



CLFLWD
WATERSHED DISTRICT



Annual Report

Comfort Lake-Forest Lake
Watershed District

2023

***Protecting and improving your local water resources
through adaptive management and education of
local stakeholders***

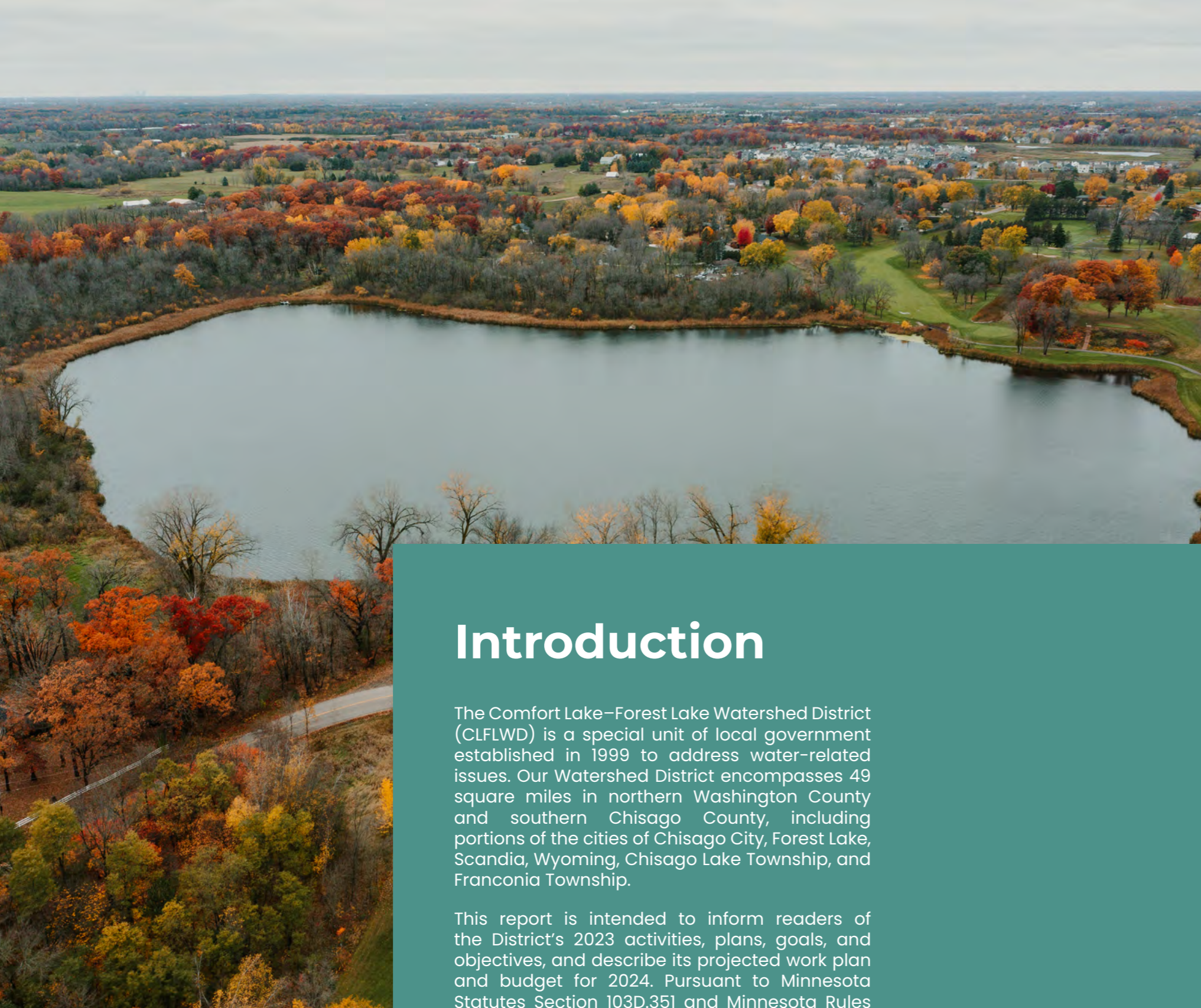


Image (above): Aerial of Shields Lake
Image (cover): Aerial of Lake Keewahtin
Icons: Freepik.com

Introduction

The Comfort Lake–Forest Lake Watershed District (CLFLWD) is a special unit of local government established in 1999 to address water-related issues. Our Watershed District encompasses 49 square miles in northern Washington County and southern Chisago County, including portions of the cities of Chisago City, Forest Lake, Scandia, Wyoming, Chisago Lake Township, and Franconia Township.

This report is intended to inform readers of the District's 2023 activities, plans, goals, and objectives, and describe its projected work plan and budget for 2024. Pursuant to Minnesota Statutes Section 103D.351 and Minnesota Rules Section 8410.0150, the CLFLWD Board of Managers submits its 2023 Annual Report to the Board of Water and Soil Resources, the Commissioner of the Department of Natural Resources, and the Director of the Ecological and Water Resources Division.



For more information, including the District's interactive history timeline and the 2023 Progress Report visit www.clflwd.org.

Annual Report Contents

Tables & Figures | 04

Board of Managers | 05

Advisory Committees | 06

Staff and Consultants | 08

History of Significant Events | 12

2023 Program Activities | 14

2023 Project Activities | 26

2023 Financials | 30

2024 Work Plan & Budget | 33

Appendix A: Permits & Variances

Appendix B: 2023 Newsletter

Tables & Figures

Tables

Table 1. 2023 Citizen Advisory Committee	6
Table 2. 2023 Technical Advisory Committee.....	7
Table 3. 2023 Staff.....	10
Table 4. Consultants	11
Table 5. Water Quality Trends.....	15
Table 6. Clean Water Fund Summary	31
Table 7. Financial Report / Budget Comparison.....	32
Table 8. 2024 Expense Budget Overview.....	34
Table 9. 2024 Estimated Revenue Overview	36
Table 10. 2024 Work Plan Overview.....	37

Figures

Figure 1. History of significant events	12
Figure 2. Summary of Cost-Share activity	17
Figure 3. Map of the Lower St. Croix One Watershed-One Plan Area	21
Figure 5. District Wide Watercraft Inspection Summary	23
Figure 4. 2023 Watercraft Inspection Hours by access	23
Figure 6. Progress toward phosphorus reduction goals	26
Figure 7. 2023 Expense Budget and Estimated Revenues.....	31
Figure 8. 2024 Budget Summary.....	33

Board of Managers

Watershed districts are governed by a board of managers appointed by their respective counties. Roughly 60% of CLFLWD is in Washington County and 40% is in Chisago County. As such, three managers are appointed by Washington County and two managers are appointed by Chisago County.

In 2023 the Board of Managers held 29 public board meetings, spending a total of 67 hours in these meetings and passing 126 motions.



Stephen Schmalz, President
Appointed County: Washington
Term Expires: September 2026



Christopher Loth, Vice President
Appointed County: Washington
Term Expires: September 2025



Dave Bakke, Secretary
Appointed County: Washington
Term Expires: September 2024



Jackie Anderson, Treasurer
Appointed County: Chisago
Term Expires: September 2026



Douglas Toavs, Assistant Treasurer
Appointed County: Chisago
Term Expires: September 2023

Advisory Committees

Citizen Advisory Committee

The Citizen Advisory Committee (CAC) is an advisory group that is made up of volunteers who advise the Board of Managers on water-related community concerns and issues.

In 2023 the CAC met eleven times including a special meeting for a shoreline tour of Bone Lake. Specific initiatives the CAC pursued included shoreline restoration, wake boat impacts, and aquatic invasive species prevention and treatment. 2023 members of the CAC included:

Table 1. 2023 Citizen Advisory Committee

Name	Location
Tom Furey	Scandia, MN
Jerry Grundtner	Forest Lake, MN
Ted Hansen	Wyoming, MN
Geneva Kubal	Forest Lake, MN
Mike Miron	Hugo, MN
Randy Schumacher	Forest Lake, MN
Curt Sparks	Forest Lake, MN



Photo: Partial aerial image of the Bone-Birch-School-Little Comfort Tributary

Technical Advisory Committee

Representatives from each of the District's cities and counties, state agencies, neighboring watershed districts, and the Metropolitan Council comprise the District's Technical Advisory Committee (TAC).

The TAC provides assistance with the development of the District's watershed management and capital improvement plans, rules and specific projects, as well as support for the CAC. 2023 members of the TAC included:

Table 2. 2023 Technical Advisory Committee

Name(s)	Organization
Michelle Jordan	Board of water and soil resources
Mike Isensee	Carnelian-Marine-St. Croix WD
John Pechman, Jason Lind	Chisago City
Susanna Wilson-Witkowski	Chisago County
Jessica Jagoe	Chisago County Dept. of Env. Services/Zoning
Craig Mell	Chisago Soil & Water Conservation District
Sherry Stirling, Jeanetter Peterson	Chisago Lake Township
Patrick Casey, Ryan Goodman, Tim Olson	City of Forest Lake
Ken Cammilleri	City of Scandia
Robb Linwood, Fred Weck, Mark Erichson	City of Wyoming
Melissa Glenna	Franconia Township
Nicholas Phelps, Angelique Dahlberg	MN Aquatic Invasive Species Research Center
Jeffrey Berg	MN Department of Agriculture
John Freitag	MN Department of Health
Daniel Scollan	MN Department of Natural Resources
Nick Tiedeken	MN Department of Transportation
Eric Alms	MN Pollution Control Agency
Nick Tomczik	Rice Creek WD
Jay Riggs	Washington Conservation District
Tom Dietrich, Stephanie Grayzeck Souter	Washington County

Staff & Consultants

CLFLWD staffing has consistently adapted each year to meet the needs of the District based on the goals and objectives of the Watershed Management Plan and the directives of the Board of Managers. In addition, numerous contractor consultants provided all necessary accounting, legal, engineering and other services to fulfil its obligations, goals, and objectives within the plan and budget. The District's last biennial professional services RFP, per MN Statutes 103B.227, subd. 5, occurred in 2022.

The 2023 staff work plan accounted for 11.3 full-time equivalent (FTE) employees, totaling 20,100 working hours at an estimated cost of \$884,345 for staff wages and benefits. The work plan included staff assignments in all administration, program, and project categories according to the Watershed Management Plan. In 2023 the District employed 11 staff members over the course of the year, plus a Pollution Control Agency GreenCorps member. Total actual working hours for the year was 18,000 hours. Employee turnover in three full-time staff positions resulted in fewer working hours than planned. The District has hired three new full-time permanent staff, and is fully staffed as of January 2024.



Photo: 2023 Staff (left to right) Victoria D'Amico, Garrett Miller, Mike Kinney, Blayne Eineichner, Jessica Lindemyer, Aidan Read, Bobbie Law, Emily Heinz, Mike Sandager, Beth Carreno.

The District was able to achieve the objectives set forth in the 2023 work plan. Major work plan objectives that were achieved include:

- » Continued project development for a new District office space including **public outreach/surveys, an open house event, funding research, and a feasibility study.**
- » Continued permitting program management, active site inspections, and **increased oversight of buffers and permit maintenance declarations**
- » Continued implementation of a multi-faceted stream and lake monitoring program
- » Establishment of **new water quality cost-share programs**, completion of **updated lake shoreline inventories**, and **increased emphasis on lakeshore buffer restorations**
- » Completion of a **logo re-design, re-branding, and website update, approval of a new Comprehensive Education & Outreach Plan, completion of a detailed Annual Education & Outreach Plan**, and overall **increased activity in the Education & Outreach Program** including multiple workshops and events, creation of informational videos and other materials, direct communications to target audiences, and social media posts.
- » **Increased interagency partner coordination** in the form of regular meetings, joint grant proposals and letters of support, data sharing, and general communications/notifications about activities in the watershed.
- » **Record-high grant awards** in terms of dollar amounts and variety of grant programs applied to, including \$2.8 million in grant awards in FY23 alone and active grants in 10 different grant programs
- » **An all-time high number of projects under the Operations & Maintenance Program**; this program will continue increase as the District completes more projects in the coming years
- » Continued implementation of a multi-faceted Aquatic Invasive Species Prevention & Management Program including consistently high watercraft inspections numbers, public outreach, surveys, AIS management, and **no new AIS introductions observed in 2023**
- » Development of a new, large **land acquisition in the Bone Lake subwatershed**
- » **Initiation of a Floodplain Resiliency Assessment** which will be completed in 2024
- » **Completion of two large water quality capital projects, completion of the first phase of the Forest Lake Alum Treatment**, and project development for an additional four projects

District Staff

Table 3. 2023 Staff

Name	Position & Contact Info	
Mike Kinney	Administrator	
	p: (651) 395-5850	e: michael.kinney@clflwd.org
Aidan Read	Land Management Specialist	
	p: (651) 583-6590	e: aidan.read@clflwd.org
Beth Carreno	Senior Program Manager	
	p: (651) 395-5852	e: beth.carreno@clflwd.org
Blayne Eineichner	Project Coordinator	
	p: (651) 395-5857	e: blayne.eineichner@clflwd.org
Emily Heinz	Planning Coordinator	
	p: (651) 395-5856	e: emily.heinz@clflwd.org
Garrett Miller	Aquatic Invasive Species (AIS) Coordinator	
	p: (651) 395-5854	e: garrett.miller@clflwd.org
Mike Sandager	Permitting Coordinator	
	p: (651) 395-5859	e: mike.sandager@clflwd.org
Victoria D'Amico	Water Resources Technician	
	p: (651) 313-8821	e: victoria.damico@clflwd.org

The District office is located at:

- » 44 Lake St. South, Suite A, Forest Lake, MN 55025.

Employees from 2023 that no longer work for the District include:

- » Jessica Lindemyer, Education & Outreach Coordinator
- » Bobbie Law, Office Manager
- » Peter Brennhofer, Water Resources Technician
- » Jess Hall, MN GreenCorps Member (2022-2023 contract with MPCA)

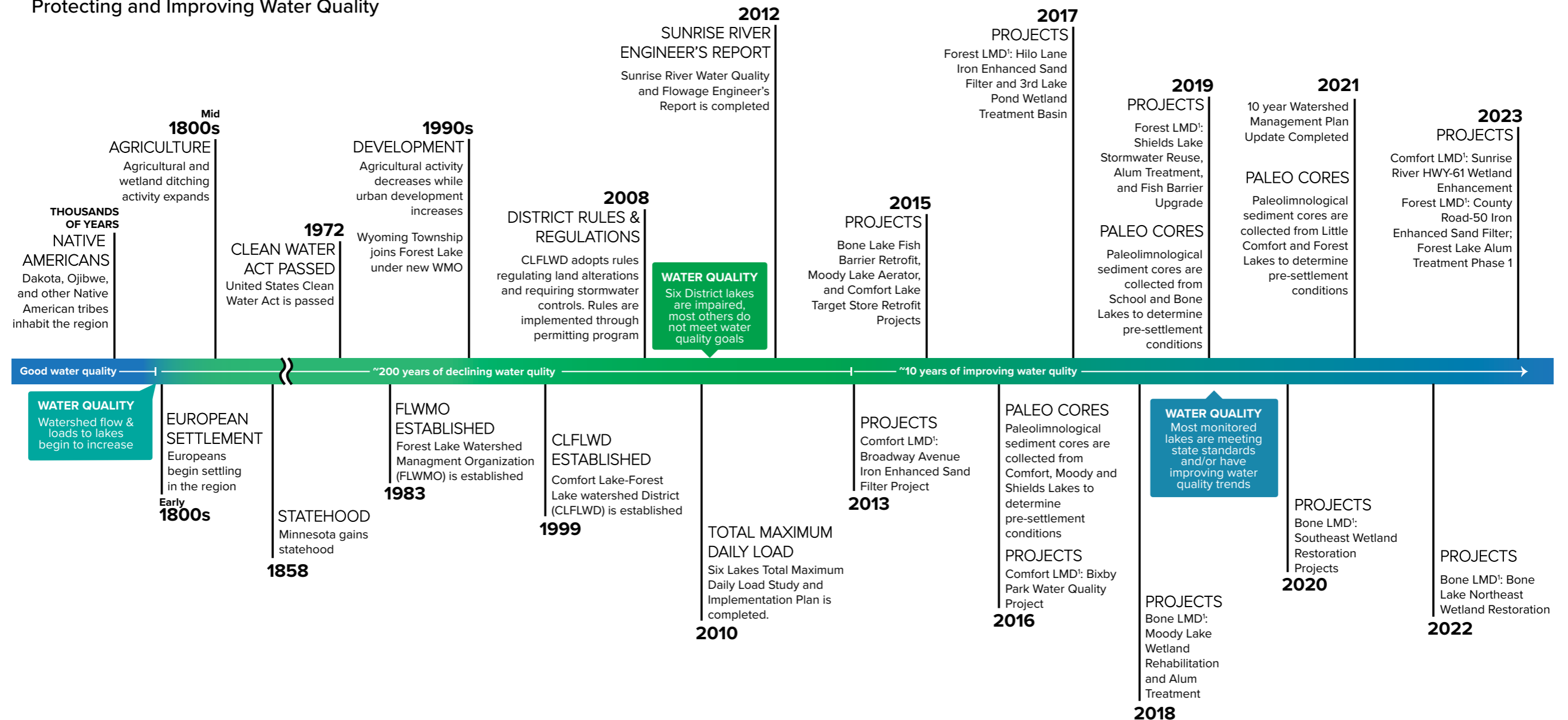
Consultants

Table 4. Consultants

Name(s)	Service & Contact Info	
Bonnie Burns	Accountant, Redpath & Company	
	4810 White Bear Pkwy, White Bear Lake, MN 55110	
	p: (651) 255-9308	e: bburns@redpathcpas.com
Melissa Doumbia	Payroll, Redpath & Company	
	4810 White Bear Pkwy, White Bear Lake, MN 55110	
	p: (651) 255-9351	e: mdoumbia@redpathcpas.com
Greg Graske Cecilio Oliver Anne Wilkinson	Engineers, Emmons & Olivier Resources	
	1919 University Ave W Suite 300, St Paul, MN 55104	
	p: (651) 770-8448	e: ggraske@eorinc.com e: colivier@eorinc.com
Justin Nilson	Auditor, Abdo	
	5201 Eden Avenue, Ste 250, Edina, Minnesota 55436	
	p: (952) 715-3011	e: justin.nilson@abdosolutions.com
Ken Carlson	Insurance, North Risk Partners	
	2010 Centre Pointe Blvd., Mendota Heights, MN 55120	
	p: (651) 379-7909	e: kcarlson@bearence.com
Chuck Holtman	Attorney, Smith Partners PLLP	
	400 Second Ave. S. #1200, Minneapolis, MN 55401	
	p: (612) 344-1400	e: holtman@smithpartners.com
Jay Riggs Angela Defenbaugh	Technical Advisors, Washington Conservation District	
	455 Hayward Ave N, Oakdale, MN 55128	
	p: (651) 330-8220	e: jriggs@mnwcd.org e: adefenbaugh@mnwcd.org
Craig Mell Casey Thiel	Technical Advisors, Chisago Soil & Water Conservation District	
	38814 3rd Ave., North Branch, MN 55056	
	p: (651) 674-2333	e: craig.mell@mn.nacdnet.net e: casey.thiel@mn.nacdnet.net

History

Comfort Lake-Forest Lake Watershed District Historic Timeline Protecting and Improving Water Quality



¹Lake Management District (LMD)

Figure 1. History of significant events

Program Activities

■ Ongoing work that occurs annually

Permitting

Protecting water resources when development occurs

In order to fulfill requirements mandated by the State, as well as provide guidance to local communities, the CLFLWD adopted Rules on December 18, 2008. The District rules and information on its permit program and materials can be found on its website at www.cflwd.org/permitting.

In 2023, there were 33 permit applications. All applications were reviewed by staff and the District Engineer, Emmons & Olivier Resources, Inc. Over the course of the year, 32 permits were active at various times, 44 permits were closed out, and 1,304 site inspections occurred.

In 2023 active permit sites were 97% compliant with District Rules, which is measured as “Excellent” by the District’s progress evaluation metric. Frequent site inspections and consistent communications have a positive effect on compliance with District rules. District staff have increased their outgoing communications to permittees and interagency partners in order to support compliance with rules. Examples include proactive notifications regarding forecasted weather events and necessary erosion and sediment control measures, creation of new outreach materials such as stormwater pond safety, creation of door hangers to let landowners know of a site visit, and improvements to online regulatory materials. The number of site inspections has remained high in order to ensure full coverage of highly active sites. It is anticipated that a high level of permit activity will continue in 2024. Appendix A contains a summary of the permits and variances issued in 2023.

In addition to regular permit administration and active site inspections, the District increased oversight and performed inspections for stormwater best management practices (BMPs) and buffers required under past permits. In 2023, staff inspected 94 individual BMPs on 53 properties, and 79% of such sites were in compliance with maintenance requirements. Increased involvement from staff results in improved BMP/buffer performance and improved protection for the surrounding water resources.

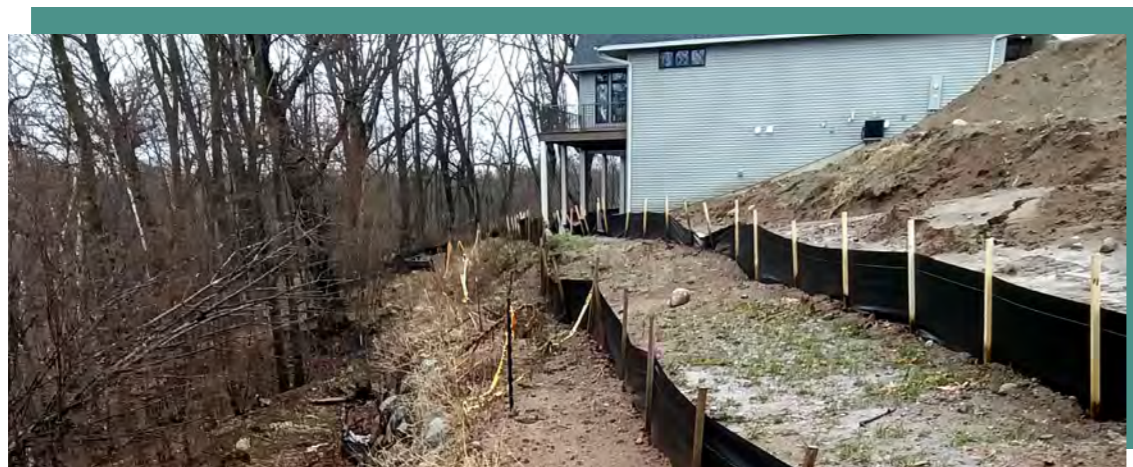


Photo: Double silt fence containing erosion at a construction site

Water Monitoring

Measuring the health of our lakes

The District has a robust annual monitoring program with the purpose of evaluating the water quality conditions in lakes and streams. The District uses these data to establish baseline water quality trends, to identify waterbodies that are impaired and in need of restoration, and to evaluate the success of completed projects.

The 2023 monitoring plan was implemented by a combination of volunteers, District staff, and the District Engineer, Emmons & Olivier Resources. In 2023, 5 volunteers participated in the Citizen Assisted [Lake] Monitoring Program (CAMP) and 1 volunteers participated in the Citizen Assisted Tributary (CAT).

Some of the main takeaways from this year’s monitoring report include:

- » Overall, the 2023 average growing season lake water quality was excellent with most of the lakes in the District showing an improving trend and meeting State standards.
- » Spring 2023 was wetter than normal, and summer 2023 was dryer than normal. This had an effect on water monitoring data and is consistent with climate change predictions for Minnesota.

Monitoring reports and presentations can be found on the District’s website at www.cflwd.org.



Table 5. Water Quality Trends

Lake	Water Quality Trends		
	Total Phosphorus	Chlorophyll-a	Secchi Disk
Bone	2013	2001	2013
Comfort	1994	2014	2014
Forest (West)	1984	2001	2013
Forest (Middle)	2013	2013	2013
Forest (East)	2013	2013	2013
Keewahntin	2013	2013	2013
Little Comfort	2013	2013	2013
Moody	2005	2005	2005
Shields	2013	2001	1993

Key	Significantly Improving since (year)	Improving since (year)	Declining since (year)

Cost-Share Program

Providing resources to homeowners for stewardship on their properties

In 2023 the District revamped its cost-share program, offering additional financial assistance for homeowners to restore their shorelines and implement other water-friendly practices. New programs include

- » the Mini-Grant (\$500 reimbursement grant suitable for small projects),
- » the Community Water Cost-Share (competitive program, up to 75% cost-share up to \$7,500),
- » and the Watershed Legacy Payment (annual payments to landowners for land protection).

The District partners with Washington Conservation District (WCD) and Chisago Soil and Water Conservation District (CSWCD) to implement these programs. In 2023, CLFLWD, WCD, and Chisago SWCD staff performed 35 initial site visits in order to engage with interested homeowners.

As a result of those site visits,

- » 12 Mini Grants were approved (a 71% increase vs the previous “plant grant” program),
- » 2 Clean Water applications were received,
- » 6 residents participated in the Legacy Payment Program
- » 8 residential soil tests were conducted
- » \$23,000 in grant funds were awarded

In 2023 the District continued to coordinate with the farmer-led council in order to expand adoption of non-structural agricultural conservation practices throughout the watershed using

- » cost-share funds,
- » increased farmer outreach,
- » and the assistance of soil and water conservation district partners.

The District offered a Municipal Stormwater Remediation Program and a Lake Association Grant Program in 2023, but received no applications.

COST-SHARE ACTIVITY 2020-2023

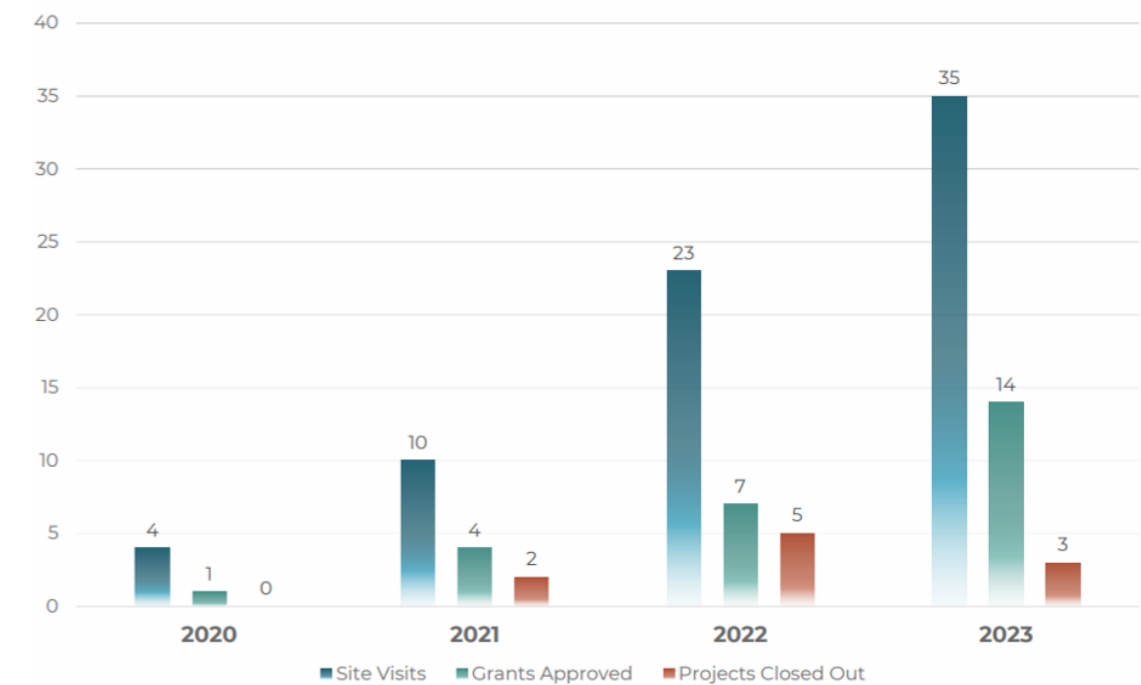


Figure 2. Summary of Cost-Share activity

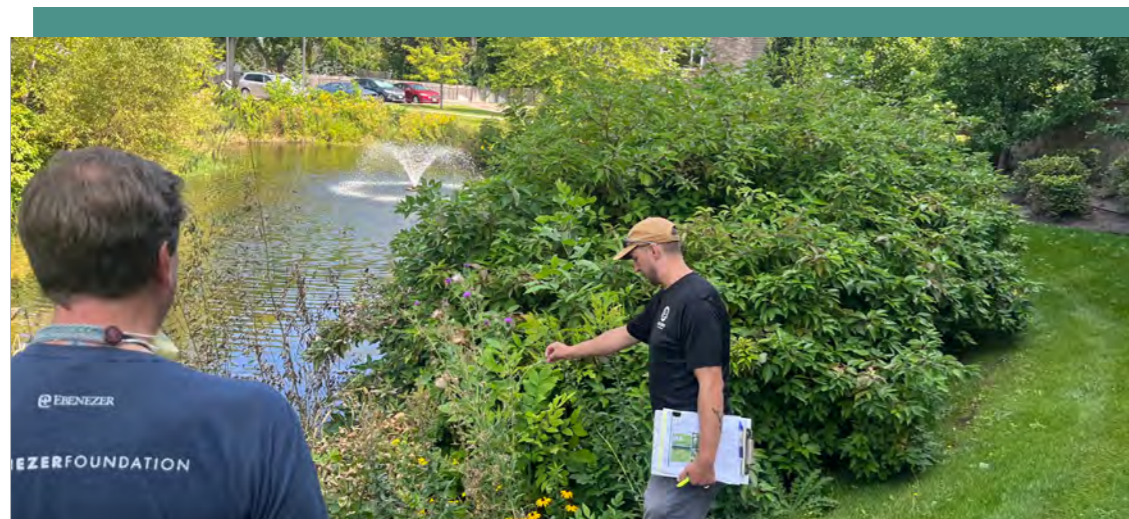


Photo: Land Management Specialist, Aidan, identifying vegetation during a free site visit

Education & Outreach

Communicating about our work and promoting stewardship

The District adopted its first Comprehensive Education & Outreach Plan in 2023, demonstrating its commitment to clear and consistent public outreach. Below is a summary of education and outreach activities performed by the District in 2023 as part of the comprehensive plan. Appendix B contains a copy of the District's annual newsletter, as required by MN Rules 8410.0100, subpart 4.

In addition to the District's in-house efforts, the District continued to partner with the East Metro Water Resources Education Program (EMWREP).

The EMWREP 2023 Annual Report is available at www.mnwcd.org/emwrep-partners.



Ongoing Activities

- » Continued the implementation of several citizen science programs including Citizen Assisted Monitoring Program (CAMP), Citizen Assisted Tributary monitoring program (CAT), and zebra mussel sampling plate program (see additional detail on next page).
- » Continued local student engagement with annual visits to classrooms at Lakes International Language Academy (LILA) and Wyoming Elementary School to present on water quality and facilitate the implementation of public-facing educational messaging as designed by the students.
- » Presented at local lake association meetings (Bone Lake, Comfort Lake and Forest Lake).
- » Maintained social media presence.
- » Hosted weekly informational booth at the City of Forest Lake's Arts in the Park.
- » Worked with partner agencies to host and promote online webinars and in-person workshops on topics such as shoreline buffers, fall yard maintenance, aquatic plants, and information about District projects.
- » Presented at the Minnesota Watersheds annual conference on the District's Legacy Payment Program.

Citizen Scientists at Work

The District worked with multiple volunteers to collect important data throughout the watershed and advise on watershed activities in 2023.

- » Citizen Assisted Monitoring Program (CAMP): 5 volunteers collected in-lake water quality samples – Tom Furey, Wally Ostlie, Doug Joens, Steve Schmaltz, and Amy Vislisel.
- » Citizen Assisted Tributary (CAT) Monitoring Program: 1 volunteer collected tributary water quality samples – Randy Schumacher.
- » Zebra Mussel Sampler Plates: 11 volunteers monitored zebra mussel sampler plates on their docks throughout the summer to gauge zebra mussel populations – Steve Schmaltz, Tom Furey, KC Douglas, Doug Joens, Dave Bakke, Kathleen Krause, Cheryl Komlac, Michelle Stevens, Mark Mckee, Geneva Kubal, Keith Kuhnly.
- » Continued partnership in the regional Adopt-A-Drain program.
- » Partnerships: In 2023 the District continued its support of the Minnesota Water Stewards Program, Blue Thumb Initiative, and Metro Blooms.
- » Citizen Advisory Committee: In 2023 the Citizen Advisory Committee met eleven times, including a special meeting for a shoreline tour of Bone Lake. Specific initiatives the CAC pursued included shoreline restoration, wake boat impacts, and aquatic invasive species prevention and treatment.



Photo: Water Resources Technician, Victoria, showcasing macroinvertebrates at event

Interagency Communication

Working together with our partners to achieve better outcomes

Ongoing Interagency Communication

The District coordinates with other agencies on a regular basis in order to implement the majority of its programs and projects. It is estimated that at least 70% (likely more) of the District's activities are coordinated with another organization or agency. Some of the agencies and organizations that the District regularly coordinates with include: local municipalities, neighboring watershed districts, Chisago and Washington Soil and Water Conservation Districts, Chisago and Washington Counties, Chisago Lake Improvement District, MN Dept. of Natural Resources, MN Pollution Control Agency, MN Dept. of Transportation, Metropolitan Council, St. Croix Watershed Research Station, East Metro Water Resources Education Program, and more.

The District created a new position and hired a Senior Program Manager in 2022. This position has helped to further expand the District's interagency communication efforts, make communications more consistent, and help coordinate among all District staff members to increase communication overall. This work supports and overlaps with most of the District's programs and projects, and it involves all staff. The District has seen an increase in two-way dialogue with its partners and increased coordination on joint grant proposals, data sharing, and notifications about activities going on in the watershed.

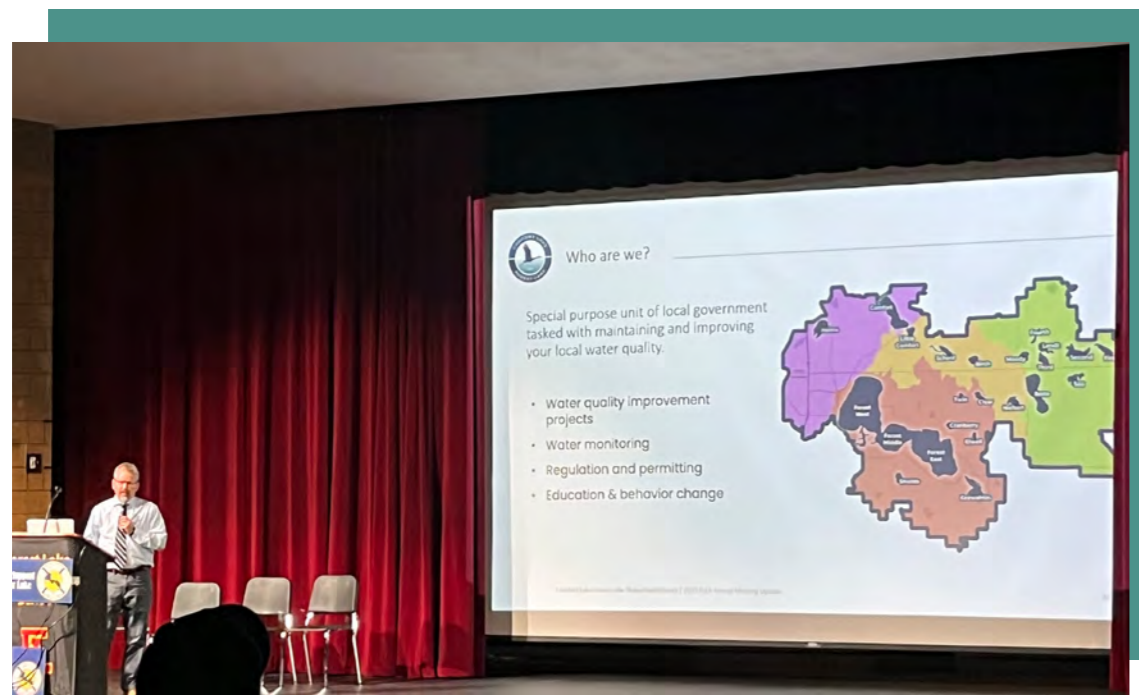


Photo: Administrator Kinney presents at the 2023 meeting of the Forest Lake Lake Association

One Watershed, One Plan

On November 10, 2020, the CLFLWD Board adopted Resolution 20-11-01, adopting the Lower St. Croix Comprehensive Watershed Management Plan, which will not replace, but will supplement, the CLFLWD Watershed Management Plan by better defining how the District will carry out certain program activities within its discretion. In 2023 the District continued to participate in the Lower St. Croix Partnership at multiple levels including Policy Committee, Advisory Committee, Steering Committee, and Planning Team.

More information, including the LSC approved plan, Watershed Based Implementation Funding grant work plan, watershed boundaries and the organizations involved can be found at www.lsc1wlp.org.



Lower St. Croix Watershed Boundaries

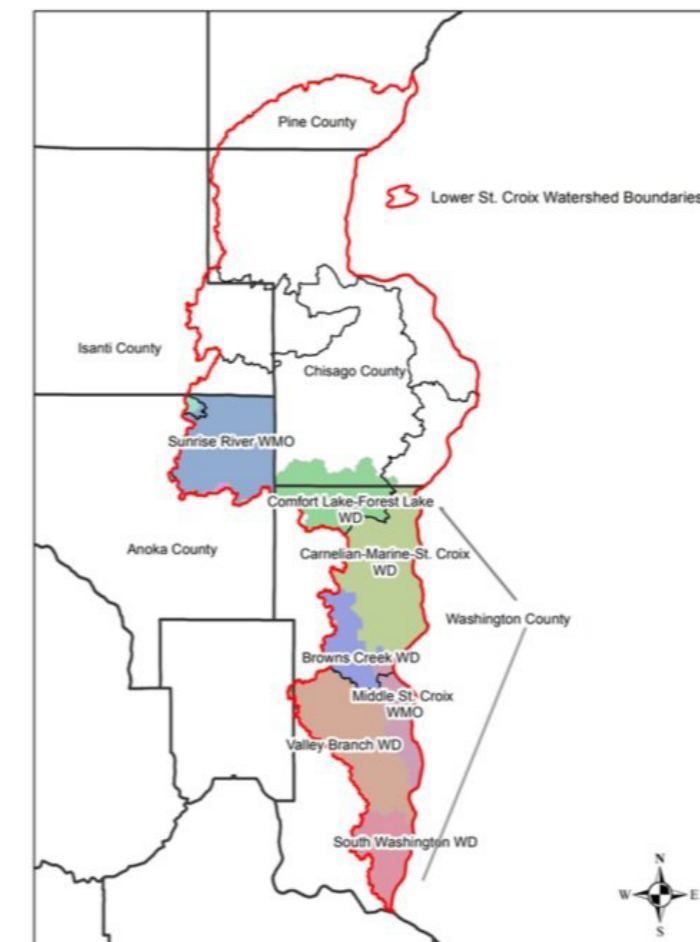


Figure 3. Map of the Lower St. Croix One Watershed-One Plan Area

Aquatic Invasive Species Prevention & Management

Preventing the spread and mitigating impacts of invasive species

In 2023, the District continued a high level of involvement in the prevention and management of aquatic invasive species (AIS) on all major lakes. Regular updates were provided at monthly board meetings throughout the growing season.

The following yearend reports and summaries were completed for the year 2023:

- » District-Wide: AIS Program Yearend Summary and Watercraft Inspection Program Yearend Report
- » Moody Lake: Curly-leaf Pondweed Delineation & Assessment (including full point-intercept survey as required for Natural Environment Lakes)
- » Bone Lake: Curly-leaf Pondweed and Eurasian Watermilfoil Delineation & Assessment, Zebra Mussel and Starry Stonewort Search, plus a separate lake-wide Point-Intercept Survey
- » Little Comfort Lake: Curly-leaf Pondweed Survey
- » Lake Keewahtin: AIS Detection Survey (including observations of curly-leaf pondweed and purple loosestrife)
- » Shields Lake: Curly-leaf Pondweed Delineation & Assessment (including full point-intercept survey as required for Natural Environment Lakes)
- » Forest Lake: Curly-leaf Pondweed and Eurasian Watermilfoil Delineation & Assessment, Flowering Rush Delineation & Assessment, plus a separate lake-wide Point-Intercept Survey
- » Comfort Lake: Curly-leaf Pondweed and Eurasian Watermilfoil Delineation & Assessment, plus a separate lake-wide Point-Intercept Survey

As in previous years, the District contracted with Blue Water Science to complete several AIS surveys. Using information from the surveys, the District coordinated two curly-leaf pondweed treatments (Shields Lake and Forest Lake), two purple loosestrife treatments (Lake Keewahtin and Forest Lake), four rounds of flowering rush treatment and manual removal of 4,000 flowering rush seed heads on Forest Lake. The District did not treat Eurasian watermilfoil in 2023 but continued to coordinate the surveys, and some lake associations coordinated treatments. Management of curly-leaf pondweed and flowering rush in Forest Lake was a joint effort between the District, the Forest Lake Lake Association, and the City of Forest Lake. Communication with the lake associations on Bone, Comfort, and Forest lakes were a key component of AIS prevention and management in 2023 and will continue in 2024.

In 2023, there were **7,903 inspection surveys** performed over **3,934 hours** at public accesses within the CLFLWD, which includes three accesses on Forest Lake, one on Bone Lake, and one on Comfort Lake. This includes inspections by the MN Department of Natural Resources, the CLFLWD-Chisago County joint program, and locally hired CLFLWD inspectors. Figure 4 shows the total number of inspection hours per public access in 2023. Figure 5 summarizes the District-wide total inspection hours and number of inspections performed each season since 2014.

Inspection numbers vary each year, but have generally increased compared to when the program began (there were less than 800 hours in 2010). A major factor in the District's ability to perform more inspection surveys and hours at accesses is funding, which comes from multiple sources such as local tax levy, grants, and partner organization contributions. In 2023, the District's watercraft inspection program received funding contributions from the following sources: Washington County AIS Prevention Aid, Chisago County AIS Prevention Aid, City of Forest Lake, City of Scandia, Bone Lake Association, Scandia-Marine Lions Club, Comfort Lakes Association, and the District's tax levy.

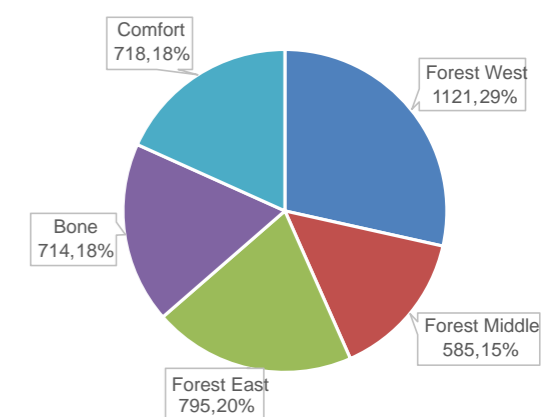


Figure 4. 2023 Watercraft Inspection Hours by access

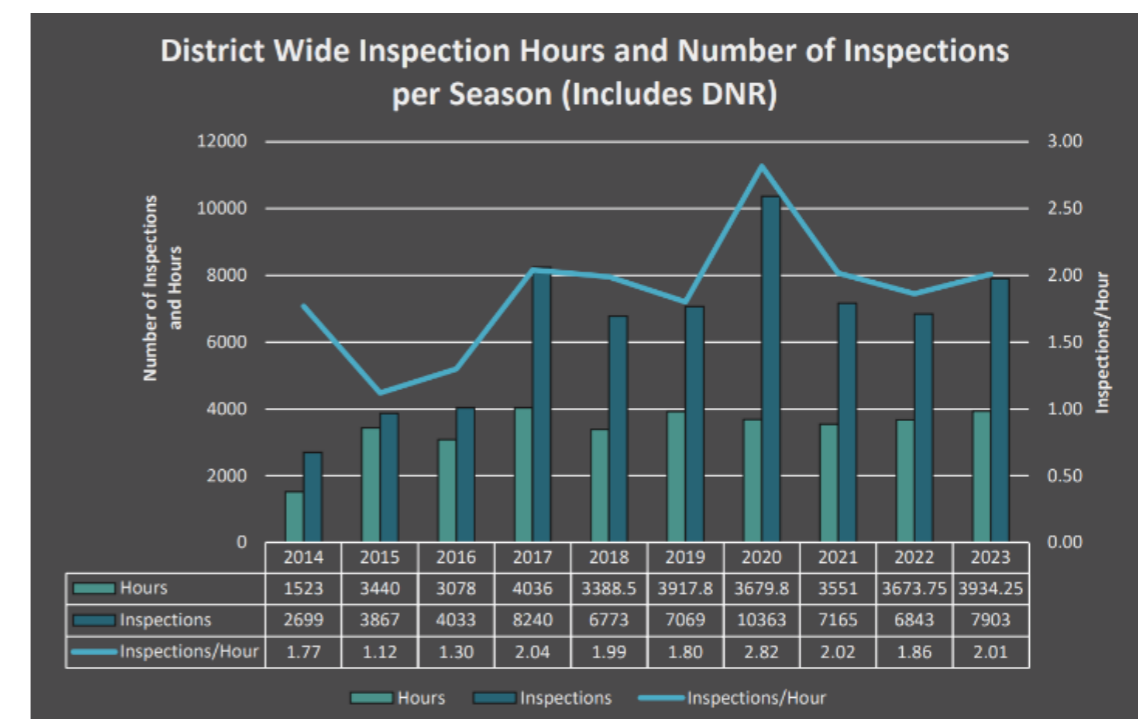


Figure 5. District Wide Watercraft Inspection Summary

Land Acquisition & Management

Protecting land to improve our water resources

In 2023 the District continued to research several properties that align with District goals and objectives including shoreland preservation, wetland protection/restoration, native plant species protection, education and outreach, and placement of a new District office space.

The District was awarded a Lessard-Sams Outdoor Heritage Fund grant in the amount of \$1.94 million, to acquire a property south of Bone Lake. The property contains 119 acres of wetland and 110 acres of restorable upland habitat. The District is currently undergoing land negotiations. The District also identified a property near Little Comfort Lake that would be a good candidate for a water quality improvement project and is currently undergoing land negotiations. Both of these properties were evaluated against the land acquisition criteria in the Watershed Management Plan and found to be good candidates for acquisition in order to serve the District’s goals.

In 2022 the District acquired a property north of Forest Lake’s east basin, near Cranberry Lake. This property is referred to as the North Shore Trail Nature Area. This is a 19-acre parcel with shoreline frontage on the north side of Forest Lake’s east basin (“3rd Lake”). The District’s acquisition of this parcel means protection of approximately 2-3 acres of mature forested upland, 16 acres of wetland and over 3,000 feet of undeveloped shoreline, all of which provide significant habitat for a variety of terrestrial and aquatic species. The District obtained a Conservation Partners Legacy grant in the amount of \$400,000 which funded the majority of the acquisition cost. In 2023 the District began a partnership with Great River Greening to enhance the native vegetation and improve wildlife habitat on the site using grant funds from the Environment and Natural Resources Trust Fund. This work will continue in 2024 and 2025.

Watershed Planning & Resiliency

Adapting to a changing climate

Floodplain Vulnerability and Resiliency Planning

The District began to evaluate flood hazards with local communities in 2022 and continued that work in 2023. The Floodplain Vulnerability Assessment will continue into 2024 with further community engagement, prioritization, and final reporting.



Photo: North Shore Trail Nature Area access gate



Photo: North Shore Trail Nature Area

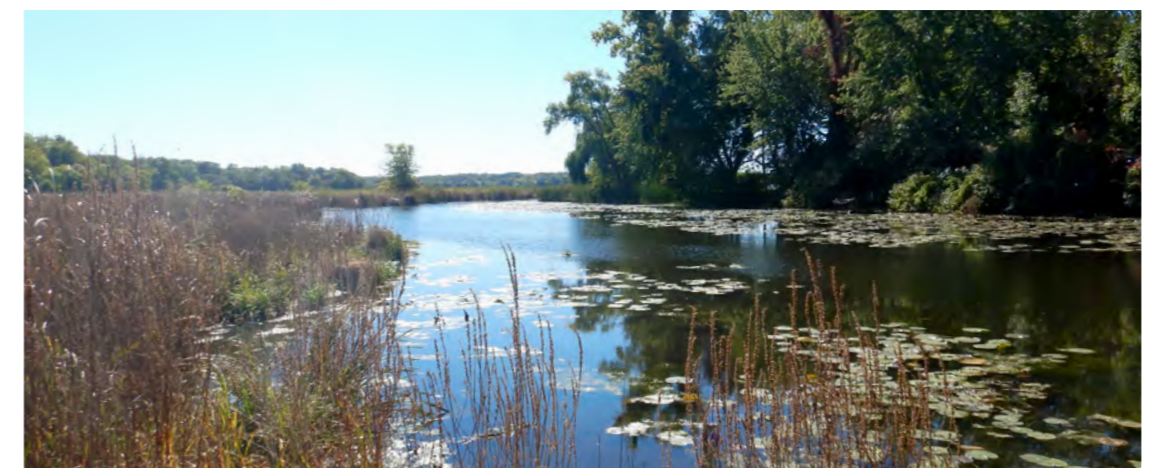


Photo: Second Lake

Project Activities

■ On-the-ground projects that improve our water resources



State Standard Reduction Goal: 3,245lbs
District Sustainable Reduction Goal: 5,802lbs*

Figure 6. Progress toward phosphorus reduction goals

As of the end of 2023, the District has implemented projects and programs to achieve cumulative phosphorus load reductions so that priority lakes were 94% of the way toward meeting state standards (3,050 lb/yr out of 3,245 lb/yr) and 78% of the way toward meeting District long-term goals (4,669 lb/yr out of 5,802 lb/yr).

The reduction goal to achieve the District's long-term sustainable goals has increased by 527 lb/yr as a result of findings from the 2022 Forest Lake In-Lake Feasibility Study. Forest Lake's internal load reduction goal was uncertain prior to the study, but is now set at 527 lb/yr. This goal will be achieved by an alum treatment project which will occur in 2023-2025.

Calculating Project Cost-Benefit

The District evaluates the cost-benefit of every project it undertakes. Phosphorus is a major nutrient affecting water quality in Minnesota lakes and streams, and is therefore a high priority factor for which the District evaluates cost-benefit. For each of the following projects, a phosphorus reduction cost-benefit (i.e., cost per pound of phosphorus removed over the lifecycle of the project) is listed. The estimated cost takes into consideration the cost of project development/design (e.g., staff time), construction (e.g., labor and materials), and post-construction operations & maintenance (e.g., cleanouts and equipment replacements). The estimated annual phosphorus reduction is multiplied by the number of years for which the project is expected to function, in order to get a total life cycle phosphorus reduction (e.g., 100 pounds per year x 25-year lifecycle = 2,500 pounds removed over the project lifecycle). The total lifecycle cost is then divided by the total lifecycle phosphorus reduction to get the lifecycle cost-benefit (cost per pound).

A cost-benefit below \$1,000/lb is generally considered acceptable. Most of the District's capital improvement projects have a phosphorus reduction cost-benefit below \$500/lb and many are even below \$100/lb.

Moody Lake Capstone Projects

Project Cost: \$275,000 | Phosphorus Reduction: 58 lb/yr | Cost-Benefit: \$200/lb

The District completed construction on this project during the winter of 2023/2024. This project involves multiple best management practices in order to reduce phosphorus loading to Moody Lake by a total of 58 pounds per year and reduce sediment loading by a total of 140 pounds per year. The District performed diagnostic monitoring and site-specific wetland coring to target remaining nutrient loading hotspots in the direct drainage area. Projects include: excavation of phosphorus-laden soils, raingarden and other park improvements, and wetland dredging. The District received a \$239,500 Clean Water Fund grant for this project.



Photo: Moody Lake Capstone wetland dredging in-progress

WJD-6 Western Tributary Wetland Restoration

Project Cost: \$520,000 | Phosphorus Reduction: 20 lb/yr | Cost-Benefit: \$1,000/lb

The District completed construction on the Washington Judicial Ditch-6 (WJD-6) Western Tributary Wetland Restoration project during the winter of 2023/2024. This project restored a degraded wetland by means of sediment excavation and vegetation rehabilitation. The original wetland condition is partially drained by a small private ditch that flows into WJD-6 and eventually into Forest Lake, and 100% dominated by a monotype of reed canary grass. The project provides for deeper pools along with large shallow wetland benches to promote nutrient uptake, treat stormwater and improve habitat diversity. This project reduces phosphorus loading by approximately 20 lb/yr and sediment loading by 3,200 lb/yr. The District received a \$386,000 Clean Water Fund grant for this project.

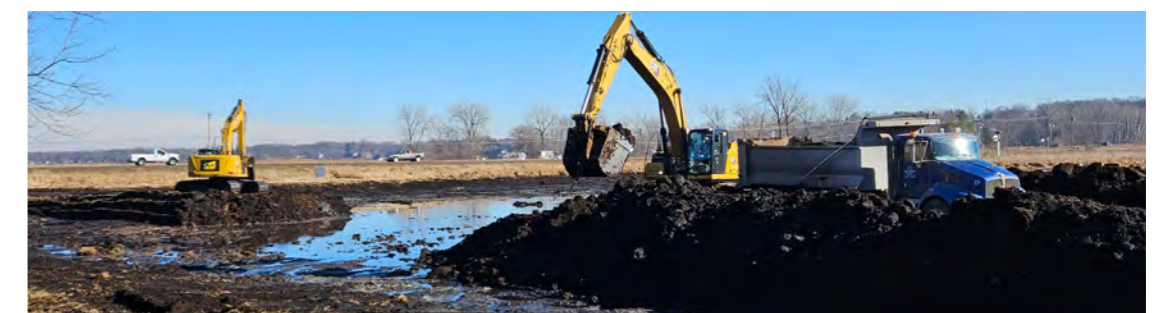


Photo: Excavation at the WJD-6 Western Tributary Wetland Restoration project site

WJD-6 County Road 50 Iron-Enhanced Sand Filter

Project Cost: \$1.5 M | Phosphorus Reduction: 97 lb/yr | Cost-Benefit: \$500/lb

The District finished construction and closed out this project in 2023. This project treats 50% of the subwatershed runoff with an offline, multi-cell iron enhanced sand filtration (IESF) treatment system. The headwaters of Washington Judicial Ditch 6 (WJD-6) are dominated by wetlands and contributes nearly half of the total phosphorus load in the WJD-6 system, most of which is difficult to remove with traditional best management practices. This project reduces watershed phosphorus loads to Forest Lake by 97 pounds per year. This project was identified through multiple rounds of diagnostic monitoring which found that WJD-6 is the second largest contributor of water flow and phosphorus loads to Forest Lake, second only to Shields Lake which is currently addressed by implementation of the Shields Lake Stormwater Harvest, Irrigation Reuse System and Alum Treatment project. The District was awarded multiple grants for this project totaling \$939,365.



Photo: View from County Road-50 of the WJD-6 CR-50 IESF

July Avenue Feedlot

Project Cost: \$100,000 | Phosphorus Reduction: 61 lb/yr | Cost-Benefit: \$200/lb

The District was awarded a \$90,000 Clean Water Fund grant for this project in December 2023. Project feasibility, design, and implementation will occur in 2024/2025. This project will implement agricultural best management practices on a farm/feedlot in southern Chisago County. Proposed practices include cover crops, roof runoff management, clean water diversion, livestock waste management system, and vegetated treatment area. The proposed project is estimated to reduce approximately 61 lb/yr of watershed phosphorus loading to School Lake, which discharges through a stream to Little Comfort Lake.



Photo: Adobe stock image of cattle feedlot

Sunrise River-Highway 61 Wetland Enhancement

Project Cost: \$1.6 million | Phosphorus Reduction: 89 lb/yr | Cost-Benefit: \$600/lb

The District finished construction and closed out this project in 2023. This project modified an existing ditched wetland complex located on 41.7 acres of District-owned tax forfeited property to increase water quality treatment potential and storage capacity. The project results in annual phosphorus reductions of 89 pounds per year to the Sunrise River and 65 pounds per year to Comfort Lake, helping to restore and protect Comfort Lake which ultimately drains to the St. Croix River through the Sunrise River. The project was identified for targeted implementation through the District's 2012 Sunrise River Water Quality and Flowage Project and the 2010 CLFLWD District Six Lakes TMDL Study. The District was awarded multiple grants for this project, totaling \$892,449. This project was a result of the [2010 Chisago County petition](#).



Photo: View from HWY-61 of the Sunrise River HWY-61 Wetland Enhancement Project

Heath Avenue Iron Enhanced Sand Filter

Project Cost: \$1.5 M | Phosphorus Reduction: 79 lb/yr | Cost-Benefit: \$800/lb

The District began project development in 2023 including initial feasibility investigation, grant seeking, interagency coordination, and landowner communications. The proposed project will treat nutrient-rich runoff from this stormwater conveyance system with an iron enhanced sand filter. This project has an estimated phosphorus reduction of 79 pounds per year for Little Comfort Lake.

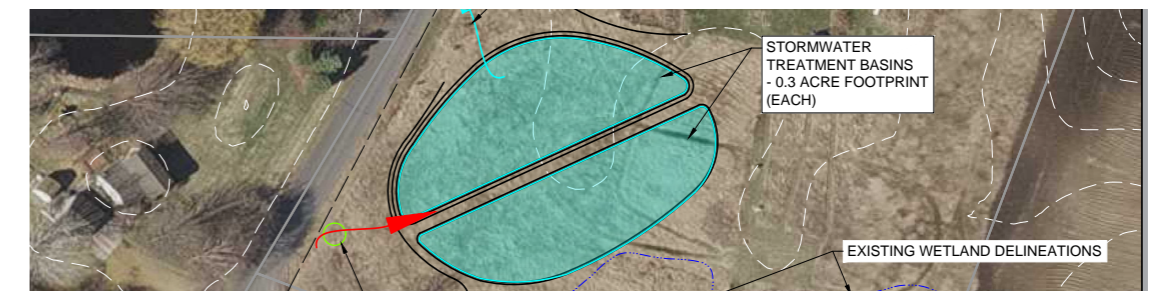


Photo: Preliminary project design for the Heath Avenue IESF

2023 Financials

The District is primarily funded by a combination of tax levy, grants, and a Clean Water Partnership loan.



Levy

The District's tax revenue comes from an ad valorem levy on properties within the District boundaries. The Board of Managers carefully weighs tax impacts when considering its annual levy. Over time, property values within the District have steadily increased, and the levy has increased in parallel. The levy represents a steady source of revenue that ensures the District can maintain operations and provide watershed services. In order to accomplish more outcomes without increasing the levy too much, the District seeks grants and loans in order to supplement funding.



Loan

The Clean Water Partnership Loan is a low interest, 7-year amortized, loan from the Federal Clean Water Act Fund, administered through the Minnesota Pollution Control Agency (MPCA). This loan operates on a reimbursement basis. The use of the grants and loan programs through the state and federal clean water programs allows the District to accelerate projects and to reach water quality goals much sooner than is common practice. The District has taken a multi-phase approach to its use of loan funds. In 2023 the District received almost \$500,000 in loan disbursements. The District was awarded another \$750,000 in loan funds in 2023 and will disburse those funds and close out that loan in 2024.



Grants

The District submitted 14 grant applications and applied for \$5.4 million in grant funds in fiscal year 2023. The District was awarded a total of \$2.8 million in FY23 (note that due to payment schedules, grant awards do not necessarily result in actual grant revenue in the same year). Statewide, the District is the biggest winner of Clean Water Fund Projects & Practices grants over the past 11 years with a cumulative award of \$5.1 million between fiscal years 2014-2024 (see Table 5). The District's use of diagnostic monitoring to target highly cost-effective water quality improvement projects is key to its success in winning grants.

Table 6. Clean Water Fund Summary

	Organization	Grant Dollars Awarded Total Projects and Practices (FY 2014-2024)	Application Points Total Projects and Practices (FY2014-2024)
1	Comfort Lake-Forest Lake WD	\$5,157,334	1,286
2	Becker SWCD	\$4,433,710	868
3	Benton SWCD	\$3,658,010	1,010
4	Bois de Sioux WD	\$3,355,010	504
5	Crow Wing SWCD	\$3,335,000	519

The 2023 financial audit office visit was completed by Abdo, on March 20-21, 2024. The final audit documents include the District's Annual Financial Report and the Independent Auditor's Report on Compliance with Minnesota Legal Compliance Guide of Local Governments for the year ended December 31, 2023. Once complete, a copy of the 2023 financial audit report will be available by contacting the District office or visiting the District's website at www.clflwd.org.



Figure 7. 2023 Expense Budget and Estimated Revenues

2024 Work Plan & Budget

Table 7. Financial Report / Budget Comparison

	2022 Actual (audited)	2023 Budget (w/ transfers)	2023 Actual (unaudited)
REVENUES:			
Levy	\$1,617,288	\$1,622,500	\$1,617,288
Grants & Other	\$1,603,675	\$3,050,063	\$1,168,030
TOTAL REVENUES	\$3,220,963	\$4,672,563	\$2,785,318
EXPENDITURES:			
Administration	\$479,492	\$470,488	\$546,062
Debt Services	\$150,000	\$150,000	\$150,000
Programs:			
General Program Development	\$7,187	\$12,559	\$7,887
Rules and Rulemaking	\$0	\$25,000	\$0
Permitting	\$232,694	\$225,433	\$221,266
Monitoring and Assessment	\$178,183	\$184,229	\$165,064
NPS Abatement (Cost-Share)	\$28,128	\$191,653	\$40,298
Education & Outreach	\$133,178	\$149,203	\$112,162
Interagency Communication	\$156,339	\$48,971	\$54,386
Research	\$76,903	\$9,559	\$22,362
Measurement of Progress	\$12,029	\$9,059	\$8,080
Grant Research & Prep	\$12,244	\$23,473	\$13,943
Operations & Maintenance	\$51,395	\$63,387	\$72,293
Aquatic Invasive Species	\$188,554	\$276,932	\$200,951
Land Acquisition and Management	\$530,385	\$806,471	\$49,803
Watershed Planning & Resiliency	\$6,930	\$9,679	\$24,692
Projects:			
General Project Development	\$164,831	\$112,793	\$94,142
Floodplain	\$0	\$77,676	\$24,710
Lakes - District-Wide	\$62,380	\$68,027	\$66,500
Lakes - Individual Lake Projects	\$1,464,148	\$1,940,000	\$2,218,242
Streams	\$37,678	\$67,426	\$22,086
Wetlands	\$13,870	\$15,117	\$14,724
Upland Resources	\$81,251	\$0	\$31,860
Groundwater	\$6,929	\$7,559	\$7,362
TOTAL EXPENDITURES	\$4,074,728	\$4,944,689	\$4,168,874
Loan Proceeds	\$763,394	\$1,200,000	\$986,604
Revenues over expenditures	(\$853,765)	(\$272,126)	(\$1,383,557)
Fund balance - January 1	<u>\$1,217,330</u>	-	<u>\$1,126,959</u>

The 2024 budget and levy were adopted on September 12, 2023, with an approved expense budget of \$3.6 million and watershed-wide ad valorem levy of \$1,719,850.

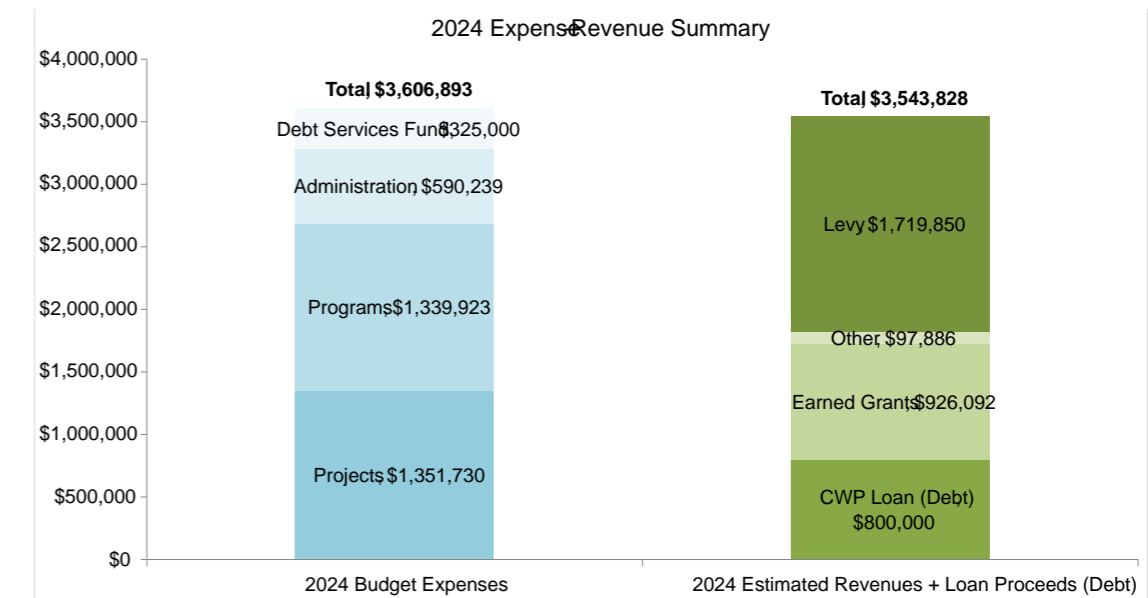


Figure 8. 2024 Budget Summary

Table 8. 2024 Expense Budget Overview

Account Code	Budget Item	2024 WMP
	<i>Staff/Consultant Summaries (pulled out from budget below)</i>	
	District Staff Wages/Benefits (Rolled in to each subca	\$806,814
	Engineering Costs (Rolled in to subcategories below)	\$698,072
	Legal Costs (Rolled in to subcategories below)	\$94,420
1-000	ADMINISTRATION	\$462,224
1-001	BOARD ADMINISTRATION	73,213
1-002	GENERAL OFFICE EXPENSES	110,365
1-003	GENERAL ADMINISTRATIVE	184,671
1-004	PROFESSIONAL SERVICES	93,975
2-000	DEBT SERVICES FUND	\$150,000
2-000	CWP LOAN PRINCIPAL REPAYMENT	150,000
3-000	PROGRAMS	\$1,613,266
3-000	GENERAL PROGRAM DEVELOPMENT	15,845
3-001	DISTRICT RULES AND RULEMAKING	0
3-002	PERMITTING	218,545
3-003	MONITORING & DATA ASSESSMENT	297,222
3-004	NON-POINT SOURCE POLLUTION ABATEMENT	134,405
3-005	EDUCATION AND OUTREACH	136,773
3-006	INTERAGENCY COMMUNICATION	61,193
3-007	RESEARCH	18,030
3-008	MEASUREMENT OF PROGRESS	12,566
3-009	GRANT RESEARCH & PREPARATION	23,494
3-010	OPERATIONS & MAINTENANCE	61,193
3-011	AIS PREVENTION & MANAGEMENT	302,904
3-012	LAND ACQUISITION & MANAGEMENT	302,139
3-013	WATERSHED PLANNING & RESILIENCY	28,957
5-000	PROJECTS	\$1,996,791
5-000	GENERAL PROJECT DEVELOPMENT	101,077
5-100	FLOODPLAIN	103,263
5-200	LAKES	895,686
5-300	STREAMS	39,520
5-400	WETLANDS	833,751
5-500	UPLAND RESOURCES	0
5-600	GROUNDWATER	23,494
TOTAL BUDGET		\$4,222,281

*District staff costs (wages, benefits, PERA, payroll taxes) are allocated to different sections of the budget using the breakdown from the 2020 Workload Analysis.

2024 Est. Grant Spend	2024 Est. Other Rev. Spend	2024 Ongoing Expenses	2024 New Expenses	2024 Total Expense Budget
\$0	\$49,886	\$922,893	\$0	\$972,780
\$50,000	\$0	\$705,000	\$0	\$755,000
\$5,000	\$0	\$80,000	\$0	\$85,000
\$0	\$0	\$509,703	\$80,536	\$590,239
		36,000	4,000	40,000
		107,130	14,000	121,130
		256,573	0	256,573
		110,000	62,536	172,536
\$0	\$0	\$325,000	\$0	\$325,000
		325,000	0	325,000
\$29,954	\$87,886	\$1,197,083	\$25,000	\$1,339,923
0	0	8,814	0	8,814
0	0	0	0	0
0	78,386	183,901	0	262,287
0	0	176,144	0	176,144
0	0	181,629	0	181,629
0	0	184,254	0	184,254
0	0	60,513	0	60,513
0	0	9,314	0	9,314
0	0	10,314	0	10,314
0	0	13,314	15,000	28,314
0	0	98,692	0	98,692
29,954	9,500	196,315	10,000	245,769
0	0	18,314	0	18,314
0	0	55,564	0	55,564
\$896,138	\$0	\$405,592	\$50,000	\$1,351,730
0	0	91,572	0	91,572
0	0	34,943	50,000	84,943
896,138	0	199,191	0	1,095,329
0	0	54,943	0	54,943
0	0	16,629	0	16,629
0	0	0	0	0
0	0	8,314	0	8,314
\$926,092	\$87,886	\$2,437,379	\$155,536	\$3,606,893

Table 9. 2024 Estimated Revenue Overview (Updated as of February 2024)

Revenue Source Description	Estimated Revenue
2024 LEVIES	\$1,719,850
Chisago County Apportionment	\$413,177
Washington County Apportionment	\$1,306,673
2024 LOAN	\$750,000
Clean Water Partnership Loan C	\$750,000
2024 ESTIMATED EARNED GRANT REVENUE	\$2,329,750
FY22 Clean Water Fund: WJD-6 Wetland Enhancement	\$193,000
FY22 Clean Water Fund: Moody Lake Capstone Projects	\$119,750
FY24 Clean Water Fund: July Avenue Feedlot	\$45,000
FY23 Lessard-Sams OHF: Bone Lake South Wetland Acquisition	\$1,942,000
FY24 DNR & Washington County AIS Grants	\$30,000
2024 ESTIMATED OTHER REVENUES	\$123,500
City of Forest Lake (AIS prevention partnership)	\$9,000
Bone Lake Association (AIS prevention partnership)	\$3,000
City of Scandia (AIS prevention partnership)	\$1,000
Scandia Lions Club (AIS prevention partnership)	\$500
Chisago County (AIS prevention partnership)	\$5,000
Permit Fees	\$100,000
Interest Income	\$5,000
Dept. of Natural Resources provided watercraft inspection hours on Forest Lake	550 hours
TOTAL ESTIMATED REVENUE	\$4,293,100

*Excess revenue is placed in Reserve Fund for future projects.

Table 10. 2024 Work Plan Overview

WMP Code	Work Plan Category	Total Staff Hours	FTE	Percentage of Total Work Plan	2024 Cost
1000	ADMINISTRATION	3,203	1.8	16.06%	\$156,181
1001	BOARD ADMINISTRATION	1,452	0.8	7.28%	\$70,801
1002	GENERAL OFFICE EXPENSES	544	0.3	2.73%	\$26,526
1003	GENERAL ADMINISTRATIVE	1,155	0.6	5.79%	\$56,319
1004	PROFESSIONAL SERVICES	52	0.0	0.26%	\$2,536
3000	PROGRAMS	13,789	7.7	69.12%	\$672,364
3000	GENERAL PROGRAM DEVELOPMENT	354	0.2	1.77%	\$17,261
3001	DISTRICT RULES AND RULEMAKING	12	0.0	0.06%	\$585
3002	PERMITTING*	3,832	2.1	19.21%	\$186,852
3003	MONITORING & DATA ASSESSMENT	1,637	0.9	8.21%	\$79,822
3004	NON-POINT SOURCE POLLUTION ABATEMENT	2,111	1.2	10.58%	\$102,934
3005	EDUCATION AND OUTREACH	2,127	1.2	10.66%	\$103,714
3006	INTERAGENCY COMMUNICATION	672	0.4	3.37%	\$32,767
3007	RESEARCH	96	0.1	0.48%	\$4,681
3008	MEASUREMENT OF PROGRESS	208	0.1	1.04%	\$10,142
3009	GRANT RESEARCH & PREPARATION	389	0.2	1.95%	\$18,968
3010	OPERATION & MAINTENANCE	180	0.1	0.90%	\$8,777
3011	AIS PREVENTION & MANAGEMENT*	1,415	0.8	7.09%	\$68,997
3012	LAND ACQUISITION	576	0.3	2.89%	\$28,086
3013	WATERSHED PLANNING & RESILIENCY	180	0.1	0.90%	\$8,777
5000	PROJECTS	2,958	1.6	14.83%	\$144,235
5000	GENERAL PROJECT DEVELOPMENT	1,287	0.7	6.45%	\$62,755
5100	FLOODPLAIN	492	0.3	2.47%	\$23,990
5200	LAKES*	1,179	0.7	5.91%	\$57,489
5300	STREAMS	0	0.0	0.00%	\$0
5400	WETLANDS	0	0.0	0.00%	\$0
5500	UPLAND RESOURCES	0	0.0	0.00%	\$0
5600	GROUNDWATER	0	0.0	0.00%	\$0
Totals		19,950	11.1	100%	\$972,780