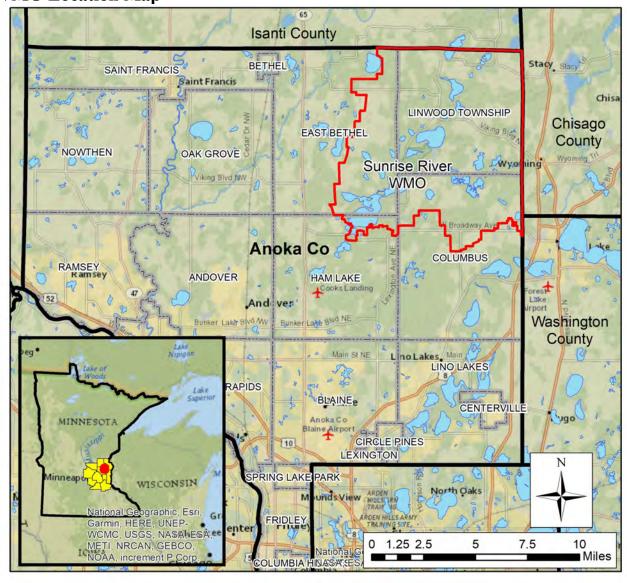
## 2023 Annual Report



East Bethel – Ham Lake – Linwood - Columbus April 1, 2024

#### **Sunrise River WMO Location Map**



#### **Table of Contents**

I. Introduction to this Report	2
II. About the Sunrise River WMO	2
III. Activity Report	
a. Current Board Members	4
b. Day to Day Contact	5
c. Employees and Consultants	5
d. Highlighted Recent Projects	
e. Public Outreach	9
f. Water Quality Trends	
g. Evaluation of Watershed Management Plan Implementation_	11
h. 2024 Work Plan	13
i. Status of Local Ordinances Plan Adoption and Implementation	n 13
j. Solicitations for Services	
k. Permits, Variances, and Enforcement Actions	13
IV. Financial and Audit Report	
a. 2023 Financial Report	14
b. Financial Report Audit	14
c. 2024 Budget	
Appendix A – 2023 Financial Report	
Appendix B - 2023 Progress Toward Goals	
Appendix C - 2023 Community Reports to the SRWMO	
Appendix D - 2023 Water Monitoring and Management Work Results	

#### I. Introduction to this Report

This report is intended for local and state oversight agencies, as well as interested citizens. At the local level, it is intended to provide member communities, their elected officials, and staff with an activity update. At the state level, this report meets the annual watershed management organization reporting requirements of Minnesota Rules 8410.0150. The report is intended to fulfill 2023 reporting requirements.

#### II. About the Sunrise River WMO

The Sunrise River Watershed Management Organization (SRWMO) is a special purpose unit of government that operates as a joint powers organization under Minnesota Statutes, Section 471.59. It is comprised of Linwood Township and portions of the Cities of Columbus, Ham Lake, and East Bethel. Board members are appointed by the member communities. Financing is from member communities. The SRWMO's direction is laid out in its watershed management plan and the member municipalities' local water plans.

The SRWMO area is rich in water and natural resources. Approximately 50% of the area is water and wetlands, including 19 lakes. Four are major recreational lakes (Coon, Linwood, Martin, and Typo). 19% of the SRWMO area is high quality natural communities that have undergone little human disturbance since pre-settlement times. Many of these areas have been designated by the State as sites of biodiversity significance or regionally significant ecological areas. 27 plant and animal species that are state endangered, threatened, special concern, or rare are known to occur in the SRWMO. These water and natural resources are at the heart of the character of these north Twin Cities metro communities.

Despite the overwhelming good quality of the natural resources, there are some areas of concern. Martin, Typo, and Linwood Lakes have been designated as "impaired" by the Minnesota Pollution Control Agency for excess nutrients. Coon and Linwood Lakes are infested with two aquatic invasive species: curly leaf pondweed and Eurasian or hybrid





water milfoil. Old, failing or improperly maintained septic systems likely have an impact on water quality. Many of these problems flow across community boundaries and cannot be effectively addressed by any one community alone. This is the reason for this joint powers watershed management organization.

SRWMO work has yielded some successes over these concerns. The Sunrise River in Linwood Township was impaired for pH, turbidity, and the fish community but in 2022 was removed from the impaired waters list. Martin and Typo Lakes both have statistically significant trends of improving water quality, and Martin Lake has arguably reached the criteria for delisting. Other beneficial project have also occurred, including those that are preventative of problems. Realizing the benefits of watershed management often takes decades.

#### \$RWMO Watershed Management

The SRWMO is guided by its 10-year watershed management plan. The plan can be found on the SRWMO website (www.SRWMO.org).

The Sunrise River WMO Board of Managers considers its responsibilities to be overseeing the management of water resources in the watershed. The WMO serves the community by:

- Providing a forum to consider inter-community water problems.
- Collecting data and conducting resource monitoring to guide management.
- Facilitating water quality improvement projects, which often will be cooperative endeavors with others.
- Setting minimum standards for member community ordinances that consider local water resources issues. The SRWMO will not have its own permitting program.
- Providing a linkage between natural resources and land use planning decisions.
- Educating the public about water resources, and enabling or incentivizing individual action.
- Informing and engaging local elected officials about water problems, projects and the SRWMO.
- Ensuring expenditures result in corresponding benefits to the public.
- Avoiding duplication among government agencies and communities.

#### The SRWMO operates under the following philosophies:

- Water-related problems are community problems and not individual problems.
- Water resource management is a vital matter that cannot be effectively addressed by individual communities because watersheds cover multiple communities.
- Water resources should be managed on a watershed basis.
- Aquatic and terrestrial areas are integrally linked and cannot be effectively managed separately.

#### III. Activity Report

#### a. Current Board Members

#### CITY OF COLUMBUS

Timothy Melchior (Secretary)

8306 177<sup>th</sup> Lane

Columbus, MN 55025

651.210.6842

Janet Hegland (Treasurer)

16319 Kettle River Blvd

Columbus, MN 55025

651.464.3120

timothymelchior@gmail.com councilsjaneth@ci.columbus.mn.us

CITY OF HAM LAKE

Troy Wolens Brian Kirkham

17817 Oak Land Dr NE Ham Lake, MN 55304 15544 Central Ave NE Ham Lake, MN 55304

763.755.8871 612.978.2764

denise@pioneercycle.com bkirkham@ci.ham-lake.mn.us

CITY OF EAST BETHEL

Brian Mundle (Chair) Leon Mager

2241 221<sup>st</sup> Ave NE
East Bethel, MN 55011

19511 East Tri Oak Circle NE
Wyoming, MN 55092-8420

763.434.0120 763.434.9652 Brian.mundle@ci.east-bethel.mn.us lam3@isd.net

LINWOOD TOWNSHIP

Jonn Olson Kevin Kelly (Vice Chair)
22817 Typo Creek Dr NE 22919 W Martin Lake Dr NE

Stacy, MN 55079 Stacy, MN 55092 651.200.0864 651.890.7085

Jonn.olson@linwoodtownship.org wyomingkellys@yahoo.com

Current SRWMO Managers and contact information can be found at www.SRWMO.org

#### b. Day to Day Contact

The day to day contact person for the SRWMO who can answer questions about the organization is:

Jamie Schurbon, Watershed Projects Manager Anoka Conservation District 1318 McKay Drive NE, suite 300 Ham Lake, MN 55304 763-434-2030 ext. 210

#### c. Employees and Consultants

The SRWMO does not employ staff, but does utilize consulting services and enters into cooperative agreements with other government agencies. A description of contracted services is listed below:

SRWMO consultants and partners during the reporting period:

Consultant/	Contact	Work Description
Partner Anoka Conservation District	Jamie Schurbon Watershed Projects Manager 1318 McKay Drive NW, #300 Ham Lake, MN 55304 763-434-2030 ext. 210 jamie.schurbon@anokaswcd.org	1. Water Monitoring – Water quality and hydrology monitoring in lakes, streams and wetlands.  2. Water Quality Improvement Projects – Implementation of water quality improvement efforts, including administering the SRWMO water quality grant program.  3. Education – Promotion of SRWMO programs.  4. Website - Maintain SRWMO website.  5. Reporting - Assistance preparing this annual report and State Auditor reporting.  6. Administration – Serve as a limited, on-call administrator to address miscellaneous day-to-day operational issues. Reviews local water plans.
Cameron Blake	Cameron Blake 1316 Oak Street W Stillwater, MN 55082 (763) 753-2368 blake257@umn.edu	Recording secretary for meetings, plus miscellaneous administrative assistance.

#### d. Highlighted Recent Projects and Accomplishments

Listed below from most to least recent

#### **Lakeshore Projects** (2023)



We commonly have a few lakeshore projects each year. In 2023 we secured a Clean Water Fund grant, project sites, and designed 8 projects for construction in 2024. All are at Martin Lake. We also secured a second Clean Water Fund grant to be received in 2024 for another round of lakeshore stabilizations.

#### Coon Lake Beach Community Center Rain Garden Rehab (2023)



ACD staff led a local Boy Scout group in an effort to rehabilitate the rain garden which was constructed in 2015. It has become overgrown with black locust trees and a variety of weeds, which were removed. The inlet had also become clogged, and was cleared. Finally, a fresh layer of mulch was installed. The rain garden captures and infiltrates road runoff which otherwise would be directly into Coon Lake.

#### Adopt-a-Drain (2022-)



As a pilot effort, we reached out to residents around Martin Lake through the lake association's Facebook. Quickly, 11 stormwater catch basins that drain to the lake were adopted by residents who will periodically clean them. Many drains around Coon Lake have also been adopted. Lakes for future promotion are Martin, Linwood, Fawn, and Coon.

#### Street Sweeping (2022-)



With funding from the Lower St. Croix (LSC)
Partnership we worked with the Anoka
Conservation District (ACD) & Linwood
Township to complete a street sweeping study
for the Martin and Linwood Lakes areas. That
study identified specific streets where more frequent
sweeping would be especially beneficial to lakes. An
additional 3 curb-miles will be swept four times

annually (i.e. 12 curb-mi additional sweeping per year). The pollutant reduction is 17.9 lbs/yr of phosphorus. Enhanced sweeping started in 2023

#### **Agricultural Projects** (2022-)



With funding from the LSC Partnership and Chisago Soil & Water Conservation
District, incentive grants are being offered to agricultural producers for cover crops, strip till, and other conservation practices.
LSC Partnership staff are taking the lead on outreach to our producers. The ACD will issue any grants. In 2023 one small conservation cover project was done.

#### Septic System Fix Ups (2022-)

With a variety of grant funding sources, low income homeowners can receive funds to fix failing septic systems. Shoreland areas are prioritized. In 2023 failing septic systems were replaced near Fawn, Coon, and Martin Lakes.

#### **Sunrise River Chain of Lakes Carp Project** (2017-2022)



Multiple grants have funded carp management in the chain of lakes including Linwood, Martin and Typo. The project installed four carp barriers and removed 14,517 carp resulting in water quality and habitat improvements. Harvest methods included box netting and seining. "Maintenance" box netting is planned in 2025. Partners include the Anoka Conservation District, SRWMO, Martin Lakers Association and Linwood Lake Improvement Association.

#### West Branch of Sunrise River Removed from Impaired Waters List (2022)

The stream from Martin Lake to Pool 1 has been removed from the State impaired waters list. Previously, high nutrients and algal production in upstream lakes had resulted high pH. Thanks to many water quality projects at Martin and Typo Lakes (both of which have improving water quality trends), stream water quality has improved!

#### Martin Lake Shores Park Stormwater Pond Enhancement (2021)



An existing stormwater pond treating water draining to Martin Lake was enhanced. The pond footprint was increased 55% and depth doubled to achieve greater pollutant reductions from a 41 acre drainage area.



#### Martin Lake Shoreline Stabilization at 22865 W Martin Lake Dr (2021)



Prior to the project, the lakeshore was a failing mix of concrete and railroad tie retaining walls, & mowed turf grass. Retaining wall debris was removed, the shore graded to a stable slope, and rock rip rap installed. A 612 sq ft vegetated buffer of native plants was installed. The project benefits Martin Lake water quality and near shore habitat.



#### **Linwood Elementary School Rain Garden (2021)**



This project corrected poor drainage and appearance in an existing rain garden while serving as a demonstration project and educational opportunity. The rain garden is located at the school's main entrance, and included interpretive signage.

#### 4471 Channel Lane Rain Garden for Coon Lake (2020)



A double-inlet curb cut rain garden was installed at a private residence that treats stormwater from 7.85 acres of the neighborhood. It captures and infiltrates water that would otherwise be directly discharged to Coon Lake without treatment.



#### Coon Lakeshore Restoration (2020)



A private lakeshore at Coon Lake had 41ft stabilized and 877 sq ft restored with native vegetation. The project filters runoff to benefit water quality and provides near-shore habitat.

#### 228th Lane and 230th Ave Stormwater Pond Enhancements (2019)



Two stormwater ponds were renovated along West Martin Lake Dr. in Linwood Township. This renovation made them larger and deeper. These stormwater ponds will now be more effective at treating stormwater being discharged into Martin Lake.



#### **Public Outreach**

The URRWMO and its member cities do periodic public outreach and education projects. The URRWMO's website serves as the primary, continuous public outreach tool while other outreach is more targeted. Website contents include general information about the organization, the watershed management plan, meeting agendas and minutes, water monitoring results, profiles of WMO projects, access to mapping and data access tools, and others.

The SRWMO ensures visibility of its website by asking member cities and townships to post the SRWMO website address in their newsletters. Links to the SRWMO website are also provided at the Anoka Conservation District and member municipality websites.

The website address is http://www.srwmo.org

#### Sunrise River WMO website homepage



The SRWMO benefits from two outreach collaboratives: The Lower St. Croix Partnership and the Anoka County Water Resources Outreach Collaborative. The SRWMO provides financial support to the latter. These collaboratives do public outreach for broader geographic areas including the SRWMO, offering efficiencies. Recent work has included promotion of incentive grants to agricultural producers, a Realtor shoreland workshop, animated videos, community events, animated videos, and others.

Additional public outreach is accomplished through newsletters, public announcements and similar work on a schedule specified in our Watershed Management Plan. The articles are distributed to member communities and lake assoications for distribution in their newsletters. Periodic larger articles are distributed as press releases to local newspapers. In 2023 the SRWMO's printed outreach included:

- Promotion of local water recreation opportunities
- Septic system fix up grants.

- Stop aquatic hitchhikers
- Information about the SRWMO.
- Infographics about lakeshore stewardship provided to lake associtions for their newsletters.

Community events are an increasing focus of the SRWMO. In 2023 they hosted booths at community events for three of four cities. They've found this is an especially valuable way to contribute and increase awareness of their organization.

#### e. Water Quality Trends

The SRWMO has a long term water quality monitoring program that includes most larger stream and recreational lakes in the watershed. From 2000-2009 the SRWMO had a robust water monitoring program to establish a baseline of data; little water monitoring had been done previously. From 2010 to the present the amount of monitoring has moderated to a level sufficient to detect trends (every 2-3 yrs) or track the effectiveness of projects (every 1-2 years). An important part of evaluating implementation of the watershed management plan is looking at water quality trends.

The SRWMO lakes have a range from poor to good water quality (table below). Three of the lakes (Martin, Typo and Linwood) are impaired for excess nutrients. Two of those lakes, Martin and Typo, have been a focus of SRWMO management and are improving (see figures below).

Water quality summary for monitored SRWMO lakes as of 2023. Data shown are for the most recent year. Trends are based on a MANOVA with response variables of TP, chlorophyll-a and Secchi transparency.

Lake	Letter Grade	Total phosphorus summer average (µg/L)	Chlorophyll- a summer average (µg/L)	Secchi transparency summer average (ft)	Year of most recent data	# years of monitored	Trend
Coon – East Bay	В	29.6	11.70	5.7	2022	23	Improving
Coon – West Bay	В	24.2	8.45	6.08	2022	14 (6 with TP and chlorophyll)	Insufficient data. No evidence of decline.
Boot	В	33.8	9.2	8.3	2021	3	Insufficient data
Linwood	С	48.0	20.2	3.2	2022	19	Slight improving
Туро	F	166.2	79.9	1.1	2023	23	Improving
Martin	C	46.6	26.1	3.0	2023	23	Improving
Fawn	A	17.1	4.0	13.7	2018	14	No change
Island	C	33.9	10.6	4.6	2011	9	NA

More detailed water quality data and analysis can be found in **Appendix B** and online. Additionally, all water quality data collected by the SRWMO is on the MN Pollution Control Agency's EQuIS database, which is accessible through their website.

#### f. Evaluation of Watershed Management Plan Implementation

The SRWMO Watershed Management Plan contains a schedule of tasks that the WMO should accomplish in order to realize its goals (see table on following page). The tables on the following pages compare work planned and work actually accomplished for the most recent years and upcoming year. Additionally, **Appendix B** contains a summary of progress toward all SRWMO plan goals. **Appendix C** contains member community annual reports to the SRWMO with their progress on watershed plan tasks.

2021-2023 SRWMO Watershed Plan tasks planned and accomplished.

_	21-2023 SRWMO Watershed I	Funding*		021	20		20	22	20	24
	Fidit Action	runung	Planned	Done	Planned	Done	Planned	Done	Planned	
	ating Tasks (as defined by JPA)									
	Recording Secretary services - contractual	SRWMO	\$1,449	✓	\$1,500	✓	\$1,552	✓	\$1,607	underwa
2	Administrator services - contractual	SRWMO	\$6,210	<b>~</b>	\$6,427	<b>~</b>	\$6,652	✓	\$6,885	underwa
3	Fiscal mgmt assistance - E Bethel Finance Director & Treasurer	SRWMO				✓		✓		
4	Financial contributions calculation update	SRWMO								
5	Financial audits	SRWMO								
6	Liability Insurance	SRWMO	\$1,550	<b>~</b>	\$1,581	<b>~</b>	\$1,613	✓	\$1,645	underw
7	Reports to BWSR, State Auditor	SRWMO	\$1,139	✓	\$1,178	✓	\$1,220	✓	\$1,262	underw
8	Annual written communication to member communities	SRWMO	\$621	✓	\$643	✓	\$665	✓	\$689	underw
9	Community ordinance reviews	SRWMO	1	underway		✓				
10	Review/approve community local water plans	SRWMO	\$2,240					4/4 done		
11	Seek bids for professional services	SRWMO	\$100	✓			\$100	✓		
	operating General									
										metro WBIF Coon Lak ra
12	Grant search and applications	SRWMO	\$1,035	SSTS	\$1,071	CWF-shorelines phase 1	\$1,109	phase 2	\$1,148	garden and lakeshores, Linwood SV
13	Undesignated reserve	SRWMO		spent down		spent down		maintained		maintain
14	Update Watershed Plan	SRWMO								
omi	nunications with Member Communities									
	Project reporting to member communities	SRWMO	<b>√</b>	✓	✓	✓	✓	✓	✓	underw
	Annual board member reporting to member communities	SRWMO	<b>-</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	underv
	Project tours	SRWMO		<b>√</b>						
	c Outreach		_							
18	Lake association and community newsletter content	SRWMO	\$2,190	✓	\$1,168	✓	\$938	✓	\$2,184	underv
18 19	Newspaper press releases	SRWMO	92,190	-	1,108	FL Times-carp	δοες	<u> </u>	72,104	unuerv
_	Lakeshore restoration guidance materials	_	+		ć2 200	FL Times-carp  ✓	-	<b>—</b>		$\vdash$
20		SRWMO	+		\$3,300	•	ļ	<b>——</b>		<del></del>
21	Shoreland stewardship display	SRWMO	+				ļ	<u> </u>		<u> </u>
22	Community event displays	SRWMO	Provided by bd	<b>√</b>	Provided by bd	<b>√</b>	Provided by bd	<b>√</b>	Provided by bd	underv
23	Stakeholder event attendance	SRWMO	Provided by bd	✓	Provided by bd	✓	Provided by bd	<b>√</b>	Provided by bd	underv
24	Workshops promotion	SRWMO			\$815	✓		✓		underv
25	Engage citizen leaders	SRWMO		✓		✓		<b>✓</b>		
26	Websites	SRWMO	\$725	✓	\$750	✓	\$776	✓	\$803	underv
27	Anoka Co Outreach Coordinator position	SRWMO	\$2,500	✓	\$4,450	✓	\$4,606	<b>✓</b>	\$4,767	underv
29	Advisory committees	SRWMO	1	<b>√</b>	. ,	<b>√</b>	. ,		. , , .	
	Promote Well Water Wise	SRWMO	\$50	<b>✓</b>	\$52	<b>√</b>	\$54	<b>√</b>	\$55	underv
	I.	SILVVIVIO	330	•	252	•	<del>-</del> 554	•	رور	underv
	r Condition Monitoring Water condition monitoring	course.	646.446	✓	640.260	✓	60.425	<b>√</b>	640.535	
		SRWMO	\$16,446	·	\$10,369	•	\$9,125	•	\$18,535	underv
	lopment Reviews								1	
_	Development reviews	MC**	\$1,000	✓	\$1,000	✓	\$1,000	✓	\$1,000	underw
	-partner Coordination									
	Participate in 1W1P	SRWMO	\$662	✓	\$686	✓	\$710	no	\$734	no
	r Improvement Projects									
34	Ag conservation planning outreach	SRWMO	\$1,120	✓	\$1,120	done in '21		✓		underv
		Grants		<b>~</b>						
25								available, but		
S										
J	Cost share grant program- open to the public	SRWMO	\$2,500	✓	\$1,500	✓	\$1,000	no projects	\$1,000	
	Cost share grant program- open to the public	SRWMO	\$2,500	✓	\$1,500	<b>√</b>	\$1,000	no projects	\$1,000	Coon Lk Re
	Cost share grant program- open to the public	SRWMO	\$2,500	<b>√</b>	\$1,500	<b>√</b>	\$1,000	no projects	\$1,000	
	Cost share grant program- open to the public	SRWMO Grants	\$2,500	✓	\$1,500	<b>√</b>	\$1,000	no projects  phase 1	\$1,000	Communit
		Grants	\$2,500	<b>√</b>		<b>√</b>		phase 1	\$1,000	Communit
	Cost share grant program - open to the public  Cost share grant program - through lake associations	Grants SRWMO	\$2,500	<b>√</b>	\$7,500		\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC
36		Grants	\$2,500	✓ 		<b>√</b>		phase 1	\$1,000	Communit (\$ from AC
36	Cost share grant program - through lake associations	Grants SRWMO Grants			\$7,500 \$30,000	√ \$78,500	\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC \$107,
36		Grants SRWMO	\$2,500 \$7,500	·	\$7,500	<b>√</b>	\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC \$107,
36	Cost share grant program - through lake associations	Grants SRWMO Grants		·	\$7,500 \$30,000	\$78,500	\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC \$107,
36	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants	\$7,500	<i>*</i>	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	\$107,0 planned 20
36	Cost share grant program - through lake associations	Grants SRWMO Grants SRWMO	\$7,500	·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	(\$ from AC
36	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	<i>*</i>	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	\$107,
336	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	\$107,000 planned 2000 Blvd rg
336	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	\$107,000 planned 2000 Blvd rg
36 37 38	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	\$107,000 planned 2000 Blvd rg
36 37 38 39	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$7	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 20 Blvd rg WBIF
36 37 38 39	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500	\$25,000	phase 1 underway	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$\frac{1}{2}\$\$\frac{1}{	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$7	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$\frac{1}{2}\$\$\frac{1}{	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500	\$25,000	phase 1 underway see 2022	\$1,000	Community (\$ from AC \$107,i planned 20 Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500 \$\frac{1}{2}\$  \$\frac{1}{2}\$  \$\f	\$25,000	phase 1 underway see 2022	\$1,000	Community (\$ from AC \$107,i planned 20 Blvd rg WBIF
36 37 38 39 40 41 42	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41 42	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500 \$\frac{1}{2}\$  \$\frac{1}{2}\$  \$\f	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	\$78,500 \$78,500 \$\frac{1}{2}\$  \$\frac{1}{2}\$  \$\f	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	· · · · · · · · · · · · · · · · · · ·	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 20 Blvd rg WBIF
36 37 38 39 40 41 42 43 44	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communit (\$ from AC \$107, planned 20 Blvd rg WBIF
36 37 38 39 40 41 42 43	Cost share grant program - through lake associations  Carp removals	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	S107, planned 20 Blvd rg WBIF
36 37 38 39 40 41 42 43 44	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communic (S from AC \$107), planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43 44 45	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communic (S from AC \$107), planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43 44 45	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	Communic (S from AC \$107), planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43 44 45	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits  Carp management feasibility and effectiveness studies	Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022		Communic (S from AC \$107), planned 2C Blvd rg WBIF
36 37 38 39 40 41 42 43 44 45	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits	Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$1,000	WBIF
36 37 38 39 40 41 42 43 44 45 46 47	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits  Carp management feasibility and effectiveness studies	Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022		(Sfrom ACI \$107, M planned 20 Bbvd rg WBIF
36 37 38 39 40 41 42 43 44 45 46 47	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits  Carp management feasibility and effectiveness studies	Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	✓ \$78,500  ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	\$25,000	phase 1 underway see 2022		Community (§ from AC \$107,i planned 20 Blwd rg WBIF
36 37 38 39 40 41 42 43 44 45	Cost share grant program - through lake associations  Carp removals  Stormwater retrofits  Carp management feasibility and effectiveness studies	Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants SRWMO Grants	\$7,500	√	\$7,500 \$30,000 \$7,500	7 \$78,500  7 7 7 7 4 done in 2021	\$25,000	phase 1 underway see 2022	\$5,500	Community (§ from ACC \$107, to 100, to

#### g. 2024 Work Plan

See table above.

#### h. Status of Local Ordinances, Water Plan Adoption and Implementation

All SRWMO member communities are required to have a Local Water Plan that is consistent with the SRWMO Watershed Management Plan. The WMOs have approval authority over these Local Water Plans. Whenever a WMO plan is updated the member municipalities have two years to update their Local Water Plans, ordinances, and other control measures to be consistent with the WMO Plan. All local water plans have been approved.

To track member cities' progress on local plan implementation, the SRWMO requires a brief annual report from each city and provides a template for this report. In addition to serving as a reporting tool, the template serves as a "to do" list for our cities. These reports are provided as **Appendix** C.

#### i. Solicitations for Services

State rules require watershed management organizations to solicit bids for professional services at least once every two years. Most recently the SRWMO solicited bids in early 2022 and 2024 for water monitoring and management work to occur in the same years. Requests for proposals were provided to the Anoka Conservation District and member communities' consulting engineering firms. One entity, the Anoka Conservation District, provided a proposal, and was selected. The SRWMO similarly solicited bids for recording secretarial services in 2022 and 2024, selecting Cameron Blake from amongst two bids.

#### j. Permits, Variances, and Enforcement Actions

The SRWMO does not issue permits, variances, or take enforcement actions. These responsibilities are held by the member municipalities, as outlined in each municipality's local water plan, ordinances, and policies.

#### IV. Financial and Audit Report

#### a. 2023 Financial Report

See Appendix A – 2023 Financial Report.

#### b. Financial Audit

Per MN Statutes, section 6.756 and the MN State Auditor's minimum revenue thresholds, the SRWMO has not been required to do annual audits, but an audit or agreed upon procedures engagement once every five years is required. An agreed upon procedures engagement was completed in 2020 for 2019 finances. It is next planned in 2025.

**c. 2024 Budget**In November 2023 the SRWMO Board approved the following 2024 budget.

	Row Labels	Sum of 2024 Budget
1	Non-operating	
2	Collaboration/Planning	
3	Aerial photos	\$0.00
4	Participate in One Watershed, One Plan (1W1P)	\$0.00
5		
6	Education and Public Outreach	
7	Anoka Co Outreach Coordinator Position	\$4,767.00
8	Lakeshore Restoration Guidance Materials	\$0.00
9	Newsletters	\$2,184.00
10	Promote Well Water Wise	\$55.00
11	Website operations/maintenance	\$870.00
12	Workshops Promotion	\$0.00
13	Website platform update	\$0.00
14		,
15	Non-Operating General	
16	Grant Search and Applications	\$1,148.00
17	Clair Coardi ana Approach	<b>\$1,110.00</b>
18	Water Quality Improvement Projects	
19	Ag Conservation Planning Outreach	\$0.00
20	Alum Feasibility Study or Treatment	\$0.00
21	Carp Management	\$0.00
22	Carp Mgmt Feasibility Study or Maintenance Harvests	\$1,000.00
23	Ditch 20 Wetland Restoration Outreach	\$0.00
24	Linwood Lake Subwatershed Retrofitting Study	\$2,000.00
25	SRWMO Cost Share Grant Fund - open to public	\$1,000.00
26	SRWMO Cost Share Grant Fund - through lake associations	\$0.00
	SKWINO Cost Share Grant Fund - through lake associations	\$0.00
27	Manitarina Effectiveness	
28	Monitoring - Effectiveness	<b>#4.000.00</b>
29	Lake Water Quality Monitoring	\$4,800.00
30	Stream Water Quality Monitoring	\$1,680.00
31	A4 1/ 1 B1 1/	
32	Monitoring - Diagnostic	#0.00
33	Lake Water Quality Monitoring	\$0.00
34		
35	Monitoring - Surveillance	04.407.00
36	Chloride sampling - streams	\$1,197.00
37	Lake Level Monitoring	\$1,650.00
38	Lake Water Quality Monitoring	\$7,200.00
39	Reference Wetland Hydrology Monitoring	\$2,175.00
40	Secchi Transparency Lake Monitoring - volunteer coord.	\$273.00
41		
42	Actions for Finances Mgmt	
43	Reserve Spend-Down	\$0.00
44	Carryover Funds*	\$1,186.00
45		
46	Operating	
47	Operating Expenses	
48	Advertise Bids for Pro Services (req'd in odd yrs)	\$0.00
49	Annual Reports to BWSR, State Auditor	\$1,262.00
50	Annual Written Communication to Member Communities	\$689.00
51	Liability Insurance	\$1,850.00
52	On-call Administrative Assistance	\$8,800.00
53	Recording Secretary services	\$1,400.00
54	SRWMO JPA update inc Plan and boundary updates	\$0.00
55	<u> </u>	
56	Actions for Finances Mgmt	
	Reserve Spend-Down	\$0.00
	·	
	Grand Total	\$47.186.00
56 57 58		\$0.00 \$47,186.00

# Appendix A:

### 2023 Financial Report

# SUNRISE RIVER WATERSHED MANAGEMENT ORGANIZATION

#### FINANCIAL REPORT FOR YEAR ENDED DECEMBER 31, 2023

## To the Chairperson, Janet Hegland, of Sunrise River Water Management Organization

The enclosed statement has been prepared after review of the organization's financial records. I have not audited the organization's records and do not express an opinion. The enclosed information fairly reflects the Sunrise River WMO's financial position for the stated year.

March 7, 2024

Prepared by: Jamie Schurbon, Anoka Conservation District 1318 McKay Drive NE, suite 300 Ham Lake, MN 55304 763-434-2030

#### SUNRISE RIVER WATERSHED MANAGEMENT ORGANIZATION 2241 221st Ave NE Cedar, MN 55011

#### STATEMENT OF REVENUES AND EXPENSES

For: year beginning January 1, 2023 and ending December 31, 2023

Expenditures	Amount
Operating	
Insurance – MN Counties Intergovernmental Trust	\$1,774.00
Secretarial services - Cameron Blake	\$1,200.00
On-call admin assistance - Anoka Conservation District (ACD)	\$8,800.00
Annual reports to BWSR & State Auditor – ACD	\$1,220.00
Annual written communication to member communities - ACD	\$665.00
SUBTOTAL	L \$13,659.00
Non-Operating	
Water monitoring and management - ACD	\$28,946.00
Joint powers agreement (JPA) update	\$20,060.62
SUBTOTAL	L \$49,006.62
GRAND TOTAL	L \$62,665.62
Revenues	Amount
Linwood Twp - SRWMO Budget	\$17,847.64
Linwood Twp - JPA update	\$3,320.03
City of Columbus - SRWMO Budget	\$9,346.73
City of Columbus - SRWMO Budget City of Columbus - JPA update	
	\$5,320.03
City of Columbus - JPA update	\$5,320.03 \$0.00
City of Columbus - JPA update City of Ham Lake - SRWMO Budget	\$5,320.03 \$0.00 \$3,320.03
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update	\$5,320.03 \$0.00 \$3,320.03 \$12,647.05
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update City of East Bethel - SRWMO Budget	\$5,320.03 \$0.00 \$3,320.03 \$12,647.05 \$3,210.25
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update City of East Bethel - SRWMO Budget City of East Bethel - JPA update	\$5,320.03 \$0.00 \$3,320.03 \$12,647.05 \$3,210.25 0.00
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update City of East Bethel - SRWMO Budget City of East Bethel - JPA update Insurance dividend	\$9,346.73 \$5,320.03 \$0.00 \$3,320.03 \$12,647.05 \$3,210.25 0.00 5,025.45 0.00
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update City of East Bethel - SRWMO Budget City of East Bethel - JPA update Insurance dividend Anoka Conservation District - Returned carp mgmt funds	\$5,320.03 \$0.00 \$3,320.03 \$12,647.05 \$3,210.25 0.00 5,025.45 0.00
City of Columbus - JPA update City of Ham Lake - SRWMO Budget City of Ham Lake - JPA update City of East Bethel - SRWMO Budget City of East Bethel - JPA update Insurance dividend Anoka Conservation District - Returned carp mgmt funds Other	\$5,320.03 \$0.00 \$3,320.03 \$12,647.05 \$3,210.25 0.00 5,025.45 0.00

#### SUNRISE RIVER WATERSHED MANAGEMENT ORGANIZATION

#### **BALANCE SHEET**

For the year beginning January 1, 2023 and ending December 31, 2023

Assets	
Cash	\$20,422.39
Water quality project grant fund held at the Anoka Conservation District	\$6,024.24
Other	\$0.00
Other	\$0.00
Total Assets	\$26,446.63
Liabilities	
Accounts Payable - Cameron Blake - Nov 2023 secretarial services	\$2,900.00
Other	\$0.00
Other	\$0.00
Total Liabilities	\$2,900.00

## Appendix B:

2023 Progress Toward Plan Goals

#### **SRWMO Goals Evaluation Template**

Year: 2023

							Progr	ess Description
#		D-1-tdtiith	Not applicable - No	Donate alarmed but	Progress, but less	B	Ahead of	<b>✓</b> Goal
	Goal	Related actions in the current year & all years	progress was planned by this time	Progress planned, but none achieved	than planned	Progress-ing as planned	plan	Accomplished
High I	Priority Issue Lake and Stream Water Quality	years	by this time	Holle achieved	than planned	as plainteu	piaii	Accomplished
	Complete eight conservation plans by 2022 for landowners. Highest priority properties are those with livestock/horses and sites within impaired waters' watershed. Work to be done by the BWSR/NRCS funded Watershed Conservation Planner housed at Chisago SWCD.	2020 - Identified 42 owners of parcels 20+ acres in priority drainages (Coon, Linwood, Martin & Typo Lakes). 2 letters to each. In-person visits to 6 top priorities. 3 conservation plans completed. Watershed Conservation Planner program has ended. 2023 - 0.5 ac conservation cover project installed. Ongoing outreach planned by LSC Partnership. New \$10,000 soil health			<b>√</b>			
G2	Implement projects in five conservation plans produced by the BWSR/NRCS funded Watershed Conservation Planner housed at Chisago SWCD. Funding sources may include federal agriculture programs or other existing programs.	cost share available via Chisago SWCD.  USDA NRCS 2019-2023 in SRWMO has planned and installed 1 high tunnel and 2 pasture plantings (14.7 ac total). ACD installed 1 (0.5 ac) conservation cover			<b>√</b>			
G3	Create a new BMP incentives program to benefit lake water quality that increases participation by increasing available funding and operating the program jointly with lake associations. The SRWMO will provide primary funding while the lake associations will, where willing, provide most promotion & outreach. Where lake associations do not participate the SRWMO will continue to directly offer cost share grants to homeowners.	practice in 2023.  In 2022 the SRWMO decided not to create this program through lake associations, but instead was successul getting 2023 & 2024 CWF grant for targeted shorelines stabilizations. Different path, same goal (or more) reached.						
G4	20% or less of lakeshore will be mowed turf to the water's edge or retaining walls. When most recently inventoried in 2004 lakes had 20% (Linwood Lake), 24% (Coon Lake), 27% (Martin Lake), 37% (Fawn Lake), 4% (Typo Lake). Install at least two lakeshore buffer or stewardship projects per year to work toward this goal.	2020 - installed 41 If @ Scheiderich. 2021 -installed 140 If @ Ferden, Bibus, Arvold. 2022 -Installed 420 If @ Dale (Fawn Lk), Lucas (Martin Lk), Lausche & Goldstrand (Linwood Lk). 2022 - CWF grant for shoreland stabs secured with 300 If goal.				<b>✓</b>		
G5	Manage carp in Typo, Martin, Linwood and Coon Lakes recreational lakes to 100/kg per hectare, the threshold above which they are destructive to lake health. This is equivalent to 89 lbs/acre.	Multiple carp removals. Poorer success rate than past years. Martin Lake water quality near delisting.			<b>~</b>			
G6	Road deicing salt will be minimized through training on effective, science-based deicing techniques.					<b>✓</b>		
G7	Work toward 20% phosphorus reduction within the SRWMO to help meet the multi-agency St. Croix Basin TMDL 20% reduction goal for the entire Sunrise River watershed.	Carp removals. 3 stormwater ponds, 2 rain gardens, 4 shore stabilizations. 9.38 lbs TP + carp removals.				<b>~</b>		
G8	Achieve pollutant reductions needed to get Martin and Linwood Lakes off the impaired waters list and work toward the reductions needed for other waterbodies. See plan text for more detail on targeted pollutant reductions management strategies.	Carp removals, stormwater retrofits, shoreline stabilizations. Martin Lake has improving trend and is near state water quality standard. 2023 enhanced street sweeping at both lakes. 2022 adopt-a-drain started at Martin Lake.				<b>✓</b>		
G9	Maintain Coon Lake water quality through projects that offset landscape pressures that might cause eutrophication.	1 rain garden. 1.25 lbs TP. 19255 E Front Blvd rg planned for 2024-25.			✓			

							Progr	ess Description
#			Not applicable - No				Progressin	
		Related actions in the current year & all	progress was planned	Progress planned, but	Progress, but less	Progressing	g, ahead of	✓ Goal
	Goal	years	by this time	none achieved	than planned	as planned	plan	Accomplished
High F	Priority - Water Monitoring							
G10	Monitor the effectiveness of installed water quality projects					✓		
	(effectiveness monitoring).	Typo and Martin Lakes monitored				•		
G11								
		Unplannned 2024 monitoring of Linwood	✓				<b>✓</b>	
	Diagnose water quality problems to inform management	Lake tribs planned to determine scope of	<b>,</b>				, v	
	(diagnostic monitoring).	subwatershed study.						
G12	Detect changes or trends (surveillance monitoring).	All priority waters are on a monitoring				✓		
	Detect changes of trends (surveillance monitoring).	schedule				•		
High I	Priority - Funding							
G13	SRWMO continues to have approximately 50% of its budget							
	grant funded.	Up to 2022 - 1 CWF grant (\$157K						
		retrofits), 1 CWF grant (\$148K carp),						
		Lower St. Croix WBIF collaborative						
		(\$1.2M),						
		2022 - \$78,500 CWF grant for lakeshore					<b> </b>	
		stabilization, \$10,000 CWF from Chisago					<b>'</b>	
		SWCD for soil health.						
		2023 - \$107K CWF grant for shore stabs.						
		2024 - Possible metro WBIF allocation for						
		E Front Byld rg and shoreline stabs.						
		All - Septic fix up grants via ACD.						
G14	Maintain average annual budgets of local funds from	Have spent down reserve funds for						
01.	member communities <\$50,000 from 2020-2025 and	budget <\$50K. Community contributions					,	
	<\$60,000 from 2026-2030.	<\$50K every year.					✓	
		COOK EVERY YEAR.						
G15	Minimize budget variations amongst years. This requires							
013	carrying a balance forward from lower expenditure years to							
	pay for future higher expenditure years.					✓		
	pay for future fligher experiulture years.							
G16	Always have the 10% match required to secure non-	Undesignated reserve is 15-30% of annual						
010	competitive Watershed Based Funding from the State Clean	average expenses. Annual budgets include				<b>✓</b>		
	Water Legacy Fund.	match.				, ,		
G17	Never ask member communities for additional funding above	materi.						
01/	an approved annual budget to cover unforeseen					✓		
	circumstances.					*		
C10								
G18	Solicit quotes for professional services every two years.					✓		
	Priority - Communications with Member Communities	2024						
G19	City councils know about SRWMO projects.	2021 projects tour. Annual mini-reports.				✓		
C20	Annually deliver a switten and '	Annual mini roport						
G20	Annually deliver a written and in person report to city	Annual mini-report				✓		
-	councils and town board.							
G21	SRWMO board meetings are posted on each member community's calendar.					✓		
ui-k s	Criority - Outreach and Education							
	Personal, relevant communications for the key messages and	Using outreach schedule in watershed						
G22	, ,					<b>✓</b>		
	timeline described in the plan text (sec 7.5, goal 22).	plan. At least 1 lake association				<b>,</b> ,		
G23	Diversify outreach methods, using three different methods	presentation per yr. Methods used in 2021: in-person tour,						
023		lake assoc and city newsletters, website,						
	Highest priority and frequency: member community and lake	signage, direct mailings to landowners						
	association newsletters, SRWMO website, workshops, displays	with shore erosion, social media from						
	and personal interactions.	ACD.						
	Lower priority and frequency: signage in public places	2022: All of above except tour. 3				✓		
	(especially for AIS prevention), direct mailings (for	community event booths.						
	neighborhood-specific issues), social media (for current events							
	items).	website, direct mailing to candidate						
		landowners for projects, 3 community						
		event booths.						
G24	Consistent messaging across time and space, including	Achieved with help of Lower St. Croix					/	
	consistency with neighboring jurisdictions.	Partnership outreach staff.					<b>'</b>	
					!			

							Progr	ess Description
#	Goal	Related actions in the current year & all years	Not applicable - No progress was planned by this time	Progress planned, but none achieved	Progress, but less	Progressing as planned	Progressin g, ahead of plan	✓ Goal Accomplished
G25	SRWMO becomes a regular contributor to lake association	2021-present: newsletter contributions	Dy time time	none admered	than planted	√	pian	riccompilation
G26	newsletters.  Promote every completed project in the lake associations'	submitted 2x/yr min.  Lake association presentations, written				·		
020	newsletters, website, Facebook or similar.	reports, emails to stakeholders. 2022						
		local newspaper story about carp and				<b>✓</b>		
D 0 111-	Delaute. Accepte lacentics Commission	stormwater projects.						
G27	ım Priority - Aquatic Invasive Species Identify new infestations early.	County AIS program				<b>✓</b>		
G28	,	2024 - Possible purple loosestrife beetle						
	Contain or eradicate any small scale, newly discovered	releases at Linwood and Island Lakes				✓		
Modi	infestations. Im Priority - Septic Systems	through County AIS program.						
	Locate and fix non-functioning septic systems.	2020-1 SSTS fixed at each Martin and						
		Fawn Lakes						
		2021-1 SSTS fixed in Linwood Twp. 2022 - Additional MPCA & BWSR funds						
		secured. Regular outreach in city				✓		
		newsletters.						
		2023 - Septics fixed near Coon, Martin,						
G30	Annually promote to financial assistance available through	and Fawn Lakes.  Newsletter articles annually						
	Anoka County and Anoka Conservation District for fixing non-	,						
	compliant septic systems. The SRWMO's target audience is					✓		
	shoreland residents. Support any efforts to increase available funding.							
G31	Secure grant funds to (a) develop, and set up implementation	Linwood Township adopted and began						
	of, point of sale septic system inspection requirements. These	implementing SSTS POS ordinance with						
	requirements currently do not exist in Ham Lake or Linwood;	ACD financial assistance. Other						
	(b) inspect shoreland septic systems older than 10 years or without a certificate of compliance in the last 10 years; and (c)	communities understood to have it.				✓		
	assist East Bethel with developing an automated SSTS							
	maintenance tracking and reminder system.							
	Im Priority - Development Identify any undesirable natural resource impacts of	Davidanment ravious:						
G32	proposed developments and recommended alternatives	Development reviews: 2020 - 1. 2021 - 0. 2022 - 3. 2023 - 0.				<b>✓</b>		
	early in the planning process.					_ •		
Medi	ım Priority - Multi-Partner Coordination							
G33	Every SRWMO water quality improvement project has	Lake groups, cities, & schools were						
	support from affected stakeholders including member	collaborators on a Coon Lake rain garden,						
	communities, lake groups, adjacent water management entities, or others.	3 Martin Lake ponds, Linwood Elem rain garden, and 3-lake carp mgmt., adopt-a-						
		drain, etc.				✓		
G34	Attend at least two stakeholder/partner events per year.	2019-21 - Martin Lakers Assoc mtg. 2020 -						
1	The most common example is lake association meetings.	Coon Lake Improvement Assoc. 2020-21						
		Linwood Twp bd mtgs.				✓		
		2022 - Martin and Linwood Lake assoc mtgs.						
G35	Partner with Anoka County Parks on shoreline or stormwater	=						
035	demonstration projects.	for demo projects within Coon Lake Park,						
		soon to be a regional park with many				✓		
		enhancements starting in 2025.						
Medi	ım Priority - Stormwater Management							
	City stormwater regulations are consistent with SRWMO	2022 - 3 cities have updated ordinances						
	Stormwater Standards.	and are complete!						
								✓
L								
G37	City Stormwater regulations are all found in a single place.	Cities are reviewing, but reluctant to do						
	Currently some may be distributed amongst local water plans, storm water pollution prevention plans, ordinances making it	ordinance clean up.						
	difficult for permitting staff and permittees to properly				✓			
	implement.							
	I.	ı	I .		l	1		

			Progress Description				ess Description	
#	Goal	Related actions in the current year & all years	Not applicable - No progress was planned by this time	Progress planned, but none achieved	Progress, but less than planned	Progressing as planned	Progressin g, ahead of plan	✓ Goal Accomplished
Medi	um Priority - Groundwater							
G38	Residents are advised to test private wells regularly for contaminants.	Annual promo on city websites, occasional promo in city newsltrs				✓		
G39	All irrigation systems will be "smart" by 2040, providing water when needed based upon soil moisture and forecasted rain.	2023 - City newsletter article.			✓			
G40	Five residential or one larger "smart" irrigation systems will be installed during the 10-years of this Plan, partially using SRWMO incentive grants. Larger irrigation systems include sporting fields, homeowner associations, schools, or other campuses.	In Lower St. Croix 1W1P, but funding anticipated in later years. U of M Extension turf mgmt promo booth at community events. No known projects yet.	<b>✓</b>					
G41	Prevent improper household hazardous waste disposal.	Cities promote				✓		
Medi	um Priority - Administrative Efficiencies							
G42	SRWMO continues to spend <20% of its local funds on administration on average across years. Administration, for this purpose, includes the following items for which the SRWMO has some control over costs: recording secretary, reporting, and administrative assistance.	26-30% during 2020-2023, but not because admin costs have increased. It's because other costs have decreased.			<b>✓</b>			
G43	<b>SRWMO will have a key contact person</b> that can be reached by the public or agencies.					✓		
G44	SRWMO meetings are efficient and occur no more than eight times per year.	5-6 mtgs/yr. <1.5 hrs each.				✓		
G45	Board members include representatives from key stakeholder groups including lake residents and local elected officials.	SRWMO board includes elected officials for each community, 2 lakeshore homeowners, residents, business owners, and natural resources pros.					<b>✓</b>	
G46	Correct the SRWMO boundary. Presently eight parcels that are part of the SRWMO are in an area that is discontinuous with the rest of the SRWMO. Corrections are needed with the Rice Creek Watershed District (RCWD) boundary. Starting in 2019 the RCWD is systematically examining hydrologic and political boundaries with the SRWMO. A petition to the state for boundary amendment is anticipated.	RCWD has initiated a boundary change that is finalized in early 2022. CCWD and SRWMO initiated a boundary change that was finalized in 2023.						<b>√</b>
Medi	um Priority - Chlorides							
	Increase municipal snow plow drivers with level 1 MPCA Smart Salting Certification from one to 100% of member community plow drivers.	4 of 4 communities				<b>✓</b>		
G48	Increase the number of member communities with level 2 MPCA Smart Salting Certification from zero to four (100%). This is an organizational certification that requires completing an organizational salt saving assessment using the online Winter Maintenance Assessment tool.	Ham Lake and Linwood			<b>√</b>			
	I .		1					

			Progress Description				ess Description	
#			Not applicable - No				Progressin	
		Related actions in the current year & all	progress was planned		Progress, but less	Progressing	J.	✓ Goal
	Goal	years	by this time	none achieved	than planned	as planned	plan	Accomplished
G49	Member communities' will have technology on board plow	uncertain						
	trucks that helps ensure only the amount of deicing agent							
	required to achieve safe roads.							
Lower	Priority - Ditching/Drainage							
	Ditch maintenance activities, if any, will not have a negative		,					
	water quality impact on downstream streams and lakes.		✓					
G51		SRWMO initiated conversation in 2020.						/
	owned by the MN DNR. The structure is important to	County made major repairs in 2021.						•
	maintain lake levels.							
	Priority - Climate Change Stormwater facilities should be designed to accommodate	202 -All 4 communities now requrie Atlas						
		14 in their stormwater ordinances and						./
	storm frequencies and intensities in the most up-to-date climatological data: Atlas 14.	sizing.						•
Lower	r Priority - Water Quantity	Sizing.						
	Hydrological systems will be managed to keep current	2022-4 of 4 with ordinances requiring pre-						
055	discharge rates and volumes.	and post-development rates and volumes						1
	discharge rates and volumes.	be equal.						•
Lower	r Priority - Fisheries							
G54	Reduce rough fish when they negatively affect water quality.							
		Ongoing carp mgmt throughout W Branch				./		
		Sunrise R chain of Lakes 2016-2022.				•		
		Maintenance harvests start in 2025.						
G55	Maintain strong pan fish populations that will control	2019 Martin Lake special panfish bag limit					<b>✓</b>	
	spawning success of common carp.	rule change.					•	
G56	Winter aeration systems will be used where winterkills of	Martin and Coon Lakes aeration managed						
	game fish may occur. Loss of game fish affects recreational	by Co Parks.				✓		
	opportunities and lake water quality.							
	Priority - Wildlife Habitat							
G57		ACD has done buckthorn workhops, and						
	protect, enhance and/or maintain ecological integrity.	numerous projects on public lands etc.						
						,		
L								
G58	Restore at least one wetland in the SRWMO that benefits	2021- One project along Ditch 20						
	water quality and habitat.	designed, but found not cost effective for						
		wq. Abandoned.			<b>~</b>			
		2023 - Updated outreach to candidate						
		landowners.						

# Appendix C:

2023 Community Reports to the SRWMO



City or township:	Columbus
Completed by:	Jack Davis
For year:	2023

#### **Member Community Responsibilities Summary**

This checklist includes actions required of member community in the SRWMO 4<sup>th</sup> Generation Watershed Management Plan, excluding items that don't warrant regular reporting. It must be submitted to the SRWMO annually by each city/township. In turn, the SRWMO includes this information in its required reporting to the State.

Member Community Action	Not	Partially	Completed	Notes
	Completed	Completed		
	Check	✓ appropriate	e box	
Local water plan approved by the			yes	
SRWMO.				
As of 1/17/20 SRWMO records indicate:				
<u>Linwood</u> : Tabled. Township considering				
resolution to adopt SRWMO plan and may				
revise draft comp plan.				
Columbus: Approved				
East Bethel, Ham Lake: Approved				
contingent upon receipt of revised plan				
addressing SRWMO comments.				
Provide a link on the community's			yes	
website to the SRWMO website.				
Provide space in community newsletters			yes	
for ¼ page minimum SRWMO articles.				
Add the SRWMO onto distribution lists			yes	
for development sketch plan reviews.				
Consider, but not be bound by, SRWMO				
comments on development proposals.				
Serve as the Local Governmental Units			yes	
(LGU) administering MN Wetland				
Conservation Act in SRWMO.				

Member Community Action	Not Completed	Partially Completed	Completed	Notes
Fulfill the duties of MS4 permits with the State (for permitted communities only). Among these duties the SRWMO's priorities are: (1) inspection and maintenance of existing stormwater treatment, (2) map stormwater conveyance and treatment systems, and (3) ensure new development and redevelopment has the required stormwater treatment (4) sweep streets with curb and gutter once annually in all areas, and twice annually in priority areas. Priority areas shall be areas that drain directly to water bodies and/or natural wetlands without pretreatment of storm	Completed	Completed		Not applicable
water runoff.  Operate permitting programs. Adopt, implement, and enforce ordinances that meet or exceed the standards in Appendix B of the SRWMO Plan. Required ordinances			yes	
include:      Septic system ordinance     Stormwater ordinance     Wetland ordinance				
If municipal stormwater standards or rules are spread amongst local water plans, storm water pollution prevention plans, ordinances or other documents, condensed them into a single location.			yes	
Provide household hazardous waste disposal information on community websites, ultimately directing residents to the Anoka County Household Hazardous Waste Facility.			yes	
Provide Anoka County Well Water Wise private well testing program on community websites.			yes	
Obtain level 1 MPCA Smart Salting Certification for all snow plow drivers within two years of adoption of this plan or their hire date.			Yes 2-14-24	
Obtain level 2 MPCA Smart Salting Certification (one certification per municipality) within two years of adoption of this plan. Maintain level 2 MPCA Smart Salting Certification by annually submitting Best Management Practices and Salt Savings report through the MPCA Winter Maintenance Assessment tool.			Yes 3-12-24	

Member Community Action	Not	Partially	Completed	Notes		
	Completed	Completed				
Public education about the SRWMO and	<u>Topics covered:</u>					
water resources. Please describe efforts of	⊠Hazardo	⊠Hazardous waste disposal				
your community in the last year.	⊠ Water c	onservation				
		Shoreline management				
	☐ Aquatic invasive species					
	⊠ Habitat					
	⊠ Water q	☑ Water quality improvement				
	☐ Activities of the SRWMO					
	☐ Other:					
	Media used for public education:					
	⊠Website					
		Newsletters (# articles:2_)				
		ops (# )				
		- ,	isplays (descri	be: _Fall Fest Event)		
		tions to elected				
	□ Presenta	tions to the pub	olic			
	☐ Other:	1				
	Audience reach	ned:				
	# of households/residents (circle one): 4,100 residents					
			· <del>-</del>	<del></del>		
Please list any other water quality						
improvement efforts.						
Other feedback for the SRWMO.						

City or township: East Bethel
Completed by: Aaron Berg
For year: 2023

#### **Member Community Responsibilities Summary**

This checklist includes actions required of member community in the SRWMO 4<sup>th</sup> Generation Watershed Management Plan, excluding items that don't warrant regular reporting. It must be submitted to the SRWMO annually by each city/township. In turn, the SRWMO includes this information in its required reporting to the State.

Member Community Action	Not	Partially	Completed	Notes
	Completed	Completed		
	Check	✓ appropriate	e box	
Local water plan approved by the SRWMO.			X	
East Bethel plan approved by SRWMO board 11/2020.				
Provide a link on the community's website to the SRWMO website.			X	
Provide space in community newsletters for 1/4 page minimum SRWMO articles.			X	
Add the SRWMO onto distribution lists for development sketch plan reviews.  Consider, but not be bound by, SRWMO comments on development proposals.			X	Will add SRWMO to electronic distribution list for future projects.
Serve as the Local Governmental Units (LGU) administering MN Wetland Conservation Act in SRWMO.			X	

Member Community Action	Not Completed	Partially Completed	Completed	Notes
Fulfill the duties of MS4 permits with the State (for permitted communities only). Among these duties the SRWMO's priorities are: (1) inspection and maintenance of existing stormwater treatment, (2) map stormwater conveyance and treatment systems, and (3) ensure new development and redevelopment has the required stormwater treatment (4) sweep streets with curb and gutter once annually in all areas, and twice annually in priority areas. Priority areas shall be areas that drain directly to water bodies and/or natural wetlands without pretreatment of storm	Completed	Completed	X	
water runoff.			V	
Operate permitting programs. Adopt, implement, and enforce ordinances that meet or exceed the standards in Appendix B of the SRWMO Plan. Required ordinances include:			X	
Septic system ordinance				
Stormwater ordinance				
Wetland ordinance				
If municipal stormwater standards or rules are spread amongst local water plans, storm water pollution prevention plans, ordinances or other documents, condensed them into a single location.			X	
Provide household hazardous waste			X	
disposal information on community websites, ultimately directing residents to the Anoka County Household Hazardous Waste Facility.				
Provide Anoka County Well Water Wise private well testing program on community websites.			X	Test kits are available to the public.
Obtain level 1 MPCA Smart Salting Certification for all snow plow drivers within two years of adoption of this plan or their hire date.			X	
Obtain level 2 MPCA Smart Salting Certification (one certification per municipality) within two years of adoption of this plan. Maintain level 2 MPCA Smart Salting Certification by annually submitting Best Management Practices and Salt Savings report through the MPCA Winter Maintenance Assessment tool.	X			

Member Community Action	Not	Partially	Completed	Notes	
	Completed	Completed			
Public education about the SRWMO and	<u>Topics covered:</u>				
water resources. Please describe efforts of	⊠Hazardo	us waste dispos	al		
your community in the last year.	⊠ Water c	onservation			
	Shoreline management     Shoreline ma				
	☐ Aquatic	invasive specie	S		
	☐ Habitat	<u>.</u>			
	☐ Water q	uality improven	nent		
	1 -	es of the SRWM			
	☐ Other:				
	Media used for public education:				
	⊠Website	-			
	Newslet	ters (# articles:	4 )		
	☐ Worksh	ops (# )			
		nity events or d	isplays (descri	be: )	
		tions to elected			
	☐ Presenta	itions to the pub	lic		
	☐ Other:	1			
	Audience reach	ned:			
	# of households/residents (circle one): 4550				
Please list any other water quality					
improvement efforts.					
Other feedback for the SRWMO.					

City or township: Ham Lake

Completed by: Tom Collins, Consulting Engineer

For year: 2023

#### **Member Community Responsibilities Summary**

This checklist includes actions required of member community in the SRWMO 4<sup>th</sup> Generation Watershed Management Plan, excluding items that don't warrant regular reporting. It must be submitted to the SRWMO annually by each city/township. In turn, the SRWMO includes this information in its required reporting to the State.

Member Community Action	Not	Partially	Completed	Notes
	Completed   Completed   Check ✓ appropriate box			
T 1 1 1 1	Check	Тарргориац	DUX	
Local water plan approved by the SRWMO.				
As of 1/17/20 SRWMO records indicate:				
<u>Linwood</u> : Tabled. Township considering resolution to adopt SRWMO plan and may revise draft comp plan.			✓	
Columbus: Approved				
East Bethel, Ham Lake: Approved contingent upon receipt of revised plan addressing SRWMO comments.				
Provide a link on the community's website to the SRWMO website.			✓	
Provide space in community newsletters for ¼ page minimum SRWMO articles.			✓	
Add the SRWMO onto distribution lists			✓	
for development sketch plan reviews.			•	
Consider, but not be bound by, SRWMO comments on development proposals.				
Serve as the Local Governmental Units			✓	
(LGU) administering MN Wetland Conservation Act in SRWMO.			•	

Member Community Action	Not	Partially	Completed	Notes
	Completed	Completed	_	
Fulfill the duties of MS4 permits with the			<b>✓</b>	
State (for permitted communities only).			_	
Among these duties the SRWMO's				
priorities are: (1) inspection and				
maintenance of existing stormwater				
treatment, (2) map stormwater conveyance				
and treatment systems, and (3) ensure new				
development and redevelopment has the				
required stormwater treatment (4) sweep				
streets with curb and gutter once annually in				
all areas, and twice annually in priority				
areas. Priority areas shall be areas that drain				
directly to water bodies and/or natural				
wetlands without pretreatment of storm				
water runoff.				
Operate permitting programs. Adopt,			✓	
implement, and enforce ordinances that meet				
or exceed the standards in Appendix B of				
the SRWMO Plan. Required ordinances				
include:				
Septic system ordinance				
Stormwater ordinance				
Wetland ordinance				
If municipal stormwater standards or	<b>▼</b>			
rules are spread amongst local water plans,				
storm water pollution prevention plans,				
ordinances or other documents, condensed them into a single location.				
Provide household hazardous waste				
disposal information on community			✓	
websites, ultimately directing residents to				
the Anoka County Household Hazardous				
Waste Facility.				
Provide Anoka County Well Water Wise			-/	
private well testing program on			<b>~</b>	
community websites.				
Obtain level 1 MPCA Smart Salting			~/	
Certification for all snow plow drivers			<b>Y</b>	
within two years of adoption of this plan or				
their hire date.				
Obtain level 2 MPCA Smart Salting			~/	
Certification (one certification per			<b>Y</b>	
municipality) within two years of adoption				
of this plan. Maintain level 2 MPCA				
Smart Salting Certification by annually				
submitting Best Management Practices and				
Salt Savings report through the MPCA				
Winter Maintenance Assessment tool.				

Member Community Action	Not	Partially	Completed	Notes		
	Completed	Completed				
Public education about the SRWMO and	Topics covered	<u>l:</u>				
water resources. Please describe efforts of	⊠Hazardo	us waste dispos	al			
your community in the last year.	⊠ Water c	onservation				
	☐ Shorelin	ne management				
	☐ Aquatic	invasive specie	s			
	☐ Habitat	•				
	⊠ Water q	uality improven	nent			
	_	es of the SRWM				
	☐ Other:					
	_	public education	on:			
	⊠Website	•				
		ters (# articles:	51)			
		ops (# 1 – Annu	*	olic hearing)		
		nity events or d	-	<u> </u>		
		ntions to elected				
		ations to the pub				
		Partnerships				
	Audience reach	-				
	# of households/residents (circle one): 6,458					
Please list any other water quality		·		·		
improvement efforts.						
Other feedback for the SRWMO.						

City or township:	Linwood Township
Completed by:	Pam Olson
For year:	2023

# **Member Community Responsibilities Summary**

This checklist includes actions required of member community in the SRWMO 4<sup>th</sup> Generation Watershed Management Plan, excluding items that don't warrant regular reporting. It must be submitted to the SRWMO annually by each city/township. In turn, the SRWMO includes this information in its required reporting to the State.

Member Community Action	Not Completed	Partially Completed	Completed	Notes
		✓ appropriate	e box	
Local water plan approved by the SRWMO.				
As of 1/17/20 SRWMO records indicate: <u>Linwood</u> : Approved <u>Columbus</u> : Approved			<b>√</b>	
East Bethel, Ham Lake: Approved contingent upon receipt of revised plan addressing SRWMO comments.			•	
Provide a link on the community's website to the SRWMO website.			✓	
Provide space in community newsletters for ¼ page minimum SRWMO articles.			✓	
Add the SRWMO onto distribution lists for development sketch plan reviews. Consider, but not be bound by, SRWMO comments on development proposals.			✓	
Serve as the Local Governmental Units (LGU) administering MN Wetland Conservation Act in SRWMO.			✓	

Member Community Action	Not Completed	Partially Completed	Completed	Notes
Fulfill the duties of MS4 permits with the State (for permitted communities only). Among these duties the SRWMO's priorities are: (1) inspection and maintenance of existing stormwater treatment, (2) map stormwater conveyance and treatment systems, and (3) ensure new development and redevelopment has the required stormwater treatment (4) sweep streets with curb and gutter once annually in all areas, and twice annually in priority areas. Priority areas shall be areas that drain directly to water bodies and/or natural wetlands without pretreatment of storm water runoff.				N/A
Operate permitting programs. Adopt, implement, and enforce ordinances that meet or exceed the standards in Appendix B of the SRWMO Plan. Required ordinances include:  • Septic system ordinance • Stormwater ordinance • Wetland ordinance			✓	
If municipal stormwater standards or rules are spread amongst local water plans, storm water pollution prevention plans, ordinances or other documents, condensed them into a single location.			✓	
Provide household hazardous waste disposal information on community websites, ultimately directing residents to the Anoka County Household Hazardous Waste Facility.  Provide Anoka County Well Water Wise private well testing program on			<b>√</b>	Water test kits available to residents at town hall
Community websites.  Obtain level 1 MPCA Smart Salting Certification for all snow plow drivers within two years of adoption of this plan or their hire date.			<b>√</b>	
Obtain level 2 MPCA Smart Salting Certification (one certification per municipality) within two years of adoption of this plan. Maintain level 2 MPCA Smart Salting Certification by annually submitting Best Management Practices and Salt Savings report through the MPCA Winter Maintenance Assessment tool.			✓	Completed 1/16/24

Member Community Action	Not	Partially	Completed	Notes
	Completed	Completed		
Public education about the SRWMO and	Topics covered	<u>l:</u>		
water resources. Please describe efforts of	⊠Hazardo	us waste dispos	al	
your community in the last year.	⊠ Water c	onservation		
	☐ Shorelin	ne management		
	☐ Aquatic	invasive specie	S	
	☐ Habitat			
		uality improven	nent	
		es of the SRWM	1O	
	☐ Other: _			
	Media used for	public education	<u>on:</u>	
	⊠Website			
	Newslet	ters (# articles:	<u>4</u> )	
	☐ Worksh	ops (#)		
	⊠ Commu	nity events or d	isplays (descri	be: Family Fun Day Booth)
	□ Presenta	tions to elected	officials	
	☐ Presenta	tions to the pub	olic	
	☐ Other: _			
	Audience reach			
	# of househ	olds (circle one	e): <u>2100</u>	
70				
Please list any other water quality				
improvement efforts.				
Other feedback for the SRWMO.				

# Smart Salting Level 2 SSAt Certification

This is to certify that

# **Linwood Township**

has completed the certification requirements of the Smart Salting Assessment tool for planning, tracking, and implementing salt reduction strategies.

Your knowledge and actions will help protect Minnesota lakes, streams and groundwater.







Resource Management and Assistance Division

But C. Arshu

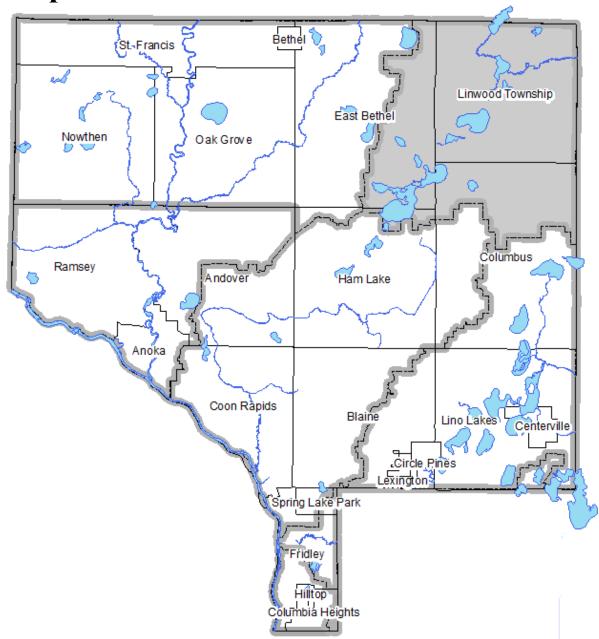
Issue Date: January 16, 2024

Certificate expires 2 years from issue date

# Appendix D:

# 2023 Water Monitoring and Management Work Results

# **Excerpt from the 2023 Water Almanac Chapter 2: Sunrise River Watershed**



**Prepared by the Anoka Conservation District** 

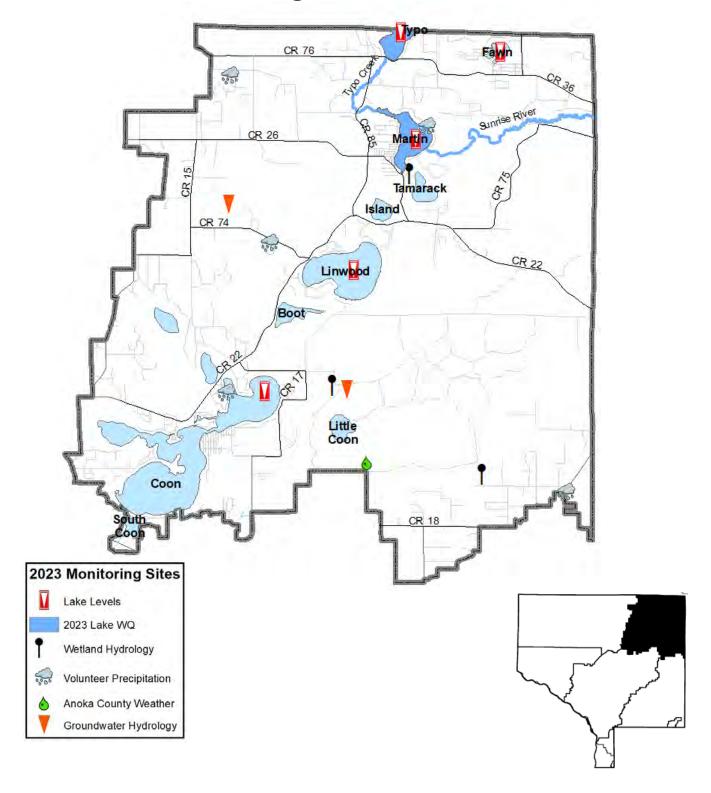
# **Table of Contents**

Recommendations	3
Lake Level Monitoring	5
Lake Water Quality	11
Typo Lake	12
Martin Lake	15
Wetland Hydrology	18
SRWMO Water Quality Grant Funds	22
Water Quality Improvement Projects	23
On–call Administrative Services	26
Annual Written Communication to Member Communities	27
SRWMO Annual Report to BWSR and State Auditor	28
Grant Search and Applications	29
Outreach and Education	30
Wehsite	32

# Recommendations

- ➤ Implement the SRWMO Watershed Management Plan. The plan, approved in 2019, reflects the latest science and includes schedules for various projects and programs.
- > Continue working towards removing Martin Lake from the impaired waters list. The last five years of data support delisting.
- ➤ Target outreach to key audiences rather than community-wide messaging. Lakeshore landscaping messaging to lakeshore owners is one priority, particularly given the availability of funding to install lakeshore stewardship projects.
- ➤ Utilize the recently completed shoreline 360-degree photo inventories to prioritize shoreline projects on Martin, Linwood, and Coon Lake. Outreach can target those properties with documented problems. In 2024, inventories will likely be completed by the Anoka Conservation District at Typo Lake and possibly Fawn Lake.
- > Promote Septic System Fix-up Grants to landowners, particularly in shoreland areas. Grants are available for low income households.
- > Promote well sealing cost-share grants to landowners.
- ➤ **Promote Adopt-a-Drain** around Martin, Linwood, Fawn, and Coon Lakes. This program began in 2022 at Martin Lake. Annual reminders for volunteers are recommended.
- ➤ Install the already-designed rain garden on East Front Blvd at Coon Lake as designed in 2021. The project's cost effectiveness is only moderate, but other means to treat runoff in the neighborhood are not available.
- ➤ Continue prioritizing water quality monitoring to assess baseline conditions, diagnose problems early and provide quality data to help determine the effectiveness of implemented water quality projects. This data also helps with strategically implementing grant and local funds.
- ➤ Monitor Linwood Lake tributaries to determine the need or scope of a Linwood Lake subwatershed assessment study. The study would identify and rank water quality improvement projects.
- ➤ Request Watershed Based Funding from the Lower St. Croix One Watershed, One Plan group. The most immediate priority project is a Linwood Lake subwatershed assessment study. Other candidates for the future are a wetland restoration at Ditch 20 and internal loading studies for Linwood, Typo, or Martin Lake.

# 2023 Water Monitoring Sites: Sunrise River Watershed



# Lake Level Monitoring

Partners: SRWMO, ACD, MNDNR, Local Volunteers

**Description:** Weekly water level monitoring was conducted with staff gages installed in each lake. The

past one, five, and twenty-five years of data for each lake are illustrated below, and all historical data are available on the Minnesota DNR website using the "LakeFinder" feature (www.dnr.mn.us.state\lakefind\index.html). Ordinary High Water Level (OHW), the

elevation below which a DNR permit is needed to perform work, is listed for each lake on the

corresponding graphs below.

**Purpose:** To understand lake hydrology, inform concerns about lake levels, and understand the impact

of other water budget changes. These data are useful for regulatory, building/development,

and lake management decisions.

**Locations:** Coon, Fawn, Linwood, Martin, and Typo Lake

**Results:** Coon Lake. In 2023, Coon Lake had high spring flooding water levels. Late summer had

low levels due to drought. Lower water levels have been observed in other years including

2000, 2007, 2009, and 2022.

**Linwood Lake.** In 2023, Linwood Lake had high spring flooding water levels. Thereafter, the lake dropped to more common levels and then low levels due to drought. Lake water levels averaged similar to 2022 levels in summer. Late summer lows were not historically

low; as lower water levels were observed in previous years.

Martin Lake. In 2023, Martin Lake had its highest ever recorded water levels in spring and

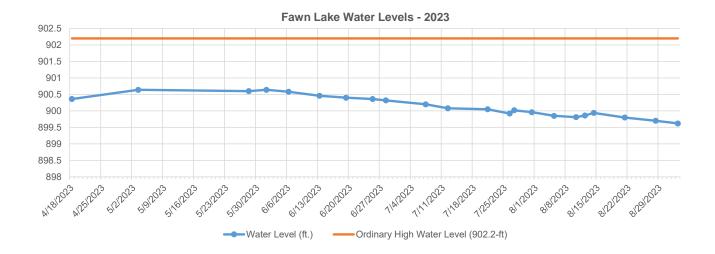
then dropped to levels more historically common.

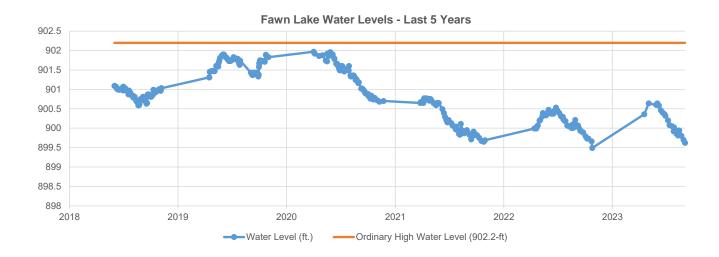
**Typo Lake.** In 2023, Typo Lake had spring flooding, then dropped to normal levels. In July, the lake saw an atypical increase in water levels. This was due to beaver dam blockages in downstream culverts. As a result, approximately 1-ft of water was dammed s. The Anoka County Highway Department, with assistance from their beaver trapper, worked to resolve the issue by beaver and dam removal. It needs to be watched, as the problem may reoccur.

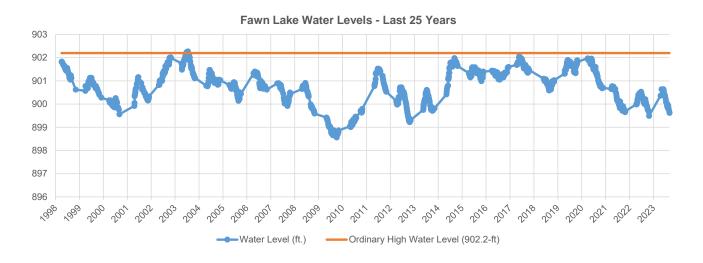
**Fawn Lake.** In 2023, Fawn Lake experienced little spring flooding compared to other lakes due to its small watershed. Low levels were experienced in late summer and fall due to

drought.

## Fawn Lake

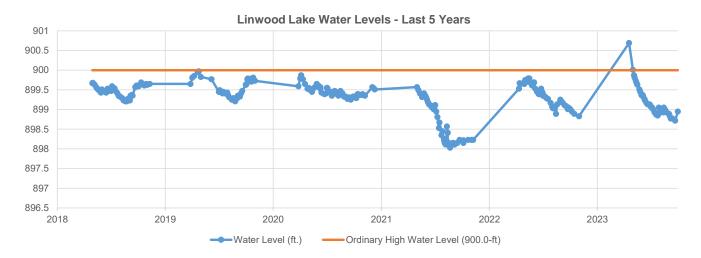


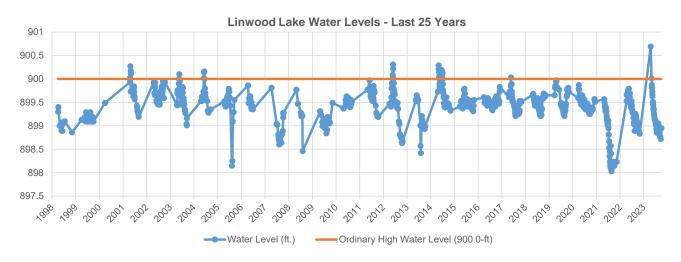




## **Linwood Lake**

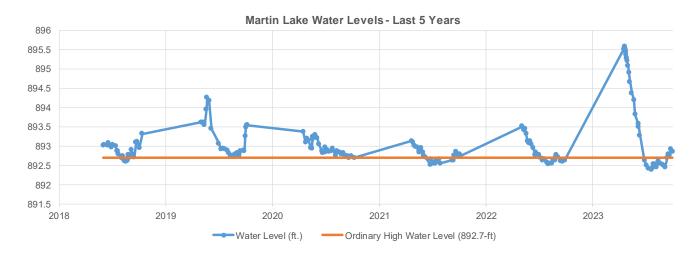


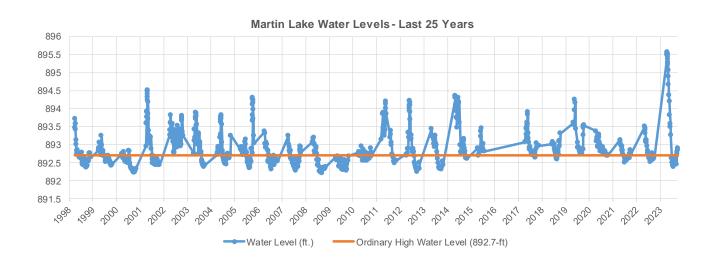




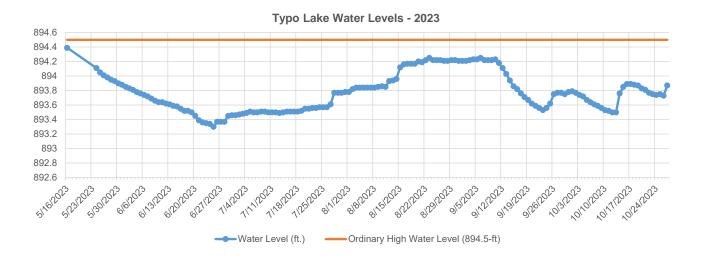
## **Martin Lake**

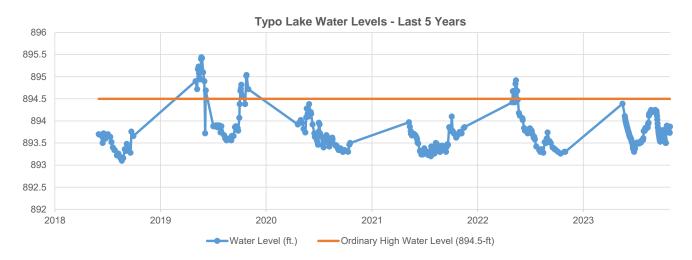


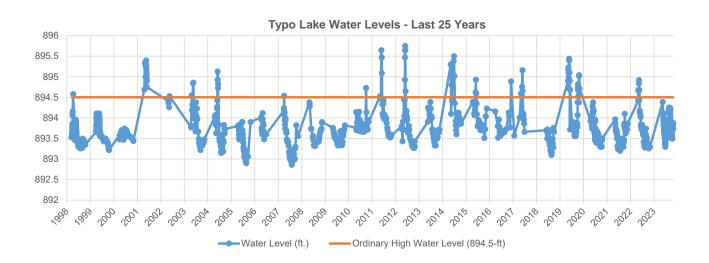




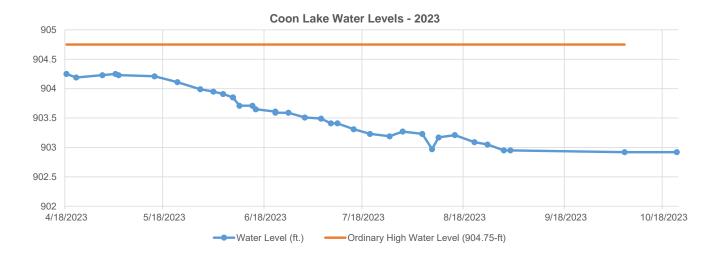
# Typo Lake

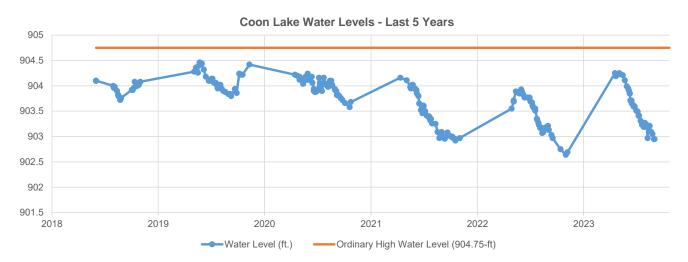


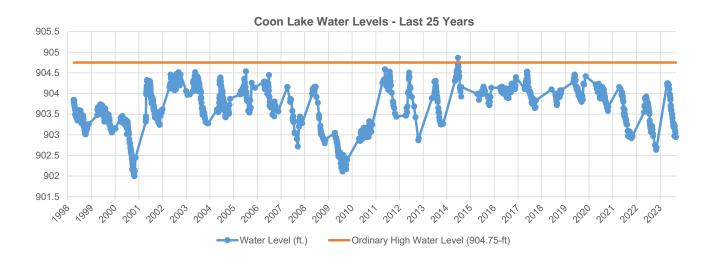




## **Coon Lake**







# Lake Water Quality

**Description:** Lake water quality monitoring was conducted on ten occasions between May and September,

approximately every two weeks. The monitoring parameters include total phosphorus (TP), chlorophyll-a (Cl-a), Secchi transparency, dissolved oxygen, turbidity, temperature, specific

conductance, pH, and salinity.

**Purpose:** To detect water quality trends and diagnose the cause of changes.

**Locations:** Typo Lake, Martin Lake

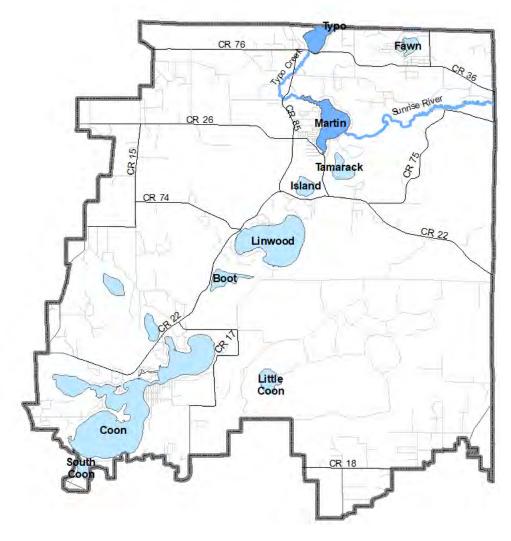
**Results:** Detailed data for individual lakes is provided on the following pages, including summaries of

historical conditions and trend analysis. Previous years' data are available on the Minnesota Pollution Control Agency (MPCA) electronic data access (EDA) website or on ACD's online database (https://maps.barr.com/Anoka/Home/Chart/). Refer to Chapter 1 for additional

information on lake dynamics and interpreting the data.

# 2023 Sunrise River Watershed Lake Water Quality Monitoring Sites

(darker shaded lakes were monitored)



# Typo Lake

#### Lake ID # 30-0009

#### **Background**

Typo Lake is located in northeast Anoka County with the north end of the lake in southeast Isanti County. The lake has a surface area of 290 acres and maximum depth of 6 feet. The lake bottom varies from mucky and loose soils to sandy soils. The public access is small, located at the south end of the lake. Typo Lake is used little for fishing or recreational boating because of the shallow depth and extremely poor water quality. The lake is not regularly suitable for swimming due to low clarity or excessive algae caused by high nutrient concentrations. The lake's shoreline is mostly undeveloped, with only 21 homes within 300 feet of the lakeshore. The lake's watershed of 11,520 acres is 3% residential, 33% agricultural, and 28% wetlands, with the remainder forest or grassland. Typo Lake is listed as impaired for excess nutrients and water quality in the lake is being monitored for best management practice (BMP) effectiveness. The MNDNR conducted a fisheries survey in 2016 which found walleye, black crappie, white crappie, northern pike, and bluegill.

#### 2023 Results

In 2023, Typo Lake had poor water quality compared to other lakes in this region (NCHF Ecoregion). While Typo Lake remains at an overall F letter grade in 2023, there was a slight increase in quality when compared to 2022 and similar to other years after 2012. Average total phosphorus (TP) was 166.2  $\mu$ g/L, which was a decrease from the 2022 average of 175.5  $\mu$ g/L. While TP levels continue to far exceed the 60  $\mu$ g/L state standard for shallow lakes, average concentrations have improved over the past two decades (average 270  $\mu$ g/L during 2000-2009, 186  $\mu$ g/L 2012-2020, and 164  $\mu$ g/L 2021-2023). Chlorophyll-a (Cl-a) levels in 2023 averaged 70.91  $\mu$ g/L. This was a decrease from 2022 (114.26  $\mu$ g/L) and consistent with previous years (average 75  $\mu$ g/L 2015-2022). In many recent years, Cl-a concentrations have stayed below the historical average for the lake (105.5  $\mu$ g/L 1993-2023) but are still many times higher than the state standard for Cl-a in shallow lakes (20  $\mu$ g/L). Average Secchi transparency in 2023 was 1.08 feet. This is only a couple inches poorer than 2022 measurements (0.89 feet), and that particular year was the poorest since 2016. While transparency in Typo Lake has shown improvements over the last decade, it remains well below the state standard for transparency in shallow lakes (3.3 feet).

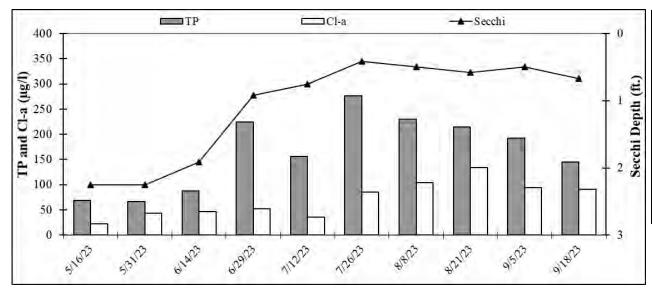
#### **Trend Analysis**

The MPCA (1993 -'95) and ACD (1997 -'01, '03, '05, '07, '09, '12, '14 -'23) have conducted twenty-three years of water quality monitoring on Typo Lake. Overall, water quality has improved in a statistically significant trend since 1993 (MANOVA with response variables TP, Cl-a, and Secchi depth (F 3,19=5.0436, p<0.01). When these variables are tested individually, TP shows no significant change across this time period although the data suggests that TP concentrations have an overall improving trend. Cl-a levels, however, are showing a statistically significant improvement (p<0.001) and is the major driver of improved water quality in Typo Lake. Increased Seechi transparency is also a positive factor although not yet statistically significant (p<0.08).

#### **Discussion**

Typo Lake was the subject of a TMDL study by ACD in 2012. This study documented nutrient input sources and reductions needed. Some factors it identified affecting water quality in Typo Lake included rough fish, ditched wetlands west of the lake, and internal lake sediment. Recent work has included installation of carp barriers, carp removals, and a feasibility study of ditched wetland restorations upstream of Typo Lake. The feasibility study identified four potential projects along Ditch 20. Shoreline conditions on Typo Lake were inventoried in 2020 and have assisted in identifying potential lakeshore projects. Recent water quality monitoring results suggest these management approaches are improving conditions in Typo Lake but reaching improvement goals will require substantial additional effort and time.

TYPO LAKE 2023 Results



#### 2023 Median Results

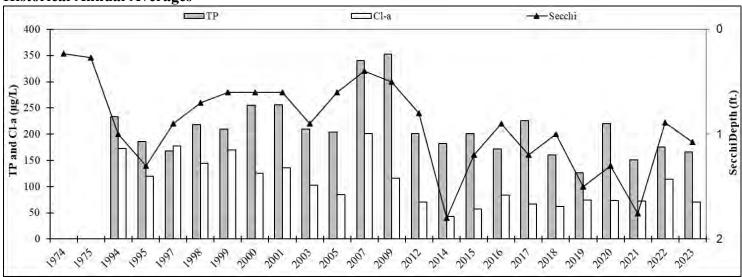
2025 Median Results						
рН		8.61				
Specific Conductance	mS/cm	0.26				
Turbidity	NTU	64.65				
D.O.	mg/l	10.58				
D.O.	%	127.20				
Temp.	°F	74.50				
Salinity	%	0.14				
Cl-a	μg/L	68.75				
T.P.	μg/l	174.50				
Secchi	ft	0.71				

Typo Lake	
30-0009-00-204	

Typo Lake															
30-0009-00-204		Date:	5/16/2023	5/31/2023	6/14/2023	6/29/2023	7/12/2023	7/26/2023	8/8/2023	8/21/2023	9/5/2023	9/18/2023			
2023 Water Quality Data	ļ	Time:	10:20	9:45	10:55	10:30	10:00	10:00	10:30	11:00	10:30	10:04			
	Units	R.L.*											Average	Min	Max
рН		0.1	8.76	8.62	8.53	8.49	8.59	8.35	8.97	9.43	9.22	8.03	8.70	8.03	9.43
Specific Conductivity	mS/cm	0.01	0.243	0.314	0.325	0.316	0.297	0.282	0.245	0.223	0.210	0.222	0.268	0.210	0.325
Turbidity	NTU	1	13.30	17.50	39.50	74.90	98.40	13.500	105.00	109.00	81.00	54.40	58.39	13	109
D.O.	mg/l	0.01	11.69	9.70	12.19	9.15	10.92	5.01	10.23	12.66	9.64	12.01	10.32	5.01	12.66
D.O.	%	100.0%	128.7	120.0	147.0	111.8	130.7	64.8	125.7	150.1	122.6	132.6	123.4	64.8	150.1
Temp.	°C	0.1	18.75	23.97	23.25	24.08	22.43	25.29	24.14	22.76	25.41	18.67	22.9	18.7	25.4
Temp.	°F	0.1	65.8	75.1	73.9	75.3	72.4	77.5	75.5	73.0	77.7	65.6	73.2	65.6	77.7
Salinity	%	0.01	0.12	0.15	0.16	0.15	0.14	0.14	0.15	0.11	0.10	0.11	0.13	0.10	0.16
Cl-a	μg/L	1	22.70	43.79	46.73	52.07	35.60	85.44	104.13	133.50	94.34	90.78	70.91	22.7	133.5
T.P.	mg/l	0.005	0.069	0.067	0.088	0.224	0.156	0.276	0.230	0.214	0.193	0.145	0.166	0.067	0.276
T.P.	μg/1	5	69	67	88	224	156	276	230	214	193	145	166.20	67	276
Secchi	ft		2.3	2.3	1.9	0.9	0.8	0.4	0.5	0.6	0.5	0.7	1.08	0.4	2.3
Secchi	m		0.69	0.69	0.58	0.28	0.23	0.13	0.15	0.18	0.15	0.20	0.3	0.1	0.7
Physical			2	2	2	2	2	2	2	2	3	3	2.2	2.0	3.0
Recreational			3	3	4	3	3	2	3	2	3	3	2.9	2.0	4.0

<sup>\*</sup>Reporting Limit

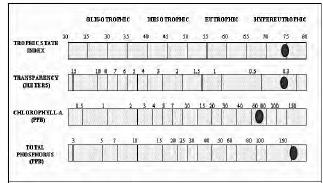
## **Historical Annual Averages**



**Historical Report Card** 

Year	TP	Cl-a	Secchi	Overall
1974			F	F
1975			F	F
1993	F	F	F	F
1994	F	F	F	F
1995	F	F	F	F
1997	F	F	F	F
1998	F	F	F	F
1999	F	D	F	F
2000	F	F	F	F
2001	F	F	F	F
2003	F	F	F	F
2005	F	F	F	F
2007	F	F	F	F
2009	F	F	F	F
2012	F	D	F	F
2014	F	C	F	D-
2015	F	D	F	F
2016	F	F	F	F
2017	F	D	F	F
2018	F	D	F	F
2019	D	D	D	D
2020	F	C	F	F
2021	D	D	F	D
2022	F	F	F	F
2023	F	D	F	F
State Standards	60 ug/L	20 ug/L	>3.3 ft	

Carlson's Trophic State Index



Grade	Percentile	TP (μg/L)	Cl-a (μg/L)	Secchi Disk (m)
A	< 10	<23	<10	>3.0
В	10 - 30	23 – 32	10 - 20	2.2 - 3.0
С	30 – 70	32 – 68	20 – 48	1.2 - 2.2
D	70 – 90	68 – 152	48 – 77	0.7 – 1.2
F	> 90	> 152	> 77	< 0.7

#### Martin Lake

#### Lake ID # 02-0034

#### **Background**

Martin Lake is located in northeast Anoka County. The lake has a surface area of 223 acres and a maximum depth of 20 ft. The public access is located on the south end of the lake. The lake is used extensively by recreational boaters and anglers. Martin Lake is almost entirely surrounded by private residences, and has an active lake association. The 5,402-acre watershed is 18% developed; the remaining 82% is vacant, agricultural, or wetlands. The invasive aquatic plant, curly-leaf pondweed, is present in the lake but not at nuisance levels. Martin Lake is on the state impaired water's list for excess nutrients. The MNDNR conducted a fisheries survey in 2015, with the lake being managed primarily for walleye and bluegill. An aeration system designed to prevent winter kills was installed in 1993.

#### 2023 Results

In 2023, Martin Lake received an overall C letter grade for water quality. This is an improvement from the D letter grade the lake received for 2022 however C's have been common since 2014. In 2023, total phosphorous (TP) averaged 46.60  $\mu$ g/L, a significant improvement from 2022 (78.40  $\mu$ g/L) and similar to other years since 2017. Average TP over the last five years (61.4  $\mu$ g/L) is close to the state impairment standard (60  $\mu$ g/L). In 2023, chlorophyll-a (Cl-a) averaged 26.10  $\mu$ g/L, which was half the 2022 average of 53.04  $\mu$ g/L but similar to other years since 2012. While the most recent 5-year average for Cl-a (33.70  $\mu$ g/L) is much lower than the 2005-2009 average (108.3  $\mu$ g/L), Cl-a remains above the state impairment standard of 20  $\mu$ g/L. Average Secchi transparency in 2023 was 3.0 feet, a slight increase from 2.3 feet in 2022, but still poorer than the state standard of 3.3 feet.

#### **Trend Analysis**

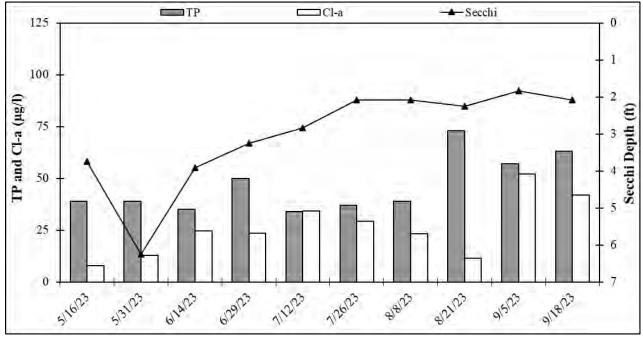
Twenty-three years of water quality data have been collected by the MPCA (1983), Metropolitan Council (1998, '08), and ACD ('97, 1999-'01, '03, '05, '07, '09, 2012-'23). Notes from DNR fisheries data indicate poor water quality dating back to 1954. Water quality in Martin Lake has shown a statistically significant improvement from 1983 to 2023 (MANOVA with response variables TP, Cl-a, and Secchi;  $F_{2,18}$ =5.96, p <0.005), and this is especially true for the last decade. Further examination of the data shows that while Secchi transparency has not changed in a statistically significant way since 1983, chlorophyll-a (p<0.005) and TP (p=0.05) concentrations have both shown a statistically significant improvement over this time period.

#### Discussion

Martin Lake was the subject of a TMDL study by ACD in 2012. The study found that low quality water flowing from Typo Lake and internal loading (carp, septic systems, sediment, etc.) are two of the largest factors negatively impacting water quality in Martin Lake. Carp management efforts, septic system replacements, and storm water retrofits have been implemented in recent years. Shoreline conditions on Martin Lake were inventoried in 2019 and 2023, resulting in the implementation of multiple lakeshore restoration projects in 2021 and 2022. Eight additional lakeshore restoration are scheduled for construction in 2024. Additional funding for projects has been secured for the Sunrise River Watershed. Recent water quality monitoring results suggest these types of management approaches are resulting in measurable lake improvement. Because many of the most cost-effective watershed projects have been implemented already an alum-treatment should be considered in the future.

## MARTIN LAKE

## 2023 Results



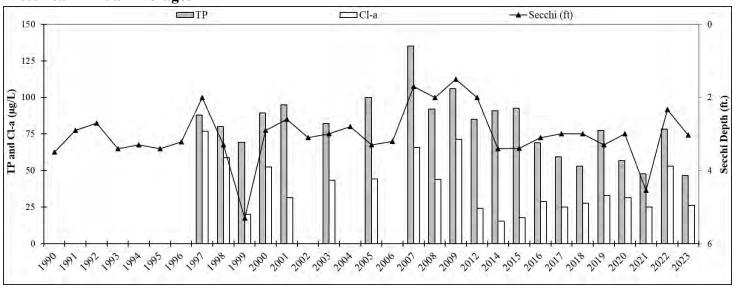
#### **2023 Median Results**

	2020 Micalan Results						
рН		8.11					
Specific Conductance	mS/cm	0.31					
Turbidity	NTU	15.50					
D.O.	mg/l	8.76					
D.O.	%	106.35					
Temp.	°F	73.92					
Salinity	%	0.15					
Cl-a	μg/L	24.03					
T.P.	μg/l	39.00					
Secchi	ft	2.54					

Martin Lake															
02-0034-00-202		Date:	5/16/2023	5/31/2023	6/14/2023	6/29/2023	7/12/2023	7/26/2023	8/8/2023	8/21/2023	9/5/2023	9/18/2023			
2023 Water Quality Data	1	Time:	9:10	9:00	9:50	9:30	9:00	9:00	9:30	10:00	9:30	9:26			
	Units	R.L.*											Average	Min	Max
pН		0.1	8.45	7.88	8.12	8.28	8.08	8.10	8.39	7.84	8.15	7.82	8.11	7.82	8.45
Specific Conductivity	mS/cm	0.01	0.247	0.301	0.311	0.322	0.331	0.318	0.307	0.318	0.301	0.309	0.307	0.247	0.331
Turbidity	NTU	1	5.40	2.40	9.10	12.40	15.80	17.400	27.20	15.50	19.60	20.30	13.94	2	27
D.O.	mg/l	0.01	10.95	8.64	9.84	8.41	8.05	10.95	8.85	8.39	8.67	9.03	9.18	8.05	10.95
D.O.	%	100.0%	121.3	104.0	118.6	104.0	97.8	141.2	111.2	100.4	108.7	100.2	110.7	97.8	141.2
Temp.	°C	0.1	18.62	22.72	22.66	24.61	23.42	26.24	25.22	23.16	24.68	19.28	23.1	18.6	26.2
Temp.	°F	0.1	65.5	72.9	72.8	76.3	74.2	79.2	77.4	73.7	76.4	66.7	73.5	65.5	79.2
Salinity	%	0.01	0.12	0.14	0.15	0.16	0.16	0.15	0.15	0.15	0.14	0.15	0.15	0.12	0.16
Cl-a	μg/L	1	8.01	12.82	24.56	23.50	34.18	29.37	23.14	11.57	52.07	41.83	26.10	8.0	52.1
T.P.	mg/l	0.005	0.039	0.039	0.035	0.050	0.034	0.037	0.039	0.073	0.057	0.063	0.047	0.034	0.073
T.P.	μg/1	5	39	39	35	50	34	37	39	73	57	63	46.60	34	73
Secchi	ft		3.8	6.3	3.9	3.3	2.8	2.1	2.1	2.3	1.8	2.1	3.03	1.8	6.3
Secchi	m		1.14	1.90	1.19	0.99	0.86	0.63	0.63	0.69	0.56	0.63	0.9	0.6	1.9
Physical			1	1	2	2	2	1	1	3	3	3	1.9	1.0	3.0
Recreational			1	1	2	2	2	2	2	2	3	3	2.0	1.0	3.0

<sup>\*</sup>Reporting Limit

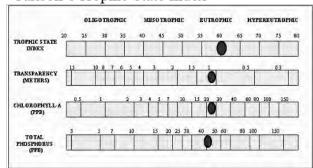
## **Historical Annual Averages**



#### **Historical Report Card**

Year	TP	Cl-a	Secchi	Overall
1996			D	D
1997	D	D	F	D
1998	D	D	D	D
1999	С	В	С	С
2000	D	С	D	D
2001	D	С	D	D
2002			D	D
2003	D	С	D	D
2004			D	D
2005	D	С	D	D
2006			D	D
2007	D	D	F	D
2008	D	С	F	D
2009	D	D	F	D
2012	D	С	F	D
2014	D	В	D	C
2015	D	В	D	C
2016	C C	C C	D	С
2017	С	С	D	С
2018			D	C
2019	D C	C	D	D
2020	С	С	D	C
2021	С	С	С	C
2022	D	D	D	D
2023	С	С	D	C
State Standards	40 ug/L	14 ug/L	>4.6 ft	

Carlson's Trophic State Index



Grade	Percentile	TP (μg/L)	Cl-a (μg/L)	Secchi Disk (m)
A	< 10	<23	<10	>3.0
В	10 - 30	23 – 32	10 - 20	2.2 - 3.0
С	30 – 70	32 – 68	20 – 48	1.2 - 2.2
D	70 – 90	68 – 152	48 – 77	0.7 - 1.2
F	> 90	> 152	> 77	< 0.7

# Wetland Hydrology

**Description:** Continuous groundwater level monitoring. Countywide, ACD maintains a network of

23 wetland hydrology monitoring stations.

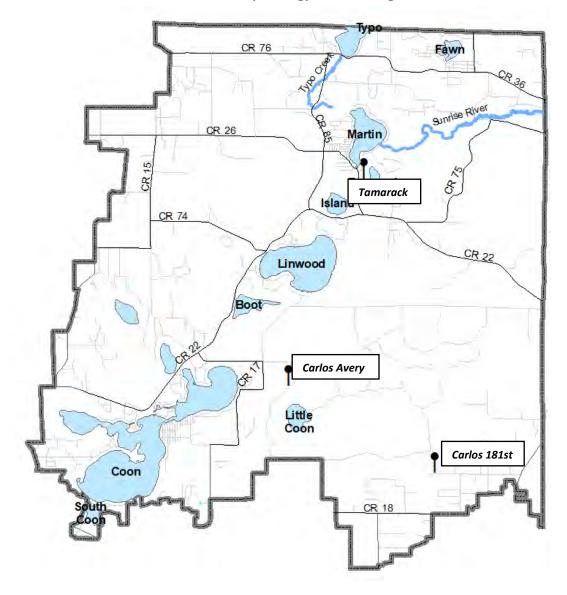
**Purpose:** To provide understanding of wetland hydrology, including the impacts of climate and

land use change. These data aid in delineation of nearby wetlands by documenting hydrologic trends including the timing, frequency, and duration of saturation.

Locations: Carlos Avery Wetland, Carlos 181st Wetland, Tamarack Wetland

**Results:** See the following pages.

#### 2023 Sunrise River Watershed Wetland Hydrology Monitoring Sites



## CARLOS AVERY REFERENCE WETLAND

Carlos Avery Wildlife Management Area, City of Columbus

#### **Site Information**

Monitored Since: 1997 Wetland Type: 3

Wetland Size: >300 acres

**Isolated Basin:** No **Connected to Ditch:** Yes

**Surrounding Soils:** Lino loamy fine sand

#### **Soils at Well Location:**

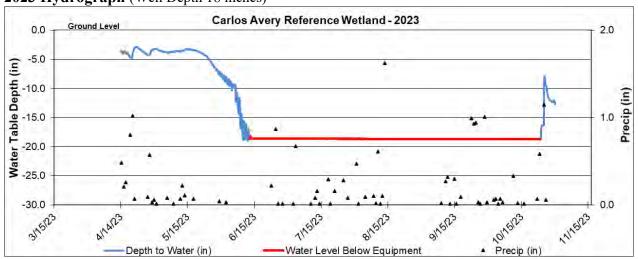
Horizon	Depth	Color	Texture	Redox
Oa	0-4	N2/0	Organic	-
$\operatorname{Bg}$	4-25	10yr	Sandy	25% 10yr 5/6
_		5/2	Loam	with organic
				streaking

#### **Vegetation at Well Location:**

Scientific	Common	% Coverage
Phalaris arundinacea	Reed Canary Grass	80
Carex Spp	Sedge undiff.	40
Quercus macrocarpa	Bur Oak	40
Sagitaria latifolia	Broad-leaf Arrowhead	20
Cornus stolonifera	Red-osier Dogwood	20

**Other Notes:** This wetland is within a state managed WMA. Anoka County was in a state of drought most of the growing season, which caused this well to go dry in the summer-fall.

#### **2023 Hydrograph** (Well Depth 18 inches)



## **CARLOS 181st REFERENCE WETLAND**

Carlos Avery Wildlife Management Area, City of Columbus

#### **Site Information**

Monitored Since: 2006 Wetland Type: 2-3

Wetland Size: Approx. 3.9 acres

**Isolated Basin:** Yes

**Connected to Ditch:** Roadside swale only **Surrounding Soils:** Soderville fine sand

#### **Soils at Well Location:**

Horizon	Depth	Color	Texture	Redox
Oa	0-3	N2/0	Sapric	-
A	3-10	N2/0	Mucky Fine	-
			Sandy Loam	
Bg1	10-14	10yr 3/1	Fine Sandy Loam	-
Bg2	14-27	5Y 4/3	Fine Sandy Loam	-
Bg3	27-40	5y 4/2	Fine Sandy Loam	-

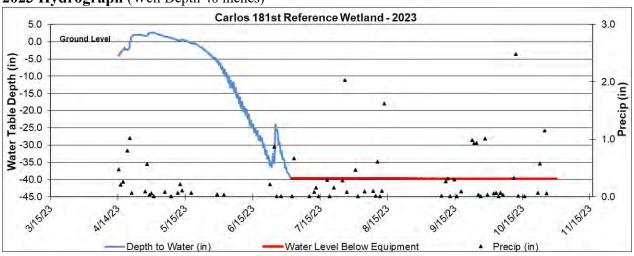


#### **Vegetation at Well Location:**

<b>Scientific</b>	Common	% Coverage
Phalaris arundinacea	Reed Canary Grass	100
Rhamnus frangula (S)	Glossy Buckthorn	40
Ulmus american (S)	American Elm	15
Populus tremulodies (T)	Quaking Aspen	10
Acer saccharum (T)	Silver Maple	10

**Other Notes:** This site is managed by the Minnesota DNR. In 2023, Anoka County was in a state of drought most of the growing season.

#### 2023 Hydrograph (Well Depth 40 inches)



## TAMARACK REFERENCE WETLAND

Carlos Avery Wildlife Management Area, City of Columbus

#### **Site Information**

Monitored Since: 1999 Wetland Type: 6

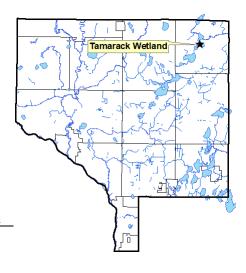
Wetland Size: Approx. 1.9 acres

**Isolated Basin:** Yes **Connected to Ditch:** No

**Surrounding Soils:** Sartell fine sand

#### **Soils at Well Location:**

Horizon	Depth	Color	Texture	Redox
A	0-6	N2/0	Mucky Sandy Loam	-
A2	6-21	10yr 2/1	Sandy Loam	-
AB	21-29	10yr3/2	Sandy Loam	-
$\mathbf{B}\mathbf{g}$	29-40	2.5y5/3	Medium Sand	_

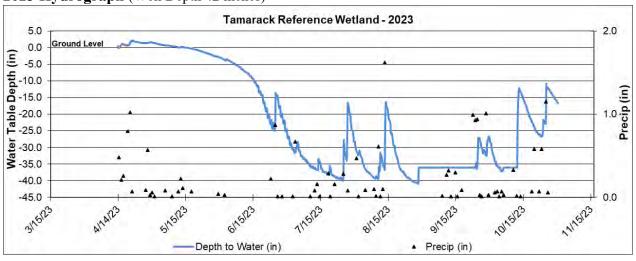


#### **Vegetation at Well Location:**

Scientific	Common	% Coverage
Rhamnus frangula	Common Buckthorn	70
Betula alleghaniensis	Yellow Birch	40
Impatiens capensis	Jewelweed	40
Phalaris arundinacea	Reed Canary Grass	40

**Other Notes:** The site is managed by Anoka County Parks with the boring located on the edge of the wetland. Anoka County was in a state of drought most of the growing season.

#### 2023 Hydrograph (Well Depth 42 inches)



# SRWMO Water Quality Grant Funds

**Description:** The Sunrise River Watershed Management Organization (SRWMO) offers cost share

grants to encourage projects that will benefit water quality in local lakes and streams. These types of projects include lakeshore restorations, rain gardens, erosion control

practices, and others. These ACD administered grants offer cost sharing for

implementing projects. The landowner is responsible for a portion of expenses. ACD assists interested landowners with design, materials acquisition, installation, and

maintenance.

**Purpose:** To improve water quality in area lakes, stream, and rivers.

**Locations:** Throughout the watershed.

**Results:** Projects reported in the year they were installed.

#### **SRWMO Cost Share Fund Summary**

2021 Year-End Balance	\$3,024.24
2022 SRWMO contribution	\$1,500.00
2023 SRWMO contribution	\$1,500.00
Fund Balance	\$6,024.24

#### **Projects Funded Since Inception:**

2006 – Coon Lakeshore restoration - Rogers

2008 – Martin Lakeshore restoration - Moos

2012 - Linwood Lakeshore restoration, Gustafson

2012 - Transfer to Martin - Typo Lakes Carp Barriers

2016 - Coon Lake Rain Garden - Voss

2018 - Coon Lakeshore Restoration - Gunnink

2020 - Coon Lakeshore Restoration - Scheiderich

2021 - Linwood Elementary Rain Garden

# Water Quality Improvement Projects

The following water quality projects were installed in 2023 in the Sunrise River WMO.

### **Enhanced street sweeping** - Linwood and Martin Lakes

Linwood Township revised their street sweeping in 2023 in response to a 2022 enhanced street sweeping study. That study identified specific streets where more frequent sweeping would be especially beneficial to lakes. An additional 3 curb-miles will be swept four times annually (i.e. 12 curb-mi additional sweeping per year). The pollutant reduction in 17.9 lbs/yr of phosphorus.

In 2023, weather prevented the first spring sweeping, so three sweepings were done. Partial funding is from a grant from the Lower St. Croix Partnership using Clean Water Land and Legacy grant funds



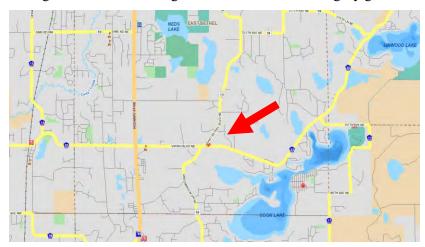
#### Adopt a drain - Martin and Coon Lakes

In 2023, ACD expanded promotion of Adopt a Drain. In this program, volunteers clean storm drains. Outreach focused on drains leading directly to Coon and Martin Lakes. Presently 11 of 22 priority drains have been adopted at Martin Lake. None are formally adopted at Coon Lake, but residents have stated that they do clean certain drains.



#### **Pollinator planting** – 19515 Jamestown St NE (near Coon Lake)

The homeowners planted a 0.6-acre pollinator planting for habitat and water quality benefits. Partial funding was from ACD using Clean Water Land and Legacy grant funds.







# <u>Lakeshore restorations</u> – Martin and

#### Coon Lakes

ACD, in collaboration with the Sunrise River WMO, secured a 2023 state Clean Water Fund grant for shoreline stabilizations. In 2023, twenty-two landowners expressed interest at the target waterbody (Martin Lake) and funding was sufficient for the top eight priority projects. Designs, landowner agreements, and construction contracting are complete. Construction will take place in 2024. Additional funding is provided from landowners and ACD.

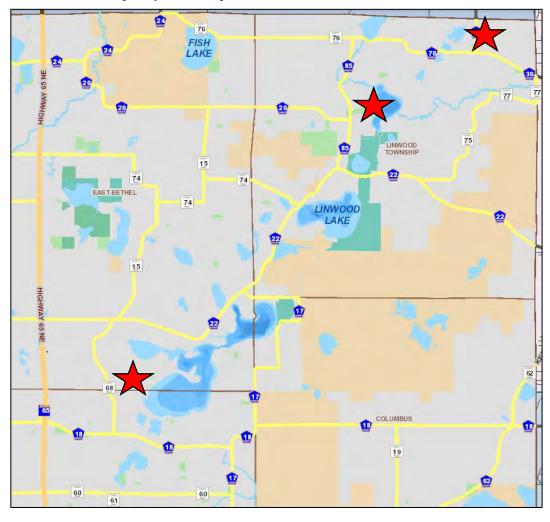


One of the 2024 lakeshore stabilization sites.

## Septic System Fix Ups -

Three non-compliant septic systems were replaced in 2023 using grant funds for low income households. The SSTS Fix-Up Program is administered by ACD, which prioritizes projects near priority lakes and streams. Funding was from the MN Pollution Control Agency and the Board of Water & Soil Resources. 2023 projects were near Fawn, Martin, and Coon Lakes.

Locations of 2023 septic system fix ups



# **Coon Lake Beach Community Center Rain Garden Rehab**

ACD staff led a local Boy Scout group in an effort to rehabilitate the rain garden which was constructed in 2015. It has become overgrown with black locust trees and a variety of weeds, which were removed. The inlet had also become clogged, and was cleared. Finally, a fresh layer of mulch was installed. The rain garden captures and infiltrates road runoff which otherwise would be directly into Coon Lake.



# On-call Administrative Services

**Description:** ACD provides on-call administrative assistance to the SRWMO. Tasks are limited to

those defined in a contractual agreement.

**Purpose:** To ensure day-to-day operations of the SRWMO are attended to.

**Location:** Watershed-wide

**Results:** Administrative assistance provided to the SRWMO commonly includes:

- Assist the SRWMO Board with day-to-day operational items
- Prepare and distribute board meeting materials
- Prepare budgets
- Advise or represent the SRWMO on water management issues
- Annual MN Campaign Finance Board documents
- Joint powers agreement updates
- Respond to public inquiries about SRWMO programs, permitting, and grants
- Respond to board member and member community questions
- Process resident requests for SRWMO cost share grant funds
- Complete annual risk assessments required by the SRWMO's insurer
- Prepare meeting minutes in the Recording Secretary's absence
- Prepare materials for State performance reviews of the SRWMO
- Order annual audits and prepare related information

# Annual Written Communication to Member

# **Communities**

**Description:** ACD provides a summary of activities

completed in the preceding years.

**Purpose:** To create a summary for board members

to use during annual reporting.

**Location:** Watershed wide

**Results:** A short summary of SRWMO activities

for the preceding years was prepared by ACD. This summary included work accomplished, finances, leveraged funds, and current events. Board members will use it during annual reporting to their city

councils and town boards in January-

March.



# SRWMO Annual Report to BWSR and State Auditor

**Description:** 

The SRWMO is required by law to submit an annual report to the Minnesota Board of Water and Soil Resources (BWSR). This report consists of an up-to-date listing of SRWMO Board members, activities related to implementing the SRWMO Watershed Management Plan, the status of municipal water plans, financial summaries, and other work results. The SRWMO bolsters the content of this report beyond the statutory requirements so that it also serves as a comprehensive annual report to SRWMO member communities. The report is due annually, 120 days after the end of the SRWMO's fiscal year (April 30th).

The SRWMO must also submit an annual financial report to the State Auditor. They accept unaudited financial reports for financial districts with annual revenues less than \$272,000. The SRWMO was below this threshold.

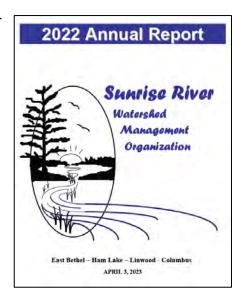
**Purpose:** To document progress toward implementing the SRWMO Watershed Management

Plan and to provide transparency of government operations.

**Location:** Watershed-wide.

**Results:** ACD assisted the SRWMO with preparation of

the annual SRWMO Annual Report. After SRWMO Board review, the final draft was forwarded to BWSR. The report is also shared with SRWMO communities' staff and elected officials, and is publicly available on the SRWMO website.



# Grant Search and Applications

**Description:** ACD partners with the SRWMO for the preparation of grant applications. Several

projects in the SRWMO Watershed Management Plan need outside funding in order

to be accomplished.

**Purpose:** To provide funding for high priority local projects that benefit water resources.

**Results:** In 2022 and 2023 the SRWMO and ACD pursued a State Clean Water Fund grant for

shoreline stabilizations. Both were awarded in the amounts of \$78,500 and \$107,000. Each grant expires in three years. Work will be focused at Martin Lake for the first grant, and Martin, Coon, or Linwood for the second grant. ACD is the grant recipient.

In 2023, \$10,000 was requested and received from the Lower St. Croix Partnership for soil health practices. The grant funds various agricultural practices that benefit water quality. Promotion to landowners will begin in early 2023. ACD is the grant recipient.

Since 2014, the following grants have been secured for SRWMO projects through the assistance of ACD:

Project	<b>Grant Source</b>	Amount
2014 Martin and Typo Lake Carp Barriers, site 2	MN DNR CLP	\$35,770
2014 Martin and Typo Lake Carp Barriers, sites 1,3,4	MN DNR CLP	\$399,983
2014 Coon Lake Area Stormwater Retrofits	BWSR CWF	\$42,987
2015 Ditch 20 Wetland Restoration Feasibility Study	BWSR CWF	\$72.400
2017 Martin and Typo Lake Carp Harvests	MN DNR CLP	\$99,000
2017 Septic System Fix Up Fund*	MPCA	\$23,040
2018 Watershed Based Funding – stormwater retrofits &	BWSR WBIF	\$156,750
more		
2018 Septic System Fix Up Fund*	MPCA	\$27,055
2019 Septic System Fix Up Fund*	MPCA	\$40,000
2019-20 Surface Water Monitoring Grant, Sunrise R	MPCA	\$5,102
2019 Sunrise River Chain of Lakes Carp Mgmt	BWSR CWF	\$148,000
2020 Septic System Fix Up Fund*	MPCA	\$25,447
2021 Lower St. Croix WBIF –internal loading analyses	BWSR WBIF	\$0
2021 Septic System Fix Up Fund*	MPCA	\$34,876
2022 Septic System Fix Up Fund*	MPCA	\$34,876
2022 Street Sweeping study – Linwood and Martin Lakes	Lower St. Croix	\$2,000
	Partnership	
2023 Septic System Fix Up Fund*	MPCA	\$33,418
2023 Sunrise Chain of Lakes Shoreline Stabilizations	BWSR CWF	\$78,500
2023 Soil Health grant	Chisago SWCD,	\$10,000
	Lower St. Croix	
	Partnership	
2023 Septic System Fix Up Fund*	MPCA	\$33,418
2024 Sunrise Chain of Lakes Shoreline Stabilization –	BWSR CWF	\$107,000
Phase 2		
TOTAL		\$1,308,506

<sup>\*</sup>Countywide Grant

# Outreach and Education

**Description:** ACD conducted public outreach and education including newsletter articles,

workshops, community events, and others. Topics included lakeshore stewardship, financial assistance for fixing failing septic systems, agricultural soil health practices,

pollinator planting, native aquatic plants, and the goals of the SRWMO.

**Purpose:** To provide information and education to the public, especially information that will

result in behavioral changes beneficial to natural resources.

**Location:** Watershed-wide

**Results:** Outreach efforts are collaborative. Some tasks are exclusively performed by ACD for

the SRWMO. The SRWMO also provides funding to support the Anoka County Water Resources Outreach Program which uses funds pooled from various watersheds and grants to perform regional outreach or produce materials used in multiple

watersheds. Finally, the SRWMO area benefits from outreach by the Lower St. Croix

Partnership without SRWMO funding.

2023 accomplishments included:

#### **City newsletter content**

- Local waters and SRWMO goals.
- Septic system fix-up grants.
- Aquatic invasive species.

#### Lake association newsletter content:

• Lakeshore stewardship.

#### **Workshops promotion**

- "Living Large on a Small Lake" a workshop for owners and prospective buyers of property on smaller lakes. It discussed practical and legal expectations, and how to find a lake that fits you. Led by the Lower St. Croix Partnership.
- Realtor Workshop about Lakeshore A continuing education course about laws and landowner expectations for lakeshore. Led by the Lower St. Croix Partnership.
- Smart Salting Distributed information to community public works departments about this training and certification program from the MN Pollution Control Agency. All SRWMO communities are now certified.

#### **Community events**

- Linwood Family Fun Day Staffed by SRWMO board members. Booth focused on turf management and groundwater protection.
- Columbus Fall Fest Staffed by SRWMO board members and University of MN Extension. Booth focused on turf management and groundwater protection.
- City of East Bethel Open House A SRWMO board member staffed a booth at this indoor community event to share information about SRWMO programs.
- Martin Lakers Association annual meeting. A presentation about SRWMO
  programs was given by ACD staff. The focus was on recruiting landowners to do
  shoreline restoration projects. Approximately 60 residents attended.

- Coon Lake Improvement Association Fall meeting. ACD staff presented about four things (one in each season) residents can do on their own property to protect the lake. Approximately 60 residents attended.
- Coon Lake Beach Community Center Rain Garden Rehab Approximately 14
  Boy Scouts and parents joined ACD staff to remove weeds, clean the inlet, and
  spread mulch. Many neighbors stopped by to thank us.

#### Other

- Lakeshore stewardship promotion Produced a brochure with SRWMO branding that was distributed at workshops and community events. Lower St. Croix Partnership staff gave a presentation at a Martin Lakers Association meeting.
- Adopt a Drain ACD promoted this program through the Martin and Coon Lake Associations. 11 of 22 drains that go directly to Martin Lake have been adopted.
- Videos The "Our Waters" video series which the SRWMO contributed to
  produce received national press. The "Our Groundwater Connection" video was
  used by Ohio TV news to help explain groundwater contamination from the East
  Palestine train derailment.
- Land Use Planning A new video entitled "When Development Comes to Town" was promoted to elected officials and planning/zoning committees. The video was funded by the Lower St. Croix Partnership.

#### Sampling of outreach and education in 2023 printed materials











n the area, head toward Lake George in the City of Oa

# Website

**Description:** The SRWMO contracts ACD to maintain a website on behalf of the SRWMO.

**Purpose:** To increase awareness of the SRWMO and its programs. The website also provides

resources that helps residents better understand water resource issues in the area. The

website serves as the SRWMO's alternative to a state-mandated newsletter.

**Location:** <u>www.srwmo.org</u>

**Results:** In 2023, ACD maintained the SRWMO website and posted board minutes and

agendas.

