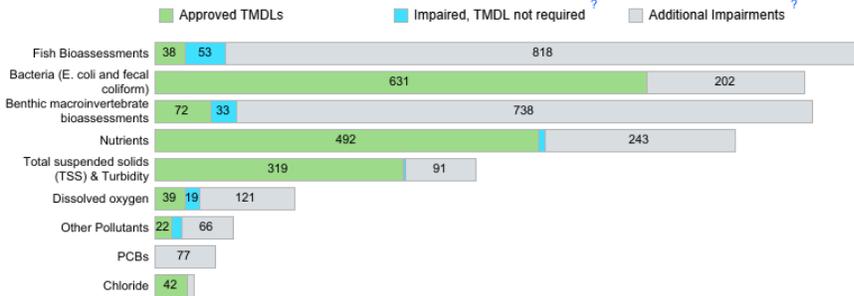
TMDL status (Figure 10) can be found at <https://www.pca.state.mn.us/water/tmdl-status>.

Figure 10. TMDL status, taken August 31, 2021

Showing data for: **All Minnesota watersheds**

### Total Maximum Daily Load (TMDL) approval status

The information below tracks the MPCA's efforts to develop TMDLs on all impaired waterbodies on the 2020 Impaired Waters List. TMDLs are approved by the U.S. Environmental Protection Agency and set pollutant reduction goals that help target implementation strategies and actions to r..



**Filter by geography**

**Watershed**  
All

**Subwatershed**  
All

**County**  
All

**Legislative district (Senate, House)**  
All

**Waterbody (ID or Name)**  
All

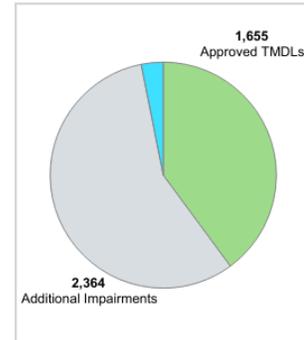
**Include mercury TMDLs?**  
 Yes  
 No

[Reset Filters](#)

### List of impaired waters and TMDL status

County	Waterbody ID	Waterbody	Pollutant/Stressor	First Listed	TMDL Status	View data
Aitkin	07030004-552	Bear Creek	Benthic macroinvertebrates bi..	2020	Planned, 2021	
	pH		2008	Planned, 2021		
	58-0138-00	Big Pine Lake	Nutrients	2020	Planned, 2020	
	01-0062-00	Big Sandy Lake	Nutrients	2002	TMDL Approved, 2011	<a href="#">Link</a>
	01-0188-00	Blind Lake	Nutrients	2010	Planned, 2020	
	07010207-554	Borden Creek	Dissolved oxygen	2010	Planned, 2027	
	01-0123-00	Elm Island Lake	Fish bioassessments	2020	Planned, 2020	
			Nutrients	2010	TMDL Approved, 2020	<a href="#">Link</a>
	01-0147-00	Esquagamah Lake	Nutrients	2010	Planned, 2020	
	01-0105-00	Fleming Lake	Nutrients	2010	TMDL Approved, 2020	<a href="#">Link</a>
	01-0099-00	Gun Lake	Nutrients	2010	TMDL Approved, 2020	<a href="#">Link</a>
	01-0034-00	Horseshoe Lake	Nutrients	2010	TMDL Approved, 2019	<a href="#">Link</a>
	07010104-701	Little Willow River Old Cha..	Fish bioassessments	2020	Not Required	
	07010103-518	Minnewawa Creek	Benthic macroinvertebrates bi..	2018	Not Required	
			Fish bioassessments	2018	Not Required	
	07010103-519	Minnewawa Creek	Fish bioassessments	2018	Planned, 2029	
	01-0033-00	Minnewawa Lake	Nutrients	2002	TMDL Approved, 2011	<a href="#">Link</a>
	07010103-708	Mississippi River	Total suspended solids (TSS)	2016	TMDL Approved, 2020	<a href="#">Link</a>
07010104-655	Mississippi River	Turbidity	1998	TMDL Approved, 2020	<a href="#">Link</a>	

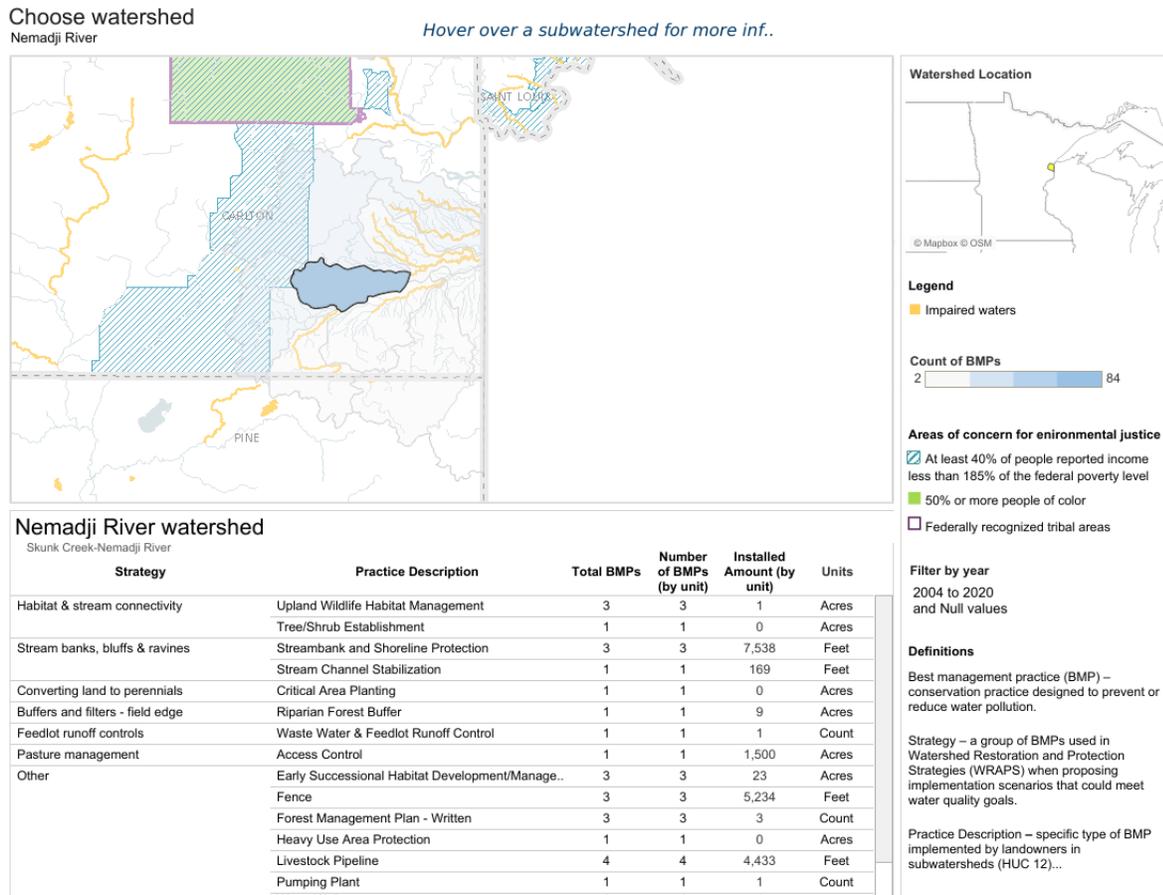
Updated:



[About this data](#)

Best management practices implemented by watershed (Figure 11) can be found <https://www.pca.state.mn.us/water/best-management-practices-implemented-watershed>.

**Figure 11. BMPs by watershed, Skunk Creek (Nemadji River) taken August 31, 2021**



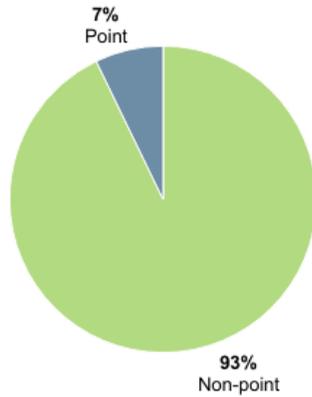
[About this data](#)

Implementation spending for watershed implementation projects are described <https://www.pca.state.mn.us/water/spending-watershed-implementation-projects>. This describes spending related to state and federally funded programs. Does not include all government spending or private spending for stormwater and other clean water projects.

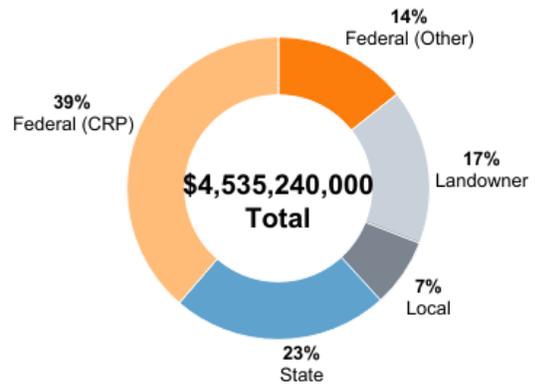
Figure 12. Spending in all watersheds within all counties in Minnesota, taken on August 31, 2021

All watersheds within all counties

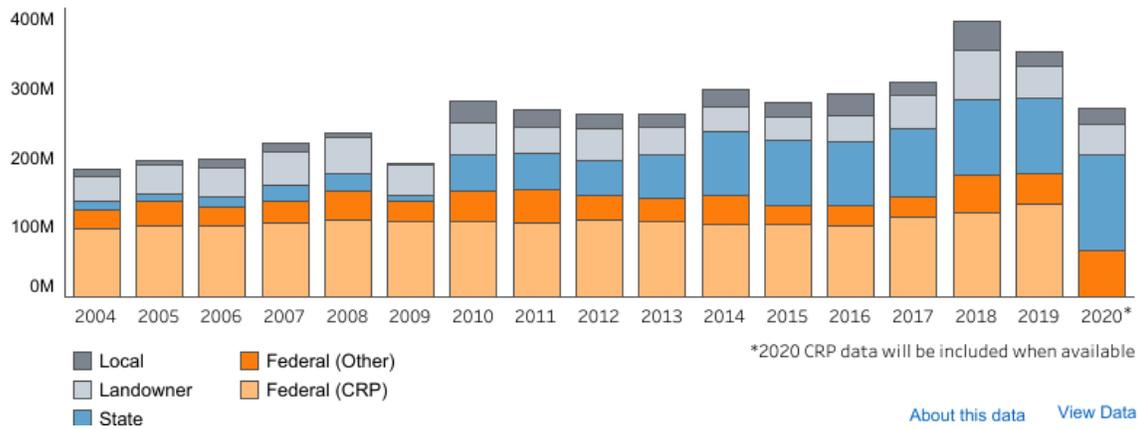
Spending by **pollution type**



Spending by **funding source**



Spending by **year**



# NPS pollution implementation funding at MPCA

Most of the implementation funding to address NPS pollution in Minnesota is administered by the Minnesota Board of Soil and Water (BWSR). A description of these grant programs can be found at <http://bwsr.state.mn.us/grants>. Funds are awarded, based on program requirements, as competitive and noncompetitive grants, as well as watershed based funding.

## Section 319 Program

### Section 319 Small Watershed Focus Program

Section 319 Grant Program Changes – Small Watersheds Focus MPCA developed the Section 319 Small Watersheds Focus Program in partnership with small watersheds to develop a long-term roadmap to support comprehensive nonpoint source implementation on a small-scale watershed. To date, 30 small watersheds selected for prioritized funding, 10 each for prioritization for funding in 2020, 2021, and 2022. In 2021, the small watersheds for Group D, to be prioritized for funding in 2023, will be selected.

The selections are part of the transition in the federal Clean Water Act Section 319 Program from one-time grants to more reliable funding focused on small watersheds. The goal of the program is to help local governments make measureable changes toward water quality improvements. Based on input from many local governments, the program is designed to provide a reliable and longer-term funding source to address all pollutants in small watersheds.

**Table 2. Focus Watersheds and the years they are prioritized for funding**

Prioritization group	Group A	Group B	Group C	Group D
Funding years	2020, 24, 28, 32	2021, 25, 29, 33	2022, 26, 30, 34	2023, 27, 31, 35
Prioritized watersheds	Fairmont Chain of Lakes and Dutch Creek (Blue Earth River)	Big Sandy Chain of Lakes	Rat Root River (Rainy River)	TBD
	Dobbins Creek (Cedar River)	Brown’s Creek (St. Croix River)	Cascade Creek (Zumbro River)	TBD
	Plum Creek (Redwood River)	Como Lake (Mississippi River-Twin Cities)	Comfort Lake/Forest Lake Chain (St. Croix River)	TBD
	Upper Hawk Creek and Wilmar Chain of Lakes (Minnesota-Yellow Medicine)	Coon Creek (Mississippi River-Twin Cities)	Amity Creek (St. Louis River)	TBD
	Sand Creek (Lower Minnesota)	Rice Creek (Le Sueur River)	Pelican Lake (Lake Superior)	TBD
	Black River and Red Lake River-Thief River Falls to Crookston	South Heron Lake (Des Moines)	Cook SWCD – TBD	TBD
	Skunk Creek (Nemadji River)	Twelvemile Creek (North Fork Crow River)	Campbell Creek (Otter Tail River)	TBD

Prioritization group	Group A	Group B	Group C	Group D
	Whiskey Creek (Red River of the North)	Tamarack, Birch, and Wilkinson Lakes (Vadnais Lake)	Tributary to the Redeye River	TBD
	Green Lake (Rum River)	West Indian Creek (Zumbro River)	Rice Lake (North Fork Crow River)	TBD
	Pipestone, Split Rock and Mound Creeks (Big Sioux and Rock Rivers)	Whitefish Chain of Lakes (Pine River)	Skunk Creek (Lake Superior)	TBD

There have been 41, 34, and 31 declarations of interests from local governments to participate in Groups A, B, and C, respectively. The MPCA conducted telephone interviews with all applicants each year. These candidates were narrowed down further, and three-hour interviews were conducted. The agency then chose ten watersheds for funding based on criteria such as state priorities and collaboration, along with input from the BWSR. The MPCA will choose an additional group of watersheds for prioritized funding in 2023 in spring 2022.

## Environmental Performance Partnership Grant

The MPCA will requested \$2,668,650 in technical (program) funds from the EPA for FFY 2021 as part of a larger grant agreement that funds multiple programs at the MPCA. Section 319 is the funding source for a portion of that agreement.

The MPCA has entered into an Environmental Performance Partnership Agreement (EnPPA) with the EPA Region 5. This is a multi-year agreement that specifies how the two agencies will jointly protect Minnesota’s environment. The EnPPA uses the Performance Partnership Grant (PPG) workplan template to detail tasks or work commitments from the states. On October 1, 2016, the MPCA and EPA Region 5 entered into a new four-year agreement. This agreement includes air quality permits, mining permits, and the Minnesota Watershed Approach and the Section 319 grants program. For the purposes of this report, only the Section 319 funding will be discussed.

The Performance Partnership Agreement (PPA) is an extension of the MPCA’s Strategic Plan and the EPA’s Regional Plan. In Minnesota, there are 80 HUC8 watersheds. In a ten-year period, all 80 HUC8 watersheds will be intensively monitored or sampled, assessed for impaired waters and waters in need of protection, modeled with U.S. Geological Service HSPF (Hydrological Simulation Program-FORTRAN) model, and investigated for biological stressors. Using this data, TMDLs are developed. This information is gathered in a WRAPS report that uses the collected data to create a table of strategies (generally BMPs) needed to achieve water quality standards in that major watershed. Input from not only local governmental units, but also citizens, is integral to the process of creating the WRAPS reports. Ownership by the local stakeholders of the WRAPS report is the central tenet of the process: with that ownership, the right conservation practices are more likely to be implemented in the areas where they’re most effective.

Section 319 program funding currently funds 21.85 full-time equivalents (FTE) to support the NPS program work. These positions support the development, management, and administration of the program.

## CWP loans

The CWP program offers zero-interest loans to local units of government for implementing nonpoint source BMPs and other activities that target the restoration and protection of a water resource such as a lake, stream, or groundwater aquifer.

Loans can be used for these activities:

Urban green infrastructure

Buffers

Septic system upgrade or replacement

Technical assistance, outreach and education

Equipment (e.g., salt application, street sweeping)

Any nonpoint source BMP

Feedlot upgrade or replacement

There was \$6.0 million of CWP Loans awarded in FY 2021. Individual loans are described in the following river basin sections.

# Lower Mississippi River Basin

The Lower Mississippi River Basin covers approximately 6,300 square miles. Since 2016, there has been an investment of \$1,965,046 of Section 319 funds and Clean Water Partnership (CWP) Loan funds for projects in the Lower Mississippi River Basin. Local partners have committed to investing an additional \$2,143,170.92 of state and local matching funds to these projects.

The Lower Mississippi Basin is located in the southeastern portion of Minnesota. Watersheds included in the Lower Mississippi River basin: [Upper Iowa River](#), [Mississippi River - Reno](#), [Root River](#), [Zumbro River](#), [Cannon River](#), [Mississippi River - Lake Pepin](#), [Mississippi River - Winona](#), [Mississippi River - La Crescent](#).

Regionally speaking, Southeastern Minnesota has a number of opportunities for improvement. These include the reduction of nitrogen leaching to groundwater, which will more often than not emerge in surface water in this area partially dominated by karst geology. Likewise, the same opportunity is present for the reduction of bacteria leaching and runoff from feedlots as southeast Minnesota is home to four of the top 10 beef and dairy producing counties in the state ([MDA Dairy Industry Profile](#), [MDA Beef Industry Profile](#)). Other significant opportunities lie in the reduction of sediment and nutrient delivery to streams, in part to contribute to the [Nutrient Reduction Strategy for the Mississippi River](#) and to restore and protect the regions water resources.

## Newly awarded projects in the Lower Mississippi River Basin

There was one project awarded in the Lower Mississippi River Basin in 2021, which is summarized in Table 3. New projects in the Lower Mississippi River Basin The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$1,000,000 of CWP loan funds newly awarded in the Lower Mississippi River Basin, with a commitment of \$1,237,987.92 in local match.

**Table 3. New projects in the Lower Mississippi River Basin**

<b>Project name</b>	<b>Fountain Lake restoration project</b>
<b>Sponsor</b>	Shell Rock WD
<b>FY awarded</b>	2021
<b>Project timeframe</b>	April 2021 to April 2024
<b>Funding type</b>	CWP Loan
<b>Funding</b>	\$1,000,000
<b>Match</b>	\$1,237,987.92
<b>HUC code</b>	07080202
<b>Watershed</b>	Shell Rock
<b>Project goal</b>	The goal of the Fountain Lake Restoration Project is to improve water quality by removing 290,000 cubic yards of sediment to reduce internal loading of nutrients, reduce harmful algal blooms, and improve water clarity within Fountain Lake.
<b>BMPs planned</b>	Hydraulic dredging of Fountain Lake
<b>Estimated reductions</b>	Phosphorus: 52-63% lbs/yr Sediment: 290,000 Yds <sup>3</sup> Soil Loss: NA Nitrogen: NA BOD5: NA E. coli: NA

## Completed projects in the Lower Mississippi River Basin

There were no projects completed in the Lower Mississippi River Basin in FY 2021.

## Active projects in the Lower Mississippi River Basin

There are four projects that are currently under way in the basin are described in Table 4. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are \$905,046 of Section 319 funds, with \$905,182 of committed local and state matching funds.

**Table 4. Active projects in the Lower Mississippi River Basin**

<b>Project name</b>	<b>Middle Fork Zumbro River critical source area restoration</b>	<b>Mississippi River Lake Pepin Watershed WRAPS Implementation</b>	<b>Reducing bacteria from southeast Minnesota feedlots</b>	<b>Whitewater Watershed nitrogen reduction project</b>
<b>Sponsor</b>	Dodge SWCD	Goodhue SWCD	Goodhue SWCD	Whitewater Joint Powers Board
<b>FY awarded</b>	2016	2016	2017	2017
<b>Project timeframe</b>	January 2018 to August 2020	January 2017 to August 2020	March 2018 to August 2021	March 2018 to August 2021
<b>Funding type</b>	Section 319	Section 319	Section 319	Section 319
<b>Funding</b>	\$219,000	\$117,221	\$336,000	\$232,825.00
<b>Match</b>	\$222,906	\$227,432	\$275,000	\$179,845
<b>HUC 8 code</b>	07040004	07040001	Multiple	07040003
<b>Watershed</b>	Zumbro River	Mississippi River - Lake Pepin	Multiple watersheds	Mississippi River - Winona
<b>Project goal</b>	Address the turbidity TMDL by installing sediment reducing practices in the identified critical source areas to have an estimated sediment reduction of 200-246 tons per year	Implement restoration and protection strategy practices from the Mississippi River/Lake Pepin WRAPS to improve stream habitat, increase upland storage and reduce sediment and nutrient loading.	Provide targeted technical and financial assistance to critical loading SE MN open lot feedlots under 500 AU's and reducing fecal coliform bacteria runoff to negligible levels from a goal of 30 feedlots.	The project addresses nitrate pollution to surface waters within critical source areas by increasing implementation of nitrogen management practices and cover crops.

# Minnesota River Basin

The Minnesota River Basin covers approximately 15,000 square miles within the State of Minnesota.

Since 2016, there has been an investment of \$14,264,737 of Section 319 funds and Clean Water Partnership Loan funds. Local partners have invested an additional \$5,499,502 of state and local match dollars to these projects. The projects funded by Section 319 and CWP Loan funds address sediment and nutrient loading, improving soil health, addressing altered hydrology, in-lake contributions, and upgrading and replacing SSTS.

This could be a pivotal year for the Minnesota River and its tributaries (**Error! Reference source not found.**). Recent watershed assessment studies emphasize the need for widespread changes to the Minnesota River Basin, which covers 10 million acres in southern Minnesota.

**Figure 13. The Minnesota River Basin**



Sediment pollution (also called total suspended solids) is clouding the water in the major portion of the Minnesota River. TMDL and sediment reduction studies call for decreasing sediment in the river by 50%. The Minnesota River Basin has erodible soils and is naturally vulnerable to sediment pollution. The incised zone of many watersheds compounds this but some practices, such as artificial drainage, worsen the situation by bringing too much water, too quickly, into the system. Increasing flows are a major threat to water quality in the basin, accelerating riverbank erosion and threatening infrastructure. In the past 80 years, flow amounts have doubled in the Minnesota River.

The increased flow isn't just due to increased rainfall; the river carries more water per inch of rain than in previous decades. Increased artificial drainage, fewer wetlands to store water, lack of perennial vegetation and agricultural and urban land use practices all contribute to higher flows and erosion of fields and streambanks.

The muddy water then makes it hard for fish and other aquatic species to breathe, find food, and reproduce. The sediment is also filling in the Lower Minnesota River and Lake Pepin downstream at a much faster rate than before European settlement and intensive farming of the basin.

The Minnesota River Basin contains the following HUC8 watersheds: [Minnesota, River – Headwaters](#), [Pomme de Terre River](#), [Lac qui Parle River](#), [Minnesota River –Yellow Medicine](#), [Chippewa River](#), [Redwood River](#), [Minnesota River - Mankato](#), [Cottonwood River](#), [Blue Earth River](#), [Watowan River](#), [LeSueur River](#), and [Lower Minnesota River](#).

For more information on the Minnesota River, see the interactive report found at <https://www.pca.state.mn.us/water/minnesota-river-basin>.

## **Newly awarded projects in the Minnesota River Basin**

There were six projects awarded in the Minnesota River Basin in 2021, which are summarized in Table 5. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$4,737,100 of CWP loan and Section 319 Funds for newly awarded in the Minnesota River Basin, with a commitment of \$790,842 in local match.

Table 5. Newly awarded projects in the Minnesota River Basin

Project name	Renville County Buffer Implementation Loan Program	Yellow Medicine County Non-Conforming SSTS Abatement Project	Fairmont Lakes Plan Implementation Phase 1	Upper Hawk Creek Watershed Restoration Phase 1	Plum Creek Watershed Phase 1	Sand Creek Phase 1: The Daikini
<b>Project sponsor</b>	Renville County	Yellow Medicine County	Martin SWCD	Hawk Creek Watershed Project	Redwood County SWCD	Scott Watershed Management Organization
<b>FY Awarded</b>	2021	2021	2021	2021	2021	2020
<b>Project timeframe</b>	August 2020 to July 2023	March 2021 to March 2024	November 2020 to August 2024	December 2020 to August 2024	October 2020 to August 2024	December 2020 to August 2024
<b>Funding type</b>	CWP Loan	CWP Loan	Section 319	Section 319	Section 319	Section 319
<b>Funding</b>	\$3,000,000	\$600,000	\$284,275	\$284,275	\$284,275	\$284,275
<b>Match</b>	\$ -	\$ -	\$190,000	\$190,000	\$189,517	\$221,325
<b>HUC code</b>	07020012, 07020007, 07020004, 07010205	07020004, 07020003, 07020006	07020009	07020004	07020008	07020012
<b>Watershed</b>	Minnesota River: Lower, Middle (Mankato), Yellow Medicine/Hawk Creek Mississippi: South Fork Crow	Yellow Medicine River, Lac qui Parle River, Redwood River	Blue Earth	Minnesota River-Yellow Medicine	Cottonwood River Watershed	Lower Minnesota River Major
<b>Project goal</b>	Provide loan funding to purchase easements and establish approximately 800 acres of vegetative buffers along nearly 230 miles of open drainage ditches located in portions of the Hawk Creek, High Island, Crow River, and Middle Minnesota watersheds.	Offer loans to approximately 45 landowners to replace non-conforming septic systems. Priority will be given to those systems in Floodplain, Shoreland, and areas with completed TMDLs or identified in the Yellow Medicine River One Watershed One Plan.	Reduce TSS, E. coli, and nutrient loading to the Fairmont Chain of Lakes.	The goal is to address existing watershed impairments and to decrease pollutant loading to downstream waterbodies.	Implementation of BMPs that are effective at abating non-point source sediment runoff and E.coli to impaired waterbodies within the Plum Creek Watershed.	Implementation practices will address the MA needs as well as having additional benefits in downstream MAs.
<b>BMPs planned</b>	Utilize loan funding to purchase easements and establish approximately 800 acres of vegetative buffers (approximately 16.5 feet wide) along nearly 230 miles of open drainage ditches.	Protect surface water and ground water quality from contamination caused by point and non-point source pollution by upgrading 45 non-complaint Subsurface Sewage Treatment Systems (SSTS)	Multiple projects implemented and necessary reports completed in a timely manner, including 7,500 linear feet of grassed waterways, 200 acres of no till/strip till practices, 200 acres in cover crops, two saturated buffers, and three Water and Sediment Control Basins (WASCOBs).	Agriculture BMP's -1,000 acres of soil health practices, Five side inlet practices for drain tile, Two water and sediment control basins (WASCOBs) and 650 acres of reduced tillage and/or nutrient management Lakeshore BMPs - proper lawn clipping placement, leaf management, and fertilizer. Urban BMPs - Two residential rain gardens & Five rain barrels.	24 Water and Sediment Control Basins (WASCOB), 8 grade stabilization structures, and 1 miles of streambank stabilization.	40 acres of Conservation Tillage, 10 Rock Tile Inlets, 900 In-ft of Grassed Waterway, 1 Wet Detention Basin, 2.5 acres of Filter Strip, 1450 In-ft of Terraces, & 4 WACOB's
<b>Estimated reductions</b>	Phosphorus: 13.1 lbs/acre/yr Sediment: 7.8 t/acre/yr Soil Loss: NA Nitrogen: 35.8 lbs/acre/yr BOD <sub>5</sub> : NA E. coli: NA	Phosphorus: 399 lbs/yr Sediment: 8,877 t/yr Soil Loss: NA Nitrogen: 573 lbs/yr BOD <sub>5</sub> : NA E. coli: NA	Phosphorus: 270 lbs/yr Sediment: 305 t/yr Soil Loss: NA Nitrogen: 3,030 lbs/yr BOD <sub>5</sub> : NA E. coli: NA	Phosphorus: 1136 lbs/yr Sediment: 626 t/yr Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: 2.8E+14 CFU	Phosphorus: NA Sediment: 577 tons/y Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: 340 Billion MPN/yr	Phosphorus: 364 lbs/yr Sediment: 35 t/yr Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: NA

## Completed projects in the Minnesota River Basin

There were two projects completed in the Minnesota River Basin are shown in Table 7. The final amount of Section 319 and CWP Loan funds invested were \$604,199 with \$190,585 of state and local match. The projects addressed nutrient, sediment, and *E. coli* loading in the basin, with estimated reductions summarized in Table 6. Best management practices (BMPs) installed included both structural practices and education/outreach activities. BMPs installed included alternative inlets, water and sediment control basins, 188.28 acres of cover crops planted, streambank stabilization, lake shore restorations and SSTS upgrades.

**Table 6. Estimated reductions for completed projects in the Minnesota River Basin**

<b>Pollutant</b>	<b>Reduction (unit)</b>
Phosphorus	1,871 lbs/yr
Sediment (TSS)	1,192 t/yr
Nitrogen	487 lbs/yr
BOD <sub>5</sub>	6,6367 lbs/yr
Bacteria	82.8+13 cfu/yr

**Table 7. Completed projects in the Minnesota River Basin**

<b>Project name</b>	<b>Chippewa River Sediment Reduction</b>	<b>Chippewa Countywide Septic System Upgrades</b>
<b>Project sponsor</b>	Chippewa River Watershed Project	Chippewa County
<b>FY awarded</b>	2016	2017
<b>Project timeframe</b>	January 2017 to August 2021	June 2017 to June 2021
<b>Funding type</b>	Section 319	CWP Loan
<b>Funding</b>	\$285,878	\$318,321
<b>Match</b>	\$190,585	\$ -
<b>HUC code</b>	7020005	07020005, 07020004, 07020001
<b>Watershed</b>	Chippewa	Chippewa River, Hawk Creek, Upper MN River
<b>Project goal</b>	Target areas of erosion in Upper Reaches of the Chippewa River and to broaden adoption of continuous living cover and water retention in areas of the watershed that contribute to turbidity impairments.	To upgrade or replace 40 SSTS per year, with approximately 25% applying for loans per year.
<b>BMPs installed</b>	Implementation included 188.28 acres of cover crops, 43 water and sediment control basins (WASCOBs), three (3) lake shoreland restoration, one (1) streambank stabilization, and five (5) alternative tile inlets.	This project implemented 29 SSTS upgrades.
<b>Estimated reductions achieved</b>	Phosphorus: 1,650 lbs/yr Sediment: 1,190 t/yr Soil Loss: NA Nitrogen: NA BOD5: NA E. coli: NA	Phosphorus: 221 lbs/yr Sediment: 1.7 t/yr Soil Loss: NA Nitrogen: 487 lbs/y BOD5: 6,367 lbs/yr E. coli: 82.8E+13 CFU
<b>Project highlights</b>	Implementation included 188.28 acres of cover crops, 43 water and sediment control basins (WASCOBs), three (3) lake shoreland restoration, one (1) streambank stabilization, and five (5) alternative tile inlets. Chippewa River Turbidity TMDL Report, utilizing the strategies outlined in the Chippewa River Fecal Coliform and Turbidity TMDL Implementation Plan approved February 2016. The MPCA will be in the process of completing Cycle II Watershed Approach to update water quality monitoring and assessment, stressor identification, and completed any necessary TMDLs	This project implemented 29 SSTS upgrades which resulted in an estimated reduction of 221 pounds/yr of phosphorus, 487 pounds/yr of nitrogen, 6367 pounds/yr of BOD, 3,466 pounds/yr of TSS, and 82.8E+13 CFU of bacteria. Upgrade of noncompliant SSTS such as this loan project, are identified in the Chippewa County Local Water Plan. This project has helped the County move closer to accomplishing the objectives and goals of their Plan. The activities accomplished through this loan project, are also identified in the Hawk Creek Watershed and Chippewa River Watershed

<b>Project name</b>	<b>Chippewa River Sediment Reduction</b>	<b>Chippewa Countywide Septic System Upgrades</b>
	for new waters quality stream and/or lake impairments. The Chippewa River Watershed Project is currently under reorganization and will pursue the One Watershed One Plan planning process through the Board of Water and Soil Resources that will then complete a Comprehensive Watershed Plan for future implementation.	Restoration and Protection Strategies reports, have helped to move closer to accomplishing the goals and priorities of those reports.
<b>Partnerships</b>	Douglas Soil and Water Conservation District Grant Soil and Water Conservation District Land Stewardship Project (LSP) Pope Soil and Water Conservation District Stevens Soil and Water Conservation District Landowners	Chippewa County staff County Commissioners Hawk Creek Watershed Project Landowners MPCA staff

## Active projects in the Minnesota River Basin

There are 16 projects that are currently under way in the basin are described in Table 8. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There is currently \$6,469,523 of Section 319 and CWP loan funds invested in the Minnesota River Basin. Those funds are leveraged by a commitment of \$3,632,646 in local and state matching funds.

**Table 8. Active projects in the Minnesota River Basin**

<b>Project name</b>	<b>Greater Blue Earth River Basin TMDL Implementation</b>	<b>Le Sueur River WRAPS Implementation Endeavor</b>	<b>Pomme de Terre WRAPS BMP Implementation Project</b>	<b>Minnesota River and Sand Creek Improvement Project</b>	<b>Hawk Creek Watershed Improvement Project</b>	<b>Mankato Watershed – Renville Co FY17 Improvement Project</b>	<b>Seven Mile Creek Assessment and Implementation</b>	<b>Swift County SSTS Upgrades</b>
<b>Project sponsor</b>	Greater Blue Earth River Basin Alliance	Faribault SWCD	Pomme de Terre River Association	Scott County/Scott WMO	Hawk Creek Watershed Project	Hawk Creek Watershed Project	Gustavus College	Swift County
<b>FY awarded</b>	2016	2016	2016	2016	2017	2017	2017	2018
<b>Project timeframe</b>	December 2016 to August 2021	January 2017 to August 2021	December 2016 to August 2021	November 2016 to August 2021	January 2018 to August 2021	February 2018 to August 2021	June 2018 to August 2021	April 2018 to April 2021
<b>Funding type</b>	Section 319	Section 319	Section 319	Section 319	Section 319	Section 319	Section 319	CWP Loan
<b>Funding</b>	\$400,000	\$347,950	\$285,000	\$832,789	\$397,000	\$297,000	\$475,524	\$250,000
<b>Match</b>	\$266,700	\$138,500	\$190,000	\$960,000	\$265,000	\$199,000	\$328,096	
<b>HUC code</b>	0702009, 07020011, 07020010	7020011	7020002	07020012	7020004	7020007	7020007	7020005, 07020002
<b>Watershed</b>	Blue Earth River, Le Sueur River, and Watonwan River	LeSueur	Pomme de Terre	Lower Minnesota River	MN River - Yellow Medicine	MN River - Mankato	MN River - Mankato	Chippewa River /Pomme de Terre
<b>Project goal</b>	Two specific agricultural BMPs will be implemented through this project: alternative tile intakes and cover crops.	Provide cost-share assistance to landowners within targeted watersheds of the LeSueur River Watershed to implement nonpoint source reduction best management practices	The Pomme de Terre WRAPS BMP Implementation Project intends to continue implementation of restorative BMPs to reduce nutrient and sediment loading and to help improve habitat and biological diversity. Additionally, to engage citizens of all ages throughout the watershed through a multipronged effort.	The following goals are based on the TSS load duration curves prepared for the Sand Creek Watershed Impaired Waters Resource Investigation completed in 2010.	Carry out BMP implementation in critical areas to progress the Lower Minnesota River Dissolved Oxygen TMDL Implementation Plan: alternative intakes, side inlets, streambank /grade stabilizations, cover crops, and WASCObS. This project also includes education and outreach to promote BMP implementation and general watershed knowledge.	Carry out BMP implementation in critical areas to progress the Lower Minnesota River Dissolved Oxygen TMDL Implementation Plan: alternative intakes, side inlets, streambank /grade stabilizations, cover crops, and WASCObS. This project also includes education and outreach to promote BMP implementation and general watershed knowledge.	Gather watershed data necessary to evaluate the effectiveness of BMP implementation in a typical agricultural watershed in southern Minnesota.	The problem of SSTS is ongoing. Swift County upgrades on average 22 systems per year with approximately 32% applying for low interest loans annually.

Table 8 continued. Active projects in the Minnesota River Basin

Project name	Internal Loading BMPs in Spring Lake and Prior Lake	Hawk Creek Watershed FFY 2018 Implementation Project	Lac Qui Parle-Yellow Bank SSTS Loans Phase II	Brush Creek & Blue Earth River Sediment	Improving Chetomba, Sacred Heart & Wood Lake Creek	North Branch Yellow Medicine River Protection Project	Pomme de Terre Watershed BMP Implementation	Whetstone River Restoration
<b>Project sponsor</b>	Prior Lake-Spring Lake WD	Hawk Creek Watershed Project	Lac qui Parle-Yellow Bank WD	Faribault SWCD	Hawk Creek Watershed Project	Lincoln SWCD	Pomme de Terre River Association	Upper Minnesota River WD
<b>FY awarded</b>	2018	2018	2019	2019	2019	2019	2019	2020
<b>Project timeframe</b>	February 2019 to December 2021	March 2019 to August 2022	August 2018 to August 2021	January 2020 to August 2023	January 2020 to August 2023	January 2020 to August 2023	January 2020 to August 2023	March 2020 to March 2023
<b>Funding type</b>	Section 319	Section 319	CWP Loan	Section 319	Section 319	Section 319	Section 319	CWP Loan
<b>Funding</b>	\$80,300	\$477,000	\$900,000	\$387,000	\$499,860	\$106,000	\$304,100	\$430,000
<b>Match</b>	\$55,600	\$318,000		\$302,000	\$334,000	\$70,750	\$205,000	
<b>HUC code</b>	7020004	7020004	07020003, 07020001, 07020004	07020009	07020004	07020004	07020002	70200001
<b>Watershed</b>	Yellow Medicine	MN River - Yellow Medicine	Lac qui Parle, MN River Headwaters, Yellow Medicine	Blue Earth	MN River - Yellow Medicine	MN River - Yellow Medicine	Pomme de Terre	Minnesota River-Headwaters
<b>Project goal</b>	The goal of this project is to improve the water quality of Spring and Upper Prior Lakes by decreasing total phosphorus concentrations through the use of integrated pest management to effectively manage the common carp populations and through the encouragement of native aquatic plant establishment.	Carry out BMP implementation in critical areas to work towards the goals of the Hawk Creek Watershed TMDL, Hawk Creek Watershed WRAPS, and Lower Minnesota River Dissolved Oxygen TMDL Implementation Plan. BMPs will include alternative/side intakes, grade stabilization, WASCOB, lakeshore restoration, ag waste project, cover crops, and no till/strip tillage.	Provide low interest funds for homeowners to bring non-conforming septic systems into compliance of the Minnesota Rules Chapter 7080. Upgrades for 70 to 80 SSTS in Lac qui Parle County.	Implementation of BMPs focusing on sediment reduction, nutrient transport, and increased infiltration in the Blue Earth Watershed.	Implement prioritized BMPs and increase civic engagement in critical areas to reduce nonpoint sources of E. coli, sediment (TSS), and nutrient eutrophication in order to achieve the impairment and water quality goals for the Hawk Creek Watershed.	Reduce sediment from entering the North Branch and Upper Branch water bodies. As a secondary benefit, phosphorus is reduced naturally by keeping the sediment on the upland. By doing so, impairments such as turbidity and Nutrient Eutrophication will be reduced.	Implement BMPs effective in abating nonpoint source phosphorous and sediment runoff to impaired waterbodies within the Pomme de Terre watershed.	Engineering Design Report, funding for flowage easements and land purchases between the levees. The completed project moves beyond operations and controls by moving toward a permanent solution to Big Stone Lake water quality and restoration of the lower Whetstone and Minnesota Rivers.

# Des Moines and Missouri River Basins

The Minnesota portion of the Des Moines River, Missouri – Big Sioux, Missouri – Little Sioux cover approximately 3,300 square miles. Since 2016, there has been an investment of \$1,862,157 of Section 319 funds and Clean Water Partnership Loan funds. Local partners have invested an additional \$317,867 of state and local match dollars to these projects. These projects span a period of three to four years.

The Des Moines River watershed is located in southwestern Minnesota, including parts of Lyon, Pipestone, Murray, Cottonwood, Nobles, Jackson, and Martin counties. There are two HUC8 watersheds in Minnesota, [Des Moines River –Headwaters](#) and [East Fork Des Moines River](#). It has five subwatersheds: Lake Shetek, Beaver Creek, Heron Lake, Lime Creek, and the West Fork Des Moines River Main Stem. The river joins the East Fork Des Moines River in Iowa, and eventually enters the Mississippi River at Keokuk, Iowa. It is located in the Western Cornbelt Plains ecoregion of southwestern Minnesota and northern Iowa.

The river is used for recreational activities such as fishing, tubing, snowmobiling, and canoeing. It is also a valuable fisheries resource with the following species of fish prevalent throughout the watershed: northern pike, buffalo, carp, walleye, channel catfish, crappie, and bullhead. Land use is primarily agricultural. Okamanpeedan, Bright and Pierce Lakes in the eastern part of the watershed in Minnesota are used for recreation such as fishing and hunting. Several shallow waterfowl lakes are also located in the southern part of the watershed.

The Missouri River Basin has three HUC8 watersheds in Minnesota, the [Upper Big Sioux River](#), [Lower Big Sioux River](#), and [Rock River](#).

## Newly awarded projects in the Des Moines and Missouri River Basins

There was one project awarded in the Des Moines and Missouri River Basins in 2021, which is summarized in Table 9. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$284,275 of Section 319 funds newly awarded in the Des Moines River Basin, with a commitment of \$189,517 in local match.

**Table 9. Newly awarded projects in the Des Moines and Missouri River Basins**

<b>Project name</b>	<b>Pipestone, Split Rock and Mound Creeks Phase 1</b>
<b>Project sponsor</b>	Pipestone Soil and Water Conservation District
<b>FY awarded</b>	2020
<b>Project timeframe</b>	December 2020 to August 2024
<b>Funding type</b>	Section 319
<b>Funding</b>	\$284,275
<b>Match</b>	\$189,517
<b>HUC code</b>	1070203, 1017204
<b>Watershed</b>	Lower Big Sioux, Rock
<b>Project goal</b>	Restore water quality to standards, which provide for ultimate public recreational opportunities, while increasing agricultural production, profitability, and sustainability.

<b>Project name</b>	<b>Pipestone, Split Rock and Mound Creeks Phase 1</b>
<b>BMPs planned</b>	Task A : estimated: 300 acres of priority riparian pastureland areas, four (4) alternate water supply, five (5) miles of livestock interior fencing. Task B: estimated one (1) feedlot runoff control practice. Task C: estimated six (6) grassed waterways, and fifteen (15) water and sediment control basins.
<b>Estimated reductions</b>	Phosphorus: 11.8 lbs/yr Sediment: 2.2 t/yr Soil Loss: NA Nitrogen: 140 lbs/yr BOD <sub>5</sub> : NA E. coli: 762 billion MPN/yr

## Completed projects in the Des Moines and Missouri River Basins

There were no completed projects in the Des Moines and Missouri River Basins in 2021.

## Active projects in the Des Moines and Missouri River Basins

There are four projects that are currently under way in the basin are described in Table 10. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There is currently \$1,335,335 of Section 319 and CWP loan funds invested in the Des Moines and Missouri River Basin. Those funds are leveraged by a commitment of \$128,350 in local and state matching funds.

**Table 10. Active projects in the Des Moines and Missouri River Basins**

<b>Project name</b>	<b>South Heron Lake TMDL implementation plan</b>	<b>Complete water softener removal</b>	<b>Wellhead nitrogen reduction project</b>	<b>Heron Lake phosphorus reductions III</b>
<b>Project sponsor</b>	Heron Lake WD	City of Lakefield	Rock County Rural Water	Heron Lake WD
<b>FY awarded</b>	2018	2020	2020	2020
<b>Project timeframe</b>	April 2019 to August 2022	Not fully executed	June 2020 to June 2023	March 2020 to March 2023
<b>Funding type</b>	Section 319	CWP Loan	CWP Loan	CWP Loan
<b>Funding</b>	\$122,125.00	\$483,210	\$300,000	\$430,000
<b>Match</b>	\$126,250	\$2,100		
<b>HUC code</b>	7100001	7100001	10170204	07100001, 07100002
<b>Watershed</b>	Des Moines Headwaters, Heron Lake	Des Moines Headwaters, Heron Lake	Rock River	Des Moines Headwaters, Lower Des Moines

<b>Project name</b>	<b>South Heron Lake TMDL implementation plan</b>	<b>Complete water softener removal</b>	<b>Wellhead nitrogen reduction project</b>	<b>Heron Lake phosphorus reductions III</b>
<b>Project goal</b>	The primary goal of the project is to reduce phosphorus by restoring and stabilizing 3,300 linear feet of streambank in the JD 3, restoring two wetlands and installing nine alternative side inlets.	The program will remove chlorides being discharged into the Heron Lake Watershed. Chlorides are toxic to aquatic life.	We are purchasing land directly in our flow path of groundwater to our wells. The land acquisition will have a large positive	Through the low interest loan project, the HLWD proposes to replace 30 Subsurface Sewage Treatment System (SSTS) over the three-year period.

# Lake Superior Basin

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Minnesota's portion of the Lake Superior Basin (HUC4) encompasses approximately 6,000 square miles and is located within Carlton, Cook, Lake, Pine and St. Louis counties in northeastern Minnesota. The Lake Superior Basin is remarkably diverse in natural features including the rugged coastline of Lake Superior, with bedrock outcrops, cascading waterfalls and cold water streams draining to Lake Superior. The Lake Superior Basin is split into two HUC8s watersheds, the [Lake Superior - North](#) and [Lake Superior – South](#) watersheds. The interior area, comprised of the [St. Louis River](#) and [Cloquet River](#) watersheds, includes a diverse mix of lakes and streams, along with significant areas of wetlands and peatlands. The southern portion includes the [Nemadji River](#) watershed, a stream-dominated drainage developed on a glacial lake plain. Many of the streams in the basin support coldwater and sensitive species, including wild rice. Overall, the Lake Superior Basin is sparsely populated, with people concentrated mainly in Duluth & surrounding communities in the south, the Iron Range communities in the northwest, in small towns dotting Lake Superior's North Shore, and other small communities distributed throughout. Two tribal governments and reservations, Fond du Lac Band of Lake Superior Chippewa, near Cloquet, and Grand Portage Band of Lake Superior Chippewa, at Grand Portage, are located in the Basin, along with the 1854 Treaty Area. A large percentage of lands are publicly owned, including portions of the Boundary Waters Canoe Area Wilderness, the Superior National Forest, and State & County managed forested lands. Lands are managed for forestry/forest management, small agricultural operations in the south & western basin, iron mining on the northwest edge, and aggregate mining throughout. Tourism and recreational outdoor activities, such as hiking, canoeing, fishing and hunting are popular in this region. The undeveloped nature for much of the basin is undoubtedly key to the high water quality of most lakes and streams. Minnesota's efforts to restore, protect and maintain water quality on those tributary lakes and streams are a primary focus for protecting Lake Superior and the Lake Superior Basin.

Despite its immense size, Lake Superior is surprisingly vulnerable. The year-round cold temperatures of Lake Superior and small amount of nutrients entering the lake result in a simple and fragile food chain. Because Lake Superior is nourished by forests and watered by streams, changes on the land become changes in the lake. We find algae blooms in Lake Superior bays, decreasing clarity in the western arm of the lake, contaminated sediment in the Duluth-Superior harbor and toxic contaminants building up in the food chain.

Unlike waters such as the Mississippi and Minnesota Rivers, most of Lake Superior has never suffered the extreme degradation that once characterized these rivers. Slowly, carefully, and with considerable effort and expense, those waters are being reclaimed. The challenge with Lake Superior is to keep it as clean as it is now and to clean up the problems that have been found.

## Newly awarded projects in the Lake Superior Basin

There was one project awarded in the Lake Superior River Basin in 2021, which is summarized in Table 11. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$284,275 of Section 319 funds newly awarded in the Des Moines River Basin, with a commitment of \$350,000 in local match.

**Table 11. Newly awarded projects in the Lake Superior Basins**

<b>Project name</b>	<b>Skunk Creek Watershed Restoration and Protection Project Phase 1</b>
<b>Project sponsor</b>	Carlton Soil and Water Conservation District
<b>FY awarded</b>	2020
<b>Project timeframe</b>	November 2020 to August 2024
<b>Funding type</b>	Section 319
<b>Funding</b>	\$284,275
<b>Match</b>	\$350,000
<b>HUC code</b>	4010301
<b>Watershed</b>	Nemadji River
<b>Project goal</b>	Improve aquatic habitat by removing the aquatic organism barrier on Elim Creek, reduce TSS loading from road erosion on Skunk and Elim Creeks, and work towards future watershed restoration projects.
<b>BMPs planned</b>	This objective will design and implement a bankfull sized culvert at CSAH6/Elim Creek and stabilize the stream where slumping is a concern.
<b>Estimated reductions</b>	Phosphorus: NA Sediment: 17,600 t/rain event Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: NA

## Completed projects in the Lake Superior Basin

There were no completed projects in the Lake Superior Basin in 2021.

## Active projects in the Lake Superior Basin

There are no active projects in the Lake Superior Basin in 2021.

# Rainy River Basin

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The Rainy River Basin encompasses a total area of 27,114 square miles, of which 11,244 square miles (41 percent) are in Minnesota and 15,870 square miles (59 percent) are in Ontario. The primary focus of the Rainy River Basin Information Document is on the Minnesota portion of the Basin. The Minnesota portion of the Basin is bounded on the north by the Province of Ontario, the east by the Lake Superior Basin, the south by the Upper Mississippi Basin and the west by the Red River Basin.

The Rainy River Basin is home to some of Minnesota's finest forest and water resources. Voyageurs National Park and the Boundary Waters Canoe Area Wilderness (BWCA) are located within the Rainy River Basin, as are several of the state's most famous walleye fisheries and many top-notch trout streams.

The Basin includes portions of eight Minnesota counties, including substantial portions of Cook, Itasca, Lake, Lake of the Woods, Koochiching, and St. Louis Counties with relatively minor portions of Beltrami and Roseau Counties.

The headwaters of the Basin are located in Cook, Lake, Itasca and St. Louis Counties. The eastern headwaters portion of the Basin includes an extensive area of irregularly shaped lakes on Canadian Shield topography. This area includes the BWCA. The southern headwaters portion includes the Vermilion Iron Range, part of the Mesabi Iron Range, and, in Itasca County, numerous northern lakes situated in glacial till.

The central, or large lakes, portion of the Basin is characterized by relatively large lakes on Canadian Shield topography. This area includes Voyageurs National Park. Lakes include Crane, Kabetogama, Namakan, Rainy and Vermilion.

The Lake of the Woods portion of the Basin is characterized by extensive wetlands located on the old Glacial Lake Agassiz lake bed and, of course, Lake of the Woods.

The Basin is made up of eight watersheds partially or wholly within the United States. These watersheds are: [Rainy River Headwaters](#), [Vermilion River](#), [Rainy River/Rainy Lake](#), [Lower Rainy River](#), [Little Fork River](#), [Big Fork River](#), [Rapid River](#), and [Lake of the Woods](#).

The Red Lake Band of Chippewa (Miskwaagamiiwi-zaaga'igan) own many acres in the Rainy Basin which are spread out from the Northwest Angle to southern Koochiching County. Bois Forte Band of Chippewa own three sectors, Nett Lake (*Asabiikone-zaaga'igan*), Vermilion (*Onamani-zaaga'igan*), and Deer Creek (*Waawaashkeshi-ziiibiins*). Both are independent tribal nations located in the Rainy Basin. Both Bands have active water quality programming and work with the US Environmental Protection Agency and the Minnesota Pollution Control Agency in water quality matters.

In addition, other Bands not located in the Basin, have hunting, fishing, and gathering rights on off-reservation lands located within the Rainy Basin.

For more information about their water quality program, please contact the Bands at:

Bois Forte Band of Chippewa, Ecological Resources Program, 218-757-3261 Extension 1305 or [cholm@boisforte-nsn.gov](mailto:cholm@boisforte-nsn.gov)

Red Lake Band of Chippewa, Red Lake DNR, 218-679-3959, or [rldnr@redlakenation.org](mailto:rldnr@redlakenation.org)

## Newly awarded projects in the Rainy River Basin

There are no newly awarded projects in the Rainy River Basin in 2021.

## Completed projects in the Rainy River Basin

There were no completed projects in the Rainy River Basin in 2021.

## Active projects in the Rainy River Basin

There is one project that is currently under way in the basin are described in Table 12. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There is currently \$1,110,500 of CWP loan funds invested in the Rainy River Basin.

**Table 12. Active projects in the Rainy River Basins**

<b>Project name</b>	<b>CLWSD Management and Expansion program</b>
<b>Project sponsor</b>	Crane Lake Water & Sanitary District
<b>FY awarded</b>	2020
<b>Project timeframe</b>	March 2020 to March 2023
<b>Funding type</b>	CWP Loan
<b>Funding</b>	\$1,110,500
<b>Match</b>	\$ -
<b>HUC code</b>	9030003
<b>Watershed</b>	Rainy-Lake of the Woods
<b>Project goal</b>	Providing an alternative, reasonable source of funding to assist CLWSD property owners with replacement or upgrade of septic systems.

# Red River Basin

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The Red River of the North Basin encompasses a total area of 45,000 square miles, of which 41% of the total drainage area is in Minnesota. The remaining portion of the basin occupies substantial portions of North Dakota, southern Manitoba and a small portion of northeastern South Dakota to the north and west. The Minnesota portion of the basin is bound by the Minnesota River Basin to the south, and the Rainy and Upper Mississippi River Basins to the east. The Red River flows to the north, feeding into Lake Winnipeg in Manitoba and ultimately to the Hudson Bay.

The Red River Valley is one of the most productive agricultural areas of the world. While extensive human created and modified drainage systems have resulted in extremely rich agricultural areas, portions of the basin still support the ecologically abundant prairie-pothole region. Five National Wildlife Refuges, eight state parks, and many acres of federal and state wildlife management areas are located within the Basin. The Upper and Lower Red Lakes, two of the largest lakes in Minnesota, are located in the upper reaches of the Red River Basin. Flooding is a major concern for residents in the basin because frequent floods in the relatively wide and flat Red River Valley impact urban and rural infrastructure and agricultural production.

The Minnesota portion of the Red River Basin covers the entirety of 9 Minnesota counties and portions of 12 additional counties. Several moderate to small urban centers are located along the Red River main stem and tributaries in Minnesota, including Crookston, Thief River Falls, Detroit Lakes, Roseau, and Fergus Falls, as well as the North Dakota and Minnesota border communities of Wahpeton-Breckenridge, Fargo-Moorhead and Grand Forks-East Grand Forks.

The headwaters of the Red River of the North is the confluence of the Bois de Sioux and Otter Tail rivers within the city of Breckenridge, along the North Dakota – South Dakota boarder. The Minnesota portion of the Red River Valley is approximately 16,500 square miles, incredibly flat, and characterized by poorly drained, fine silt and clay left behind by Glacial Lake Agassiz. The beach ridges to the east of the valley are the remnants of the Glacial Lake Agassiz shoreline and are characterized by sandy, coarse-textured deposits and disconnected aquifers. The beach ridges are where the northern Minnesota Glacial Lakes area is located and includes lakes from around Fergus Falls up through Detroit Lakes and to Upper and Lower Red Lakes.

The Basin is made up of 17 watersheds partially or wholly within the United States. These watersheds are: [Upper Red River of the North](#), [Bois de Sioux River](#), [Mustinka River](#), [Otter Tail River](#), [Buffalo River](#), [Red River of the North - Marsh River](#), [Wild Rice River](#), [Clearwater River](#), [Red River of the North - Sand Hill River](#), [Upper and Lower Red Lakes](#), [Thief River](#), [Red Lake River](#), [Red River of the North - Grand Marais Creek](#), [Snake River – Red River Basin](#), [Lower Red River of the North - Tamarac River](#), [Two Rivers](#), and [Roseau River](#). Assessment of 16 of these watersheds is complete with the one remaining in progress.

Common water quality issues found during these assessments include: cloudy water caused by too much sediment and very fine, natural local soils; unsafe swimming conditions due to algae blooms in lakes caused by excessive nutrients and due to high bacteria levels in streams caused by humans, livestock, and wildlife; and low dissolved oxygen and degraded fish and macroinvertebrate communities caused by degraded natural habitat, lack of connectivity, and low flow issues in modified drainage systems.

The Red Lake Band of Chippewa Ojibwe and White Earth Band of Ojibwe are independent tribal nations located in the Red River Basin. Both Bands have tribal lands in the Basin that is outside of their reservation boundaries.

Red Lake Band of Chippewa Ojibwe, Red Lake DNR, 218-679-3959, or [rldnr@redlakenation.org](mailto:rldnr@redlakenation.org)

## Newly awarded projects in the Red River Basin

There were two projects awarded in the Red River Basin in 2021, which are summarized in Table 13. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$568,550 of Section 319 Funds for newly awarded in the Red River Basin, with a commitment of \$381,428 in local match.

**Table 13. Newly awarded projects in the Red River Basin**

<b>Project Name</b>	<b>Red Lake River Targeted Watershed Grant Phase 1</b>	<b>Whiskey Creek Watershed Restoration</b>
<b>Project sponsor</b>	Red Lake Watershed District	Buffalo-Red River Watershed District
<b>FY Awarded</b>	2020	2020
<b>Project timeframe</b>	December 2020 to August 2024	December 2020 to August 2024
<b>Funding type</b>	Section 319	Section 319
<b>Funding</b>	\$284,275	\$284,275
<b>Match</b>	\$189,289	\$192,139
<b>HUC Code</b>	9020303	9020104
<b>Watershed</b>	Red Lake	Buffalo-Red River
<b>Project goal</b>	Restore impaired waters within priority management areas through focused reduction of sediment and E. coli loading from critical loading areas.	To improve habitat within the Whiskey Creek watershed by completing 16 miles of stream restoration via the construction of a two-stage ditch. In addition, to reduce sediment and phosphorus loading to Whiskey Creek
<b>BMPs planned</b>	Implement cattle exclusion practices, grazing management, and practices to reduce E. coli. Implement structural BMPs-grade stabilization structures, Water and Sediment Control Basins, streambank and ditch outlet stabilization, Implement non-structural practices such as cover crops, field borders, riparian forest buffers, riparian buffers, and critical area plantings.	Project implementation and construction of approximately 2 miles of channel restoration and approximately ten sediment BMPs.
<b>Estimated reductions</b>	Phosphorus: NA Sediment: 1,148 t/yr Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: 95 MPN/100mL	Phosphorus: NA Sediment: 465 t/yr Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: 30 billion MPN/yr

## Completed projects in the Red River Basin

There were no completed projects in the Red River Basin in 2021.

## Active projects in the Red River Basin

There is one projects that is currently under way in the basin are described in Table 14. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There is currently \$613,908 in Section 319 funds invested, with a commitment of \$412,087 of local and state match.

**Table 14. Active project in the Red River Basin**

<b>Project Name</b>	<b>Upper Buffalo River Sediment Reduction</b>
<b>Sponsor</b>	Buffalo-Red River WD
<b>FY awarded</b>	2018
<b>Project timeframe</b>	March 2019 to September 2022
<b>Funding type</b>	Section 319
<b>Funding</b>	\$613,908
<b>Match</b>	\$412,087
<b>HUC Code</b>	09020106
<b>Watershed</b>	Buffalo River
<b>Project goal</b>	Provide civic engagement (outreach and education) to landowners in the upper Buffalo River watershed resulting in BMP project implementation.

# Saint Croix River Basin

The Saint Croix River Basin extends between both Minnesota and Wisconsin (Figure 14). The Minnesota side of the Saint Croix River Basin covers approximately 3,500 square miles. The 9 projects currently awarded and underway in the Saint Croix Basin represents a total of \$3,041,632 of Section 319 and CWP Loan funds invested in the basin and \$984,840 of committed local and state matching funds.

The St. Croix River offers good water quality, excellent fisheries, and a thriving mussel population. But there are some problems, including phosphorus levels and resulting algae in two sections of the river, with more threats to water quality on the horizon. One of the first rivers in the United States to be designated as wild and scenic, with special protections, the St. Croix River now needs protective measures more than ever.

The St. Croix River is indeed a treasure, with good water quality, excellent fisheries, and a thriving mussel population. This river has a healthy ecosystem, in large part because of relatively little disturbance to its wetlands, floodplains and other features. This condition helps makes the basin more resilient to climate change. Located near major metropolitan areas, the St. Croix offers exceptional recreation for hundreds of thousands of people every year. But that attraction also poses threats. Development—for housing, recreation and agriculture—means more runoff, and more runoff means more pollutants. One of the first rivers in the United States designated and protected under the Wild and Scenic Rivers Act, the St. Croix now needs protective measures more than ever.

Protection crucial: This river faces threats from changes in land use, both different agriculture practices and expanding urban development, so protection is crucial. Climate change is also a threat.

Popular: The St. Croix River is extremely popular because of its high water quality, exceptional recreation, and ease of public access.

**Figure 14. Saint Croix River Basin – Minnesota and Wisconsin**



Nutrient diet prescribed: Many partners are working to reduce phosphorus in Lake St. Croix to prevent algal blooms. The stretch of the river coming into the lake also needs reductions in nutrients.

Healthy biology: The fish and bugs are in good to excellent condition. And this river is one of the few of its size in the United States with a thriving native mussel population (MPCA, 2020).

The following HUC8 watersheds are contained on the Minnesota side of the Saint Croix River Basin: [Kettle River](#), [Lower St. Croix River](#), [Snake River-St. Croix Basin](#), and [Upper St. Croix River](#).

## Newly awarded projects in the Saint Croix River Basin

There are no newly awarded projects in the Saint Croix River Basin in 2021.

## Completed projects in the Saint Croix River Basin

There is one project completed in the Saint Croix River Basin is shown in Table . The final amount of Section 319 funds invested were \$76,000 with \$76,000 of state and local match. This project addressed nutrient loading in the basin, with estimated reductions summarized in Table 15. Best management practice (BMP) installed included an iron enhanced sand filter.

**Table 15. Completed projects in Saint Croix River Basin**

<b>Project name</b>	<b>Goose Lake TMDL final implementation projects</b>
<b>Project sponsor</b>	Carnelian-Marine-St. Croix Watershed District
<b>FY awarded</b>	2017
<b>Project timeframe</b>	April 2018 to August 2021
<b>Funding type</b>	Section 319
<b>Funding</b>	\$76,000
<b>Match</b>	\$76,000
<b>HUC code</b>	7030005
<b>Watershed</b>	Lower St. Croix River
<b>Project goal</b>	To design and install up to four stormwater quality improvement projects to reduce phosphorus loading to Goose Lake by 38 lbs/yr.
<b>BMPs installed</b>	Iron enhanced sand filter
<b>Estimated reductions achieved</b>	Phosphorus: 88 lbs/yr Sediment: NA Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: NA
<b>Project highlights</b>	Completed water quality improvement projects for Goose Lake as identified in the 2010 Carnelian Marine St. Croix Watershed District 10 year management plan. This project was able to be completed by the Carnelian Marine St. Croix Watershed with the help of multiple partnerships and coordination. The Iron Enhanced Sand Filter removes several dissolved constituents, including phosphate, from the stormwater.
<b>Partnerships</b>	Emmons and Oliver Resources Washington Conservation District East Metro Water Resources Education Program CMSCWD

## Active projects in the Saint Croix River Basin

There are nine projects that are currently under way in the basin are described in Table . The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$2,965,632 of Section 319 and CWP loan funds invested in the Saint Croix River Basin, with a commitment to \$908,840 of local and state match.

**Table 16. Active project in the Saint Croix River Basin**

<b>Project name</b>	Carnelian Marine St Croix Bridging Funds Loan	Marine on St. Croix Stormwater, Phase 4	Moody Lake Wetland Rehabilitation Project	Snake River Watershed Resource Protection Project	Lower St. Croix Targeted Phosphorus Reduction Project	Carnelian Marine Stormwater Phase 2	Chisago Lakes Gully Restoration Green Lake	Marine on St. Croix Stormwater Phase 3	Comfort Lake Forest Lake Adaptive Management Project Implementation
<b>Project sponsor</b>	Carnelian-Marine-St. Croix WD	Carnelian-Marine-St. Croix WD	Comfort Lake Forest Lake WD	Snake River Watershed Management Board	Washington Conservation District	Carnelian-Marine-St. Croix WD	Chisago SWCD	Carnelian-Marine-St. Croix WD	Comfort Lake Forest Lake WD
<b>FY awarded</b>	2020	2019	2016	2016	2017	2017	2018	2018	2018
<b>Project timeframe</b>	November 2019 to November 2022	January 2020 to August 2023	January 2017 to August 2020	July 2016 to July 2020	March 2018 to August 2021	March 2018 to August 2021	April 2019 to August 2021	April 2019 to December 2020	June 2018 to June 2021
<b>Funding type</b>	CWP Loan	Section 319	Section 319	CWP Loan	Section 319	Section 319	Section 319	Section 319	CWP Loan
<b>Funding</b>	\$317,000.00	\$55,635.00	\$81,497	\$400,000	\$300,000	\$92,500	\$50,000	\$169,000	\$1,500,000
<b>Match</b>	\$200,000.00	\$40,340.00	\$210,000		\$200,000	\$82,500	\$55,000	\$121,000	
<b>HUC code</b>	7030005	7030005	7030005	7030004	7030005	7030005	7030005	7030005	7030005
<b>Watershed</b>	Lower St. Croix	Lower St. Croix	Lower St. Croix River	Snake River	Lower St. Croix River	Lower St. Croix River	Lower St. Croix	Lower St. Croix	Lower St. Croix

<b>Project name</b>	Carnelian Marine St Croix Bridging Funds Loan	Marine on St. Croix Stormwater, Phase 4	Moody Lake Wetland Rehabilitation Project	Snake River Watershed Resource Protection Project	Lower St. Croix Targeted Phosphorus Reduction Project	Carnelian Marine Stormwater Phase 2	Chisago Lakes Gully Restoration Green Lake	Marine on St. Croix Stormwater Phase 3	Comfort Lake Forest Lake Adaptive Management Project Implementation
<b>Project goal</b>	These CWP loan funds will assist in bridging the gap between expenditures and grant reimbursements associated with three 319 grant project that have been awarded.	The goal of this project is to reduce phosphorus loading and sedimentation to the St. Croix River and downstream to Lake St. Croix.	Reduce phosphorus from three degraded wetlands in the Moody Lake Watershed by removing phosphorus rich sediment in the wetlands, restoring wetland hydrology and managing livestock in the area.	This project would replace approximately 33 subsurface sewage treatment systems (SSTs) in the three year grant period.	Design and install up to 16 stormwater quality improvement practices within the Lower St. Croix Watershed to reduce phosphorus loading by at least 160 lbs/year.	Reduce phosphorus loading and sedimentation to the St. Croix River and downstream to Lake St. Croix. Stabilize an area of active ravine erosion on the headwaters of Marine Landing Creek.	Stabilize the large gully on the Parmly Campus in Chisago City, Minnesota. Improves will benefit Green Lake, the Sunrise River, and Lake St. Croix by controlling sediment and phosphorus from erosion.	Reduce phosphorus loading and sedimentation to the St. Croix River, and Lake St. Croix, Design and implement two biofiltration basins and up to 10 raingardens for stormwater within the City of Marine on St. Croix.	Bring target waterbodies back to pre-development conditions, which in some cases means exceeding state water quality standards.

# Upper Mississippi River Basin

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The Upper Mississippi River Basin (UMRB) within Minnesota stretches from the headwaters of the Mississippi River at Lake Itasca to Lock and Dam #2 near Hastings. It is the largest of Minnesota's 10 major river basins, and is the only major drainage basin with all of its watersheds contained entirely within Minnesota's borders. The watershed drains 20,105 square miles and 510 miles of river corridor are located within the basin. There are dramatic changes in the river as it flows downstream from the headwaters to the metro area. The Northern part of the River and Basin is dominated by lakes and forests and the Southern part of the River and Basin is dominated by more agricultural and urban areas. These differences in land use dictate the type of water quality issues found across the basin, as well as the specific strategies that are needed to protect or restore the river.

Watersheds that comprise all the land that drains water towards the Upper Mississippi River are [Mississippi River – Headwaters](#), [Leech Lake River](#), [Crow Wing River](#), [Pine River](#), [Long Prairie River](#), [Mississippi River – Brainerd](#), [Mississippi River – Grand Rapids](#), [Redeye River](#), [Mississippi River- Sartell](#), [Mississippi River – St. Cloud](#), [Rum River](#), [Sauk River](#), [North Fork Crow River](#), [South Fork Crow River](#), and [Mississippi River – Twin Cities](#).

## Newly awarded projects in the Upper Mississippi River Basin

There were four projects awarded in the Upper Mississippi River Basin in 2021, which are summarized in Table. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. These projects represent a total of \$1,684,275 of Section 319 grant and CWP loan investment, with a further commitment of \$185,296 in state and local matching funds.

**Table 17. Newly awarded projects in the Upper Mississippi River Basin**

Project name	Wright County Septic System Low Interest Loan Project	Mille Lacs County SSTS Upgrades	Green Lake NKE Implementation Phase 1	Lake Allie ESSD Wastewater Collection System Project
<b>Project sponsor</b>	Wright County	Mille Lacs County	Isanti SWCD	Renville County
<b>FY awarded</b>	2021	2020	2020	2021
<b>Project timeframe</b>	August 2020 to August 2023	July 2020 to July 2033	October 2020 to August 2024	November 2020 to November 2023
<b>Funding type</b>	CWP Loan	CWP Loan	Section 319	CWP Loan
<b>Funding</b>	\$500,000	\$200,000	\$284,275	\$700,000
<b>Match</b>	\$ -	\$ -	\$185,296	\$ -
<b>HUC code</b>	07010204, 07010203	07010207, 07030003	07010207	7010205
<b>Watershed</b>	North Fork Crow River and Mississippi River-St. Cloud	Rum River, Snake River	Rum River	South Fork Crow River
<b>Project goal</b>	Replace/upgrade failing or noncompliant SSTS in Wright County	Upgrade/replace approximately 15 SSTS	Implement prioritized and targeted Best Management Practices (BMPs) and strategic outreach in critical areas to reduce nonpoint sources of phosphorus to Green Lake.	The goal of the Lake Allie ESSD Wastewater Collection System Loan Project is to ensure continued surface and ground water quality protection by replacing an aging centralized sewage treatment system.
<b>BMPs planned</b>	This loan program will provide funding for approximately 30 SSTS. In Wright County, it is estimated that there is a 19% SSTS failure rate.	It is expected that approximately 15 noncompliant SSTS will be upgraded with this project.	Agricultural practices including: 3 WASCObS, 300 acres of cover crops Wyanett/North Brook row crop land, and two water retention practices. Install near-shore Best Management Practice Implementation including: bioretention, filtration, infiltration, shoreline restoration, erosion control and diversion.	Upgrade centralized sewer service for 73 residential dwellings and the Oakdale Golf Club.
<b>Estimated reductions</b>	Phosphorus: 270 lbs/yr Sediment: NA Soil Loss: NA Nitrogen: 390 lbs/yr BOD <sub>5</sub> : 11,070 lbs/yr E. coli: NA Fecal Coliform: 1.89E+15cfu	Phosphorus: 134 lbs/y Sediment: NA Soil Loss: NA Nitrogen: 387 lbs/yr BOD <sub>5</sub> : 5,415 lbs/yr E. coli: NA Fecal Coliform:9.24E+14cfu	Phosphorus: 162 lbs/yr Sediment: 0.32t/yr Soil Loss: NA Nitrogen: NA BOD <sub>5</sub> : NA E. coli: NA	Phosphorus: 135 lbs/yr Sediment: 1,802 t/yr Soil Loss: NA Nitrogen: 947 lbs/yr BOD <sub>5</sub> : 1,849 lbs/yr E. coli: NA

## **Completed projects in the Upper Mississippi River Basin**

There were no completed projects in the Upper Mississippi River Basin in 2021.

## **Active projects in the Upper Mississippi River Basin**

There are 18 projects that are currently under way in the basin are described in Table 18. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$7,848,697 of Section 319 and CWP loan funds invested in the Upper Mississippi River Basin, with a commitment to \$2,318,711.58 of local and state match.

Table 18. Active project in the Upper Mississippi River Basin

Project name	Meeker County SSTS Program	H2O (HOPP) Water Preservation Project	Todd County SSTS Project	VLAWMO Bacteria, Sediment & Nutrient Reduction Project	VLAWMO Bacteria, Sediment, & Nutrient Reduction Project	Crystal Lake Management Plan	Sweeney Lake WQ Improvement Project	Lake Carlos Watershed Improvement Project	Partridge River E. coli Reduction, Phase II
				These two projects are matching projects and are cooperative					
<b>Project sponsor</b>	Meeker County	City of Mounds View	Todd County	Vadnais Area Lakes WMO	Vadnais Area Lakes WMO	Shingle Creek WMC	Basset Creek WMC	Douglas SWCD	Todd SWCD
<b>FY awarded</b>	2020	2020	2020	2019	2019	2019	2019	2019	2019
<b>Project timeframe</b>	October 2019 to October 2022	January 2020 to January 2023	March 2020 to March 2023	September 2019 to September 2022	November 2019 to August 2023	January 2020 to August 2023	December 2019 to August 2023	January 2020 to August 2023	March 2020 to August 2023
<b>Funding type</b>	CWP Loan	CWP Loan	CWP Loan	CWP Loan	Section 319	Section 319	Section 319	Section 319	Section 319
<b>Funding</b>	\$275,000	\$2,000,000	\$450,000	\$400,000	\$302,679	\$216,066	\$330,000	\$300,000	\$221,610
<b>Match</b>				\$302,679	\$601,447	\$154,440	\$238,080	\$200,000	\$148,740
<b>HUC code</b>	0701020407010205	7010206	Multiple	7010206	07010206	07010206	07010206	07010108	07010106
<b>Watershed</b>	NF Crow, SF Crow	Mississippi River-Twin Cities	Redeye, Crow Wing, Long Prairie, Sauk, Miss-Brainerd, Miss-Sartell	Mississippi River-Twin Cities	Mississippi River-Twin Cities	Mississippi River-Twin Cities	Mississippi River-Twin Cities	Long Prairie River	Crow Wing River
<b>Project goal</b>	Replace/upgrade approximately 30 SSTS	Elimination of sanitary sewer discharge to groundwater via lateral pipe repair. Reduction in chloride discharge to sanitary and/or storm water system via replacement of residential water softeners.	Replace/upgrade approximately 55 SSTS	Companion to the VLAWMO Bacteria, Sediment& Nutrient Reduction Project	Install suite of BMPs to address bacteria impairment, provide increased stormwater storage, and capture sediment in the Lambert Lake area of Lambert Creek	Improve the water quality of Crystal Lake through the reduction of phosphorus levels, removal of carp and possible treatment for aquatic invasive species.	Reduce total phosphorus concentrations in Sweeney Lake to meet water quality standards	Implement BMPs on actively eroding project areas of the Long Prairie River Watershed to address nutrient rich sediment to surface waters through field erosion, feedlot runoff, storm water, and stream erosion.	Restore water quality in the Partridge River, Egly Creek, and its associated tributaries to the EPA safety standard of 126 org/100ml through high - medium flow regimes to protect the recreational value of the Crow Wing River.

Table 18 continued. Active project in the Upper Mississippi River Basin

Project name	Lake Osakis Minor Watershed Nutrient Reduction	Middle Sand Creek Corridor Restoration	Long Prairie River Streambank Restoration	Middle Sauk River Field Runoff Reduction	JD2 Sediment Pond Dredging Project	Partridge River E. coli Reduction	Lake Monongalia Stormwater Projects Importance	Shingle Creek Watershed SRP Reduction	Osakis Lake Basin Restoration - Phase 2 Implementation
<b>Project sponsor</b>	Todd SWCD	Coon Creek WD	Todd County SWCD	Sauk River WD	Sauk River WD	Todd County SWCD	Middle Fork Crow River WD	Shingle Creek WMC	Sauk River WD
<b>FY awarded</b>	2017	2018	2018	2018	2019	2018	2019	2018	2018
<b>Project timeframe</b>	March 2018 to August 2021	April 2019 to August 2022	March 2019 to August 2022	April 2019 to August 2022	November 2018 to November 2021	March 2019 to August 2022	October 2018 to October 2021	March 2019 to August 2022	November 2017 to November 2020
<b>Funding type</b>	Section 319	Section 319	Section 319	Section 319	CWP Loan	Section 319	CWP Loan	Section 319	CWP Loan
<b>Funding</b>	\$300,000	\$291,000	\$156,450	\$104,000	\$575,000	\$79,722	\$275,000	\$72,170	\$1,500,000
<b>Match</b>	\$200,000	\$194,000	\$104,300	\$69,333		\$53,182		\$52,510	
<b>HUC code</b>	7010202	7010206	7010108	7010202	7010202	07010106	7010204	7010206	7010202
<b>Watershed</b>	Sauk River	Mississippi River-Twin Cities	Long Prairie River	Sauk River	Sauk River	Crow Wing River	North Fork Crow	Mississippi River-Twin Cities	Sauk River
<b>Project goal</b>	Reduce total phosphorus contributions from animal agriculture within the OLM using financial and technical assistance for engineering plans, and installing BMPs on feedlots.	Provide long-term channel stability, reduce non-point source sediment and nutrient loading, and to enhance aquatic and riparian habitat along a 2/3-mile reach of Middle Sand Creek. Address aquatic life impairments and TMDL loads for TSS and TP in Sand Creek and Coon Creek.	Improve water quality through reduction of phosphorus, sediment, and BOD contributions to the Long Prairie River. The lower reaches of this river have been listed as impaired for dissolved oxygen (DO) level during low flow periods.	Install cover crops to prevent field erosion using NRCS FOTG recommendations to prevent sediment from reaching the Sauk River. In addition, a farmer-led council made up of local producers will be consulted to expand public outreach efforts.	Currently the JD2 sedimentation ponds are not functioning as designed due to the sediment build up in the ponds. Cleanout for the primary and secondary ponds.	Address water quality concerns in lakes and streams in the Crow Wing River Watershed. Livestock BMPs and other practices.	Installation of these projects will result in a cost-effective pollutant reduction from City of New London runoff to various nearby water resources, and downstream drinking water supply of Minneapolis and St. Paul.	Reduce SRP loading in outflow from disturbed wetlands by field evaluating the effectiveness of three types of filter media and permanently installing filters using the best-performing media at the outlets of two high SRP concentration wetlands that discharge to impaired waterbodies.	CWP loan for nonpoint BMP implementation activities in the Sauk River Major Watershed

# Cedar River Basin

The Cedar River Basin lies in the western portion of Southeast Minnesota. Approximately 1,000 square miles cover Minnesota, but most of this Basin is in Iowa. In Minnesota, the Basin includes the following HUC-8 watersheds: [Cedar River](#), [Upper Wapsipinicon River](#), [Shell Rock River](#) and [Winnebago River](#). Agriculture dominates the land use of the Cedar River Basin. Row crop and livestock production play a large role in the watershed. Many of the water quality projects implemented in this Basin work to reduce impacts from agriculture, including sediment, nitrogen and *E. coli* reduction efforts.

## Newly awarded projects in the Cedar River Basin

There was one project awarded in the Cedar River Basin in 2021, which is summarized in Table 19. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$284,275 of Section 319 Funds for newly awarded in the Cedar River Basin, with a commitment of \$297,780 in local match.

**Table 19. Newly awarded projects in the Cedar River Basin**

<b>Project name</b>	<b>Dobbins Creek Watershed Project Phase 1</b>
<b>Project sponsor</b>	Cedar River Watershed District
<b>FY awarded</b>	2020
<b>Project timeframe</b>	December 2020 to August 2024
<b>Funding type</b>	Section 319
<b>Funding</b>	\$284,275
<b>Match</b>	\$297,780
<b>HUC code</b>	7080201
<b>Watershed</b>	Cedar River
<b>Project goal</b>	The goal is to implement best management practices in the upper watershed, capital improvement projects, accelerate bacteria treatment through SSTS improvements, implement 184 acres of Soil Health Practices, track performance and inventory landuse management and soil health BMPs, establish modeling estimate of N, P,Q, and sediment reduction benefits of priority project sites.
<b>BMPs planned</b>	Implement BMPs that may include, but not be limited to; cover crops, grass waterways, soil stabilization basins, field buffers or other tillage management practices. Adopt 184 acres of Soil Health practices on the land.

## Completed projects in the Cedar River Basin

There were no completed projects in the Cedar River Basin in 2021.

## Active projects in the Cedar River Basin

There are no current projects in the Cedar River Basin in 2021.

## Projects spanning multiple basins

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In many cases, political boundaries do not follow the natural watershed boundaries. In cases like these, often a political entity, such as a county, will develop a project within their political borders that span multiple basins. In other cases, there are projects that have a statewide impact and will benefit the entire state. Since 2016, there has been an investment of \$8,136,875 of Section 319 funds and Clean Water Partnership Loan funds. Local partners have invested an additional \$30,000 of state and local match dollars to these projects.

### Newly awarded projects in multiple basins

There were no newly awarded projects in the Multiple Basins in 2021.

## Completed projects in multiple basins

There was one completed project in Multiple Basins is summarized in Table 20. The projects represented a total of \$606,791 of Section 319 funds with \$427,375 of state and local match. These projects addressed Smart Salting and Nutrient Reduction Trainings Statewide.

**Table 20. Completed projects in multiple basins**

<b>Project name</b>	<b>Smart Salting and Nutrient Reduction Training</b>
<b>Sponsor</b>	Fortin Consulting
<b>FY awarded</b>	2016
<b>Project timeframe</b>	December 2016 to August 2020
<b>Funding type</b>	Section 319
<b>Funding</b>	\$606,791
<b>Match</b>	\$427,375
<b>HUC code</b>	Statewide
<b>Watershed</b>	Statewide
<b>Project goal</b>	<ol style="list-style-type: none"> <li>1. Provide winter maintenance professionals with information, resources and tools to reduce salt use.</li> <li>2. Provide turfgrass maintenance professionals with information and tools to reduce nutrient loading from turfgrass.</li> <li>3. Work with individual winter maintenance organizations to evaluate their program and identify specific salt reduction practices.</li> <li>4. Survey maintenance professionals on current practices, practices needing improvement, resources to help improve practices, and identify barriers to adopting specific best management practices.</li> <li>5. Communicate with local organizations implementing TMDLs the information gained from the maintenance professionals to assist with prioritizing TMDL implementation efforts.</li> </ol>

## Active projects in multiple basins

There are eight projects that are currently under way described in Table 21. The table describes the funding source and amount, the expected state and local match, the HUC8 watershed, and the goal of the project. There are currently \$6,900,000 of CWP loan funds invested, with a commitment of \$30,000 of local and state match.

**Table 21. Active projects spanning multiple basins**

Project name	McLeod County SSTS Restoration	Lincoln County SSTS Project	Itasca County SSTS Loan Program	Otter Tail County SSTS Loan	Pine County SSTS Upgrades	Renville County SSTS Loan Program	Kandiyohi County SSTS Upgrades	Cottonwood County SSTS Low Interest Loan Project
<b>Project sponsor</b>	McLeod County	Lincoln county	Itasca County	Otter Tail County	Pine County	Renville County	Kandiyohi County	Cottonwood County
<b>FY awarded</b>	2019	2019	2020	2020	2020	2020	2018	2019
<b>Project timeframe</b>	July 2019 to July 2022	June 2019 to Jun3 2022	December 2019 to December 2022	April 2020 to April 2023	June 2020 to June 2023	May 2020 to May 2023	June 2018 to June 2021	May 2019 to May 2022
<b>Funding type</b>	CWP Loan	CWP Loan	CWP Loan	CWP Loan	CWP Loan	CWP Loan	CWP Loan	CWP Loan
<b>Funding</b>	\$1,200,000	\$500,000	\$500,000	\$1,000,000	\$900,000	\$900,000.00	\$1,000,000	\$900,000
<b>Match</b>		\$30,000						
<b>HUC code</b>	07010205, 07010204, 07020012	07020003, 10170202, 10170203, 07020004, 07020006	07010101, 07010103, 09030006, 09030005, 09020302, 04010201	09020103, 07010107	07030001, 07030005, 07030004, 07030003, 04010301	07020012, 07020007, 07020004, 07010205	07010204, 07010205, 07020005, 07020004	07100001, 07020010, 07020008, 07020007, 07020009
<b>Watershed</b>	South Fork Crow, North Fork Crow, Lower Minnesota	Lac qui Parle, Minnesota - Yellow Medicine, Redwood, Upper Big Sioux, Lower Big Sioux	Mississippi -Headwaters, Mississippi-Grand Rapids, St. Louis, Little Fork, Big Fork, Upper/Lower Red Lake	Otter Tail, Redeye	Upper St. Croix, Lower St. Croix, Snake, Kettle, Nemadji	Lower Minnesota, Minnesota-Mankato, Minnesota - Yellow Medicine, South Fork Crow	North Fork Crow, South Fork Crow, Chippewa, Redwood	Mississippi River-Twin Cities Watershed
<b>Project goal</b>	Improve water quality and environmental degradation through financial assistance in replacing failing septic systems in McLeod County. Environmental benefits include proper treatment and disposal of septage that include phosphorus, sediment and nitrogen that have a negative impact on both ground and surface water.	Provide loan funds to upgrade subsurface sewage treatment systems (SSTS) to reduce multiple pollutants, including bacteria, from reaching groundwater and the identified waterbodies. Installation of conforming sewage treatment systems will assist greatly in protection of unimpaired waterbodies while restoring multiple reaches already impaired for bacteria.	Protect, enhance, and restore water quality in Itasca County by establishing a loan fund, which will encourage a faster rate of septic system replacement on properties throughout the county.	Provide loans to homeowners and commercial operators to replace noncompliant septic systems. The letters that require replacement of SSTS will promote the use of this loan program to homeowners and commercial property owners.	Replacement of noncompliant septic systems in Pine County to protect and improve public health and the water quality of the County's five major watersheds.	To achieve water quality protection and restoration by providing financial assistance for property owners to upgrade noncompliant sewage treatment systems.	Achieve water quality protection and restoration through SSTS upgrades.	Replace 72 septic systems throughout Cottonwood County over the next three years.

# Appendix A. Goals, milestones and strategies

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Minnesota has long tradition of addressing water quality issues within the state. Throughout this time many plans, initiatives and strategies were developed to address concerns throughout the state. In 2006 the Minnesota Legislature determined that: “there is a close link between protecting, enhancing, and restoring the quality of Minnesota's groundwater and surface waters and the ability to develop the state's economy, enhance its quality of life, and protect its human and natural resources; and achieving the state's water quality goals will require long-term commitment and cooperation by all state and local agencies, and other public and private organizations and individuals, with responsibility and authority for water management, planning, and protection.”

Based on this information the Minnesota Legislature passed the Clean Water Legacy Act legislatively mandating a common effort to address water quality concerns in Minnesota. From this directive several high level efforts, such as the Minnesota Water Quality Framework and the Clean Water Roadmap were completed to guide water quality improvement efforts in Minnesota. These documents along with other statewide planning and strategy documents (such as the state Nutrient Reduction Strategy and the state water plan led by the Environmental Quality Board) provide the overall goals, strategies and milestones for this plan and are outlined below.

## Guiding principle

The guiding principles of this plan follow the Minnesota Water Quality Framework principles:

- Protect, maintain, and restore the biological, chemical, and physical health of the state's water resources.
- Provide resiliency to our ecosystems, our communities, and our economies.
- Increase our understanding of our state water balance and the processes and stressors affecting it to provide for improved decision making.
- Improve our capacity for water management that can adapt to new knowledge, changing biogeochemical systems, and long-term challenges.
- Encourage sustainable, conservation-minded land use practices.
- Recognize and honor our many uses of water, including recreational, cultural, and spiritual values.
- Preserve our water-rich heritage and ensure our future legacy as national and international water stewards.
- Provide for a lasting foundation to achieve and maintain sustainable water management.

## Short term, long term, and overall goals

The Minnesota Clean Water Council has worked with stakeholders to develop overall goals for water quality in Minnesota. The overall goals listed below are applicable to this plan:

Drinking water is safe for everyone, everywhere in Minnesota.

Protect public water supplies.

Ensure private well users have safe water.

Groundwater is clean and available.

Improve and protect groundwater quality.

Ensure sustainable long-term trends in aquifer levels.

Avoid adverse impacts to surface water features due to groundwater use.

Surface waters are swimmable and fishable.

Prevent and reduce pollution of surface waters.

Maintain and improve the health of aquatic ecosystems.

Protect and restore hydrologic systems.

Minnesotans value water and take actions to sustain and protect it

Build capacity of local communities to protect and sustain water resources.

Encourage systems and approaches that support, protect, and improve water.

Provide education and outreach to inform Minnesotans' water choices.

Encourage citizen and community engagement on water issues.

Minnesota's Clean Water Roadmap establishes several long-term goals that are applicable for this plan:

Increase the percentage of Minnesota lakes with good water quality, as measured by acceptable Trophic State Index, from 62% to 70%.

Increase the percentage of Minnesota's rivers and streams with healthy fish communities, as measured by the Index of Biotic Integrity, from 60% to 67%.

Reduce nitrate levels in groundwater by 20%, which will decrease the percentage of wells exceeding the drinking water standard by 50% (in two vulnerable areas of the state).

The 2014 Minnesota Nutrient Reduction Strategy set short and long-term goals to assist in tracking Minnesota's statewide nutrient reduction progress and are applicable to this plan. Each major basin has numeric reduction goal for phosphorus and nitrogen.

[Five-year progress report | Minnesota Pollution Control Agency \(state.mn.us\)](#)

Major basin	Short term goal 2014 to 2025	Long term goal 2025 to 2040
1. <b>Mississippi River</b> (Also includes Cedar, Des Moines, and Missouri Rivers)	12% reduction in phosphorus (33% reduced prior to 2014)	Achieve <b>45%</b> total reduction from 1980-96 baseline and meet in-state lake and river water quality standards
	20% reduction in nitrogen	Achieve <b>45%</b> total reduction from 1980-96 baseline
2. <b>Red River</b> (Lake Winnipeg Basin)	10% reduction in phosphorus	Achieve final reductions identified through joint efforts with Manitoba (about 50% from 1998 to 2001) <sup>a</sup>
	13% reduction in nitrogen	
3. <b>Lake Superior</b>	Maintain protection goals, no net increase from 1970s	
<b>Groundwater/Source Water</b>	Meet the goals of the 1989 Groundwater Protection Act	

### Overall priorities

Three high-level state priorities that are identified for the use of nonpoint implementation money include:

Restore those impaired waters that are closest to meeting state water quality standards.

Impaired waters that are within 10% of meeting water quality standards should be considered a priority for implementation.

Protect those high-quality unimpaired waters at greatest risk of becoming impaired.

High-quality unimpaired waters that are within 10% of becoming impaired and have a declining water quality trend should be considered a priority for implementation.

Restore and protect water resources for public use and public health, including drinking water.

These priorities of barely impaired, nearly impaired, and those that are a significant public use and public health, especially drinking water sources, are prioritized for funding, as described in the [Section 319 Small Watersheds Focus Programs Funding Priorities and Selection Criteria](#).

### **Strategies**

High-level strategies are identified in the Minnesota Non-Point Funding Plan (NPPF) for the successful use of available funds in achieving the state’s clean water goals. These same strategies are adopted in this plan, as the Minnesota NPPF was developed to provide state agencies with a coordinated, transparent and adaptive method to ensure that Clean Water Funds and other implementation funds are targeted to cost-effective actions with measurable results. The Minnesota NPPF does not include a single scoring system with weighted criteria. Instead, it allows state agencies the flexibility to apply the NPPF priorities and criteria in ways that meet their strategic, legislative and funding source goals. Included with these strategies are this plan’s milestone activities on how these strategies will be implemented for this plan.

### **Accelerate Watershed-scale implementation**

Watershed Scale Implementation will be most effective when allocation of monies for the highest-priority actions follows local government adoption of watershed-based local water plans.

Milestone 1a – each year, up to ten small watersheds will be selected to participate in the Section 319 Small Watershed Focus Program. Up to 40 watersheds will be selected to participate in the program.

Measure – # of watersheds selected to participate in the Small Watershed Focus Program.

*Group A: 10*

*Group B: 9*

*Group C: 10*

*Group D: In progress*

Milestone 1b – provide assistance to each of the selected Small Watershed Focus Program recipients in the development of an EPA NKE watershed-based plan.

Measure – all selected watersheds have an EPA approved NKE watershed-based plan.

*Group A: 10*

*Group B: 8, 2 in progress*

*Group C: In progress*

*Group D: In progress*

Milestone 1c – provide administrative oversight of the Minnesota Section 319 Small Watershed Focus Program.

Measure – satisfactory review of administrative oversight.

*Yes*

Milestone 1d – develop or update a Watershed Management Plan (in the seven county metro area) or a Comprehensive Watershed Management Plans also known as One Watershed, One Plan (1W1P).

Measure – # of completed and approved plans, or subsequently developed updated plans.

*Metro:*

*Approved Plans: 33 out of 33*

<https://www.pca.state.mn.us/water/twin-cities-metropolitan-area-tcma-watersheds>

*Greater MN*

*Approved Plans: 24 out of 80*

*Planning: 25*

**Prioritize and target at the Watershed scale**

Models and tools are useful for watershed prioritization and for identifying potential impacts to surface and groundwater. They are often capable of targeting which actions, locations, and management practices are most effective at addressing water quality goals and project objectives. Models and tools are used to project outcomes of specific actions, locations, and management practices to forecast measurable results. Using these models and tools together with the best available science can efficiently inform Minnesota’s Water Quality Framework.

Milestone 2a – Develop and maintain Hydrological Simulation Program – Fortran (HSPF) models or other more appropriate water quality simulation models for each of the 80 watersheds in Minnesota.

Measure – # of HUC8 watersheds that have a completed and QA/QCed water quality simulation model.

*Watersheds completed: 2*

Milestone 2b – extend time series and data of each watershed model once every five years ensuring latest water quality data is available.

Measure – # of completed water quality simulation model updated once every five years.

*Watersheds completed: 7*

**Measure results at the Watershed scale**

Similar to prioritizing and targeting, measuring results is best achieved at the watershed scale.

Watershed-based local water plans capable of producing measurable results are essential to adaptive management and accountability to the public.

Milestone 3a – support ongoing nutrient load monitoring through the Watershed Pollutant Load Monitoring Network (WPLMN) which occurs on every major river throughout the state.

Measure – # of WPLMN sites maintained.

*Basin Sites: 22*

*Major Watershed Sites: 51*

*Subwatershed Sites: 122*

*Total: 195*

Milestone 3b – support Minnesota’s Watershed Approach Intensive Watershed Monitoring (IWM) program which evaluates streams and lake water quality on a 10 year cycle of biological and chemical monitoring conducted in each of the 80 HUC8 watersheds in Minnesota.

Measure - # of HUC8 watersheds completing IWM each year.

*Cycle 1: 80 out of 80 watersheds completed.*

Milestone 3c – support the Minnesota Citizen Monitoring Program (CMP) to allow dedicated citizen scientist and the MPCA to track the long-term health of Minnesota lakes and streams, in a collaborative approach, via regular summer water clarity monitoring.

Measure - # of volunteers participating in the CMP.

*A total of 1,367 CMP volunteers collected data during the most recent monitoring season.*

[Citizen water monitoring | Minnesota Pollution Control Agency \(state.mn.us\)](#)

Milestone 3d – provide input and assist in the development of the biennial Clean Water Fund Performance Report. This report provide a snapshot of how Clean Water Fund and other leveraged dollars are being spend and what progress has been made in achieving water quality goals.

Measure – Clean Water Fund Performance Report published in even numbered years.

[2020 Clean Water Fund Performance Report](#)

[Clean Water Fund Performance Reports | Minnesota's Legacy \(mn.gov\)](#)

Milestone 3e – maintain and update the Healthier Watershed webpage which provides interactive and updated information on WRAPS and TMDL status, wastewater treatment plant progress, BMP implementation by watershed, and information on state, local and federal spending for clean water projects.

Measure – webpage [Healthier watersheds: Tracking the actions taken | Minnesota Pollution Control Agency \(state.mn.us\)](#) updated annually by July 1<sup>st</sup>.

Updated June 2021

#### **Utilize science-based information**

A key to developing prioritized implementation schedules for projects with targeted actions, and measuring results of these actions, is to incorporate the wealth of science-based information, summarized in WRAPS, TMDLs and other technical reports, and practice effectiveness research into local water planning and project development processes.

Milestone 4a – Utilize Watershed Assessment Teams (WAT) and Professional Judgement Groups (PJG) in the water quality Assessment Process to determine if state waters are attaining water quality standards.

Measure - # of Assessment Processes completed each year.

10 assessment in FY 2021

Milestone 4b – perform Stressor Identification (SID) in each of the 80 HUC8 watersheds to identify stressors causing biological impairments of aquatic ecosystems through a weight of evidence approach, and provide a structure for organizing the scientific evidence supporting the conclusion. A Stressor Identification report will be developed for each of the 80 HUC8 watersheds.

Measure - # of SID reports/updates completed each year.

*FY 2021: 2 reports*

Milestone 4c – perform Problem Investigation Monitoring to investigate specific problems or protection concerns to allow for the development of a management approach to protect or improve the resource.

Measure - # of sites monitored each year.

60 sites FY2021

Milestone 4d – develop Watershed Restoration and Protection Strategy (WRAPS) reports which include major findings of the Monitoring and Assessment Report, Biological SID Report, HSPF modeling results, TMDL study information, and protection and implementation strategies for each HUC8 watershed.

Measure - # of WRAPS reports, or subsequently WRAPS Update reports, developed yearly.

*70 of 80 WRAPS approved, 8 in progress, 2 on public notice. As of 10/7/2021*

Milestone 4e – develop TMDL studies in accordance with Minnesota’s TMDL Priority Framework document.

Measure - # of TMDLs approved by EPA each year.

*TMDL FY 2021: 17*

*FY 2016-2020: 56*

[Approved TMDLs and WRAPS \(state.mn.us\)](https://state.mn.us)

Milestone 4f – develop Minnesota Department of Health Groundwater Restoration and Protection Strategies (GRAPS) reports for each watershed, which contain maps and data describing groundwater conditions in the watershed. The reports identify local groundwater concerns and outline strategies and programs to address them.

Measure - # of GRAPS developed each year.

*8 complete GRAPS reports.*

[Groundwater Restoration and Protection Strategies \(GRAPS\) \(state.mn.us\)](https://state.mn.us)

Milestone 4g – develop Minnesota Department of Natural Resources Watershed Hydrology, Connectivity, and Geomorphology Assessment Reports for each watershed which analyzes the current and historical hydrology trends of the watershed, assesses the fluvial geomorphology and stability of rivers and streams within the system and investigates connectivity (i.e. longitudinal, lateral, and riparian).

Measure - # of Hydrology, Connectivity, and Geomorphology Assessment reports developed each year.

Milestone 4h – update and revise Minnesota Nutrient Reduction Strategy (NRS). Report on progress on implementation activities and strategies, BMP adoption assessment, water quality outcomes and any recommended adjustments to the NRS implementation efforts.

Measure – NRS update completed in 2024.

[Nutrient reduction strategy | Minnesota Pollution Control Agency \(state.mn.us\)](https://state.mn.us)

### **Build local capacity**

The work of nonpoint implementation rests on the shoulders of local governments. As WRAPS proliferate and local water planning begins shifting to a watershed-based framework, success is dependent on highly capable local government staff to develop, prioritize, target, and implement projects at the local level.

Milestone 5a – maintain, support and provide training for HSPF-Scenario Application Manager (HSPF-SAM) to aid local partners in the decision on the prioritization and placement of best management practices (BMPs) needed to achieve water quality goals.

Measure - # of Processing Application Tool for HSPF (PATH) interfaces maintained.

*One PATH maintained in FY 2021*

Measure - # of trainings HSPF-SAM held.

*3 trainings during FY 2021*

Milestone 5b – provide water quality technical knowledge assistance and information to local planning partners in the development or updates 1W1P. This assistance will include: providing water quality data, identification of stressors and pollutant sources, information on prioritizing and targeting critical areas for protection and restoration, and high-level strategies to achieve water quality goals.

Measure – # of completed and approved 1W1P or subsequently developed updated 1W1P.

*Approved Plans: 24*

*Planning: 25*

Milestone 5c – provide Smart Salting training to increase awareness of chloride pollution and prevention.

Measure – cumulative # of people certified in Smart Salting.

*Trained*

*FY 2021: 785*

*Total 4942 (FY 2014-2021)*

[Smart Salting training | Minnesota Pollution Control Agency \(state.mn.us\)](#)

Milestone 5d – Implement the Minnesota Clean Water Partnership loan program offering zero-interest loans to local units of government for implementing nonpoint-source best management practices and other activities that target the restoration and protection of water resources.

Measure – amount of money loaned to local units of government per year.

*FY 2021: \$6,500,000*

Milestone 5e – Continue to direct funding resources for accelerated program management and local implementation of non-point pollution reduction activities.

Measure – amount of grant money awarded.

*Section 319 FFY2020 5,600,000*

[Show you're interested: Section 319 Small Watersheds Focus | Minnesota Pollution Control Agency \(state.mn.us\)](#)

*Clean Water Funds 5,000,000 available for FY 2021* [Clean Water Partnership loan | Minnesota Pollution Control Agency \(state.mn.us\)](#)

[Clean Water Fund | Minnesota's Legacy \(mn.gov\)](#)

Milestone 5f – maintain and update the Minnesota Stormwater Manual WIKI

Measure – continued update of manual. Updates can be tracked at [Recent changes - Minnesota Stormwater Manual \(state.mn.us\)](#).

*Last updated: 10/5/2021*

### **Maximize existing laws and regulations**

Customary approaches to nonpoint pollution implementation include regulation as well as financial incentives and education. A key to developing effective Watershed Restoration and Protection Strategies is maximizing the effectiveness of existing laws and regulations.

Milestone 6a – support and implement the 2015 Buffer Law (amended in 2016). The law establishes perennial vegetation buffers along rivers, streams, and public drainage ditches.

Measure - Percentage compliance statewide of Buffer Law.

As of July 2019, approximately 98% of parcels adjacent to Minnesota waters are compliant with the Buffer Law.

[Minnesota Buffer Law | MN Board of Water, Soil Resources \(state.mn.us\)](#)

[Where Can I Find Buffer Maps? | MN Board of Water, Soil Resources \(state.mn.us\)](#)

Milestone 6b – support and implement the MDA Minnesota Nitrogen Fertilizer Management Plan and the Groundwater Protection Rule.

Measure – annual posting of Fall Nitrogen Restriction map.

[Fall Nitrogen Fertilizer Application Restrictions \(2021\) \(arcgis.com\)](#)

Measure – annual posting of Drinking Water Supply Management Area Mitigation Level map.

[Mitigation Level Determination | Minnesota Department of Agriculture \(state.mn.us\)](#)

Milestone 6c – support and implement MPCA Feedlot rules on non-CAFO facilities

Measure - Number of high-risk feedlot inspections conducted annually.

[MPCA Feedlot Program overview](#) Updated January 2021

Milestone 6d – support and implement the MPCA Subsurface Sewage Treatment System rules

Measure - Percentage of estimated SSTS compliant systems.

[2020 SSTS Annual Report](#)

Total number of SSTS reported and construction permits issued in 2020

Total number of SSTS: 618,102

Construction permits: 12,368

### **Support innovative nonregulatory approaches**

One of several keys to leveraging various implementation monies is to support the development of market-driven and reward-driven approaches.

Milestone 7a – implement the Minnesota Agricultural Water Quality Certification Program (MAWQCP). The MAWQCP is a voluntary program that supports the implementation of conservation practices on a field-by-field, whole-farm basis through its process of identifying and mitigating agricultural risks to water quality. Overall goal is the enrollment of one million acres.

Measure – cumulative # of acres enrolled.

*Total Acres enrolled 775,139. 1,082 producers. As of 6/28/2021*

*2,181 new practices*

*38,984 tons of sediment per year*

*113,550 tons of soil per year*

*49,749 lbs of phosphorus per year*

[Minnesota Agricultural Water Quality Certification Program | Minnesota Department of Agriculture \(state.mn.us\)](#)

Milestone 7b. – support point/non-point water quality trading in a market-based approach for the protection and restoration of water resources that work in conjunction with existing voluntary, regulatory and financial assistance programs.

Measure – cumulative # of water quality trades completed.

6 Trades

[Water quality trades in Minnesota | Minnesota Pollution Control Agency \(state.mn.us\)](#)

Milestone 7c. – support the MDA and University of Minnesota Forever Green Initiative which develops and promotes methods on incorporating perennial and winter annual crops into existing agricultural practices.

Measure - # of projects funded each biennium.

Projects funded 2020-2021: 13

[2020-2021 Forever Green Projects | Minnesota Department of Agriculture \(state.mn.us\)](#)

<https://www.forevergreen.umn.edu/>

Additional strategies to achieve successful non-point pollution reductions

**Build partnerships to enhance a collaborative watershed approach to nonpoint water pollution.**

Milestone 8a – Support collaborative water quality policy development through the Clean Water Council with members from: farm organizations, business organizations, environmental organizations, Soil Water Conservation Districts, Watershed Districts, nonprofit organizations focused on water quality improvements, state agencies, county governments, city governments, township officers, tribal governments, statewide hunting organizations and statewide fishing organizations.

Measure – continued monthly meetings of the CWC and its Policy Committee.

Regular monthly meetings were held in FY 2021.

Milestone 8b – strengthen and expand state agency collaboration through the Interagency Coordination Team with members from BWSR, DNR, Met Council, MDA, MDH, MPCA, PFA and EQB.

Measure – continued regular meetings of the ICT, and its subteams.

11 regular meetings were held in FY 2021.

In addition to the above referenced strategies and milestones, Minnesota’s NPS Program will also deploy a variety of Administrative measures to evaluate Minnesota’s NPS Program administration and management including:

Timeliness and quality of report submittals to US EPA.

Timeliness of federal fund obligation with state program partners and sub-grantees.

Participation at all required meetings, conferences and other events outlined in the Programmatic Conditions section of Minnesota’s grant agreement with US EPA.

Provide administrative oversight of the Minnesota Section 319 Small Watershed Focus Program.

Submittal of an annual Watershed Achievements Report highlighting the achievements of active and recently completed nonpoint source water quality projects.

Provide Section 319 grant program process into EPA’s Grants Reporting and Tracking System (GRTS) on a semiannual basis.

Develop individual nonpoint source water quality Success Stories.

Review and update the Minnesota Nonpoint Source Management Program plan at least once every five years.

The preceding measures are reported through the Minnesota Water Performance Partnership Grant (PPG) reporting. Copy of 2021 report attached as Appendix B.

## Appendix B. Minnesota Water PPG Work Plan • FFY 2021 Report

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### Color Indicator Legend

Commitment met	Mixed progress	Commitment not met
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## Minnesota Water Performance Partnership Grant (PPG) Work Plan • FFY 2021 Report

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Includes FFY 2021 work plan revisions when applicable

Water Pollution Control Program (Sec. 106 and Sec. 319)

### Strategic Goal: 2 – Protecting America’s Waters<sup>1</sup>

**Objective 2.1: Protect and Restore Watersheds and Aquatic Ecosystems:** Protect, restore, and sustain the quality of rivers, lakes, streams, and wetlands on a watershed basis, and sustainably manage and protect coastal and ocean resources and ecosystems.

**2014- 2015 Strategic Priority goal – Improve, restore, and maintain Water Quality by enhancing nonpoint source programs**

**Water Pollution Control (sec 106)**

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<sup>1</sup> EPA Strategic Goals are located at <http://www.epa.gov/ocfo/plan/plan.htm>

Code	Outputs/Measures (identified from EPA National Program Guidance, Regulations, or Policy)	State Commitments - Outputs/Measures and Outcomes – (should relate to the Output/Measure in column 1 &2)	Progress Target Dates & Contact	Annual Performance Report of Progress Made in Meeting Commitments (Outputs and/or Outcomes) in columns 1 and 3																																													
WQ-SP10.N11	Number of waterbodies identified in 2002 as not attaining water quality standards where standards are now fully attained (cumulative)	We will report, as a cumulative number, the water bodies that have fully attained all water quality standards. We estimate that one (1) water body a year will attain all standards from the 2002 303(d) list.	Wayne Cords	<p><b>FFY 2017 Report:</b></p> <p>The following water bodies appear to meet water quality standards and are proposed to be delisted in 2018:</p> <table border="1" data-bbox="1325 548 1997 1166"> <tbody> <tr><td>2018</td><td>Red River of the North</td><td>English Coulee (ND) to Turtle R (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Turtle R (ND) to Park R (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Buffalo R to Elm R (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Elm R (ND) to to Marsh R</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Buffalo Coulee (ND) to English Coulee (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Marsh R to Buffalo Coulee (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Park R (ND) to Unnamed cr (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Unnamed cr (ND) to MN/Canada border</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Otter Tail R to Wild Rice R (ND)</td></tr> <tr><td>2018</td><td>Red River of the North</td><td>Wild Rice R (ND) to Buffalo R</td></tr> <tr><td>2018</td><td>Crystal</td><td>Lake or Reservoir</td></tr> <tr><td>2018</td><td>McMahon</td><td>Lake or Reservoir</td></tr> <tr><td>2018</td><td>Mitchell</td><td>Lake or Reservoir</td></tr> <tr><td>2018</td><td>Clearwater River</td><td>JD 1 to Lost R</td></tr> <tr><td>2018</td><td>Clearwater River</td><td>Ruffy Bk to JD 1</td></tr> </tbody> </table> <p>A previous number of 188 plus the 15 above equals 203 cumulative water bodies.</p> <p>Information on waterbody impairments/pollutants can be found at:</p>	2018	Red River of the North	English Coulee (ND) to Turtle R (ND)	2018	Red River of the North	Turtle R (ND) to Park R (ND)	2018	Red River of the North	Buffalo R to Elm R (ND)	2018	Red River of the North	Elm R (ND) to to Marsh R	2018	Red River of the North	Buffalo Coulee (ND) to English Coulee (ND)	2018	Red River of the North	Marsh R to Buffalo Coulee (ND)	2018	Red River of the North	Park R (ND) to Unnamed cr (ND)	2018	Red River of the North	Unnamed cr (ND) to MN/Canada border	2018	Red River of the North	Otter Tail R to Wild Rice R (ND)	2018	Red River of the North	Wild Rice R (ND) to Buffalo R	2018	Crystal	Lake or Reservoir	2018	McMahon	Lake or Reservoir	2018	Mitchell	Lake or Reservoir	2018	Clearwater River	JD 1 to Lost R	2018	Clearwater River	Ruffy Bk to JD 1
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<https://www.pca.state.mn.us/water/impaired-waters-delisting-decisions>

The Restored Waters map can be found at:  
<http://www.pca.state.mn.us/index.php/view-document.html?gid=15339>

**FFY 2018 Report**

In addition to those reported in 2017, the following water bodies appear to meet water quality standards and are proposed to be delisted in 2018/2020:

2018	County Ditch 57	Unnamed ditch to Clearwater R
2018	Roseau River	Hay Cr to MN/Canada border
2018	Judicial Ditch 6 (Lake Okabena Outflow)	Okabena Lk to Ocheda Lk
2020	Platte River	Rice-Skunk Lakes Dam to Unnamed cr (above RR bridge)
2020	Little Rock Creek	T39 R30W S22, south line to T38 R31W S23, west line
2020	Otter Tail River	JD 2 to Breckenridge Lk

**FFY 2019 Report**

Measure suspended in FY2019.

**FFY 2020 Report**

Measure suspended in FY2020.

**FFY 2021 Report**

				Measure suspended in FY2021.																																													
WQ-SP11	Remove the specific causes of waterbody impairment identified by states in 2002. (cumulative)	We will report, as a cumulative number, the water body impairments (parameters) that have attained the respective water quality standards (for water bodies that have both fully or partially attained the standards). We estimate that nine (9) listed impairments a year will attain its respective standard from the 2002 303(d) list.	Wayne Cords	<p><b>FFY 2017 Report:</b></p> <p>The following water body impairments appear to meet water quality standards and are proposed to be delisted in 2018:</p> <table border="1"> <tr> <td>Red River of the North</td> <td>English Coulee (ND) to Turtle R (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Turtle R (ND) to Park R (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Buffalo R to Elm R (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Elm R (ND) to Marsh R</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Buffalo Coulee (ND) to English Coulee (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Marsh R to Buffalo Coulee (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Park R (ND) to Unnamed cr (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Unnamed cr (ND) to MN/Canada border</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Otter Tail R to Wild Rice R (ND)</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Red River of the North</td> <td>Wild Rice R (ND) to Buffalo R</td> <td>PCB in fish tissue</td> </tr> <tr> <td>Crystal</td> <td>Lake or Reservoir</td> <td>Nutrient/eutrophication biological indicators</td> </tr> <tr> <td>McMahon</td> <td>Lake or Reservoir</td> <td>Nutrient/eutrophication biological indicators</td> </tr> <tr> <td>Mitchell</td> <td>Lake or Reservoir</td> <td>Nutrient/eutrophication biological indicators</td> </tr> <tr> <td>Clearwater River</td> <td>JD 1 to Lost R</td> <td>Dissolved oxygen</td> </tr> <tr> <td>Clearwater River</td> <td>Ruffy Bk to JD 1</td> <td>Dissolved oxygen</td> </tr> </table> <p>A previous number of 236 plus the 15 above equals 251 cumulative water bodies.</p> <p>Waterbody impairments/pollutants can be found at: <a href="https://www.pca.state.mn.us/water/impaired-waters-delisting-decisions">https://www.pca.state.mn.us/water/impaired-waters-delisting-decisions</a></p>	Red River of the North	English Coulee (ND) to Turtle R (ND)	PCB in fish tissue	Red River of the North	Turtle R (ND) to Park R (ND)	PCB in fish tissue	Red River of the North	Buffalo R to Elm R (ND)	PCB in fish tissue	Red River of the North	Elm R (ND) to Marsh R	PCB in fish tissue	Red River of the North	Buffalo Coulee (ND) to English Coulee (ND)	PCB in fish tissue	Red River of the North	Marsh R to Buffalo Coulee (ND)	PCB in fish tissue	Red River of the North	Park R (ND) to Unnamed cr (ND)	PCB in fish tissue	Red River of the North	Unnamed cr (ND) to MN/Canada border	PCB in fish tissue	Red River of the North	Otter Tail R to Wild Rice R (ND)	PCB in fish tissue	Red River of the North	Wild Rice R (ND) to Buffalo R	PCB in fish tissue	Crystal	Lake or Reservoir	Nutrient/eutrophication biological indicators	McMahon	Lake or Reservoir	Nutrient/eutrophication biological indicators	Mitchell	Lake or Reservoir	Nutrient/eutrophication biological indicators	Clearwater River	JD 1 to Lost R	Dissolved oxygen	Clearwater River	Ruffy Bk to JD 1	Dissolved oxygen
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WQ-	Improve water quality conditions in impaired	We will report the progress on any documented improvements in the three	Wayne Cords	<p><b><u>FFY 2017 Report:</u></b></p>																		

SP12.N11	watersheds nationwide using the watershed approach. (cumulative)	NWQI watersheds: Elm Creek (Blue Earth River HUC8), Seven Mile Creek (Minnesota River-Mankato HUC8), and Shakopee/Gilcrest (Chippewa River HUC8).	<p>For Minnesota, this is a new measure and at this point, insufficient data has been collected or analyzed for these watersheds to determine condition trends, improved or otherwise.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>Evaluation monitoring began in 2018 in the Seven Mile Creek NWQI watershed via a Section 319 grant. Monitoring will be used as post-implementation monitoring with pre-implementation monitoring having been completed by previous efforts. A long-term pollutant load monitoring site is also located at the mouth of the watershed.</p> <p>Two new NWQIs were added in FFY2018. No evaluation monitoring is being completed in Cottonwood Lake NWQI by MPCA. While specific evaluation monitoring by MPCA is not being done in the Dobbins Creek NWQI, the Cedar River Watershed District has an on-going monitoring network that will be incorporated into an evaluation monitoring design in conjunction with the watershed's selection as a long-term Section 319 Small Watersheds Focus Program project.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>Measure suspended in FY2019.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>Measure suspended in FY2020.</p>
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				<p><b><u>FFY 2021 Report</u></b></p> <p>Measure suspended in FY2021.</p>	
WQ-01a	<p>Number of numeric water quality standards adopted for total nitrogen or total phosphorus for all waters within the States or Territories for each of the following waterbody types: lake/reservoirs, rivers/streams, and estuaries.</p> <p>(new language)</p>	<p>The MPCA has already adopted numeric eutrophication water quality standards for lakes and rivers/streams.</p> <p><u>EPA:</u></p> <p>EPA is developing draft national recommended phosphorus and nitrogen criteria for lakes and reservoirs. These criteria are intended to protect aquatic life, recreation, and drinking water supply uses. Once the criteria are finalized, EPA expects that MPCA will review them to determine whether or not the Agency believes that it is appropriate to revise its water quality criteria to reflect these new recommendations. If MPCA determines that it is not necessary to revise its criteria to reflect EPA's recommendations, the Agency must provide an explanation for its conclusion at the time of its next triennial review, consistent with 40 CFR 131.20(a).</p> <p><i>MPCA is okay with the above additional language from EPA for this item.</i></p>	<p>Catherine Neuschler</p>	<p><b><u>FFY 2017 Report:</u></b></p> <p>No change. MPCA has numeric eutrophication WQS for TP and will review the national TN criteria when they are completed.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>No change.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>No change. MPCA is continuing to implement Minnesota's existing river and lake eutrophication standards, and tracking federal criteria development.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>No change. MPCA is continuing to implement Minnesota's existing river and lake eutrophication standards. MPCA has been tracking the development of the draft Lake Numeric Nutrient Criteria and will consider them as required.</p> <p><b><u>FFY 2021 Report</u></b></p>	

				MPCA is continuing to implement Minnesota’s existing river and lake eutrophication standards. MPCA has been tracking the development of the draft Lake Numeric Nutrient Criteria and is beginning a process to revise the state’s lake eutrophication standards. More information will be available in early CY2022.
WQ-03a	Number, and national percent, of States and Territories that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other resources not considered in the previous standards.	<p>The MPCA has re-designed the “triennial review” process to allow for more regular review and prioritization of water quality criteria development/revision needs. The next review is expected in FFY17.</p> <p>MPCA is currently working on the following standards updates:</p> <ul style="list-style-type: none"> <li>• Antidegradation</li> <li>• Variance procedures</li> <li>• Wild rice sulfate standard</li> <li>• Tiered Aquatic Life Uses</li> <li>• Class 3 and 4 standards</li> </ul> <p>MPCA is also tracking and developing technical documentation, as studies become available, on:</p> <ul style="list-style-type: none"> <li>• Chloride</li> <li>• Nitrate</li> </ul> <p>The MPCA will review national recommended water quality criteria to determine if the Agency believes that it is</p>	Catherine Neuschler	<p><b><u>FFY 2017 Report:</u></b></p> <p>MPCA has submitted and received approval of rule updates for antidegradation and variance. MPCA has completed the state rulemaking process for TALU and will be submitting it for EPA approval shortly. MPCA anticipates completing the state process for wild rice sulfate standard in FFY18 and will submit it for approval.</p> <p>The TSR process is beginning in early FFY18.</p> <p><b><u>FFY 2018 Report:</u></b></p> <p>MPCA completed our TSR and submitted it to EPA in July 2018. MPCA continues to actively work on the Class 3 and 4 rule update.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>MPCA plans to begin work on our next TSR in calendar year 2020, with likely submittal in FFY2021. MPCA continues to actively work on the Class 3 and 4 rule update, and is awaiting additional information from EPA on criteria for chloride/sulfate and nitrate.</p>

		<p>appropriate to revise its water quality criteria to reflect these new recommendations.</p> <p><u>EPA:</u></p> <p>If the MPCA chooses as part of the triennial review not to adopt new or revised criteria for any parameters for which EPA has published new or revised 304(a) criteria recommendations, the MPCA will explain that decision when reporting the results of their triennial review to EPA.</p> <p><i>MPCA is OK with this added language (Neuschler)</i></p>		<p><b><u>FFY 2020 Report</u></b></p> <p>All rules listed under “currently working” are complete or withdrawn (wild rice), with the exception of Class 3 and 4. Class 3 and 4 is expected to be public noticed in December 2020. Information on nitrate is now available and MPCA will likely begin to move forward on an aquatic life nitrate standard. The triennial standards review will likely be on public notice in early calendar year 2021, and will set the MPCA’s WQS workplan for the next three years.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>The Class 3&amp;4 rulemaking was completed and approved by EPA. MPCA also completed the triennial standards review and identified our standards workplan for the next three years. These include updates to the Class 1 domestic consumption standards; nitrate and ammonia; ongoing adjustments to Class 2 designations for TALU and cool/warm waters; and lake eutrophication.</p>
WQ-04a	Percentage of submissions of new or revised water quality standards from States and Territories that are approved by EPA.	<p>MPCA will continue to provide Technical Support Documents and other technical information to EPA Region 5 prior to rule adoption for discussion and common understanding. All required documentation will also be provided to EPA for adopted WQS rules that require EPA approval. Include EPA in triennial review discussions and priority setting to assist in generating workload expectations. This measure’s final determination and reporting is done at the national level.</p>	Catherine Neuschler	<p><b><u>FFY 2017 Report:</u></b></p> <p>MPCA is continuing to do this as needed for projects; has involved EPA in TSR conversations.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>MPCA is continuing to do this as needed for projects, both statewide standards and site-specific projects.</p> <p><b><u>FFY 2019 Report</u></b></p>

		<i>MPCA is okay with the above additional language from EPA for this item.</i>		<p>MPCA is continuing to do this as needed for projects, both statewide standards and site-specific projects.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>No changes.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>No changes.</p>
WQ-05	Number of States and Territories that have adopted and are implementing their monitoring strategies in keeping with established schedules.	<p>Continue to implement the 2011 Minnesota Monitoring Strategy:</p> <ul style="list-style-type: none"> <li>• Intensively monitor an average of 8 watersheds each year (IWM). This includes biological, physical and chemical monitoring of streams; flow and chemistry monitoring at the outlets of each watershed; monitoring 80-100 lakes each year (focusing on lakes &gt;500 acres); and supporting citizen and local monitoring. This level of effort depends on continued state funding at the same level as the SFY2016-2017 biennium; if that funding is not continued, the planned accomplishments will need to be adjusted.</li> <li>• Continue to actively participate in the national probabilistic monitoring efforts (lakes, streams, wetlands, coastal waters), and conduct state-level probabilistic monitoring either as an</li> </ul>	Kim Laing	<p><b><u>FFY 2017 Report:</u></b></p> <ul style="list-style-type: none"> <li>• Intensive watershed monitoring remains on track. In FFY17, we began monitoring the final 6 major watersheds in Minnesota that have not yet been sampled. Since water quality sampling is conducted over two summers before assessment occurs, we won't assess the watersheds we have started sampling this year until winter 2019. In the past year, we have completed watershed monitoring and assessment reports for the 2012, 2013, and 2014 watersheds. All have been posted to the MPCA's watershed web pages.</li> <li>• We have been piloting a slightly revised approach to our rotating watershed-based condition monitoring approach since last year. With this approach, we would only revisit of subset of the lakes and stream reaches (two thirds, on average) as we return to watersheds where we have already sampled. This approach would salvage some funding so that sister agencies and local partners can request monitoring to help fill data gaps to</li> </ul>

		<p>add-on to the national studies or through a parallel state monitoring effort (example: state wetland WQ monitoring).</p> <ul style="list-style-type: none"> <li>• Conduct wetland sampling in IWM watersheds.</li> <li>• Continue to monitor ambient ground water quality in accordance with the state's integrated ground water quality monitoring system. In this inter-agency approach, the MPCA monitors about 190 wells per year, focusing on non-agricultural chemicals in urban and natural areas.</li> <li>• Actively participate in and attend the R5 hosted webinars and bio-assessment meetings.</li> <li>• Continue to transfer water quality data to EPA's STORET Warehouse from EQuIS.</li> <li>• Communicate with external stakeholders about the purpose and expectations of TALU.</li> <li>• Continue to sample to support TALU classification system, and complete data analysis needed for TALU development.</li> </ul>		<p>complete TMDLs, restoration strategies, etc. We are gathering additional feedback and input from our local partners, policymakers, and legislators for this new approach. We should finalize by December 2017, at which time we'll look into revising the Minnesota Water Quality Monitoring Strategy.</p> <ul style="list-style-type: none"> <li>• We have completed the sampling the Rainy River for water quality and biology, and began sampling on the St. Croix River. The St. Croix is the last of the large rivers to be sampled. We are developing a future schedule for return visits to these large rivers.</li> <li>• Monitoring and program operations for the Watershed Pollutant Load Monitoring Network continues. We can calculate trends on about 15% of the load network at this time – the development of the approach is ongoing.</li> <li>• MPCA has continued to participate and provide technical expertise for the NARS steering committees, most notably in the past year the upcoming National Lake Assessment survey. Last winter, MPCA staff analyzed data and identified vouchered plant specimens associated with last summer's National Wetland Condition sampling. MPCA is currently conducting the wetland depression monitoring that expands upon last year's National Wetland Condition Assessment. We just received word that we have received funding for the upcoming Rivers and Streams survey.</li> <li>• The MPCA continues to operate its Ambient Groundwater Monitoring Network, the Citizen Monitoring Programs, and participate in the EPA's regional monitoring network.</li> </ul>	
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			<ul style="list-style-type: none"> <li>• The TALU framework is nearing completion of Minnesota’s administrative process. All that remains is final approval from the Governor and then the notice of adoption will be published in the state register (probably in a week or two). At which time the rule will be formally implemented. The rule will be submitted to EPA for approval shortly after it is published. We are also currently working on a batch of new TALU designations from the 2014 and 2015 IMW watersheds. These will be incorporated in a use designation rule package that will likely also include Class 2A (coldwater) and Class 7 (limited resource value waters) designations. A technical report should be available for these use proposals in January 2018.</li> </ul> <p><b><u>FFY 2018 Report</u></b></p> <ul style="list-style-type: none"> <li>• Intensive watershed monitoring remains on track. In FFY18, we began the final year of monitoring the last 6 major watersheds in Minnesota that have not yet been sampled. Assessments on these watersheds will begin in FFY19. In the past year, we have completed and webposted watershed monitoring and assessment reports for the 2015 watersheds.</li> <li>• The agency has adopted a revised approach to our rotating watershed-based condition monitoring. Agency selected sites have been reduced by 1/3 on watersheds we return to. This frees up funds for other state and locally identified monitoring needs (i.e. delisting, problem investigation, permitting needs). This revised approach will be incorporated into the next iteration of the Minnesota Water Quality Monitoring Strategy.</li> </ul>
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				<ul style="list-style-type: none"> <li>• We have completed the sampling the St. Croix River for water quality and biology. This is the final large river to be sampled; assessments are slated for FFY19.</li> <li>• Monitoring and program operations for the Watershed Pollutant Load Monitoring Network continues. At this time, there is a sufficient history of water sampling and associated streamflow to analyze for trends at about 30% of the 199 stations in the network. This percentage will grow to 100% over the next five years. A seasonal Kendall test will be applied universally, with other trend analysis methods applied at some sites, and as the number of years of available data grows.</li> <li>• MPCA has continued to participate and provide technical expertise for the NARS steering committees. Field planning is underway for the Rivers and Streams Survey. Reports are in development for the wetland condition monitoring and depressional wetlands. Data analysis is underway for the National Lakes Assessment and planning for the application for the 2020 Coastal Survey is underway.</li> <li>• The MPCA continues to operate its Ambient Groundwater Monitoring Network, the Citizen Monitoring Programs, and participate in the EPA’s regional monitoring network.</li> <li>• TALU has been promulgated and is a routine part of our assessment process. Work continues to properly classify stream reaches within the TALU framework ahead of each assessment cycle. Meetings have been held to help increase local partner knowledge of the framework and process.</li> </ul>	
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			<p><b><u>FFY 2019 Report</u></b></p> <ul style="list-style-type: none"> <li>• Intensive watershed monitoring is fully implemented in our second cycle. Assessments are completed for the first cycle statewide, with the exception of approximately 200 stream reaches that will be completed in FFY20. In the past year, we have completed and webposted watershed monitoring and assessment reports for the 2016 watersheds.</li> <li>• The agency has adopted a revised approach to our rotating watershed-based condition monitoring. Agency selected sites have been reduced by 1/3 on watersheds we return to. This frees up funds for other state and locally identified monitoring needs (i.e. delisting, problem investigation, permitting needs). This revised approach will be incorporated into the next iteration of the Minnesota Water Quality Monitoring Strategy.</li> <li>• Monitoring and program operations for the Watershed Pollutant Load Monitoring Network continues. At this time, there is a sufficient history of water sampling and associated streamflow to analyze for trends at about 30% of the 199 stations in the network. This percentage will grow to 100% over the next five years. A seasonal Kendall test will be applied universally, with other trend analysis methods applied at some sites, and as the number of years of available data grows.</li> <li>• MPCA has continued to participate and provide technical expertise for the NARS steering committees. Reconnaissance is underway for the Rivers and Streams Survey. Reports were completed for the wetland condition monitoring and depressional wetlands. Data analysis is underway</li> </ul>	
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			<p>for the National Lakes Assessment and funds were awarded for the 2020 Coastal Survey.</p> <ul style="list-style-type: none"> <li>• The MPCA continues to operate the Citizen Monitoring Programs, and participate in the EPA’s regional monitoring network.</li> </ul> <p><b><u>FFY 2020 Report</u></b></p> <ul style="list-style-type: none"> <li>• The 2011 Monitoring Strategy is under revision. Anticipate submitting to EPA in early 2021.</li> <li>• Intensive watershed monitoring is fully implemented in our second cycle. In the past year, we have completed and webposted watershed monitoring and assessment reports for the 2017 watersheds.</li> <li>• MPCA has revised our approach to reporting and data delivery. A new web tool will be released in early 2021 to allow for local access to assessment decisions, documentation, prioritization, and other water related data.</li> <li>• Monitoring and program operations for the Watershed Pollutant Load Monitoring Network and Ambient Groundwater Monitoring Network continues.</li> <li>• All monitoring was delayed by state stay at home orders and/or necessary social distancing protocols. Groundwater work was completed at 26% of the planned sites, and surface water work was completed at 47% of the planned sites; with no fish or lake work completed.</li> <li>• MPCA has continued to participate and provide technical expertise for the NARS steering committees. Reconnaissance is underway for the Wetlands Survey, and monitoring was initiated for</li> </ul>
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			<p>the Rivers and Streams survey in 2020. NCCA monitoring was delayed due to social distancing measures and will be completed in 2021. Report and accompanying data visualization tools were published for the National Lakes Assessment.</p> <ul style="list-style-type: none"> <li>• The MPCA continues to operate the Citizen Monitoring Programs, and added online data entry and enrollment in 2020.</li> </ul> <p><b><u>FFY 2021 Report</u></b></p> <ul style="list-style-type: none"> <li>• Intensive watershed monitoring is fully implemented in our second cycle. In the past year, we have completed and web posted watershed monitoring and assessment reports for the 2018 watersheds.</li> <li>• MPCA has revised our approach to reporting and data delivery. A new web tool was released early 2021 to allow for local access to assessment decisions, documentation, prioritization, and other water related data. We will look to continue updates to ensure tools is useful for water management.</li> <li>• Our program developed a climate data viewer tool to connect numerous water quality parameters to climate change. The climate data viewer utilized large existing datasets to display numerous water and biological factors that are expected to change as the climate changes.</li> <li>• Monitoring and program operations for the Watershed Pollutant Load Monitoring Network and Ambient Groundwater Monitoring Network continues.</li> <li>• Our biological monitoring program recorded data</li> </ul>	
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				<p>via tablets for stream biological surveys. This saved approximately 1100 hours of manual data entry and QAQC of the manual data entry. Additionally, it reduced nearly 8,000 pieces of paper, allowed staff to be more efficient and update tracking of sites in “real-time”.</p> <ul style="list-style-type: none"> <li>• All monitoring was resumed in 2021. Through careful workforce planning and increased collaboration between programs, we successfully completed lake, stream, river and wetland monitoring in spite of challenges due to COVID and a severe drought. For example, low flow studies were conducted in the Minnesota River and Des Moines River to determine, in part, if effluent limits are protective of these resources during a critical low flow period.</li> <li>• The entire complement of biological monitoring stations that comprise the long-term biological monitoring network, approximately 60 sites throughout Minnesota, were sampled during the drought year. This network of biological monitoring stations is designed to evaluate the effects of a changing climate on aquatic communities.</li> <li>• MPCA has continued to participate and provide technical expertise for the NARS steering committees. Monitoring is underway for the Wetlands Survey, and monitoring was completed for the Rivers and Streams survey in 2021. NCCA monitoring was also completed in 2021.</li> <li>• The MPCA continues to operate the Citizen Monitoring Programs, and added online data entry and enrollment in 2020.</li> </ul>	
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<p>WQ-07</p>	<p>Number of States and Territories that provide electronic information using the Assessment Database version 2 or later (or compatible system) and geo-reference the information to facilitate the integrated reporting of assessment data.</p>	<p>MPCA continues to use the Assessment Database for assessment reporting to EPA for the 2016 list. As EPA is phasing out the ADB, MPCA is working on a replacement (CARL/WALIS) and will ensure that data continues to flow to EPA. MPCA will continue efforts with MDH and Reg. 5 to explore/refine assessment methodology for water use assessment determinations for waterbodies with Public Water Supply intakes. MPCA will also work to ensure that Integrated Report (303(d) and 305(b)) determinations are accurately and consistently reflected.</p>	<p>Catherine Neuschler</p>	<p><b><u>FFY 2017 Report:</u></b></p> <p>MPCA will continue to maintain the Assessment Database (ADB) until after the 2018 submittal to EPA's new ATTAINS. MPCA has a working replacement (CARL/WALIS) and will use it as a source to flow data to EPA via the Exchange Network for 305(b) reporting in 2018. MPCA will continue to submit geospatial information via the Exchange Network.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>MPCA has replaced the ADB with CARL/WALIS and is in the process of submitting 2018 305(b) assessment data to ATTAINS, after which geospatial information will be submitted. The 2018 submittal has been manual in large parts while in 2020 MPCA will flow data to EPA via the Exchange Network for 305(b) reporting.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>MPCA is finalizing their 2018 305(b) assessment data in ATTAINS, after which geospatial information will be submitted. 2020 data will likely be submitted manually but MPCA will work on the steps necessary to flow data to EPA via the Exchange Network, planning to be completed by March 2020.</p> <p><b>EPA Remark:</b> Could MPCA please provide an update in the FY20 self-assessment related to work with MDH on the assessment methodology for waterbodies with public water supply intakes.</p>
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			<p><b><u>FFY 2020 Report</u></b></p> <p>As of November 24, 2020: GIS data has not been sent yet but is expected to be submitted December 2020. MPCA completed their 2020 assessment data submittal to ATTAINS in early November of 2020. Cycle 2020 is still in draft status and being reviewed by EPA. The submittal was accomplished by a mix of manual and batch updates in the ATTAINS interface. MPCA is investigating the resources necessary to use the Exchange Network for the 2022 Cycle</p> <p><b><u>PWS intakes:</u></b> MPCA and MDH are continuing to work together on CWA/SDWA overlap. No specific changes have been made on the assessment methodology for waterbodies with public water supply intakes. The MPCA and MDH have worked to share geographic information and improve communication around permitting of NPDES sources upstream of drinking water intakes. The MPCA anticipates beginning a more intense phase of work on revisions to the Class 1 domestic consumption WQS in early 2021, which will inform future assessment for those waters.</p> <p><b>EPA Comment: EPA is encouraged by this work. We would be interested in finding out more information on this work as a part of future MDH submissions of its PWSS Grant self-assessment or in an upcoming CW/SDWA Directors call.</b></p> <p><b><u>FFY 2021 Report:</u></b></p> <p>As of November 16, 2021, Cycle 2020 was recently finalized by EPA, and the MPCA is working on submitting all Cycle 2022 303(d) and 305(b) data into the ATTAINS interface. The MPCA is pursuing the</p>
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				resources necessary to use the Exchange Network the next reporting cycle.																									
WQ-10(a)	Number of waterbodies identified by States (in 1998/2000 or subsequent years) as being primarily nonpoint source (NPS)-impaired that are partially or fully restored. (cumulative)	We will report, as a cumulative number, the water bodies that have attained a water quality standard through restoration. Only water bodies that are judged to be mainly impacted by non-point source pollution will be counted. We estimate that one (1) water body a year will attain at least one standard from the 1998 and all subsequent 303(d) lists.	Catherine Neuschler	<p><b><u>FFY 2017 Report:</u></b></p> <p>From the draft 2018 303(d) list, a cumulative number of 24 water bodies have attained their water quality standards through non-point restoration activities.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>From the draft 2018 303(d) list, a cumulative number of 25 water bodies have attained their water quality standards through non-point restoration activities.</p> <p><b><u>FFY 2019 Report</u></b></p> <p><a href="#">Minnesota’s Draft 2020 303(d) list</a> – four additional waterbodies are scheduled for delisting in 2020 due to restoration activities for a cumulative number of 29 waterbodies that have attained their water quality standards through nonpoint restoration activities.</p> <table border="1"> <thead> <tr> <th>Delist year</th> <th>Water body name</th> <th>Water body description</th> <th>AUID</th> <th>Pollutant or stressor</th> </tr> </thead> <tbody> <tr> <td>2020</td> <td>Plum Creek</td> <td>Warner Lk to Mississippi R</td> <td>07010203-572</td> <td>Escherichia coli (E.coli)</td> </tr> <tr> <td>2020</td> <td>Sleepy Eye</td> <td>Lake or Reservoir</td> <td>08-0045-00</td> <td>Nutrients</td> </tr> <tr> <td>2020</td> <td>Faille</td> <td>Lake or Reservoir</td> <td>77-0195-00</td> <td>Nutrients</td> </tr> <tr> <td>2020</td> <td>Waverly</td> <td>Lake or Reservoir</td> <td>86-0114-00</td> <td>Nutrients</td> </tr> </tbody> </table>	Delist year	Water body name	Water body description	AUID	Pollutant or stressor	2020	Plum Creek	Warner Lk to Mississippi R	07010203-572	Escherichia coli (E.coli)	2020	Sleepy Eye	Lake or Reservoir	08-0045-00	Nutrients	2020	Faille	Lake or Reservoir	77-0195-00	Nutrients	2020	Waverly	Lake or Reservoir	86-0114-00	Nutrients
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**FFY 2020 Report**

[Minnesota’s Draft 2020 303\(d\) list](#) – two additional waterbodies are scheduled for delisting in 2020 due to restoration activities for a cumulative number of 31 waterbodies that have attained their water quality standards through nonpoint restoration activities.

Delist year	Water body name	Water body description	AUID	Pollutant or stressor
2020	North Center Lake	Lake or Reservoir	13-0032-01	Nutrient
2020	South Center	Lake or Reservoir	13-0027-00	Nutrients

**FFY 2021 Report**

[Minnesota’s Draft 2022 303\(d\) list](#) - 12 of waterbodies are scheduled for delisting in 2022 due to restoration activities for a cumulative number of 43 waterbodies that have attained their water quality standards through nonpoint restoration activities.

Delist year	Water body name	Water body description	AUID	Pollutant or stressor
2022	Buffalo River, South Branch	Unnamed cr to Deerhorn Cr	09020106-605	Turbidity
2022	East Boot	Lake or Reservoir	82-0034-00	Nutrients
2022	George	Lake or Reservoir	73-0611-00	Nutrients
2022	Hay	Lake or Reservoir	82-0065-00	Nutrients
2022	Lemay	Lake or Reservoir	19-0055-00	Nutrients

				2022	Lily	Lake or Reservoir	82-0023-00	Nutrients
				2022	Pelican Creek	T130 R41W S4, north line to Pomme de Terre R	07020002-506	Benthic macroinvertebrates bioassessments
				2022	Spring Mine Creek	Ridge Cr to Embarrass R	04010201-A42	Benthic macroinvertebrates bioassessments
				2022	Spring Mine Creek	Ridge Cr to Embarrass R	04010201-A42	Fish bioassessments
				2022	Sunfish	Lake or Reservoir	19-0050-00	Nutrients
				2022	Unnamed	Lake or Reservoir	19-0077-00	Nutrients
				2022	Unnamed creek (Little Swan Creek)	Headwaters to East Swan R	04010201-891	Fish bioassessments
				2022	Unnamed ditch	T34 R21W S24, east line to Sunrise R	07030005-723	Ammonia, un-ionized

WQ-12a	Percent of facilities covered by NPDES permits that are considered current.  [Note: Measure will still set target and commitment and	<u>New measure write-up 12a:</u>  Currently, the MPCA has 1140 wastewater NPDES permitted facilities, 656 facilities covered under individual wastewater permits and 484 facilities covered under general permits.	Holly Sandberg	<u>NPDES Comments:</u>  Based on ICIS data as of last week of July 2016, following are the #s for major and minor individual permits:
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<p>report results in both % and #.]</p>	<p>Over the past year, the MPCA has started incorporating the newly adopted river eutrophication standards (RES) into permits and also started writing permits in a new Tempo database. Both of these have brought forth a number of challenges that resulted in decreased productivity in reissuing permits. The MPCA has started to see a slight increase in productivity but anticipates that it will take 3 years to get back to full productivity. As a result throughout FY 17-20 the MPCA will work to improve productivity and will operate under a tiered approach to attain the 82% of permits (NPDES individual, general, and NOC) being considered current by FY20.</p> <p>In FY 17-18 MPCA will ensure that 70% of the NPDES wastewater permits (NPDES individual, general, and NOC) are current. In FY19 MPCA will ensure that 75 % of the NPDES wastewater permits (NPDES individual, general, and NOC) are current. In FY20 MPCA will ensure that 82 % of the NPDES wastewater permits (NPDES individual, general, and NOC) are current.</p> <p><u>EPA:</u> EPA accepts this commitment. In order to foster good communication and to ensure collaboration between the Agencies, EPA</p>			<table border="1"> <thead> <tr> <th></th> <th>Total</th> <th>Expired</th> <th>Current</th> </tr> </thead> <tbody> <tr> <td>Majors:</td> <td>101</td> <td>40</td> <td>61</td> </tr> <tr> <td>Minors:</td> <td>617</td> <td>164</td> <td>453</td> </tr> <tr> <td>Non SW GPs:</td> <td>1772</td> <td>193</td> <td>1579</td> </tr> <tr> <td>Total:</td> <td>2490</td> <td>397</td> <td>2093</td> </tr> </tbody> </table> <p>Note: EPA counts all CAFO permits, (i.e., covered by IPs as well as non-SW GPs)</p> <p>Region would like to work with MPCA to reconcile data differences, specifically, numbers to ensure ICIS is current and reflects most current and accurate data.</p> <p>State needs to commit to at least 82 % for the measure WQ-12a, which includes individual major &amp; minor permits and facilities covered under non-storm water general permits.</p> <p><u>MPCA:</u> MPCA will work with EPA Region 5 as appropriate to ensure ICIS reflects the most current data for MN.</p> <p>With the current decrease in permitting productivity due to implementation of river eutrophication standards and transitioning into a new database MPCA believes that committing to a 82% goal is currently unattainable. The MPCA expects that within approximately 3 years that we will be back to full</p>		Total	Expired	Current	Majors:	101	40	61	Minors:	617	164	453	Non SW GPs:	1772	193	1579	Total:	2490	397	2093
	Total	Expired	Current																					
Majors:	101	40	61																					
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Non SW GPs:	1772	193	1579																					
Total:	2490	397	2093																					

		<p>will engage in regular calls with MPCA NPDES program management regarding progress toward attaining this goal.</p> <p><u>MPCA: Ok.</u></p>	<p>productivity. The MPCA has proposed a tiered approach to getting back to the 82% commitment that EPA is looking for from states.</p> <p><b>FFY 2017 Report:</b></p> <p>Currently, the MPCA has 1135 wastewater NPDES permitted facilities, 646 facilities covered under individual wastewater permits and 489 facilities covered under general permits.</p> <p>37% of general permits and 46% of individual permits were current on Sept. 31, 2017 with a combined total of 42%.</p> <p>Permit productivity has not increased as anticipated by the MPCA throughout FFY17. NPDES permits with new phosphorus limits were on hold in FFY17 due to discussions between MPCA and EPA regarding implementation of river eutrophication standards (RES). In addition,</p> <p>the MPCA has continued to respond to various external comments, contested case hearing requests, and challenges related to RES.</p> <p>Throughout FFY18 MPCA will continue to work on increasing permit productivity and the goal of ensuring that 70% of the NPDES wastewater permits are current.</p> <p><b>FFY 2018 Report</b></p>
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			<p>Currently, the MPCA has 1,109 wastewater NPDES permitted facilities, 631 facilities covered under individual wastewater permits and 478 facilities covered under general permits.</p> <p>55% of general permits and 43% of individual permits were current on Sept. 30, 2017 with a combined total of 48%.</p> <p>Although the percentage of current NPDES permits increased slightly from FFY17 to FFY 18, the commitment of having 70% of the NPDES permits current by FFY18 was not met.</p> <p>The Wastewater Program has set a goal of reducing the permit backlog and having 82% of the NPDES permits current by 2020 and 90% current by June 30, 2021. This goal aligns with our federal commitment of having 82% of the NPDES permits current by FFY20.</p> <p>To achieve this goal the MPCA has completed the following actions:</p> <ul style="list-style-type: none"> <li>Final issued the Wastewater Pond General Permit on December 1, 2018. This permit accounts for approximately 20% of the overall backlog. NOCs for the 233 potential permittees will be final issued over the next 1-2 years.</li> <li>Hired 3 new permit writers (1 industrial and 2 municipal) to increase the amount of permits issued per year.</li> <li>The program is taking a closer look at permitting options/tools available to move expired permits forward that have been on hold for a period of time.</li> </ul>
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			<p><b><u>FFY 2019 Report</u></b></p> <p>Currently, the MPCA has 1,419 wastewater NPDES permitted facilities, 808 facilities covered under individual wastewater permits and 611 facilities covered under general permits.</p> <p>43% of domestic and 85% of industrial general permits and 48% of domestic and 33% of industrial individual permits were current on November 19, 2019 with a combined grand total of 55%.</p> <p>While the percentage of current NPDES permits did decrease for domestic NPDES permit it did increase for industrial NPDES permits from FFY18 to FFY 19. Despite this the commitment of having 70% of the NPDES permits current by FFY19 was not met.</p> <p>The Wastewater Program has set a goal of reducing the permit backlog and having 82% of the NPDES permits current by 2020 and 90% current by June 30, 2021. This goal aligns with our federal commitment of having 82% of the NPDES permits current by FFY20.</p> <p>To achieve this goal the MPCA has completed the following actions:</p> <ul style="list-style-type: none"> <li>Final issued the first batch of the Wastewater Pond General Permit on December 26, 2018 which included final issuing 86 Notice of Coverages to expired Permittees. The second batch of Notice of Coverages includes 62 currently expired Permittees and is anticipated to be final issued in January 2020. NOCs for the remaining 88 potential permittees will be final issued over the next year. The Wastewater Pond General Permit accounted for approximately 20% of the</li> </ul>
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			<p>overall backlog. After the Batch 2 NOCs are final issued, the backlog should change to 54% of permits being current and 46% being expired. Assuming all remaining 88 potential Batch 3 permittees are final issued in Batch 3, the permit backlog is expected to change to 63% of permits being current and 36% being expired.</p> <p>Hired 2 new permit writers (1 industrial and 1 municipal) to increase the amount of permits issued per year. There are 2 vacant municipal permit writer positions open that are going through the hiring process; one is expected to be filled by end of 2019 and the other in early 2020.</p> <p>The program is continuing to take a closer look at permitting options/tools available to move expired permits forward that have been on hold for a period of time. An effort is being made to determine specific reasons by permits are expired by grouping the permits in categories (i.e. general permits, chloride limits, phosphorus limits, etc...) and to strategize ways permit writers can use to aid in prioritizing and managing their individual work loads.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>Currently, the MPCA has 1,414 permitted wastewater facilities; 1,100 of those permitted facilities are covered by NPDES/SDS permits. Of the total 1,414 total NPDES/SDS and SDS permitted facilities, 782 facilities are covered under individual wastewater</p>
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			<p>permits and 632 facilities are covered under general permits.</p> <p>78% of domestic and 96% of industrial general permits and 51% of domestic and 33% of industrial individual permits were current on December 3, 2020 with a combined grand total of 65% current.</p> <p>The percentage of current domestic permits increased in FFY20 from FFY19 in both, the general and individual permit categories. The percentage of current industrial general permits increased from FFY19 and the percentage of current individual permits remained the same.</p> <p>At the end of 2019, the Wastewater Program set a goal of reducing the permit backlog and having 82% of the NPDES permits current by 2020 and 90% current by June 30, 2021. This goal aligns with our federal commitment of having 82% of the NPDES permits current by FFY20. Despite our improvements and increases in our percent of current permits, we were unable to meet the 82% current goal by 2020.</p> <p>In April 2020, the MPCA developed a Backlog Reduction Strategy that shifted the focus on the backlogged permits by placing more emphasis on the expired major permits. At the time of implementation of the new strategy, the major permit backlog was sitting at 60% permits expired. An internal goal for major permits was made; the goal was to get to 62%</p>
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			<p>expired for industrial permits and 42% expired for municipal permits by January 1, 2021. As of today, December 3, 2020, 83% of the industrial major permits are expired and 55% of the municipal major permits are expired. This results in a 65% current rate for industrial and domestic permits combined.</p> <p>A couple factors have been contributing to the backlog this past year. Up until recently, a number of the permits located within the MN River Basin were being held due to ongoing discussions regarding the implementation of new phosphorus limits within those permits. Additionally, a number of our permits statewide continue to receive new chloride and/or salty parameter limits and have applied to go through the MPCA’s Streamlined Chloride Variance Process or are expected to receive new chloride/salty parameter limits but are being held due to proposed Class 3/4 Rule changes. The MPCA final issued the first two permits under the Streamlined Chloride Variance process during 2020 but is still currently only able to process chloride variances on a “one at a time” basis which contributes to a significant delay in permitting. Despite this, the MPCA continues to work on the remaining permits who have also submitted applications under the Streamlined Chloride Variance process.</p> <p>The MPCA has completed the following actions making progress towards achieving the permitting goals:</p> <ul style="list-style-type: none"> <li>- Final issued Batch 2 of the Wastewater Pond</li> </ul>
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				<p>General Permit on February 14, 2020 which included final issuing 60 Notice of Coverages to expired Permittees. Batch 3 was final issued on December 1, 2020 and included 25 Notice of Coverages. Additionally, there is a smaller batch of 8 permittees included in the 4<sup>th</sup> Batch which are expected to be placed on public notice mid-December 2020 with an anticipated issuance date in March 2021. NOCs for the remaining 32 potential permittees will be final issued over the next year as phosphorus watershed reviews are completed. The issuance of 85 Notice of Coverages over the 2020 year has contributed to the improvement of our overall backlog.</p> <ul style="list-style-type: none"> <li>- Throughout the course of the entire year, we hired 2 new permit writers (1 industrial and 1 municipal) to increase the amount of permits issued per year. There is a recent permit writer position vacancy in the municipal section of which our Agency is actively requesting approval from the State of MN to backfill. Upon approval, work will be underway to fill that position, hopefully in early 2021.</li> <li>- The program is continuing to take a closer look at permitting options/tools available to move expired permits forward that have been on hold for a period of time. Included in the backlog strategy mentioned above, on a quarterly basis, permit writers account for the reasons behind each of their expired permits (i.e. resource deficiency, rulemaking, external delays, effluent limit reviews, applied for a</li> </ul>
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			<p>variance, or internal delays) which is then populated into a Tableau report identifying the percent of expired permits for each major reason. This visual representation of the data enables us to watch for trends and shift focus where needed. This also serves as an aid to permit writers in prioritizing and managing their individual workloads.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>Currently, the MPCA has 1,426 permitted wastewater facilities; 1,106 of those permitted facilities are covered by NPDES/SDS permits. Of the total 1,426 NPDES/SDS and SDS permitted facilities, 780 facilities are covered under individual wastewater permits and 646 facilities are covered under general permits.</p> <p>89% of domestic and 95% of industrial general permits and 58% of domestic and 36% of industrial individual permits were current on November 23, 2021 with a combined grand total of 70% current.</p> <p>The percentage of current domestic permits increased in FFY21 from FFY20 in both, the general and individual permit categories. The percentage of current industrial general permits slightly decreased from FFY20 and the percentage of current individual permits increased.</p> <p>At the end of 2019, the Wastewater Program set a goal of reducing the permit backlog and having 82% of</p>
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				<p>the NPDES permits current by 2020 and 90% current by June 20, 2021. This goal aligns with our federal commitment of having 82% of the NPDES permits current by FFY20. Although the initial goal of 82% current was set of the time period of FY17-20, and despite our improvements and increases in our percent of current permits, we are unable to meet the 82% current goal by the end of 2021.</p> <p>In April 2020, the MPCA developed a Backlog Reduction Strategy that shifted the focus on the backlogged permits by placing more emphasis on the expired major permits. The Backlog Reduction Strategy was updated for FY22 (July 1, 2021 – June 30, 2022) with the following goals for FY22; the goal is to get to 62% expired for industrial major permits and 18% expired for municipal major permits. As of November 23, 2021, 79% of the industrial major permits are expired and 43% of the municipal major permits are expired.</p>
WQ-13a	Number, and national percent, of facilities covered under either an individual or general MS4 permit.	<p>The MPCA will report annually the number of regulated MS4s under Phase II (general permits) and Phase I (individual permits).</p> <p>The MPCA will report annually the status of reissuing the Phase II general permit for small MS4s and the Phase I permit for large MS4s.</p>	Ryan Anderson/ Duane Duncanson	<p><b>FFY 2018 Report:</b></p> <p><b>Phase II General stormwater permit for small MS4s.</b> <b>Current regulated universe = 250</b></p> <p>Phase II general permit expired August 1, 2018. The MPCAs current schedule calls for a reissuance by October 2019.</p> <p><b>Phase I individual stormwater permit for Large MS4s.</b> <b>Current regulated universe = 2 (Minneapolis and St. Paul)</b></p>

			<p>Both phase I permits expired January 21, 2016. The Minneapolis Phase I permit was reissued on February 16, 2018, and the St. Paul Phase I permit was reissued on July 12, 2018.</p> <p><b><u>FFY 2019 Report</u></b></p> <p><b>Phase II General stormwater permit for small MS4s.</b></p> <p><b>Current regulated universe = 249</b></p> <p>Phase II general permit expired July 31, 2018. The MPCAs current schedule calls for a reissuance by late spring 2020.</p> <p><b><u>FFY 2020 Report</u></b></p> <p><b>Phase II General stormwater permit for small MS4s.</b></p> <p><b>Current regulated universe = 248</b></p> <p>The Phase II general permit expired August 1, 2018. The MPCA reissued this permit on November 16, 2020.</p> <p><b><u>FFY 2021 Report</u></b></p> <p><b>Phase II General stormwater permit for small MS4s.</b></p> <p><b>Current regulated universe = 247</b></p> <ul style="list-style-type: none"> <li>• The Phase II general permit was reissued on November 16, 2020 and expires on November 15, 2025.</li> </ul> <p><b>Phase I individual stormwater permit for Large MS4s.</b></p> <p><b>Current regulated universe = 2 (Minneapolis and St.</b></p>
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				<p><b>Paul)</b></p> <ul style="list-style-type: none"> <li>• The Minneapolis Phase I permit was reissued on February 16, 2018 and expires on February 15, 2023.</li> <li>• The St. Paul Phase I permit was reissued on July 12, 2018 and expires on July 11, 2023.</li> </ul>
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WQ-13b	Number, and national percent, of facilities covered under either an individual or general industrial storm water permit.	The MPCA will report annually the number of facilities covered by the general industrial Stormwater permit and those covered by individual Stormwater permits.	Tanya Maurice/ Jeff Udd	<p><b><u>FFY 2017 Report:</u></b></p> <p><b>3,479</b> active permittees/No Exposure certifiers. <b>1,476</b> with permit coverage, and <b>2,003</b> that have self-certified for No Exposure Approximately 150 individual NPDES point source permits, with stormwater coverage included. <b><u>Zero</u></b> applications awaiting processing and a <b><u>zero % backlog.</u></b></p> <p><b><u>FFY 2018 Report</u></b></p> <ol style="list-style-type: none"> <li>1. 3,557 active permittees/No Exposure certifiers. 1,499 with permit coverage, and 2,058 that have self-certified for No Exposure</li> <li>2. Approximately 174 individual NPDES point source permits, with stormwater coverage included.</li> <li>3. At least 4 applications awaiting processing and a .5% backlog.</li> </ol> <p><b><u>FFY 2019 Report</u></b></p> <p>MPCA reissued the general permit in 2019 and it will take effect April 1, 2020.</p>
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			<ol style="list-style-type: none"> <li>1. Active ISW Permittees (permits and No Exposure certifiers) = 3,573 <ol style="list-style-type: none"> <li>a. ISW Permit Coverage Only = 1,515</li> <li>b. No Exposure Only = 2,058</li> </ol> </li> <li>2. How many Individual NPDES/SDS Permits for Industrial and Municipal have a Stormwater chapter in them = 181</li> <li>3. Permit Backlog – 3</li> </ol> <p><b><u>FFY 2020 Report</u></b></p> <p><u>2,309 ISW Permittees under the 2020 General Permit</u>  <u>1,102 Permit Coverage</u>  <u>1,207 No Exposure</u></p> <p>How many Individual NPDES/SDS Permits for Industrial and Municipal have a Stormwater chapter in them = 121  Permit backlog =</p> <p><b><u>FFY 2021 Report</u></b></p> <p>1,137 ISW Permittees under the 2020 General Permit, with Coverage  1,810 No Exposure  Total Universe: 2,947</p> <p>Individual NPDES/SDS Permit for Industrial and Municipal with ISW chapters:</p>
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				<ul style="list-style-type: none"> <li>• 62 Individual Waste Water Permits with ISW Chapters</li> <li>• 5 Individual Industrial Stormwater Permits</li> </ul> <p>Total= 67</p> <p>Permit Backlog: 0</p>
WQ-13c	Number of facilities covered under either an individual or general construction storm water site permit.	The MPCA will reissue the Construction Stormwater General permit Sites over 1 acre will be covered by the permit.	Ryan Anderson	<p><b><u>FFY 2017 Report:</u></b></p> <p>2780 permittees covered under the general permit. MPC currently in the processing of reissuance of the general permit, estimated issuance date is spring 2018.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>The 2013 NPDES/SDS General Construction Stormwater permit expired on 7/31/2018. The 2018 permit was issued on 8/1/2018. 1,966 permittees acquired coverage under the General CSW permit in FY18.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>2,607 permittees acquired coverage under the CSW general permit in FY19</p> <p><b><u>FFY 2020 Report</u></b></p> <p>2,779 sites acquired coverage under the CSW general permit in FY20</p> <p><b><u>FFY 2021 Report</u></b></p>

				3,213 sites acquired coverage under the CSW general permit in FY21
WQ-13d	Number of facilities covered under either an individual or general CAFO permit.	<p>The MPCA will report on both the number of facilities that are covered under either an individual or general NPDES CAFO permit, and the number of facilities that are covered under either an individual or general State Disposal System (SDS) 1,000 animal units or more permit.</p> <p>The MPCA will ensure that 95% of all CAFOs with 1000 or more animal units, are covered by a current NPDES or SDS permit.</p>	Randy Hukriede	<p><b><u>FFY 2017 Report:</u></b></p> <p>1,197 CAFOs with 1,000 or more animal units have current NPDES permit coverage.</p> <p>105 CAFOs with 1,000 or more animal units have current SDS permit coverage.</p> <p>99% of CAFOs with 1,000 or more animal units have current NPDES or SDS permit coverage.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>~1,100 CAFOs with 1,000 or more animal units have current NPDES permit coverage. ~95 CAFOs with 1,000 or more animal units have current SDS permit coverage.</p> <p>99% of CAFOs with 1,000 or more animal units have current NPDES or SDS permit coverage.</p> <p><b><u>FFY 2019 Report</u></b></p> <ul style="list-style-type: none"> <li>• ~1,000 CAFOs with 1,000 or more animal units have current NPDES permit coverage.</li> <li>• ~130 CAFOs with 1,000 or more animal units have current SDS permit coverage.</li> <li>• 99% of CAFOs with 1,000 or more animal units have current NPDES or SDS permit coverage.</li> </ul>

				<p><b><u>FFY 2020 Report</u></b></p> <ul style="list-style-type: none"> <li>• ~1,000 CAFOs with 1,000 or more animal units have current NPDES permit coverage.</li> <li>• ~130 CAFOs with 1,000 or more animal units have current SDS permit coverage.</li> <li>• 99% of CAFOs with 1,000 or more animal units have current NPDES or SDS permit coverage.</li> </ul> <p><b><u>FFY 2021 Report</u></b></p> <ul style="list-style-type: none"> <li>• ~1,000 CAFOs with 1,000 or more animal units have current NPDES permit coverage.</li> <li>• ~150 CAFOs with 1,000 or more animal units have current SDS permit coverage.</li> <li>• 99% of CAFOs with 1,000 or more animal units have current NPDES or SDS permit coverage.</li> </ul>
WQ-14a	National percent of Significant Industrial Users (SIUs) that are discharging to POTWs with Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment requirements.	<p>Report percentage of Significant Industrial Users (SIUs) in delegated pretreatment POTWs with current unexpired control mechanisms:</p> <p>For FFY17 Report twice a year as follows:</p> <p>MY of current FY (by March 31)</p> <p>End of FY (by September 30)</p>	Paul Scheirer	<p><b><u>FFY 2017 Report:</u></b></p> <p>385 SIUs with control mechanisms, 0 without, 100% with</p> <p><b><u>FFY 2018 Report</u></b></p> <p>373 SIUs with control mechanisms, 0 without, 100%</p> <p>This item is duplicative EPA reporting. Remove this report out from the next EnPPA. Items WQ14-a and b, are reported directly to EPA Pretreatment staff Quintin White and those #'s can be obtained directly by EnPPa staff.</p>

				<p><b><u>FFY 2019 Report</u></b> 100% SIUs with control mechanisms</p> <p><b><u>FFY 2020 Report</u></b> 100% SIUs with control mechanisms</p> <p><b><u>FFY 2021 Report</u></b> 100% SIUs with control mechanisms</p>
WQ-14b	Percent of Categorical Industrial Users (CIUs) in non-delegated pretreatment POTWs with MPCA permits.	<p>Report known Categorical Industrial Users (CIUs) in non-delegated pretreatment POTWs with MPCA permits.</p> <p>For FFY17 Report twice a year as follows:</p> <p>MY of current FY (by March 31)</p> <p>End of FY (by September 30)</p>	Paul Scheirer	<p><b><u>FFY 2017 Report:</u></b> 48 CIUs with permits, 0 without, 100% with permits</p> <p><b><u>FFY 2018 Report</u></b> 51 CIUs with permits, 0 without, 100% with permits</p> <p>This item is duplicative EPA reporting. Remove this report out from the next EnPPA. Items WQ14-a and b, are reported directly to EPA Pretreatment staff Quintin White and those #'s can be obtained directly by EnPPa staff.</p> <p><b><u>FFY 2019 Report</u></b> 100% CIUs with permits</p> <p><b><u>FFY 2020 Report</u></b> 100% CIUs with permits</p>

				<p><b><u>FFY 2021 Report</u></b></p> <p>100% CIUs with permits</p>
WQ-15a	Percent of major dischargers in Significant Noncompliance (SNC) at any time during the fiscal year.	<p>The MPCA will report the annual percentage of Major Facilities in Significant Noncompliance</p> <p>End of FFY</p> <p>Run reporting in December of each calendar year</p>	Paul Scheirer	<p><b><u>FFY 2017 Report:</u></b></p> <p><b>MN was 2% SNC for FFY17</b></p> <p><b><u>FFY 2018 Report</u></b></p> <p><b>MN was 4% for FFY18</b></p> <p><b><u>FFY 2019 Report</u></b></p> <p><b>MN was 8% for FFY19</b></p> <p><b><u>FFY 2020 Report</u></b></p> <p>MN was 5% for FFY20</p> <p><b><u>FFY 2021 Report</u></b></p> <p>Cannot report until Nov. DMR data is in post 12/21/21</p>
WQ-19a	Number of high priority state NPDES permits that are issued in the fiscal year.	<p><u>New measure write-up 19a:</u></p> <p>The MPCA will select 20% of the facilities on the candidate list to be priority permits and take action on 80% of the permits on the list per fiscal year. The MPCA maintains a 2-year priority permit</p>	Holly Sandberg	<p><u>NPDES comment:</u></p> <p>State needs to commit to at least 80% for the measure WQ-19a, take actions (i.e., reissue or terminate) on 80% of the 20% priority permits selected for each fiscal year.</p>

		<p>schedule, which often fluctuates due to factors such as changes to water quality standards or effluent limit guidelines, potential to impact impaired waters, changes to national priorities, etc.</p>	<p><u>MPCA:</u></p> <p>As outlined in the initial state commitment MPCA has committed to taking action on 80% of the permits determined to be priority permits per fiscal year. The wording has been improved to provide clarity.</p> <p><b><u>FFY 2017 Report:</u></b></p> <p>MPCA's FFY17 Priority Permit commitment was 14 NPDES wastewater permits. MPCA took final action on 10 of the 14 NPDES wastewater permits, or 71% of the NPDES permits on the list.</p> <p>The MPCA fell short of the 80% commitment due to NPDES permits with new phosphorus limits being on hold due to discussions between MPCA and EPA regarding implementation of river eutrophication standards (RES). In addition the MPCA has continued to respond to various external comments, contested case hearing requests, and challenges related to RES.</p> <p>To work towards meeting the commitment in FFY18 MPCA will be holding a monthly priority permit management meeting for all permit writers assigned to a priority permit. At this meeting permit writers will give verbal updates on the status of their priority permit work. This will allow program management to proactively provide assistance in identifying barriers and manage permit priorities and work towards meeting the FFY18 commitment.</p> <p><b><u>FFY 2018 Report</u></b></p>
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			<p>MPCA's FFY18 Priority permit commitment was 25 NPDES wastewater permits. MPCA took final action on 25 permits, meeting the goal.</p> <p>To continue to work towards getting permits issued and removed from the priority permit list the MPCA will continue to hold monthly priority permit management meetings for all permit writers with assigned priority permits. Management will also continue to discuss barriers and permit management to work towards final action on expired permits.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>Starting in FFY2019, the MPCA no longer has a priority permit commitment to the EPA in addition to the EPA's annual list of review permits. Despite this, the MPCA still has an internal priority permit commitment to final issue a certain number of NPDES permits. MPCA's internal FFY19 Priority permit commitment was 45 NPDES wastewater permits. MPCA took final action on 25 permits as of November 19, 2019 with 2 more expected to be final issued by December 1, 2019. There may be a few additional permits issued through the month of December 2019 but not enough to meet the internal goal of 45 wastewater permits.</p> <p>To continue to work towards getting permits issued and removed from the priority permit list the MPCA will continue to hold monthly priority permit management meetings for all permit writers with assigned priority permits. Management will also continue to discuss barriers and permit management to work towards final action on expired permits.</p>
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			<p><b><u>FFY 2020 Report</u></b></p> <p>The MPCA no longer has a priority permit commitment to the EPA in addition to the EPA’s annual list of review permits. Despite this, the MPCA still has an internal NPDES permit issuance goal. In addition to what was noted in <i>WQ12-a</i> above, the MPCA’s internal FFY20 permit goal was to get to a backlog percentage of 62% expired for industrial permits and 42% expired for domestic permits. The MPCA took final action on 31 domestic permits on December 1, 2020 alone. There may be a few additional permits issued through the month of December 2020 but not enough to meet the internal backlog percentage goals.</p> <p>To continue to work towards reducing our backlogged permits, the MPCA will continue to hold monthly permit writer meetings where discussion of the backlog status will occur. Additionally permit writers will continue to provide updates on the current reasons for delays for each of their expired permits on a quarterly basis and the backlog strategy will continue to be updated based on these reasons. Management will also continue to discuss barriers and permit management to work towards final action on expired permits.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>The MPCA no longer has a priority permit commitment to the EPA in addition to the EPA’s annual Real Time Review permit list. Despite this, the MPCA still has an internal NPDES permit issuance</p>
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				<p>goal. In addition to what was noted in WQ12-a above, the MPCA’s internal FFY20 permit goal was to get to a major permit backlog percentage of 62% expired for industrial permits and 42% expired for domestic permits. The MPCA identified six major industrial permits and 15 major domestic permits to reissue from the time of development of the 2020 Backlog Reduction Strategy (April 2020) through the end of the 2020 calendar year. The MPCA took final action on one of the six major industrial permits identified and reissued 18 major domestic permits. There may be a few additional permits issued through the month of December 2021 but not enough to meet the internal backlog percentage goals.</p> <p>To continue to work towards reducing our backlogged permits, the MPCA will continue to hold monthly permit writer meetings where discussion of the backlog status will occur. Additionally, permit writers will continue to provide updates on the current reasons for delays for each of their expired permits on a quarterly basis and the backlog strategy will continue to be updated on these reasons. Management will also continue to discuss barriers and permit management to work towards final action on expired permits.</p>
WQ-20	Number of facilities that have traded at least once plus all facilities covered by an overlay permit	<p><u>FFY17 – FFY 20 Commitment:</u></p> <p>As of 2015, 33 facilities have participated in trades (25 buyers, 8 sellers). There are currently 3 NPDES Permits that include a point to non-point source trade.</p>	Holly Sandberg	<p><u>NPDES comment:</u></p> <p>State needs to send all permits (majors as well as minors) for EPA review when pollutant(s) trading requirements are incorporated in the proposed permits.</p>

	<p>that incorporates trading provisions with an enforceable cap.</p>	<p>With the implementation of River Eutrophication Standards (RES) stricter phosphorous limits are being established within individual permits than what was assigned within the Minnesota River Basin General Phosphorous Permit. As a result, the Minnesota River Basin General Phosphorous Permit will not be reissued. Minnesota has no other overlay trading permits.</p> <p>Throughout FFY17 – FFY20 MPCA anticipates that there will be an increased demand for trading. With the implementation of RES the opportunities for point-to-point source trading is likely to decrease due to the more localized nature of the WQS. Therefore, MPCA foresees a need for more point to nonpoint source trading.</p>	<p><u>MPCA:</u></p> <p>Trading is an innovative way for permittees to achieve their pollutant reductions in more cost effective manner. MPCA supports the increase in trading within the state. A number of Minnesota permittees have successfully participated in trades and MPCA anticipates that there will be an increase in demand for trading due to the implementation of RES. MPCA does not agree that it is necessary for EPA to review ALL permits that include trades as EPA Region 5 is already completing focused phosphorous reviews on ALL permits that include a new RES limit. Additional EPA review requirements would further slow down the permitting process and adversely influence the success of future trading in Permits. Note however that, since the vast majority of foreseeable trading will involve phosphorus, EPA’s review of permits containing new phosphorus limits will ensure an opportunity to review future trading permits as well.</p> <p><u>EPA response:</u></p> <p>While EPA does not agree that our review of trading permits would “further slow down” permitting or “adversely influence the success of future trading”, EPA appreciates MPCA’s statement that they will “ensure an opportunity to review future trading permits”. EPA intends to review any trading provisions incorporated into permits upon which EPA is conducting a review, including focused nutrient limit reviews, and will provide comments on the trading</p>
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			<p>provisions contained in those permits to ensure consistency with federal regulations.</p> <p><u>MPCA: Ok.</u></p> <p><b>FFY 2017 Report:</b></p> <p>As of September 30, 2017 there are 14 facilities participating in active trades (11 buyers; 3 sellers):</p> <p>Minnesota River General Phosphorus Permit trades FFY 2017 7 facilities participating in trades (6 Buyers; 1 Seller)</p> <p>Point source – nonpoint source trades FFY 2017 3 facilities involved in trades (2 industrial, one municipal)</p> <p>Point source-point source trades FFY 2017 4 facilities participating in trades (two buyers; two sellers)</p> <p>The total number of trades that have occurred (active and no longer active) is 34 (26 buyers; 8 sellers):</p> <p>Minnesota River General Phosphorus Permit trades (2008 – 2017) 25 facilities participating in trades (20 buyers; 5 seller)</p> <p>Point source – nonpoint source trades (1997 – 2017) 3 facilities participating in trades (2 industrial, one municipal)</p> <p>Point source-point source trades (2008 – 2017)</p>
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			<p>6 facilities participating in trades (three buyers; three sellers)</p> <p><b><u>FFY 2018 Report</u></b></p> <p>As of September 30, 2018 there are 14 facilities participating in active trades (11 buyers; 3 sellers):</p> <p>Minnesota River General Phosphorus Permit trades FFY 2018  9 facilities participating in trades (7 Buyers; 2 Sellers)</p> <p>Point source – nonpoint source trades FFY 2018  3 facilities involved in trades (2 industrial, 1 municipal)</p> <p>Point source-point source trades FFY 2018  2 facilities participating in trades (1 buyer; 1 seller)</p> <p>The total number of Facilities that have participated in trades (active and no longer active) is 34 (26 buyers; 8 sellers):</p> <p>Minnesota River General Phosphorus Permit trades (2008 – 2018)  25 facilities participating in trades (20 buyers; 5 seller)  124 seasonal transactions</p> <p>Point source – nonpoint source trades (1997 – 2018)  3 facilities participating in trades (2 industrial, one municipal)</p> <p>Credit generating practices include: riparian area restoration, livestock exclusion,</p>
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			<p>streambank stabilization, bluff stabilization, filter strips and cover crops</p> <p>Point source-point source trades (2008 – 2018) 6 facilities have participated in trades (three buyers; three sellers)</p> <p><b><u>FFY 2019 Report</u></b></p> <p>As of November 19, 2019 there are 14 facilities participating in active trades (11 buyers; 3 sellers):</p> <p>Minnesota River General Phosphorus Permit trades FFY 2019 9 facilities participating in trades (7 Buyers; 2 Sellers)</p> <p>Point source – nonpoint source trades FFY 2019 3 facilities involved in trades (2 industrial, 1 municipal) There is an additional municipal facility that is currently on public notice that is proposing to participate in point source – nonpoint source trading.</p> <p>Point source-point source trades FFY 2019 2 facilities participating in trades (1 buyer; 1 seller)</p> <p>The total number of Facilities that have participated in trades (active and no longer active) is 34 (26 buyers; 8 sellers):</p> <p>Minnesota River General Phosphorus Permit trades (2008 – 2019) 25 facilities participating in trades (20 buyers; 5 seller) 124 seasonal transactions</p>
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				<p>Point source – nonpoint source trades (1997 – 2019)</p> <p>3 facilities participating in trades (2 industrial, one municipal)</p> <p>Does not include the facility that is currently on public notice.</p> <p>Credit generating practices include: riparian area restoration, livestock exclusion, streambank stabilization, bluff stabilization, filter strips and cover crops</p> <p>Point source-point source trades (2008 – 2019)</p> <p>6 facilities have participated in trades (three buyers; three sellers)</p> <p><u>EPA: No Comment</u></p> <p><b><u>FFY 2020 Report</u></b></p> <p>As of December 4, 2020 there are 14 facilities participating in active trades (11 buyers; 3 sellers):</p> <p>Minnesota River General Phosphorus Permit trades FFY 2020</p> <p>8 facilities participating in trades (6 Buyers; 2 Sellers)</p> <p>Point source – nonpoint source trades FFY 2020</p> <p>4 facilities involved in trades (2 industrial, 2 municipal)</p> <p>There is an additional municipal permit that is currently in development which includes point source – nonpoint source trading.</p> <p>Point source-point source trades FFY 2020</p> <p>6 facilities participating in trades (3 buyers; 3 sellers)</p>
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			<p>The total number of Facilities that have participated in trades (active and no longer active) is 34 (26 buyers; 8 sellers):</p> <ul style="list-style-type: none"> <li>Minnesota River General Phosphorus Permit trades (2008 – 2020)</li> <li>25 facilities participating in trades (20 buyers; 5 seller)</li> <li>129 seasonal transactions</li> <li>Point source – nonpoint source trades (1997 – 2020)</li> <li>4 facilities participating in trades (2 industrial, 2 municipal)</li> <li>Does not include the municipal permit that is currently in development.</li> <li>Credit generating practices include: riparian area restoration, livestock exclusion, streambank stabilization, bluff stabilization, filter strips and cover crops</li> <li>Point source-point source trades (2008 – 2020)</li> <li>10 facilities have participated in trades (5 buyers; 5 sellers)</li> <li>4 facilities developed trade agreements that were not executed because permits for proposed facilities were not ultimately issued (2 buyers; 2 sellers)</li> </ul> <p><b><u>FFY 2021 Report</u></b></p> <p>As of November 24, 2021 there are 18 facilities participating in active trades (12 buyers, 6 sellers):</p> <p style="text-align: center;">Minnesota River General Phosphorus</p>
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				<p>Permit trades FFY2021  7 facilities participating in trades (5 buyers, 2 sellers)  Point Source – nonpoint source trades FFY2021  6 facilities involved in trades (2 industrial, 2 municipal)  There is an additional municipal permit that is currently in development which includes point source – nonpoint source trading.  Point source – point source trades FFY2021  4 facilities participating in trades (2 buyers; 2 sellers)</p> <p>The total number of Facilities that have participated in trades (active and no longer active) is 34 (26 buyers; 8 sellers)</p> <ul style="list-style-type: none"> <li>• Minnesota River General Phosphorus Permit trades (2008—2021) <ul style="list-style-type: none"> <li>○ 25 facilities participating in trades (20 buyers; 5 sellers)</li> <li>○ 134 seasonal transactions</li> </ul> </li> <li>• Point source – nonpoint source trades (1997-2021) <ul style="list-style-type: none"> <li>○ 6 facilities participating in trades (2 industrial, 4 municipal)</li> <li>○ Does not include the municipal permit that is currently in</li> </ul> </li> </ul>
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				<p>development.</p> <ul style="list-style-type: none"> <li>○ Credit generating practices include: riparian area restoration, livestock exclusion, streambank stabilization, bluff stabilization, filter strips, and cover crops</li> <li>● Point source-point source trades (2008-2021)</li> <li>● 10 facilities have participated in trades (5 buyers; 5 sellers)</li> </ul> <p>4 facilities developed trade agreements that were not executed because permits for proposed facilities were not ultimately issued (2 buyers; 2 seller)</p>
WQ- 27 (New Measure)	Extent of priority areas identified by each state that are addressed by EPA-approved TMDLs or alternative restoration approaches for impaired waters that will achieve water quality standards. These areas may also include protection approaches for unimpaired waters	We will report the number of 303(d) listed waters that will be addressed by TMDLs, as set forth in the Prioritization Plan for Minnesota 303(d) Listings to Total Maximum Daily Loads, dated September 2015 (Plan). This information will be reported through the ATTAINS database. U.S. EPA will analyze this data to convert to acreage, and supply MPCA with the acreage data. We will then report the acreage of TMDLs established through this measure. For the estimated number of TMDLs to be created each year, see the appendix of the Plan.	Wayne Cords	<p><b><u>FFY 2017 Report:</u></b></p> <p>FFY2017 goal for segments addressed by TMDLs was 1,693,086 acres (baseline of 889,173 plus 803,913 for FY17 alone). The actual results were 2,347,291 acres.</p> <p>The Universe is numbered at 6,595,313 acres, and therefore 36% of the Universe has a TMDL.</p> <p><b><u>FFY 2018 Report</u></b></p> <p>Universe – 6,484,377 acres</p> <p>Cumulative total at end of FY18: 2,793,026 acres</p> <p>Cumulative total for FY17: 2,347,291 acres</p> <p>FY18 total: 445,735 acres</p> <p>43.1% of universe.</p>

	to maintain water quality standards.			<p><b><u>FFY 2019 Report</u></b></p> <p>Universe: 8580.73 square miles  Completed: 5018.92 square miles  Percentage: 58.5%</p> <p><b><u>FFY 2020 Report</u></b></p> <p>Universe: 7701.07 square miles  Completed: 5617.29 square miles  Percentage: 72.94%</p> <p><b><u>FFY 2021 Report</u></b></p> <p>Universe: 7701.07 square miles  Completed: 7183.53 square miles  Percentage: 93.28%</p>
SS-1	Number and national percent, using a constant denominator, of Combined Sewer Overflow (CSO) permits with a schedule incorporated into an appropriate enforceable	The City of St. Paul and Metropolitan Council Environmental Services (MCES) CSO permit was terminated Oct. 2, 2014. Only one expired CSO permit (MN0046744 - City of Minneapolis and MCES) remains in Minnesota. The City of Minneapolis has completed all significant identified sewer separation work and we have no documentation regarding overflow events related to this permit since 2011. There have only been two overflow events	Randy Thorson	<p><b><u>FFY 2017 Report: Mixed progress:</u></b></p> <p>The joint City of Minneapolis and Metropolitan Council Environmental Services (MCES) CSO permit (MN0046744), which is currently expired, is the only CSO permit remaining in Minnesota. The City of Minneapolis has completed all significant identified sewer separation work and we have no documentation regarding overflow events related to this permit since 2011. There have only been two overflow events documented since 2007. While this CSO permit was not terminated during FFY17, there</p>

	<p>mechanism, including a permit or enforcement order, with specific dates and milestones, including a completion date consistent with Agency guidance, which requires: 1) Implementation of a Long Term Control Plan (LTCP) which will result in compliance with the technology and water quality-based requirements of the Clean Water Act; or 2) implementation of any other acceptable CSO control measures consistent with the 1994 CSO Control Policy; or 3) completion of separation after the baseline date. (cumulative)</p>	<p>documented since 2007. Next steps regarding this permit are still under negotiation with the permittees. We are targeting termination of this permit before the end of FF17 (Sept. 30, 2017)</p> <p>(Note: MPCA requested EPA support in conducting an inspection of Minneapolis in FY 2017.)</p> <p><i>MPCA is okay with this item.</i></p>		<p>have been significant milestone achievements including an EPA supported inspection and multiple meetings with permittees. We are targeting termination of this permit before the end of FF18 (Sept. 30, 2018)</p> <p><b><u>FFY 2018 Report</u></b></p> <p>Commitment was met. The last remaining CSO permit in Minnesota (permit MN0046744) was terminated July 13, 2018.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>Commitment was met in 2018. No report needed for 2019.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>Commitment was met in 2018. No report needed for 2020.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>Commitment was met in 2018. No report needed for 2021.</p>
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	<p>Number of type of compliance monitoring actions performed at point sources, indirect dischargers, and biosolid generators or users</p>	<p>Meet targets in, state-specific Compliance Monitoring Strategy, as negotiated on an annual basis.</p> <p>Negotiating FFY 17 CMS currently.</p>	<p>Paul Scheirer, Lisa Scheirer, Suzanne Baumann &amp; Duane Duncanson</p>	<p><b><u>FFY 2017 Report:</u></b></p> <p></p> <p>Microsoft Excel Worksheet</p> <p><b><u>FFY 2018 Report</u></b></p> <p><a href="X:\Agency Files\EnPPA PPG CMS\Compliance Monitoring Strategies\FY18 CMS">X:\Agency Files\EnPPA PPG CMS\Compliance Monitoring Strategies\FY18 CMS</a></p> <p></p> <p>Microsoft Excel Worksheet</p> <p><b><u>FFY 2019 Report</u></b></p> <p></p> <p>2019 CMS.xlsx</p> <p><b><u>FFY 2020 Report</u></b></p> <p></p> <p><b><u>FFY 2021 Report</u></b></p>
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				 2020 CMS.xlsx	
<b>New item 1)</b>	Identify and conduct State/EPA Worksharing activities in the compliance and enforcement program.	<p>Working together, U.S. EPA and MPCA will identify worksharing opportunities to support implementation of the National Enforcement Initiative (NEI) framework, and track established priorities for each FFY.</p> <p>In 2017, EPA plans to participate in a MS4 compliance inspection of St. Paul and a CSO compliance inspection of Minneapolis (activities related to managing the expired Minneapolis CSO permit, either by permit termination or an enforceable schedule, will count under EPA Strategic Measure SS-1). Beginning in 2017, EPA will kick off an industrial sector of the NEI that will include metals and chemical manufacturing, mining and food processing. Initially, this will include quarterly consultations to review data, develop baselines and conduct inspection targeting.</p>	Paul Scheirer, Suzanne Baumann, Lisa Scheirer, Tanya Maurice & Duane Duncanson	<p><b>FFY 2017 Report:</b></p> <ul style="list-style-type: none"> <li>In June of 2017 the MPCA and EPA worked together and performed an EPA lead audit of St. Paul’s MS4 program. The EPA took the lead on developing the final audit report, and the final report was completed on June 14, 2018. <b>Green</b></li> <li>R5 and MPCA program Sups meet quarterly to discuss upcoming inspections and other issues of concern. Mining was the focus in 2017.</li> </ul> <p><b>FFY 2018 Report</b></p> <p>R5 and MPCA program Sups meet quarterly to discuss upcoming inspections and other issues of concern.</p> <p><b>FFY 2019 Report</b></p> <p>R5 and MPCA program Sups meet quarterly to discuss upcoming inspections and other issues of concern.</p> <p><b>FFY 2020 Report</b></p> <p>R5 and MPCA program leaders meet quarterly to discuss upcoming inspections, SNC data, and other issues of concern.</p>	

				<p><b><u>FFY 2021 Report</u></b></p> <p>R5 and MPCA program leaders meet quarterly to discuss upcoming inspections, SNC data, and other issues of concern.</p>
<p><b>Water – Non-point Source (sec 319)</b></p>				
SP-10	<p>Number of waterbodies identified by States (in 1998/2000 or subsequent years) as being primarily nonpoint source (NPS) - impaired that are partially or fully restored. (cumulative)</p>	<ol style="list-style-type: none"> <li>1. The annual Watershed Achievements Report highlights the achievements of active and recently completed nonpoint source water quality projects, and a link will be provided for this report yearly.</li> <li>2. Staff will also provide Section 319 grant program progress into EPA’s Grants Reporting and Tracking System (GRTS) on a semiannual basis (March 15 and September 15). In addition, GRTS will also be updated by MPCA to reflect any changes to grants or related projects (upon EPA approval of proposed changes).</li> <li>3. Staff will develop individual nonpoint source water quality Success Stories for local and national presentation.</li> <li>4. MPCA staff funded through state match and Section 319 funding provide program direction, supervision, project management, technical assistance (water quality monitoring and modeling, stressor ID, data analysis and management, and GIS), program support (civic</li> </ol>	<p>Wayne Cords &amp; Juline Holleran</p>	<p><b><u>FFY 2017 Report:</u></b></p> <p>The 2017 Watershed Achievements Report (WAR) includes descriptions of completed, active and newly awarded nonpoint source projects and predicted pollutant reduction data. It was sent to EPA for approval on October 3, 2017. Once it is approved, the report will be posted on the MPCA website, at which point it can be found through the website search.</p> <p>GRTS reporting, including project reporting and pollution reductions, was completed by February 15, 2017 and September 15, 2017.</p> <p>US EPA conference and/or meetings attended included the <i>2017 National Training Workshop on CWA 303(d) Listing and TMDLs</i> held May 31 through June 2 2017 in Shepherdstown, West Virginia. Jim Courneya, Supervisor of the Northwest Watershed Unit, attended and presented with Red Lake Indian Reservation.</p> <p>Also, the <i>National NPS Training Workshop</i> in Boston, Massachusetts, held October 31 to November 3, 2016 was attended by Justin Watson, a project manager for the program.</p>

		<p>engagement, public information, computer, and administrative) for nonpoint source water quality projects and programs, including the federal Section 319 grant Pprogram.</p>	<p><b><u>FFY 2018 Report</u></b></p> <p>The 2018 Watershed Achievements Report (WAR) is in progress and will be submitted to the EPA by December 31, 2018.</p> <p>GRTS reporting was completed by February 15, and by September 20, 2018.</p> <p>US EPA conference and/or meetings attended included the 2018 National Training Workshop on CWA 303(d) Listing and TMDLs, held May 30 through June 1, 2018 in Shepherdstown, West Virginia was attended by Scott MacLean, Supervisor of the Southwest Watershed Unit. The National NPS Training Workshop is held every other year and there was no training held in FFY2018. Also, the Annual GRTS Training, held November 7, to November 8, 2017 in Chicago, IL, was attended by Cindy Penny, the Section 319 Grants Program Administrator.</p> <p><b><u>FFY 2019 Report</u></b></p> <p>The 2019 Watershed Achievements Report (WAR) is in progress and will be submitted to the EPA by December 31, 2019.</p> <p>GRTS reporting, including project reporting and pollution reductions, was completed by February 15, 2019 and September 15, 2019.</p> <p>US EPA conference and/or meetings attended included the 2019 National Training Workshop on CWA 303(d) Listing and TMDLs, held May 29 through May 31, 2019 in Shepherdstown, West Virginia was</p>
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			<p>attended by Justin Watkins, Supervisor of the Southeast Watershed Unit.</p> <p><b><u>FFY 2020 Report</u></b></p> <p>The 2020 Watershed Achievements Report (WAR) is in progress and will be submitted to the EPA in January 2021.</p> <p>GRTS reporting, including project reporting and pollution reductions, was completed by February 15, 2020 and September 15, 2020.</p> <p>Two nonpoint source water quality success stories were approved by EPA in 2020.</p> <p>US EPA conference and/or meetings attended included the 2020 National CWA 303(d) Training Workshop held May 26 through May 29, 2020 and the 2020 National Nonpoint Source Training held November 16 through November 19, 2020. These trainings were virtual and a number of Watershed staff and management attended. A Success Story training was also held on June 23, 2020 and attended by Watershed staff.</p> <p><b><u>FFY 2021 Report</u></b></p> <p>The 2021 Watershed Achievements Report (WAR) is in progress and will be submitted to the EPA in January 2022.</p> <p>GRTS reporting, including project reporting and pollution reductions, was completed by February 15, 2021 and September 15, 2021.</p>
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				<p>One nonpoint source water quality success story was approved by EPA in 2021.</p> <p>US EPA conference and/or meetings attended included the 2021 National CWA 303(d) and Data Management Training Workshop: Thoughtful Steps on the Path Ahead held June 7 through June 10, 2021 and the 2021 National Nonpoint Source Training Workshop held November 16 through November 19, 2021. These trainings were virtual and a number of Watershed staff and management attended.</p>	
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