Comfort Lake-Forest Lake Watershed District

2025 Progress Report

Draft March 16, 2026
Comfort Lake-Forest Lake Watershed District

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INTRODUCTION

MN Rules 8410.0150, subpart 3, item E, states that watershed districts shall provide a report as follows: "at a minimum of every two years, an evaluation of progress on goals and the implementation actions, including the capital improvement program, to determine if amendments to the implementation actions are necessary according to part 8410.0140, subpart 1, item C, using the procedures established in the goals and implementation sections of the plan under parts 8410.0080, subpart 1, and 8410.0105, subpart 1."

In 2015, the Comfort Lake-Forest Lake Watershed District (CLFLWD or District) began a comprehensive effort to evaluate progress toward the goals and metrics described in the District's 10-Year Watershed Management Plan, resulting in the creation of the first comprehensive Progress Report in 2016. The District produced this report on an annual basis from 2016-2021. Starting in 2022, the District scaled back its reporting efforts on a biennial basis. Every other year (odd years) the District produces a comprehensive Progress Report evaluating progress toward all of the goals in the Watershed Management Plan. In the even years, the District produces an abridged Progress Summary focusing on the highest priority water quality goals and capital improvement projects.

The Comfort Lake-Forest Lake Watershed District engages in a multitude of activities to realize water quality improvements as well as achieve additional benefits for water resources. For more information on District accomplishments in 2025, see the 2025 Yearend Summary Infographic and 2025 Annual Report. Both are available at www.clflwd.org.

Why We Want to Meet Water Quality Goals and Standards

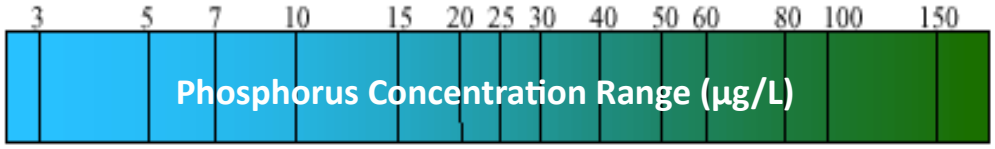
Cleaner, clearer water means:

- Better visibility/clarity
- Less frequent and less severe algae blooms
- Healthy native aquatic plant community
- Thriving gamefish population (muskie, northern, walleye, etc.)

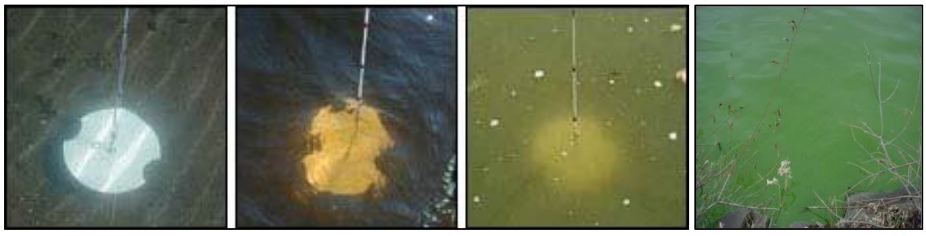
MN Clean Water Council Goals (source: Clean Water Council Strategic Plan)

1. Protect groundwater from degradation and support effective measures to restore degraded groundwater.
2. Ensure groundwater use is sustainable and avoid adverse impacts to surface water features due to groundwater use.
3. Public Water Systems--Ensure that users of public water systems have safe, sufficient, and equitable drinking water.
4. Private Water Supply Wells—Ensure that private well users have safe, sufficient, and equitable access to drinking water.
5. Monitor, assess, and characterize Minnesota's surface waters.
6. Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 by prioritizing and targeting resources by major watershed.
7. Protect and restore surface waters to achieve 70% swimmable and 67% fishable waters by 2034 via through statewide, regional, or issue-specific programs that help meet water quality goals but are not necessarily prioritized and targeted according to geography.
8. Build capacity of local communities to protect and sustain water resources.

More Phosphorus = More Algae = Less Clarity



Low ← Phosphorus (nutrients) and Chl-*a* (algae) levels → High



Clear ← Secchi Depth (Water Clarity) → Turbid

1000 ADMINISTRATION

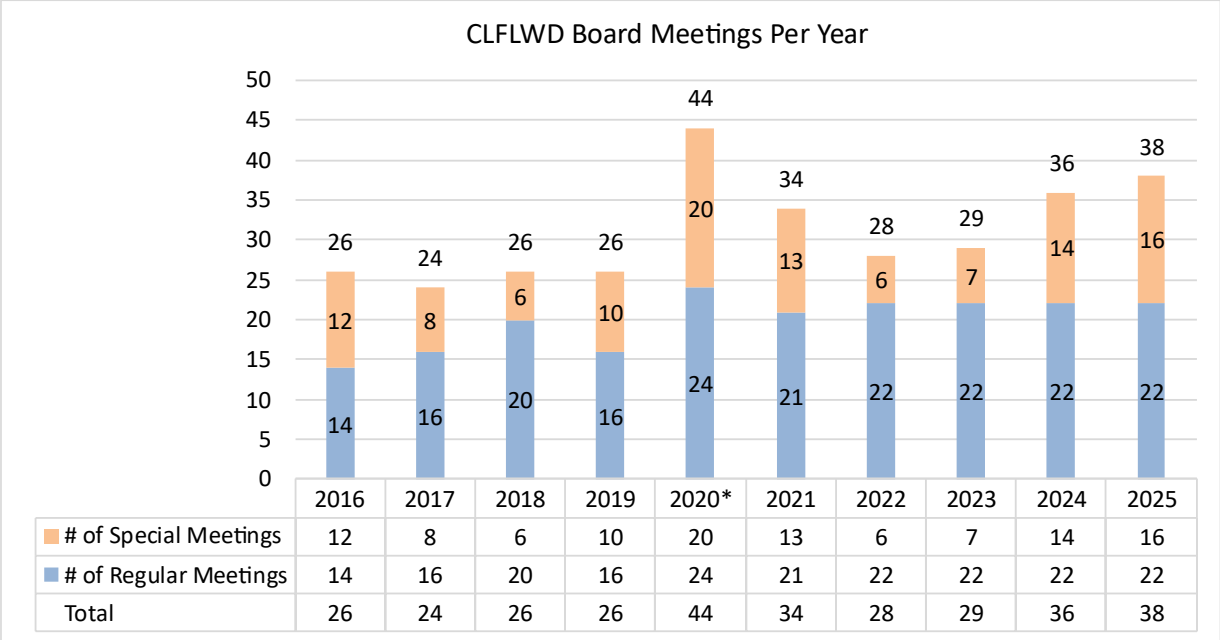
1001 Board Administration

2025 Evaluation

Progress evaluation metrics for Board Administration are not laid out in the Plan. However, the CLFLWD Board is very active and engaged in the District's activities. One way of measuring this level of activity is through board meetings.

2025 Board Meeting Highlights

- The District held 38 board meetings in total (Figure 1).
- The District held two regular meetings per month throughout most of the year.
- The District held an additional 16 special meetings throughout the year. Special meeting/workshop topics included a variety of topics, such as the 2026 budget and strategic planning.
- The District spent a total of 67 hours convened in board meetings in 2025, with an average meeting duration just under 2 hours.
- All board meeting materials and recordings are available online at www.clflwd.org



	2016	2017	2018	2019	2020*	2021	2022	2023	2024	2025
# of Special Meetings	12	8	6	10	20	13	6	7	14	16
# of Regular Meetings	14	16	20	16	24	21	22	22	22	22
Total	26	24	26	26	44	34	28	29	36	38

Figure 1. CLFLWD Board Meetings per Year

1003 General Administration

2025 Evaluation

Progress evaluation metrics are not outlined in the Plan for General Administration. In the past, CLFLWD board members have suggested that success in the overall Administration category be measured by the cost of administration as a percentage of the overall yearend expenses. This can be calculated in two ways: the entire 1000 Administration series (budget sections 1001 through 1004) as a percentage of the total 2025 yearend expenses, and the "in house" administration expenses (1001 through 1003) as a percentage of the total 2025 yearend expenses. A breakdown of each is provided in Table 1.

Table 1. Administration Over Total Expenses

All Administration	
Total Administration 2025 Budget	$470,488
2025 Yearend (Unaudited)	
1001 Board Administration	$61,824
1002 General Office Expenses	$133,833
1003 General Administration	$217,713
1004 Professional Services	$166,504
Total Administration Yearend Expenses	$579,874
Total CLFLWD Yearend Expenses	$5,565,366
2025 Administration/Total Expense	**10.4%**

"In House" Administration (Excluding Professional Services)	
Total Administration 2025 Budget (Without professional services)	$360,488
2025 Yearend (Unaudited)	
1001 Board Administration	$61,824
1002 General Office Expenses	$133,833
1003 General Administration	$217,713
Total Administration Yearend Expenses (Without professional services)	$413,370
Total CLFLWD Yearend Expenses	$5,565,366
2025 Administration/Total Expense	**7.4%**

Beginning in 2017 the District has allocated a portion of expenses under budget section 1004 Professional Services to the Programs and Projects sections of the budget, according to percentage of consultant time spent on program and project activities. Similarly, a portion of District staff costs (wages, benefits, retirement contribution/PERA, and payroll taxes) are allocated out of 1003 General Administration and into Programs and Projects; this is done in accordance with the CLFLWD workload analysis. This reflects work done by staff/consultants to directly support programs and projects.

3000 PROGRAMS

3001 District Rules & Rulemaking

3001 Progress Evaluation Metric

Success in the District Rules and Rulemaking Program will be measured by the continued implementation of the District's Rules through the Permitting Program and by the periodic reviews of rule effectiveness.

3001 Goals & Evaluation in 2025

- Goal 1 (High Priority): Ensure fair and effective implementation of District Rules through the Permitting Program (see goals under 3002 Permitting).
    - 2025 Evaluation: Since adoption of the rules on December 18, 2008, the District has utilized the permitting program to implement the rules. Implementation of this program continued in 2025. Specific progress statistics on the permitting program are provided in section 3002 of this report.

- Goal 2 (High Priority): Review and update District Rules and standards at least once every ten years, or more often as needed.
    - 2025 Evaluation: The District revised its permitting fee structure (Rule 9) in 2025. The purpose of this revision is to ensure taxpayer dollars do not pay for permitting expenses for private developments. Government units are still exempt from permitting fees. The District will review the rest of its rules and update as necessary in 2026-2027. As part of this review, the District will also review permitting program effectiveness and identify ways to improve the program.

3002 Permitting

3002 Progress Evaluation Metrics

Success in the Permitting Program will be measured using the following scale:

- 90% - 100% is measured as "Excellent"
- 75% - 89% is measured as "Good"
- 60% - 74% is measured as "Fair"
- less than 60% are measured as "Poor"

The District will utilize a consistent method for evaluating percent compliance with permit requirements which will include standard inspection and reporting forms.

3002 Goals & Evaluation in 2025

- Goal 1 (High Priority): Hold a meeting prior to permit approval for 100% of stormwater management permit applications to maximize efficiency of the application process and reduce variance requests.
    - 2025 Evaluation: The District engaged in virtual **pre-permit meetings and correspondence for 100% of stormwater management permits** in 2025. The District received four stormwater management permit applications in 2025.

- Goal 2 (High Priority): Inspect 90% or more of active permits at least once every two weeks.
    - 2025 Evaluation: Over the course of the year, **28 permits were active** at various times and **staff performed 1,538 site inspections**. In 2022 the District began using wireless tablets and online forms to complete inspection reports, which has improved efficiency. The number of inspections has remained high in order to ensure full coverage of highly active sites, as routine inspections have a positive effect on compliance with District rules. District staff have established and implemented an inspection schedule wherein active permits are inspected approximately once

every week. During the winter months, inspection frequency is reduced in some cases due to construction activity pausing due to snow cover and frozen conditions.

- Goal 3 (High Priority): Inspect 90% or more of permitted best management practices (BMPs) associated with maintenance instruments at least once a year.
    - 2025 Evaluation: The District inspected **146 best management practices** (BMPs) across **83 sites** (some sites have multiple BMPs) under maintenance instruments in 2025 (**inspected 86% of sites with maintenance instruments**). All maintenance instrument holders are still required to perform their own inspections and reporting throughout the year, as detailed in their individual maintenance instruments (see Goal 5 below). The purpose of District staff performing inspections is to assist site managers with how to perform inspections and to personally audit the self-reporting done by maintenance instrument holders. District staff met with maintenance instrument holders and clarified maintenance requirements when necessary.

- Goal 4 (High Priority): Work with permittees to maintain compliance with District rules to achieve an average annual inspection compliance rating of at least 90%.
    - 2025 Evaluation: The average compliance rating of all inspections performed in 2025 is **96%**, **which is measured as "Excellent."** The high frequency of site inspections and consistent presence by District staff helps permittees achieve and maintain compliance.

- Goal 5 (High Priority): Work with maintenance instrument holders to maintain compliance with BMP maintenance instrument requirements to achieve an average annual inspection compliance rating of at least 90%.
    - 2025 Evaluation: In 2025 the compliance rating for maintenance instrument holders was approximately **91% which is measured as "Excellent."** Best management practice (BMP) conditions varied by site, and some BMPs were in better condition than others. Consistent outreach and oversight from the District will help maintenance instrument holders achieve and maintain compliance with maintenance requirements and ensure the BMPs are achieving their purpose.

- Goal 6 (High Priority): Obtain 90% or more annual reports from permitted BMP maintenance instrument holders.
    - 2025 Evaluation: The District received **self-reporting annual reports from 19% (18 out of 96) maintenance instrument holders** (i.e., maintenance declarations for private entities, maintenance agreements for public entities).

      Permits triggering the Stormwater Management rule often require construction of one or more stormwater treatment facilities to comply with District stormwater standards (stormwater volume, rate and water quality). Such facilities constructed in the District include infiltration/biofiltration basins, bioretention basins, retention ponds, swales, permeable pavement, and underground treatment facilities. Owners are required to perform regular inspections and maintenance of the facilities and submit an annual report to the District; public entities have recorded maintenance *agreements* and private entities have recorded maintenance *declarations* requiring this. Self-reporting is required, and the District also performs its own outreach and inspections of BMPs as well.

      The self-reporting rate has historically been low. In the past, the District lacked the capacity to follow up on every report. With recent increased staffing capacity, the District is allocating more staff time to maintenance oversight including email reminders, site visits, and improved resources for site managers. The District developed an online app for annual maintenance reports. Maintenance instrument holders/site managers have the option of filling out a paper/PDF reporting form, or completing the report on the online app. This should further improve reporting rates and BMP compliance. Increased oversight and resources are expected to result in increased self-reporting rates in future years. The online form has also reduced staff time spent on each inspection, allowing more time for outreach.

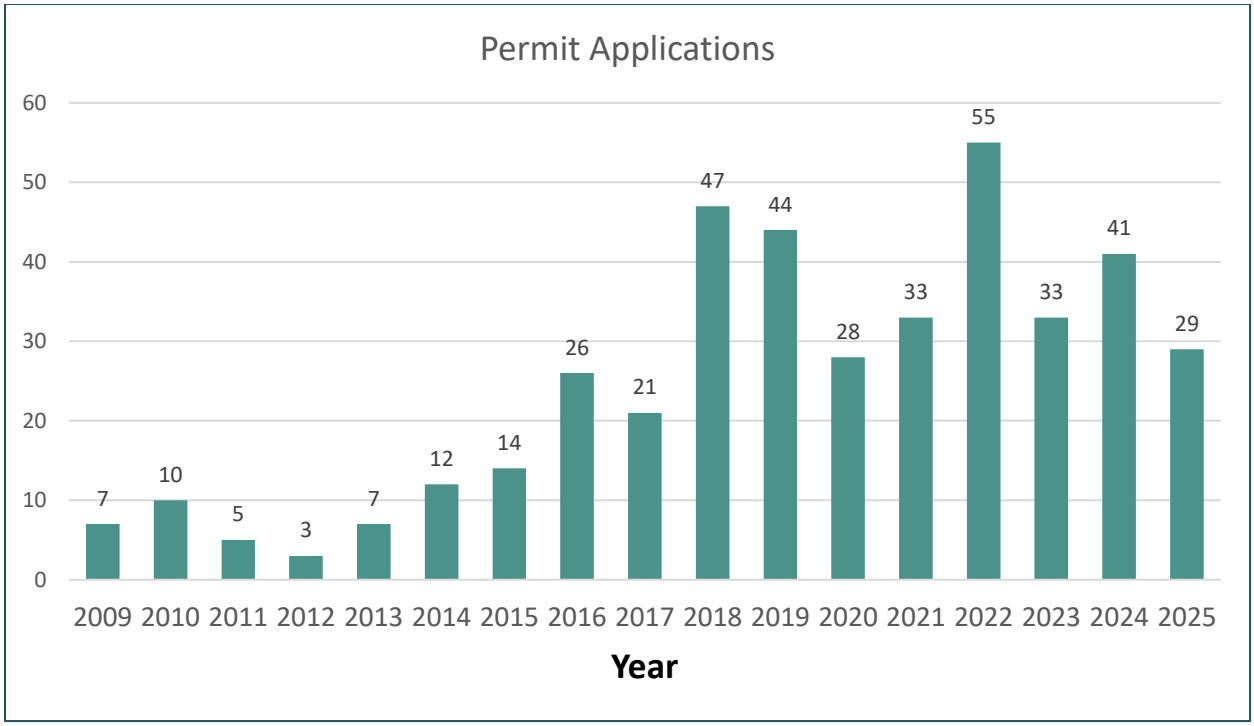


Figure 2. Permit Applications Received

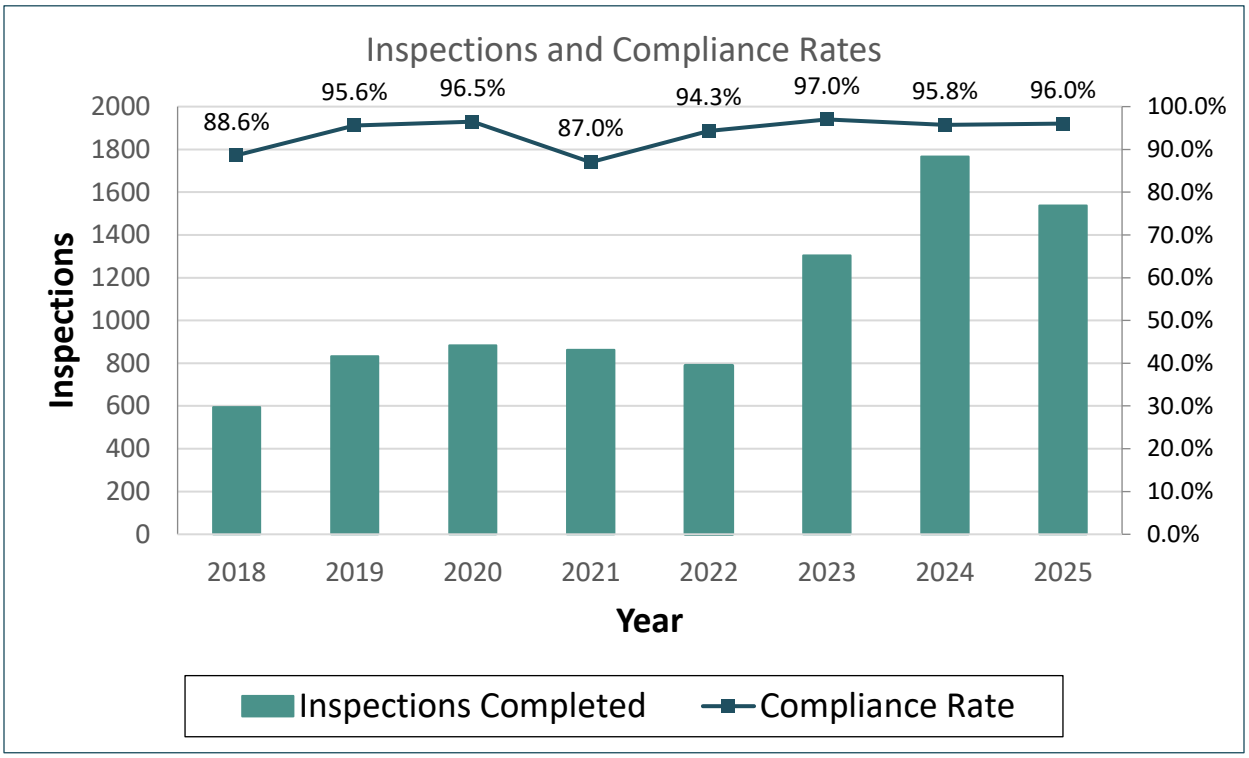


Figure 3. Permit Site Inspections and Compliance Ratio

3003 Monitoring & Data Assessment

3003 Progress Evaluation Metric

Success in the Monitoring & Data Assessment Program will be measured by the completion of monitoring and data evaluation identified in the Comprehensive Monitoring Plan. These data are needed to support the District's activities and evaluate progress toward water quality and resource goals and the quality and consistency of data collected.

3003 Goals & Evaluation in 2025

- Goal 1 (High Priority): Annually perform water monitoring in accordance with the Comprehensive Monitoring Plan to inform future management actions, identify water quality improvement opportunities, and evaluate progress toward goals.
    - 2025 Evaluation: The following section summarizes key information from the 2025 Water Monitoring Report. The full report is available at www.clflwd.org. Section 5000 of the Progress Report evaluates progress toward water resource goals, which entails analysis of monitoring data.

      Overall, the 2025 average growing season showed an improvement in lake water quality compared to 2024. The 2024 monitoring season showed particularly poor water quality because of higher-than-average precipitation resulting in increased stormwater runoff and pollutant loads. For District lakes, the 5-year average water quality continues to show an improvement compared to the 10-year average. Most of the lakes monitored in 2025 received "B" water quality letter grades. Lake Keewahtin had the best water quality with A grades across all the categories.

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

Table 2. Progress Toward District Phosphorus and Secchi Goals

Lake	Total Phosphorus			Secchi Depth		
	Existing 5-year Average TP (2021-2025) (µg/L)	2031 District Goal (µg/L)	Years of Data	Existing 5-year Average Secchi Depth (2021-2025) (ft)	2031 District Goal (ft)	Years of Data
Bone	**24**	30	5	**6.9**	7	5
Comfort	**24.6**	30	5	**6.2**	7	5
Forest (M)	**23.8**	30	5	**6.4**	7	5
Forest Lake (E)	**27.7**	30	5	**6.1**	7	5
Forest Lake (W)	**30**	30	5	**6.2**	7	5
Forest Lake	**27.1**	30	5	**6.2**	7	5
Keewahtin Lake	**11.6**	20	5	**15.2**	10	5
Little Comfort	**34.5**	30	5	**6.9**	7	5
Moody	**42.2**	40	5	**5.5**	4.6	5
School	**39.3**	60	4	**5.9**	3.3	4
Shields	**56.1**	60	5	**6**	4.3	5

N = number of years data has been collected within the 2021-2025 period.

= meets goal; ## = does not meet goal

3004 Nonpoint Source Pollution Abatement (Cost-Share) Program

3004 Progress Evaluation Metrics

Success in the Non-Point Source Pollution Abatement Program will be measured in two ways: by the BMP *outcomes* achieved and by the level of *output* of District materials, site visits etc. While BMP *outcomes* are the ultimate achievements for non-point source pollution abatement efforts, program *outputs* tell the story of how the District works toward those outcomes.

Priority BMP *outcomes* include, but are not limited to:

Reduction in phosphorus and total suspended solids loading to District lakes, streams and wetlands. Remaining phosphorus load reductions for priority District lakes based on implementation of projects completed or grant-funded through 2020 to meet long-term goals are as follows:

- Moody Lake: 169 lb/yr
- Bone Lake: 50 lb/yr
- Birch Lake: 323 lb/yr
- School Lake: 477 lb/yr
- Little Comfort Lake: 366 lb/yr
- Shields Lake: 0 lb/yr
- Lake Keewahtin: 0 lb/yr
- Forest Lake: 155 lb/yr
- Comfort Lake: 193 lb/yr

Metrics for measuring program *outputs* include, but are not limited to:

- Cumulative square footage of deep-rooted native vegetation along lake shorelines and streambanks
- Number of site visits performed
- Number of cost-share grants awarded
- Number of practices installed

3004 Goals & Evaluation in 2025

- Goal 1 (High Priority): Implement program to achieve shoreline and streambank restoration and maintenance goals under sections 5200 Lakes and 5300 Streams.
    - 2025 Evaluation: In 2025, the District continued to implement its cost-share programs, with support from Washington Conservation District (WCD) and Chisago Soil and Water Conservation District (CSWCD). In 2025, CLFLWD staff performed 61 initial site visits to engage with residents.

      As a result of those site visits,
        - 13 Mini Grants were approved
        - 3 Clean Water applications were approved
        - 15 residents participated in the payment program
        - 15 residential soil tests were conducted
        - 670 linear feet of shoreline restored
        - 1.6 acres of native plantings

- Goal 2 (High Priority): Reach out to 100% of high priority agricultural landowners identified in District diagnostic studies.
    - 2025 Evaluation: The District has reached out to 100% of high priority agricultural landowners, and has continued to engage them in efforts to promote conservation agriculture.

- Goal 3 (High Priority): Establish a farmer-led council to inform and influence agricultural land management practices.
    - 2025 Evaluation: In 2021 the District established a farmer-led council to assist in outreach and serve in an advisory role for the District's agricultural programs. The District continues to hold meetings with regular attendance by farmers from seven different operations ranging in size from 20 to 900 acres, and a diversity of enterprises including conventional corn and beans, heritage winter wheat, and grass-fed cattle. All farmer-led council members are in the process of implementing conservation agricultural best management practices, or have already done so. Practices include no-till planting, cover crops, managed rotational grazing, and conservation cover. Farmer-led council members are important members of the local farming community and have made important contributions to the uptake of conservation farming practices.

- Goal 4 (High Priority): Annually coordinate with District communities on potential Municipal Stormwater Remediation project partnerships.
    - 2025 Evaluation: District staff meet monthly with City of Forest Lake staff and quarterly with staffs of Scandia and Wyoming. Inter-staff communications also occur regularly in between coordination meetings. In 2025 the District continued working with local cities and counties to evaluate stormwater treatment practices associated with upcoming roadway projects. Such practices may go above and beyond minimum stormwater treatment requirements.

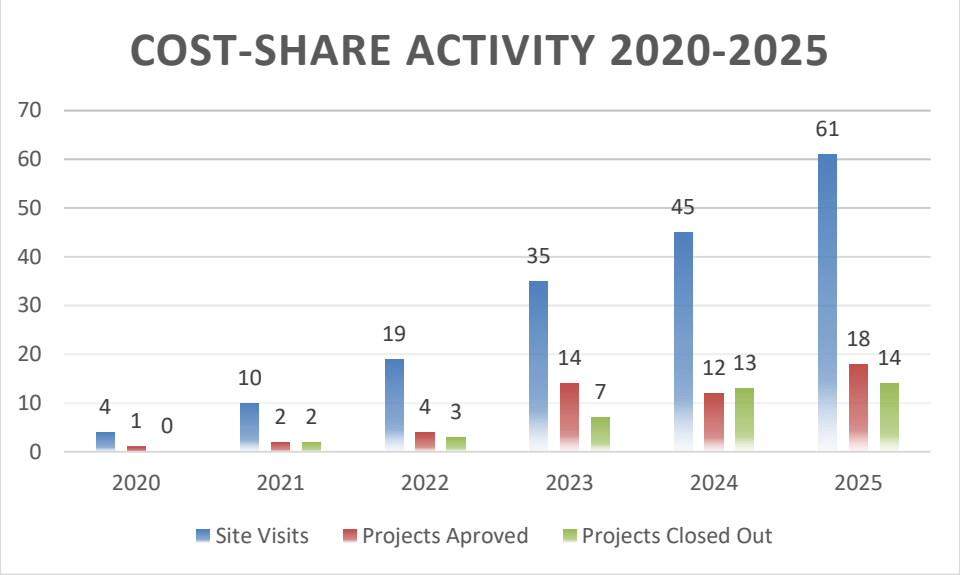


Figure 4. Cost-Share Activity 2020-2025

3005 Education & Outreach

3005 Progress Evaluation Metrics

Success in the Education and Outreach Program will be measured in two ways: by the behavior change outcomes achieved for well-defined, targeted campaigns and by the level of output of District materials, events, programs etc. While behavior change outcomes are the ultimate achievements for education and outreach efforts, program outputs tell the story of how the District works toward those outcomes. As part of this Plan, the District will establish current baselines for the following metrics against which it will measure progress. Potential methods for establishing baselines include photographic inventories, regulatory site inspections, shoreline surveys, and public questionnaires/surveys.

Priority behavior change *outcomes* relate primarily to Goal 1 and include, but are not limited to:

- Reduced instances of yard waste disposal in wetlands, ditches and other water resources and/or conveyances
- Reduced instances of noncompliance with District rules and regulations which may include performance of work without required permits, improper erosion and sediment control practices, violation of lake/stream/wetland buffer requirements
- Increased instances of deep-rooted native vegetation along lake shorelines and streambanks
- Reduced chloride usage whether through road/sidewalk salt application, water softener usage, and/or other vectors

Metrics for measuring program *outputs* relate to both Goal 1 and Goal 2 and include, but are not limited to:

- Increased number of outgoing communications to the public
- Increased number of users reached by social media posts
- Increased number of new email addresses added to the District's notification list
- Increased number of District-sponsored meetings and events
- Increased attendance numbers for District-sponsored meetings and events
- Increased participation numbers for District programs such as cost-share grants under the Nonpoint Pollution Abatement Program (3004)
- Increased audience diversity engaging in District-sponsored meetings, events and programs

Outgoing communications will take several forms including direct mail campaigns, newsletters, brochures, publications in print media, social media posts, website updates, and staff and board attendance at meetings held by groups such as lake associations, schools, and nature centers. Gross total of outgoing messages will be considered as well as number of different types of media avenues. As in all its initiatives, the District will utilize adaptive management to ensure outreach methods evolve and adapt to suit audiences' needs. Overall, the District's communications with the public should be frequent and consistent.

3005 Goals & Evaluation in 2025

- Goal 1 (High Priority): Increase public knowledge of and appreciation for human impacts to surface water, groundwater and natural resources to increase target audiences' behaviors that positively impact water resources.
- Goal 2 (High Priority): Communicate District programs, projects and other initiatives to the public in a clear, consistent and equitable manner.
    - 2025 Evaluation for Goal 1 and 2: The District's outreach methods are categorized using standard approaches to deliver communication, outreach, and education and drive engagement. These methods also balance and utilize Adaptive Management as necessary to make purposeful and informed improvements to processes and actions. These methods include:
        - **Community Education Workshops and Classes:** In 2025, 492 people participated in 28 workshops and classes. These events and engagements were made possible with partnerships from Hardwood Creek Library, Chisago Lakes Community Education, and Forest Lake Community Education. In 2025, the CLFLWD was one of three finalists for the Minnesota Watersheds Program of the Year Award for the Community Education Partnership Program.

- **Events and Tours:** The District participated in a variety of events and tours in 2025 which were a combination of District-sponsored events and participation in partner events. The District participated in the following events:
    - Presented and hosted an information booth at the three major lake association's annual meetings.
    - Participated in the Forest Lake Art in the Park with an information booth each Tuesday in June, July, and August.
    - Hosted two natural shoreline tours this year: North Shore Park Open House and Bone Lake Pontoon Tour.
    - Hosted two Floodplain Resiliency events: Community Open House and Local Governmental Unit Open House.
    - Presented two sessions at the annual Chisago County Master Garden Expo, Many Minnesota Milkweeds and Landscaping Septic Systems.
    - Hosted an information booth at the annual Lakes Area Expo.
    - Hosted the Bixby Park/8th Avenue neighborhood meeting.
    - Presented an information station at the Chisago WaterFest focused on shoreline and native plant habitat.
    - Hosted four events as part of the District's lecture series, Watershed Connections.
    - Hosted the Ice Ridge Information Workshop, attended by 261 community members.
    - Hosted two fall alum treatment events for Forest Lake, an informational meeting and an on-site open house.
- **Technology Platforms (Website and Social Media):** The District updated its website in 2025 to increase security and improve navigability. The District tracked website analytics including 928 users and 3,368 views on average per month. The District also put a high priority on engaging social media audiences in 2025 which included 2,845 average monthly page views and a total of 528 followers on social media.
- **Social Marketing (Constant Contact):** The District utilized Constant Contact for digital and email marketing in 2025. The largest use of this tool was distributing the board meeting materials. In 2025, the District sent 292 unique email events to a variety of subscribers, resulting in a total of 11,612 sends. Out of the 11,612 sends, 4,998 of those emails were opened, and 483 clicks were made on the content. 84% of the opens and clicks were from a desktop versus 16% from a mobile device.

3006 Interagency Communication

3006 Progress Evaluation Metric

Success in the Interagency Communication Program is measured in two ways:

Success in technical resource sharing is measured by the use of District data and information by other parties. Potential methods for establishing a baseline for this metric include ongoing partner meetings, review of partner websites and other materials, and establishment of interagency workgroups for specific programs (e.g., permitting).

Success in communication will be measured by the percent of District initiatives and projects that are conducted in partnership or cooperation with another agency and the distribution:

- Excellent = 70-100%
- Good = 50-69%
- Fair = 30-49%
- Poor < 30%

3006 Goals & Evaluation in 2025

- Goal 1 (High Priority): Coordinate efforts with partners to ensure the most efficient and cost-effective use of funds for water resource management.
    - 2025 Evaluation: It is estimated that at least 70% (likely more) of the District's activities are coordinated with another organization or agency. See Table 3 for more detail on coordinated activities.

- Goal 2 (High Priority): Act as the local office for facilitating public input on water resource-related issues, react in a timely manner to the concerns of citizens and operate in an open and transparent manner.
    - 2025 Evaluation: In 2025 District staff performed several activities in order to facilitate public input on water resource-related issues, to react in a timely manner to the concerns of citizens, and to operate in an open and transparent manner.
        - Responded to calls/emails, and performed several site visits/field investigations. For example, District staff received phone calls regarding suspected flowering rush growing along private shorelines, and staff visited these sites to confirm the sighting, clip seed heads, and mark the location for future herbicide treatments.
        - Held multiple outreach events and workshops in order to proactively inform the public and seek public opinion on matters include floodplain resiliency and water quality improvement projects.
        - Emailed monthly communications to local lake associations with updates on District activities. When invited, staff would also attend lake association meetings to share aquatic invasive species information and other important updates.
        - Collected and shared water quality monitoring data (annual monitoring reports) with local residents.
        - Routinely monitored and shared lake water level data with lakeshore residents.

- Goal 3 (High Priority): Participate in the evaluation of Total Maximum Daily Load (TMDL) studies and implementation of projects and programs to address impairments of waters within the District.
    - 2025 Evaluation: In 2025 the District continued to make progress toward de-listing impaired waters, with a focus on nutrient impaired lakes. Bone Lake was removed from the impaired waters list in 2024, which was the first in a series of anticipated de-listings over the next few years. Comfort Lake is slated to be delisted in 2026. See Section 5200 Lakes for an in-depth evaluation of nutrient reductions and progress toward de-listing impaired lakes.

- Goal 4 (High Priority): Work with Lower St. Croix River partners to achieve the goals of Lower St. Croix One Watershed One Plan, including associated Total Maximum Daily Loads (TMDLs) and Watershed Restoration and Protection Strategies (WRAPS).
    - 2025 Evaluation: The District continued to be an active partner in the Lower St. Croix Partnership in 2025. CLFLWD managers participated on the Policy Committee. CLFLWD staff participated on the Advisory Committee, Steering Committee, Planning Team, and mid-point evaluation workgroup. The Partnership approved several projects and initiatives for Watershed Based Implementation Funding grant dollars, which help make progress toward measurable water quality goals including TMDLs and WRAPS. More information, including a detailed annual report on the Lower St. Croix Partnership is available at www.lsc1w1p.org.

Ongoing Interagency Communication

The District coordinates with other agencies on a regular basis in order to implement the majority of its programs and projects. **At least 70%** (likely more) of the District's activities are coordinated with another organization or agency. This is measured as "Excellent" according to the metric provided in the Watershed Management Plan. Below is a list of District activities that were coordinated with other agencies in 2025.

Table 3. Interagency Coordinated Activities in 2025

Project/Initiative	Partnering Organization(s)	Description
Permitting Program	City of Forest Lake, City of Wyoming, City of Scandia, Chisago County Zoning Department (for Chisago Lake Twp), Metro Permitting Workgroup	Meetings and communications regarding development, staff attend regular meetings with Forest Lake, Scandia, and Wyoming city staff.
Monitoring and Data Assessment Program	Local volunteers, Metropolitan Council, MN Pollution Control Agency	Citizen Assisted Monitoring Program (CAMP), Citizen Assisted Tributary (CAT) Monitoring Program, impairment reviews and de-listing.
Non-Point Source Pollution Abatement (Cost-Share) Program & Shoreline Restorations	Washington Conservation District, Chisago Soil and Water Conservation District (SWCD), City of Forest Lake	Partnered with SWCDs for technical assistance/site visits. Partnered with City of Forest Lake to complete shoreline restorations in two city parks: North Shore Circle Park and Shields Lake Park.
Education and Outreach Program	Hardwood Creek Library, Forest Lake Area Schools, Lakes International Language Academy, Bone Lake Association, Comfort Lakes Association, Forest Lake Lake Association	Community education workshops, local events, mailers and outreach materials, presentations at local meetings.
Diversity, Equity, Inclusion & Accessibility	Watershed Equity Alliance	District staff participate in an interagency workgroup to share equity strategies to improve the District's level of service to all its constituents.
One Watershed, One Plan: Lower St. Croix Watershed Partnership	Anoka SWCD, Brown's Creek WD, Carnelian-Marine-St. Croix WD, Chisago County, Chisago SWCD, Isanti County, Isanti SWCD, Middle St. Croix WMO, Pine County, Pine SWCD, South Washington WD, Valley Branch WD, Washington County, Washington Conservation District	Participating partner on Policy Committee, Advisory Committee, Steering Committee, Planning Team, and mid-point evaluation workgroup.
Research Program	St. Croix Watershed Research Station, University of St. Thomas, University of MN, MN Aquatic Invasive Species Research Center	Deep sediment cores, alum treatment monitoring, aquatic invasive species research updates
Grant Research and Preparation Program	City of Forest Lake, City of Wyoming, City of Scandia, Chisago County, Washington County, Bone Lake Association, Comfort Lakes Association, Forest Lake Lake Association, Great River Greening	Coordination on grant applications/projects, and in some cases lake associations provided letters of support for CLFLWD grant proposals
Watercraft Inspection Program and AIS Prevention & Management	Chisago County/Chisago Lake Improvement District; City of Forest Lake, Forest Lake Lake Association, Comfort Lakes Association, Bone Lake Association, City of Scandia, Scandia-Marine Lions Club; Washington County	Jointly managed program; funding contributors; grant agency

Project/Initiative	Partnering Organization(s)	Description
Enhanced Street Sweeping	City of Forest Lake; City of Wyoming	Continued coordination/communication regarding ongoing sweeping programs
Multiple Topics	Washington County Water Consortium, Chisago Water Plan Policy Team, DNR Shoreline Workgroup, AIS Behavior Change Design Workshop, MN Watersheds Annual Meeting, Metro Carp Management Group, MN Association of Government Communicators	District staff and managers participate in a number of additional collaborative meetings for multiple topics.

3007 Research

3007 Progress Evaluation Metric

Success in the Research Program will be measured by the number of updates on current research received by the Board and on the number of research initiatives completed by the District or in partnership with the District. Completion of four updates and one research project per year is anticipated.

3007 Goals & Evaluation in 2025

- Goal 1 (High Priority): Initiate, advance or support at least one research initiative each year.
    - 2025 Evaluation: The District participated in a University of Minnesota alum treatment research project in 2025. The research project involved analysis of nitrogen cycling in Forest Lake before and after in-lake alum treatment. The study found that both phosphorus and nitrogen generally decrease in a lake after an alum treatment, which can aquatic vegetation. Results were presented at the August 14, 2025 regular board meeting.
- Goal 2 (High Priority): Provide at least four updates to the Board of Managers on research topics, whether initiated by the District or other organizations, each year.
    - 2025 Evaluation: In 2025, District staff provided nine updates to the Board on current research initiatives. Updates were provided at board meetings on the following dates.
        - February 27, 2025 – Update in Administrator's Report on coordination with University of Minnesota and the University of St. Thomas regarding lake user perception survey
        - April 24, 2025 – Update in Administrator's Report on lake user perception survey
        - May 25, 2025 – Updates in Administrator's Report on lake user perception survey, visitor experiences, iron enhanced sand filter performance, erosion and sediment control practices
        - July 24, 2025 – Updates in Administrator's Report on lake user perception survey, alum treatment/nitrogen cycling, and zebra mussel sampling research
        - August 14, 2025 – Presentation at regular board meeting on Forest Lake Alum Treatment and Nitrogen Cycling research project
        - August 28, 2025 – Update in Administrator's Report on alum treatment research monitoring
        - September 25, 2025 – Updates in Administrator's Report on alum treatment research monitoring, iron enhanced sand filter research, and zebra mussel sampling research
        - October 23, 2025 – Updates in Administrator's Report on alum treatment/nitrogen cycling, zebra mussel sampling research, and MN Aquatic Invasive Species Research Center showcase
        - November 20, 2025 – Update in Administrator's Report on alum treatment/nitrogen cycling

3008 Measurement of Progress

3008 Progress Evaluation Metric

Success in the Measurement of Progress Program will be based on completion of the annual progress report and 5-year comprehensive progress review.

3008 Goals & Evaluation in 2025

- Goal 1 (High Priority): Annually complete a detailed Progress Report evaluating the previous year's progress toward all goals and metrics in this Plan.
    - 2025 Evaluation: The draft 2025 Progress Report was distributed to the Board of Managers in the March 26, 2026 regular board meeting packet.

- Goal 2 (High Priority): Every five years perform a comprehensive review of District goals and metrics to evaluate achievability and course-correction actions, if needed.
    - 2025 Evaluation: The District began preparations for a mid-point plan review and Performance Review & Assistance Program (PRAP) evaluation to be completed in 2026.

3009 Grant Research & Preparation

3009 Progress Evaluation Metric

Success in the Grant Research & Preparation Program will be measured by the number of grant applications submitted to new grant programs, total grant dollars awarded per year, and percentage of required grant reports submitted on time.

3009 Goals & Evaluation in 2025

- Goal 1 (High Priority): Obtain grant awards in an amount at least equal to 25% of the District's levy, as measured on a 3-year average.
    - 2025 Evaluation: The latest 3-year grant awards average exceeds 25% of the 3-year average levy.

Fiscal Year	Grant Awards*	Levy	Grant/Levy
3-Year Average	**$1,886,793**	**$1,716,064**	**110%**
2023	$2,886,003	$1,622,500	178%
2024	$876,692	$1,719,850	51%
2025	$1,897,684	$1,805,843	105%

**Grant awards do not necessarily equate to actual grant revenue for the fiscal year. Every grant program has a different payment schedule, and payments are dependent on project implementation timelines. Earned grant revenue is tracked closely against the current year's budget.*

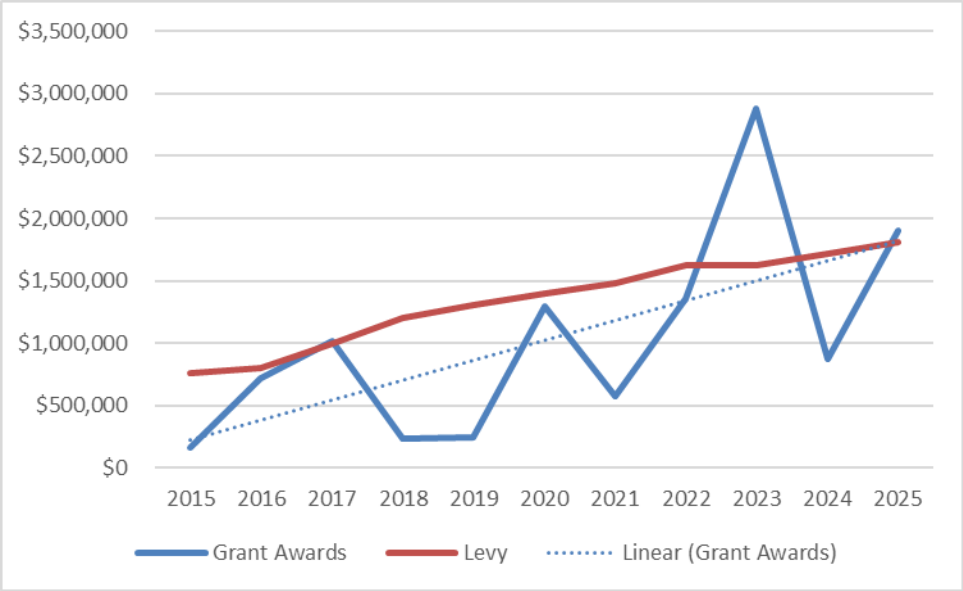


Figure 5. Grant Awards and District Levy

- Goal 2 (High Priority): Research and apply to at least one new grant program each year.
  - 2025 Evaluation: In 2025 the District submitted grant applications to seven new grant programs:
    - Community Innovation Grant: Applied to the Bush Foundation's Community Innovation Grant to perform outreach, shoreline restorations, and regulatory review.
    - No Child Left Indoors Grant: Applied to the MN Department of Natural Resources No Child Left Indoors Grant to purchase fishing kits and provide outreach to local schools.
    - ReLeaf Community Forestry Grant: Applied to MN Department of Natural Resources ReLeaf Community Forestry Grant to implement tree plantings through the District's cost-share program.
    - Keep it Clean Grant: Applied to the Board of Water and Soil Resources' Keep it Clean Grant for ice-out lake cleanup events in partnership with local lake associations.
    - Green Infrastructure Grants: Applied to the Board of Water and Soil Resources' Green Infrastructure Grant for implementation of a project to improve water quality on Comfort Lake.
    - Mid-Point Evaluation Grant: The District will receive some grant funding through the Board of Water and Soil Resources' Mid-Point Evaluation Grant for work with the Lower St. Croix Watershed Partnership.
    - Fishers & Farmers Partnership: Applied to National Fish Habitat Partnership's Fishers & Farmers Partnership Grant for farmer-led council expansion and agricultural best management practices to promote water quality and fish habitat.

- Goal 3 (High Priority): Complete grant reporting in accordance with grant contracts to ensure timely disbursement of grant funds.
  - 2025 Evaluation: In 2025 District staff completed grant reporting for 100% of its active grants on time. The District had 18 active grants in 2025.

Additional Information

The Grant Research and Preparation program is a key component to the District's implementation of its programs and capital improvement plan. In order to balance its local tax levy, the District seeks additional revenue from multiple grant sources each year. Additionally, the District funds its permitting program through permit fees and coordinates with partners to leverage additional funding for other programs and projects.

Table 4 shows CLFLWD expenses funded by grants and/or other sources of revenue such as fees and partner contributions. The remainder was funded by the District's tax levy and/or reserve fund. Grant awards and earned grant revenues differ because oftentimes large grants fund projects that span multiple years. A grant may be awarded one year, and actual revenues are earned over the following 2-5 years.

Table 4. Grants & Other Revenues as Percentage of Total Expenditures

Year	Total Yearend Expenditure	Earned Grants & Other Revenues	Percentage of Total Expenses Funded by Grants/Other
3-Year Average	**$4,116,406**	**$1,690,374**	**38%**
2023	$4,081,972	$1,456,408	36%
2024	$2,771,400	$643,715	23%
2025 unaudited	$5,495,845	$2,971,000	54%

Grant-funded projects are key to the District's ability to make progress toward nutrient reduction goals and water quality improvements. The following is a list of in-progress and recently completed grant-funded projects. See Appendix B for a map and more information on District water quality improvement projects.

- Moody Lake: Wetland Rehabilitation Project, Whole-Lake Alum Treatment, Capstone Projects, Subwatershed Assessment Agricultural Best Management Practice Implementation
- Bone Lake: Southeast Wetland Restorations, Subwatershed Assessment Agricultural Best Management Practice Implementation, Northeast Legacy Wetland Restoration, Fish Barrier Retrofits, Bone Lake South Property Acquisition and Restoration
- Shields Lake: Stormwater Reuse Project, Whole-Lake Alum Treatment, City Park Shoreline Restoration
- Forest Lake: Hilo Lane Iron Enhanced Sand Filter Project, Wetland Treatment Basin/3rd Lake Pond Project, Castlewood Cropland Conversion, County Road 50 Iron Enhanced Sand Filter, Washington Judicial Ditch 6 Wetland Restoration, Forest Lake Internal Load Feasibility Study, Forest Lake Alum Treatment, North Shore Trail Nature Area Acquisition and Restoration
- School Lake/Little Comfort Lake: School Lake Agricultural Best Management Practices, Heath Iron Enhanced Sand Filter
- Comfort Lake: Sunrise River/Highway 61 (Tax Forfeit) Wetland Restoration, Target Stormwater Retrofits Project, Bixby Park Water Quality Project; Comfort East Pond Restoration
- Multiple Lakes: Enhanced Street Sweeping – partnership effort with CLFLWD, Washington Conservation District, Carnelian-Marine-St. Croix WD, Cities of Forest Lake, Wyoming, Scandia; GreenCorps Host Site; Conservation Corps Host Site; Conservation Corps Crew Labor; Aquatic Invasive Species Prevention & Management; Floodplain Vulnerability Assessment, Floodplain Resilience Project Modeling & Concept Design; Shoreline Resiliency Planning & Outreach;

Clean Water Fund

The District was awarded two FY2025 Clean Water Fund competitive grants to plan and implement water quality improvement projects (Table 5).

Table 5. FY2025 Clean Water Fund Grant Awards

Grant ID and Project	Application Score	Application Ranking	Grant Request	Grant Award
C25-0188 Heath Iron Enhanced Sand Filter (Projects & Practices grant program)	81.32	15th out of 39	$1,499,000	$1,499,000
C25-0189 Sunrise River Headwaters Project Development (Accelerated Implementation Grant program)	80.64	12th out of 17	$118,000	$118,000
		Total	**$1,617,000**	**$1,617,000**

Statewide, the District is the largest recipient of Clean Water Fund Project and Practices grants over the past 12 years with a cumulative award of $6.6 million (17 grants awarded between FY14-25). Additionally, CLFLWD proposals have been awarded the most cumulative points by the grants review committee over the years. The grant review committee assigns points to each application according to predetermined scoring criteria which mainly focus on prioritization, targeting, measurability and cost-effectiveness. This means that the District's projects have not merely had the highest requested dollar amounts over the years, but have consistently ranked highly in project quality and applicability to the grant program criteria. Table 6 compares cumulative grant dollars and application points for the top 10 dollars winners since 2014. See also Appendix A for more detail.

Table 6. Clean Water Fund Projects and Practices Grant Award Comparison (Top 10)

	Organization	Grant Dollars Awarded Total Projects and Practices (FY 2014-2025)	Application Points Total Projects and Practices (FY2014-2025)
1	**Comfort Lake-Forest Lake WD**	**$6,656,334**	**1,367**
2	Becker SWCD	$5,233,710	952
3	Benton SWCD	$3,658,210	1,010
4	Bois de Sioux WD	$3,355,010	504
5	Crow Wing SWCD	$3,335,000	519
6	Coon Creek WD	$3,094,023	699
7	Vermillion River JPB/JPO	$3,023,950	1,012
8	Chisago SWCD	$2,952,500	1,337
9	Rice Creek WD	$2,732,104	438
10	Anoka Conservation District	$2,477,200	959

3010 Operations & Maintenance

3010 Progress Evaluation Metric

Success in the Operations & Maintenance Program will be measured by achieving the designed lifespan of each project and facility. It will also be measured by the development of a Comprehensive Operations & Maintenance Plan and by the successful implementation of activities included therein. The District will annually prepare a summary of actual inspections and maintenance activities in comparison to scheduled inspections and maintenance activities.

3010 Goals & Evaluation in 2025

- Goal 1 (High Priority): Ensure all District projects and facilities achieve their designed lifespan.
    - 2025 Evaluation: Inspected and maintained all District projects and facilities to ensure they are performing as designed and expected to achieve their designated lifespan. Projects and facilities include fish barriers, aeration systems, wetland restorations, water level control structures, iron enhanced sand filters, stormwater reuse system, and District-owned/maintained properties.

- Goal 2 (High Priority): Develop a Comprehensive Operations & Maintenance Plan.
    - 2025 Evaluation: The District has a Comprehensive Operations & Maintenance Plan which inventories projects and guides O&M inspections and activities. Each project also has an individual O&M plan with greater detail. The Plan is updated as new projects and facilities are constructed. Permitted best management practices (BMPs) are under the ownership of the maintenance instrument holders; see Section 3002 of this report for an evaluation of permitted BMP inspections and maintenance.

- Goal 3 (High Priority): Complete inspections and maintenance in accordance with the Comprehensive Operations & Maintenance Plan.
    - 2025 Evaluation: The District completed inspections and maintenance in accordance with the Comprehensive Operations & Maintenance Plan in 2025.

3011 Aquatic Invasive Species Prevention & Management

3011 Progress Evaluation Metrics

- Success in preventing the spread of new and existing aquatic invasive species (AIS) populations will be measured by employing watercraft inspectors at public launches for at least 3,500 hours per year; performing at least 12 other AIS education and outreach activities per year such as distribution of information, events and meeting attendance; performing at least one early detection survey per week at each public boat launch during the open water season; and performing at least one invasive plant delineation survey per species per year on each lake in accordance with the Comprehensive AIS Prevention & Management Plan.
- Success in managing existing populations of AIS to improve water quality will be measured by maintaining carp densities below their adverse impact threshold (100 kg/ha) and controlling curly-leaf pondweed in areas exceeding moderate growth conditions (100-280 stems/m^2). The District will coordinate with MN Department of Natural Resources to perform carp population surveys. The District will perform annual curly-leaf pondweed delineation surveys in lakes with known nuisance populations.
- Success in managing existing populations of AIS to improve native plant diversity will be measured by maintaining AIS densities below their adverse impact thresholds which will be described in the Comprehensive AIS Prevention and Management Plan. As part of this Plan, the District will establish adverse impact thresholds which will factor in ecological integrity (e.g., impacts to native plant and animal populations) and public recreation (e.g., impacts to swimming/boating etc.).
- Success in providing guidance and technical support to those who manage AIS for recreational benefits will be measured by attending at least one meeting of each lake association per year and performing at least two education and outreach activities per year such as distribution of information. An example of such information distribution may be dissemination of native plant protection facts via emails to lake associations and social media postings at the beginning of open water season.

3011 Goals & Evaluation in 2025

- Goal 1 (High Priority): Continue use and refinement of the District's prevention and early detection & rapid response initiatives to reduce the risk of new aquatic invasive species (AIS) introductions to District waterbodies and prevent the spread of existing infestations to other waterbodies.
    - 2025 Evaluation: No new AIS introductions were observed in 2025, despite several boaters coming from lakes with spiny waterflea and starry stonewort. Prevention, early detection and rapid response initiatives in 2025 included:
        - **Watercraft Inspections:** 3,563 watercraft inspection hours performed in 2025 at District boat launches including Bone Lake, Comfort Lake, and Forest Lake (3 basins). Inspectors performed 6,053 inspection surveys over the course of the season.
        - **Outreach Activities:** Communication with lake associations, AIS-related posts on Facebook, posted AIS treatment public notices on the District's website, handed out AIS informational materials at Forest Lake Arts in the Park events, mailed an informational packet regarding flowering rush to Forest Lake residents, gave watercraft inspectors informational items to hand out at boat launches including lake info pamphlets, AIS identification cards, herbicide treatment notices, and job advertisements.
        - **Early Detection Surveys:** Watercraft inspectors performed regular early detection surveys at public boat launches during the open water season.
- **AIS Delineations:** Performed at least one invasive plant delineation survey per species per year on each lake in accordance with the AIS Prevention & Management Plan.

- Goal 2 (High Priority): Manage existing populations of AIS to reduce internal phosphorus loading.
    - 2025 Evaluation: The District coordinated treatment of curly-leaf pondweed 2025. Depending on growth density, curly-leaf pondweed is estimated to result in an annual phosphorus release between one and seven pounds per acre (McComas).

- Goal 3 (High Priority): Manage existing populations of AIS to improve native plant diversity by managing AIS populations that pose a risk to native plant health.
    - 2025 Evaluation: The District managed curly-leaf pondweed, flowering rush, and purple loosestrife in 2025. The MN Department of Natural Resources (DNR) regulates treatment of AIS. DNR's goal of invasive plant management is to minimize harmful effects caused by invasive plants while also protecting the natural resources and their use in the State. CLFLWD adheres to DNR regulations with all of its AIS treatments in order to avoid undue harmful impacts to native aquatic plants. The District coordinates with DNR on the scheduling and performance of fish surveys within District lakes in order to keep track of both native and invasive fish populations.

- Goal 4 (High Priority): Ensure ecological integrity is protected by providing guidance and technical support to other organizations and residents who manage AIS for recreational benefits.
    - 2025 Evaluation: All herbicide treatments are reviewed and regulated by the MN Department of Natural Resources (DNR). The District altered its curly-leaf pondweed treatment plan on Forest Lake in 2025 to accommodate fish stocking by the DNR. The District used a different type of herbicide to treat curly-leaf pondweed, which would not impact the fish stock.

Additional Information - Reports

The following yearend reports and summaries were completed for the year 2025 and are available at www.clflwd.org.

- District-Wide: 2025 AIS Report, 2025 Watercraft Inspection Program Report, nonnative phragmites tracking and reporting
- Moody Lake: winter aeration system to promote gamefish survival, curly-leaf pondweed surveys, native aquatic plant transplant project
- Bone Lake: curly-leaf pondweed surveys, Eurasian watermilfoil surveys, zebra mussel detection surveys
- Little Comfort Lake: curly-leaf pondweed surveys, AIS tracking and early detection survey including Eurasian watermilfoil
- Shields Lake: winter aeration system to promote gamefish survival, curly-leaf pondweed surveys and treatment
- Lake Keewahtin: aquatic plant point intercept survey, purple loosestrife assessment
- Forest Lake: curly-leaf pondweed surveys and treatment, Eurasian watermilfoil surveys, flowering rush surveys and treatments, purple loosestrife assessment, zebra mussel monitoring, creation of plant harvester map to avoid AIS patches
- Comfort Lake: curly-leaf pondweed surveys and treatment, Eurasian watermilfoil surveys, zebra mussel monitoring, carp survey

3012 Land Acquisition & Management – See 6000 Series

3013 Watershed Planning & Resiliency

3013 Progress Evaluation Metric

Progress in the Watershed Planning & Resiliency Program will be measured by the inclusion of resiliency planning information in the District's annual planning and budgeting process, and by the development and implementation of an emergency response plan.

3013 Evaluation in 2025

- Goal 1 (High Priority): Incorporate climate and flooding resiliency into annual District planning and budgeting efforts.
  - 2025 Evaluation: This initiative is ongoing. See Section 5100, Goal 2 for information on the Floodplain Resilience Action Plan.

- Goal 2 (High Priority): Develop an emergency response plan for the District.
  - 2025 Evaluation: The District completed the Crisis Communication Plan in 2024 which it will review annually.

5100 FLOODPLAIN

5100 Progress Evaluation Metrics

99 ac-ft of storage added District-wide.

Floodplain Vulnerability Assessment and hydrologic & hydraulic (H&H) modeling completed; results provided to counties and District communities.

Annual check-in with District communities' vulnerability planning.

5100 Evaluation in 2025

Goal 1 (High Priority): Reduce or mitigate flooding in areas with known flooding and/or high water problems by achieving the interim measurable goal of increasing water storage by an additional 99 ac-ft (or 0.16 inches over 7,397 acres of upland) over the next 10 years (2022-2031) based on the Lower St. Croix 1W1P. The District will determine LMD-specific measurable goals from modeling floodplain conditions under future rainfall scenarios.

- 2025 Evaluation: Storage added prior to 2021 (totaling 65 ac-ft) is not counted toward the 99 ac-ft goal. Completed and in-progress projects, which count toward 99 ac-ft goal are listed below. The District is in the process of prioritizing and targeting additional water storage projects to fully achieve this goal.
  - Tax Forfeit Wetland Restoration: 26.3 ac-ft (project completed in 2023)
  - Bone Lake Northeast Legacy Wetland Restoration: 3.5 ac-ft (project completed in 2022)
  - WJD-6 Wetland Restoration: 8.7 ac-ft (project completed in 2024)
  - Moody Lake Capstone Projects: 1.3 ac-ft (project completed in 2024)
  - Bone Lake South Property Wetland Restoration TBD ac-ft (project in progress 2026-2030)
  - **Total: 39.8 ac-ft**

Goal 2 (Medium Priority): Maintain and improve community preparedness and emergency response capacity to flooding and/or high water problems by sharing floodplain modeling and mapping results under future climate conditions with counties and District communities.

2025 Evaluation: The District has finished updating its hydrologic & hydraulic (H&H) model District wide, and has shared the updated model with local partners. In 2025, the District completed a draft Floodplain Resilience Action Plan identifying high flood risk areas of the District, anticipated flooding extent and impacts in some subwatersheds, and identifying best management practices to alleviate future flooding and improve community preparedness. The District is in the process of coordinating with local municipalities to prioritize projects and finalize the Floodplain Resilience Action Plan in early 2026. In 2026 the District was awarded a Water Quality & Storage planning grant to continue project development, laying the groundwork for the District to apply for additional grants for project implementation.

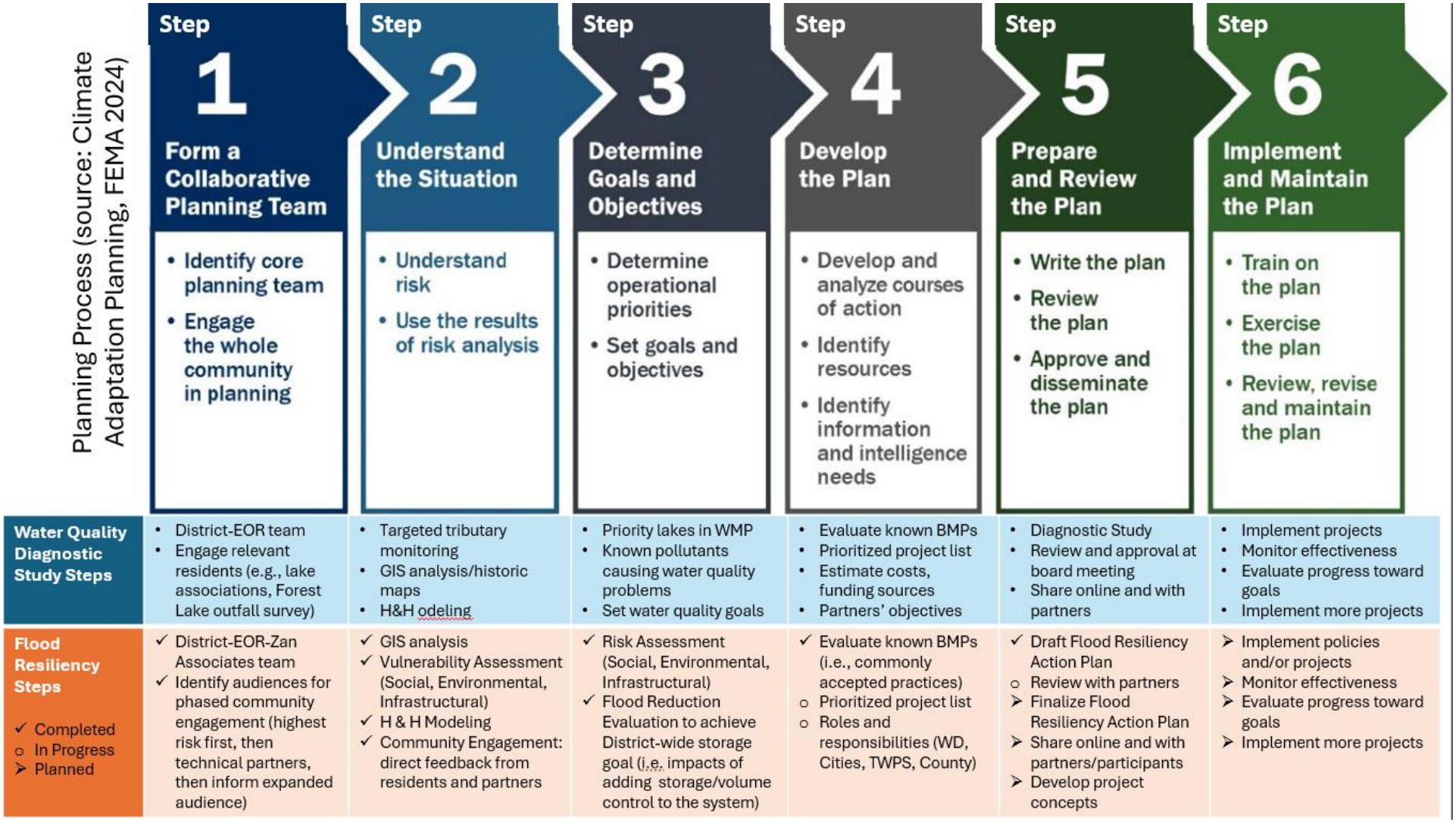


Figure 6. Planning Process Comparison Graphic: Water Quality Diagnostic Studies and Flood Resiliency Planning

5200 LAKES

The goals described in this section are those set forth in the 2022-2031 Watershed Management Plan for nine priority lakes. Priority lakes and their associated Watershed Management Plan numerical identifiers are listed below.

Priority Lakes

5221 Moody Lake	5222 Bone Lake	5223 Birch Lake
5224 School Lake	5225 Little Comfort Lake	5226 Shields Lake
5227 Lake Keewahtin	5228 Forest Lake	5229 Comfort Lake

Water Quality Highlights and Trends

- Overall, the 2025 average growing season showed an improvement in lake water quality compared to 2024. The 2024 monitoring season showed particularly poor water quality because of higher-than-average precipitation resulting in increased stormwater runoff and pollutant loads.
- For District lakes, the 5-year average water quality continues to show an improvement compared to the 10-year average.
- Likewise, the water quality trends continue to show improvement, except in the Secchi Depth in Forest-East and Middle and chlorophyll-a concentrations in Forest Middle. Fortunately, the final alum treatment was completed on Forest Lake Middle in October 2025. Thus, the decreased load should improve water clarity and chlorophyll-a concentrations in both basins.
- Most of the lakes monitored in 2025 received “B” water quality letter grades. Lake Keewahtin had the best water quality with A grades across all the categories.

The Impact of Phosphorus on Water Quality

This report quantifies the District’s progress toward achieving its long-term phosphorus load reduction goals through project implementation. Phosphorus loading is a main contributor to lake water quality (phosphorus concentration, Secchi depth). It is estimated that *1 pound of phosphorus can support up to 500 pounds of algae growth*. Progress toward reducing phosphorus loads to waterbodies generally results in progress toward achieving water quality goals.

More Phosphorus = More Algae = Less Clarity

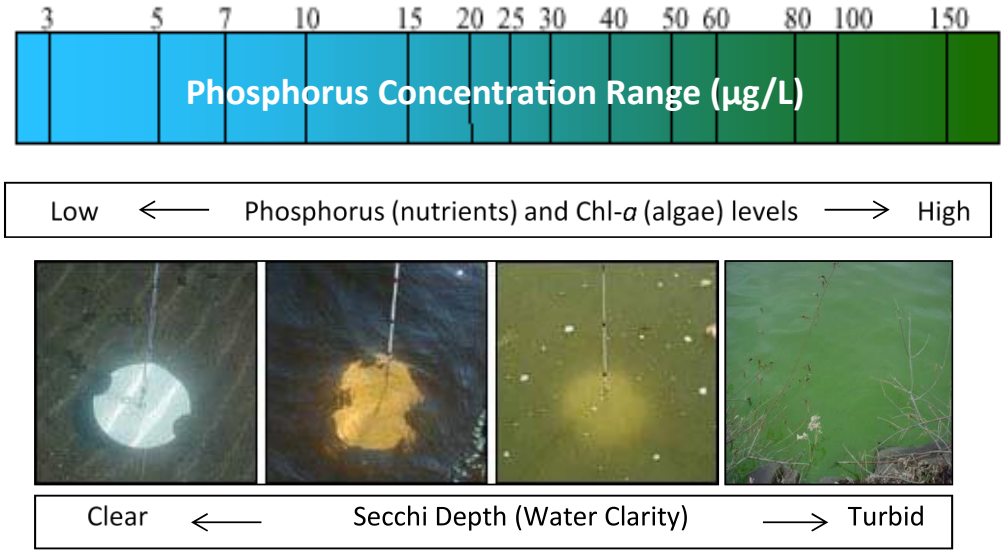


Table 7. Lake Goals

Water Resource	Parameter	2021 Starting Point	10-year (2031) Measurable Goal
Moody Lake	5-Year Mean Phosphorus Concentration	78 µg/L	≤40 µg/L
	5-Year Mean Secchi Depth	2.4 ft	≥4.6 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	TBD[3]	≥75%
Bone Lake	5-Year Mean Phosphorus Concentration	31 µg/L	≤30 µg/L
	5-Year Mean Secchi Depth	5.1 ft	≥7 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	55%	≥75%
Birch Lake	5-Year Mean Phosphorus Concentration	91 µg/L	≤60 µg/L
	5-Year Mean Secchi Depth	4.7 ft	≥3.3 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	TBD[3]	≥75%
School Lake[1]	5-Year Mean Phosphorus Concentration	51 µg/L	≤40 µg/L
	5-Year Mean Secchi Depth	3.1 ft	≥4.6 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	TBD[3]	≥75%
Little Comfort Lake[2]	5-Year Mean Phosphorus Concentration	49 µg/L	≤30 µg/L
	5-Year Mean Secchi Depth	4.5 ft	≥7 ft
	10-Year Mean Bottom Water Chloride	TBD	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	82%	≥75%
Shields Lake	5-Year Mean Phosphorus Concentration	153 µg/L	≤60 µg/L
	5-Year Mean Secchi Depth	2.6 ft	≥4.26 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	TBD[3]	≥75%

Lake Keewahtin	5-Year Mean Phosphorus Concentration	15 µg/L	≤20 µg/L
	5-Year Mean Secchi Depth	14.3 ft	≥10 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	67%	≥75%
Forest Lake[2]	5-Year Mean Phosphorus Concentration (Average)	37 µg/L	≤30 µg/L
	Forest West (1st Lake), Middle (2nd), East (3rd)	*29, 40, 41 µg/L*	
	5-Year Mean Secchi Depth (Average)	6.2 ft	≥7 ft
	Forest West (1st Lake), Middle (2nd), East (3rd)	*5.4, 6.8, 6.4 ft*	
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	27%	≥75%
Comfort Lake	5-Year Mean Phosphorus Concentration	32 µg/L	≤30 µg/L
	5-Year Mean Secchi Depth	5.6 ft	≥7 ft
	10-Year Mean Bottom Water Chloride	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Shoreline	61%	≥75%

[1] Paleolimnological core data collected in 2019 indicate that in-lake phosphorus concentrations under pre-development conditions were 50 µg/L; the Board may pursue a site-specific standard for this lake.

[2] Paleo cores collected in 2021 to determine if phosphorus conc. of 30 µg/L was achieved under pre-development conditions and is therefore a feasible goal.

[3] Data is not available for these resources on the percent of parcels with >75% natural shoreline/streambank. Lake shoreline and streambank goals will be determined following completion of shoreline/streambank inventories (3004A).

[4] Chloride and total suspended solids concentrations will be determined within the first five years of the planning period.

5200 Progress Evaluation Metrics

- Total Maximum Daily Load (TMDL) phosphorus reductions needed to meet State and District Goals.

Remaining phosphorus load reductions for priority District lakes based on implementation of projects completed or grant-funded through 2020 (benchmark year with respect to watershed management plan goals) to meet long-term goals are as follows:

  - Moody Lake: 169 lb/yr
  - Bone Lake: 50 lb/yr
  - Birch Lake: 323 lb/yr
  - School Lake: 477 lb/yr
  - Little Comfort Lake: 366 lb/yr
  - Shields Lake: 0 lb/yr
  - Lake Keewahtin: 0 lb/yr
  - Forest Lake: 155 lb/yr
  - Comfort Lake: 193 lb/yr

Fish index of biological integrity (IBI) scores.
Aquatic point intercept surveys.
Determine trends in lake bottom water chlorides.
Number of salt applicators participating in MPCA's Smart Salting training programs.
Number of landowners contacted.
Number of workshops.
Percent shoreline/shoreland in vegetated buffer/natural upland.

5200 Evaluation in 2025 (District-Wide)

Goal 1 (High Priority): Adaptively manage District lakes to reduce phosphorus loads and de-list impaired lakes with Total Maximum Daily Loads (TMDLs) to achieve state water quality eutrophication standards (total phosphorus, chlorophyll-a and Secchi).

  - 2025 Evaluation: Most District lakes are showing an improving water quality trend. See District-Wide Lake Water Quality section and individual lake summary pages for detailed analysis of progress toward water quality goals.

Goal 2 (High Priority): Adaptively manage District lakes to improve water quality by achieving the 10-year (2031) total phosphorus and Secchi goals.

  - 2025 Evaluation: Most District lakes are showing an improving water quality trend. See District-Wide Lake Water Quality section and individual lake summary pages for detailed analysis of progress toward water quality goals.

Goal 3 (High Priority): Partner with agencies to manage District lakes for healthy fish and aquatic plant communities.

  - 2025 Evaluation: The CLFLWD adheres to MN Department of Natural Resources (DNR) regulations with all of its aquatic invasive species (AIS) treatments in order to avoid undue harmful impacts to native aquatic plants. The District coordinates with DNR on the scheduling and performance of fish surveys within District lakes in order to keep track of both native and invasive fish populations. See Program 3011 AIS Prevention & Management for more information.

Goal 4 (Medium Priority): Establish bottom water chloride trends in District lakes and provide resources to salt applicators on ways to reduce chloride inputs.

  - 2025 Evaluation: The 2025 water monitoring report includes chloride monitoring. Long-term trend establishment is in progress. In 2025, lake and stream chloride concentrations were generally low throughout the monitoring season.

Goal 5 (Medium Priority): Promote natural, deep rooted, native vegetation buffers to ensure at least 75% of lakeshore parcels have at least 75% natural shoreline condition. For example, in its last shoreline survey 55% of parcels on Bone Lake were covered in at least 75% natural shoreline vegetation; the goal is to ensure 75% of parcels are vegetated thusly.

- 2025 Evaluation: The District continued implementation of its comprehensive shoreline program in 2025. As of 2025, the District has completed shoreland inventories on all of its priority lakes. Six out of nine priority lakes are meeting natural shoreline goals.

Table 8. Shoreland Inventory Schedule and Percent Natural Shoreline Cover

	2023	2024	2025	2026	2027	2028	2029	2030	2031
District Goal	75%	75%	75%	75%	75%	75%	75%	75%	75%
Moody Lake		98%							
Bone Lake	53%								
Birch Lake		100%							
School Lake		96%							
Little Comfort Lake			80%						
Shields Lake		92%							
Lake Keewahtin			78%						
Forest Lake	30%								
Comfort Lake	59%								
Key									
Meets 75% Natural Shoreline Goal			Does Not Meet Goal				Next Survey Scheduled		

District-Wide Lake Water Quality

Charts are meant to better assist with visualizing the District's progress toward its long-term phosphorus reduction goals for each lake. Status charts in this section are reflective of the District's long-term (2031) estimated phosphorus reduction goals from all loading sources (watershed, upstream lakes, and internal). The figures in these charts and graphs are based on monitoring data collected through 2025 and hydrologic/lake water quality response modeling.

Note that while the information contained in this section can be useful for high-level implementation planning, the data is always associated with some level of uncertainty. Watersheds are dynamic systems that are subject to frequent changes. Annual water monitoring data is subject to many different variables such as weather events and land use changes. Because of this annual variability, multi-year averages are generally used when evaluating progress toward goals. This report attempts to reflect actual conditions as accurately as possible but recognizes the limitations of the data and associated margin of error. The standard margin of error for water quality goals is 10%.

Furthermore, while modeling can be used to estimate phosphorus load reductions for many of the District's capital improvement projects (e.g., wetland restorations and stormwater basins), some projects have impacts that are more difficult to estimate (e.g., public education projects, regulatory measures, curly-leaf pondweed management). While such projects are difficult to quantify, and therefore would not be reflected in the status charts, they are nonetheless important in protecting and improving water resources. Additional notable projects and programs that have been completed to date, or are ongoing, are listed under some of the bar graph charts below.

Example Lake Summary Page

Explanations regarding tables and figures are provided in the following Example Lake Summary Page.

Example 2025 Water Quality Grade: lake grade will be outlined in bold borders

Excellent	Good	**Average**	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	**C** **Some samples meet or are near desired threshold**	D Many samples no not meet the desired threshold	F Most samples do not meet the desired threshold

Example Lake Goals & Status Summary

Table 9. Example Lake Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration[1]	(µg/L) micrograms per liter	(µg/L) micrograms per liter	(lb/yr) pounds per year phosphorus load still in need of removal
5-Year Average Secchi Depth[1]	(ft) feet	(ft) feet	
10-Year Average Bottom Water Chloride[2]	(mg/L) milligrams per liter	(mg/L) milligrams per liter	TBD
% of Parcels with ≥75% Natural Shoreline[3]	(%) percentage of parcels	(%) percentage of parcels	(%) percentage of parcels without natural shorelines

[1]5-year average phosphorus concentration and Secchi depth goals are based on the summertime (June-September) averages for each of the five most recently-monitored years. While state standards are based on the most recent 10-year summer average, District goals take the most recent 5-year summer average, which is a stricter measure.
[2]Chloride concentrations for each lake will be determined between 2022-2026.
[3]Data is not available for some lakes on the percent of parcels with >75% natural shoreline/streambank. Lake shoreline and streambank goals will be determined following completion of shoreline/streambank inventories.

Table 10. Example Lake Phosphorus Reduction Goals

Watershed Management Plan Code, Lake Name	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of X µg/L: (based on YEAR benchmark of X µg/L)	Phosphorus reduction needed, compared to benchmark (starting place), for the lake to achieve District long-term sustainable water quality goals (stable natural waterbody state, sometimes stricter than state standards)
Load reduction progress through 2025	Phosphorus reduction achieved between benchmark load date and December 31, 2025
2025 Remaining Load Reduction	Phosphorus reduction needed, compared to most recent available data, for the lake to achieve District long-term sustainable water quality goals (stable natural waterbody state, sometimes stricter than state standards)

Example Project Implementation Progress

This figure illustrates progress achieving the necessary phosphorus load reductions described in the table above.

Completed: Phosphorus reductions achieved by projects that are completed as of the end of 2025.

In Progress: Reductions that will be achieved by projects that are in progress as of the end of 2025.

Planned: Reductions that will be achieved by projects that are planned, but not yet started, as of the end of 2025.

Current Status: Aligns with completed projects and emphasizes phosphorus reductions achieved by completed projects as of the end of 2025. Includes a 10% margin of error.

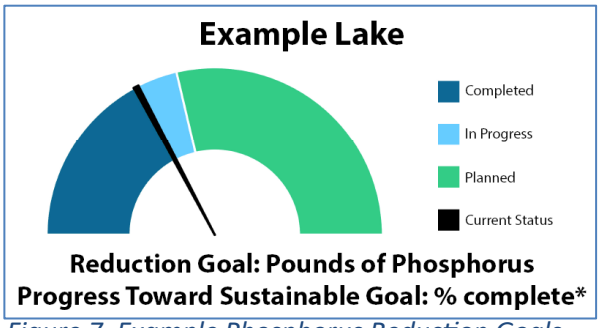


Figure 7. Example Phosphorus Reduction Goals and Project Progress Graph

*The District bases its water quality goals on historic data, collecting actual lake sediment cores in some cases, in order to determine the water quality level which each lake can sustain in the long-term. In many cases, the District goal exceeds the minimum state water quality standards.

Example Progress Toward State Standards

Six CLFLWD priority lakes are on the impaired waters list for nutrients: Moody Lake, Bone Lake, School Lake, Shields Lake, Little Comfort Lake and Comfort Lake. Forest Lake is not listed as impaired for nutrients, but its summertime water quality readings occasionally exceed state standards. Bone Lake was delisted for its nutrient impairment in 2024. The lake summaries for these seven lakes contain an additional section evaluating progress toward meeting State nutrient standards and de-listing (or prevention of being listed) for nutrient impairments. The District's ultimate goal is to delist impaired waters and prevent unimpaired waters from becoming impaired. In the meantime, an impairment listing, or even being close to the state standard, can put a lake into a higher priority ranking for certain water quality improvement grant programs.

The following criteria are summarized from the MN Pollution Control Agency's Impairment Assessment Manual (April 2024). Visit https://www.pca.state.mn.us/air-water-land-climate/minnesotas-impaired-waters-list for the full Assessment Manual. The District must coordinate closely with MPCA to proceed with delisting any waterbodies, and a full data review will occur as part of that process. **This report summarizes delisting criteria at a basic level.**

All State water quality standards are based on growing season (June-September) averages. To be removed from the impaired waters list, a lake must meet minimum requirements in the following two categories.

1. Water Quality Samples: Meet the phosphorus standard and the chlorophyll-a or Secchi depth standard based on at least 8 samples collected from at least 2 years within the most recent 10-year period. Chlorophyll-a samples are pheophytin-corrected. The MN Pollution Control Agency considers 10-year average phosphorus concentrations in addition to the 2 most recent summer averages and the individual samples of the most recent 2 years.
2. Trend/Management: In addition, there must be an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations. The local entity must provide information that details how the response conditions will be met over time for a lake to be de-listed.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

The most recent 2-year period of data will be outlined in black. Up to eight samples are shown in each table. In some cases, more than eight samples are collected within a single growing season. The summer average includes all samples taken between June-September, but all individual samples may not be shown.

Table 11. Example State Standard Evaluation Table

Example Lake <u>Phosphorus</u> Deep Lake State Standard ≤ 40 µg/L Shallow Lake State Std ≤ 60 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average										
Samples 1-8. Sample dates vary by year. All samples shown were taken between June-September.	Orange cells indicate samples that do not meet state standards					Blue cells indicate samples that meet state standards				

Example Lake <u>Secchi</u> Deep Lake State Standard ≥ 4.6 ft Shallow Lake State Std ≥ 3.3 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average										
Samples 1-8. Sample dates vary by year. All samples shown were taken between June-September.	Orange cells indicate samples that do not meet state standards					Blue cells indicate samples that meet state standards				

Example Lake <u>Chlorophyll-a</u> Deep Lake State Standard ≤ 14 µg/L Shallow Lake State Std ≤ 20 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average										
Samples 1-8. Sample dates vary by year. All samples shown were taken between June-September.	Orange cells indicate samples that do not meet state standards					Blue cells indicate samples that meet state standards				

<u>#2 Trend/Management:</u> If there is either an improving trend in total phosphorus <u>or</u> management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

Trend: Phosphorus trend is the criterion necessary for de-listing. Chlorophyll-a and Secchi trends are shown for reference.

Table 12. Example Trend Table

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Example Lake	Significantly Improving Trend Improving Trend Declining Trend Significantly Declining Trend	Significantly Improving Trend Improving Trend Declining Trend Significantly Declining Trend	Significantly Improving Trend Improving Trend Declining Trend Significantly Declining Trend

Management Activities: List of management activities in place, as well as in-progress/future activities

Conclusion:
This section will conclude whether the lake meets de-listing criteria. Once reliable data shows that the lake meets the de-listing criteria, the District may contact the MN Pollution Control Agency to proceed with the de-listing process. The District will consider management activities in place to protect water quality when evaluating lakes for de-listing.

✓ Qualifies for de-listing ○ To be determined ✖ Does not qualify for de-listing

5221 Moody Lake Summary

Moody Lake 2025 Water Quality Grade: C+

Excellent	Good	**Average**	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	**C** **Some samples meet or are near desired threshold**	D Many samples do not meet the desired threshold	F Most samples do not meet the desired threshold

Moody Lake Goals & Status Summary

Table 13. Moody Lake Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤40 µg/L	42 µg/L	Load reduction goal achieved
5-Year Average Secchi Depth	≥4.6 ft	5.5 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2024 Shoreland Inventory	≥75% of parcels	98% of parcels	Currently meeting goal

Table 14. Moody Lake Phosphorus Reduction Goals

5221 Moody Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 40 µg/L: (based on 2004 benchmark of 152 µg/L; 10% margin of error = 88 lbs)	**879**
Load reduction progress through 2025	839
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**Load reduction goal achieved**

Moody Lake Project Implementation Progress

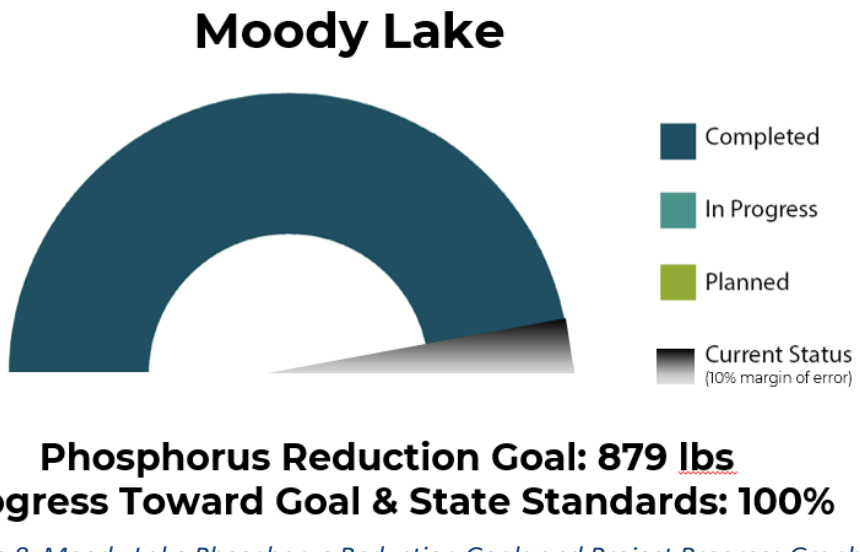


Figure 8. Moody Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: annual curly-leaf pondweed management, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Moody Lake Progress Toward State Standards

Moody Lake is nutrient impaired for aquatic recreation.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

✓ **#1 – Water Quality Samples:** Moody Lake meets criterion #1 for de-listing because seasonal averages of at least two years out of the last 10 years meet phosphorus, chlorophyll-a, and Secchi standards. However, state standard exceedances occurred within the last two years, and the 10-year average is still above the state standard; MPCA also considers these factors in delisting evaluations.

Table 15. Moody Lake Water Quality Sample Evaluation

Moody Lake Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 58 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**104**	**86**	**92**	**60**	**36**	**33**	**36**	**27**	**79**	**41**
Sample 1	59	101	73	75	58	30	46	22	68	31
Sample 2	72	107	103	83	24	62	39	13	170	36
Sample 3	130	152	84	67	45	47	51	38	91	56
Sample 4	106	63	153	109	31	55	37	20	88	45
Sample 5	91	68	112	64	34	14	44	24	61	63
Sample 6	117	72	112	57	30	14	26	22	45	48
Sample 7	162	71	41	37	40	11	17	20	62	34
Sample 8	91	54	60	40	32	27	20	34	44	25

Moody Lake Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 3.9 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**2.7**	**1.9**	**1.8**	**2.4**	**3.6**	**8.7**	**4.2**	**5.5**	**4.0**	**5.0**
Sample 1	4.0	4.0	2.5	1.5	2.6	8.9	5.9	5.6	3.3	5.2
Sample 2	3.0	1.0	1.0	2.0	4.3	8.5	5.6	4.6	3.0	4.3
Sample 3	2.0	1.2	1.5	1.7	2.0	7.2	4.9	3.3	3.9	3.0
Sample 4	2.5	1.5	0.5	0.8	3.6	7.9	3.6	5.6	4.1	4.3
Sample 5	2.0	1.5	1.2	1.5	3.3	7.2	3.0	5.6	3.6	3.6
Sample 6	1.5	2.0	1.0	1.0		7.2	3.3	7.5	4.6	4.3
Sample 7	3.0	2.0	3.5	4.0	5.2	9.8	4.3	5.6	4.3	5.9
Sample 8	3.0	2.0	3.5	2.0	3.9	12.5	5.2	7.2	4.9	7.9

Moody Lake Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 30 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**42**	**44**	**77**	**41**	**22**	**4**	**24**	**9**	**14**	**13**
Sample 1	28	22	34	60	33	3	8	7	44	6
Sample 2	38	80	110	45	11	5	11	16	8	14
Sample 3	48	66	73	63	41	4	23	21	5	46
Sample 4	30	72	130	45	17	2	20	6	5	14
Sample 5	47	34	84	19	27	7	20	7	18	13
Sample 6	74	27	93	46	23	5	20	6	11	13
Sample 7	44	30	43	22	9	5	11	4	11	5
Sample 8	33	24	30	54	17	1	8	4	9	5

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

✓ **#2 Trend/Management:**
Management activities are in place to maintain improved chlorophyll-a and Secchi observations in Moody Lake. Phosphorus, chlorophyll-a, and Secchi disk trends are significantly improving. Moody Lake meets criterion #2 for de-listing.

Trends:

Table 16. Moody Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Moody Lake	Significantly Improving Trend	Significantly Improving Trend	Significantly Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

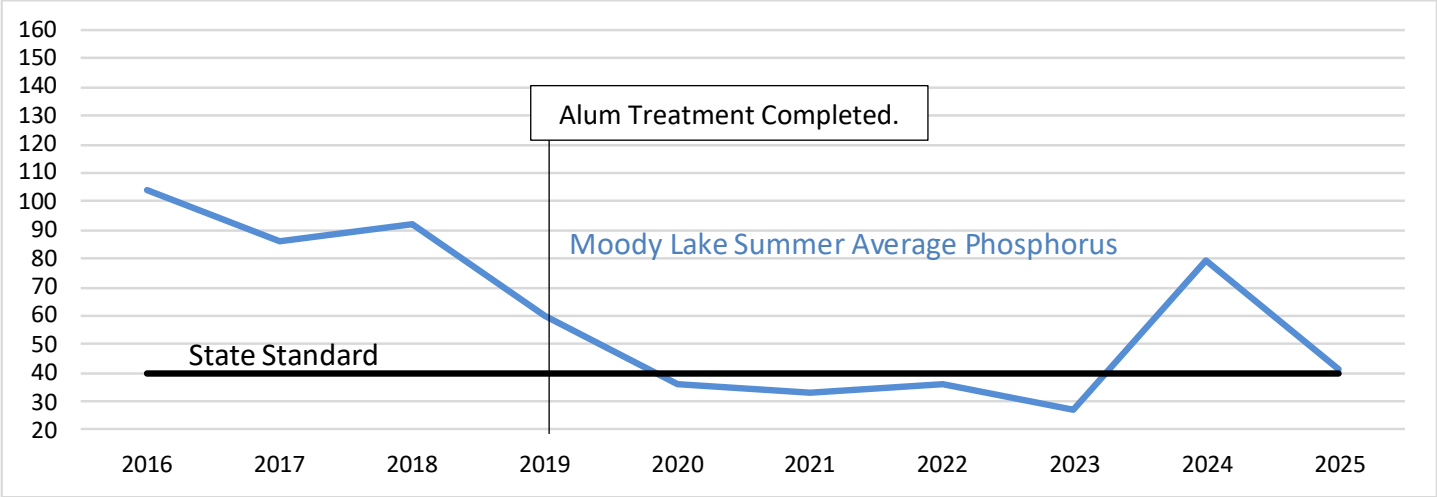


Figure 9. Moody Lake Phosphorus Concentration History

Management Activities:

- Wetland Restoration Projects (445 lb/yr phosphorus reduction)
- Whole Lake Alum Treatment (324 lb/yr phosphorus reduction, completed in 2019 – split application '18 and '19)
- Rough Fish Harvest (performed in 2009)
- Winter Aeration System (operated annually by CLFLWD)
- Downstream Fish Barrier at Bone Lake Inlet (operated annually by CLFLWD)
- Curly-leaf Pondweed Treatments (performed annually by CLFLWD)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- Moody Lake Agricultural Practices and Farmer Led Council (ongoing)
- Moody Lake Capstone Projects (60 lb/yr phosphorus reduction)

✓ **Conclusion:**
Moody Lake qualifies for de-listing at this time. However, water quality readings are still close to and occasionally exceeding state standards**.** More years of monitoring data should reflect the improving long-term trends. In all cases, the District would need to undergo a detailed data review with MPCA prior to requesting impairment delisting.

5222 Bone Lake Summary

Bone Lake 2025 Water Quality Grade: B+

Excellent	Good	Average	Marginal	Poor
A All or most samples meet the desired threshold	**B** **Many samples meet or are near the desired threshold**	C Some samples meet or are near desired threshold	D Many samples no not meet the desired threshold	F Most samples do not meet the desired threshold

Bone Lake Goals & Status Summary

Table 17. Bone Lake Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤30 µg/L	24 µg/L	Load reduction goal achieved
5-Year Average Secchi Depth	≥7 ft	6.9 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2023 Shoreland Inventory	≥75% of parcels ≥69 parcels	53% of parcels 49 parcels	22% of parcels 20 parcels

Table 18. Bone Lake Phosphorus Reduction Goals

5222 Bone Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 30 µg/L: (based on 2004 benchmark of 60 µg/L; 10% margin of error = 78 lbs)	**786**
Load reduction progress through 2025	821
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**Goal achieved**

Bone Lake Project Implementation Progress

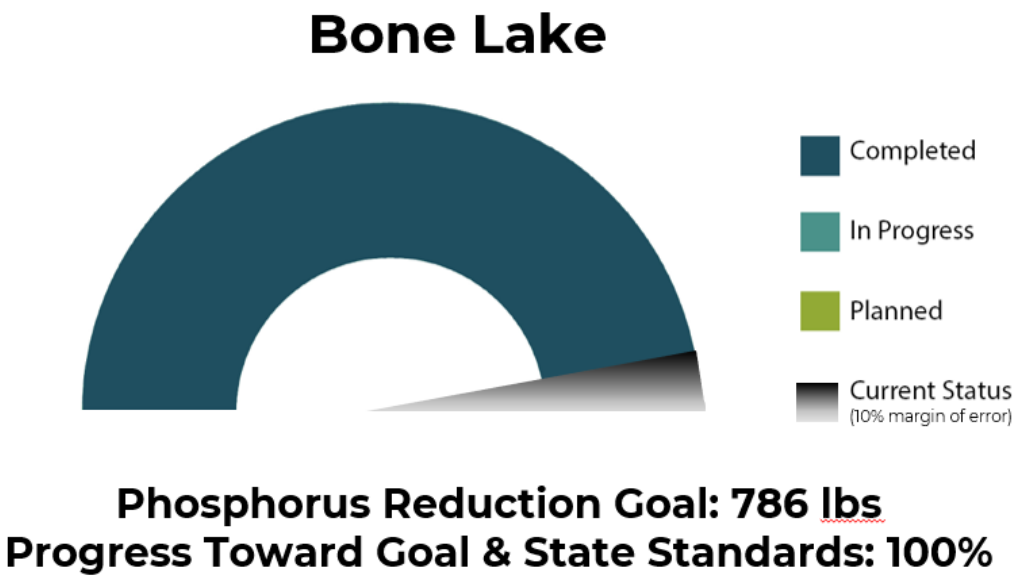


Figure 10. Bone Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: cost-share projects, annual curly-leaf pondweed management, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Bone Lake Progress Toward State Standards

Bone Lake was delisted for excess nutrients for aquatic recreation in 2024.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

Table 19. Bone Lake Water Quality Sample Evaluation

Bone Lake Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 26 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**39**	**30**	**22**	**29**	**26**	**26**	**25**	**20**	**26**	**22**
Sample 1	35	35	22	24	30	32	24	12	19	18
Sample 2	37	41	21	23	45	36	37	11	20	23
Sample 3	58	38	24	28	13	31	26	22	18	27
Sample 4	31	28	26	35	20	17	16	18	23	23
Sample 5	51	20	22	30	31	28	29	22	32	20
Sample 6	28	23	20	29	22	18	24	26	27	22
Sample 7	41	26	19	30	18	22	19	30	29	25
Sample 8	42	23	20	33		22	28		29	26

Bone Lake Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 5.7 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**4.2**	**5.8**	**6.5**	**5.0**	**5.8**	**7.3**	**5.9**	**5.5**	**7.4**	**7.9**
Sample 1	3.5	2.5	6.5	7.0	4.9	6.2	4.3	7.2	13.8	11.5
Sample 2	4.0	4.5	7.0	6.0	5.6	6.9	5.2	6.6	13.5	8.2
Sample 3	4.5	3.5	6.5	5.0	8.5	7.9	6.6	5.2	12.0	6.9
Sample 4	3.5	4.5	7.5	4.5	5.6	7.5	8.2	6.9	10.5	7.9
Sample 5	3.5	6.5	4.5	3.0	5.6	8.2	6.9	4.9	4.3	8.2
Sample 6	5.5	9.5	5.0	4.5	6.6	8.2	5.9	4.3	3.9	6.9
Sample 7	5.5	8.5	9.0	4.5	3.9	8.2	5.6	3.6	4.9	6.2
Sample 8	4.0	7.0	6.0	5.5		4.9	4.3		4.9	5.2

Bone Lake Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 14 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**22**	**20**	**10**	**21**	**12**	**8**	**14**	**13**	**15**	**11**
Sample 1	26	59	9	10	16	10	11	9	3	5
Sample 2	20	15	6	11	11	6	18	8	8	10
Sample 3	27	26	1	15	4	6	8	6	22	10
Sample 4	21	12	12	26	9	6	10	7	18	5
Sample 5	24	11	20	40	12	6	15	10	18	9
Sample 6	15	7	10	18	19	6	18	26	20	17
Sample 7	17	9	7	26	11	5	18	24	23	19
Sample 8	33	17	16	21		15	16		20	11

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

Trends:

Table 20. Bone Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Bone Lake	Improving Trend	Significantly Improving Trend	Significantly Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

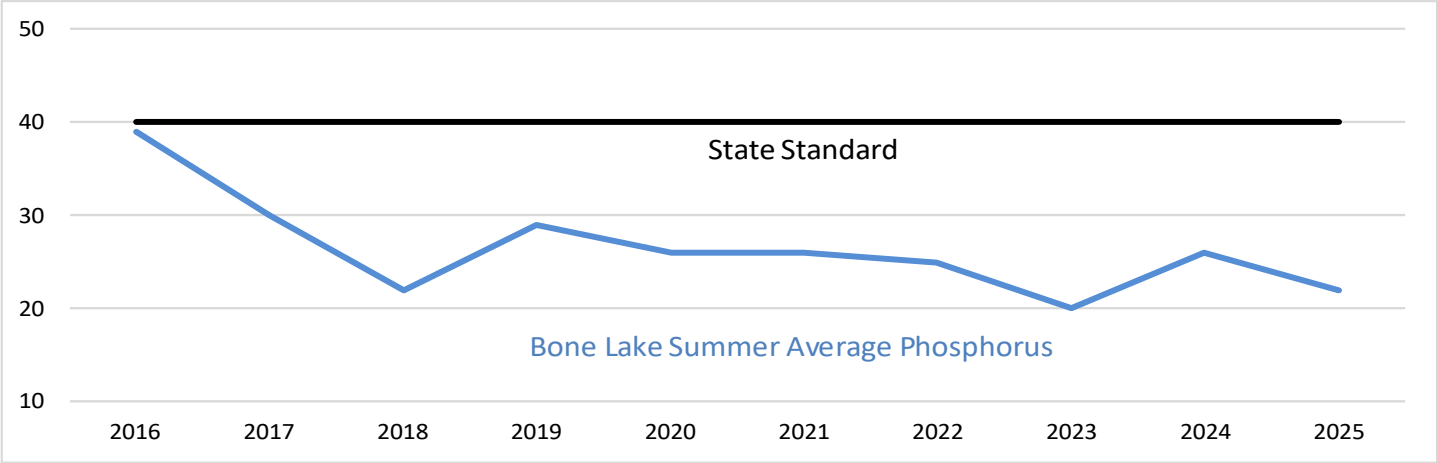


Figure 11. Bone Lake Phosphorus Concentration History

Management Activities:

- Melanie Trail Row Crop Conversion to Perennial (34 lb/yr phosphorus reduction)
- Southeast (Meadowbrook) Drained Wetland Restorations (35 lb/yr phosphorus reduction)
- Northeast Legacy Wetland Restoration (15 lb/yr phosphorus reduction)
- Inlet and Outlet Fish Barriers (operated annually by CLFLWD)
- Curly-leaf Pondweed Treatments (performed annually by CLFLWD)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- Bone Lake Agricultural Practices (ongoing, estimated 90 lb/yr phosphorus reduction)

✔ **Conclusion:**
Bone Lake was de-listed in 2024 and remains within state standard delisting criteria.

5223 Birch Lake Summary

Birch Lake 2021 Water Quality Grade (last year monitored): C

Excellent	Good	**Average**	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	**C** **Some samples meet or are near desired threshold**	D Many samples do not meet the desired threshold	F Most samples do not meet the desired threshold

Birch Lake Goals & Status Summary

Table 21. Birch Lake Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤60 µg/L	81 µg/L	TBD
5-Year Average Secchi Depth	≥3.3 ft	5.0 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2024 Shoreland Inventory	≥75% of parcels	100% of parcels	Currently meeting goal

Birch Lake is very shallow and has characteristics similar to an open water wetland. Birch Lake is located downstream of Bone Lake and is connected by a tributary stream. As such, improvements to Bone Lake will result in improvements to Birch Lake. Within the Birch Lake direct drainage area, a large portion of cropland was converted to residential subdivision in recent years. Conversion from row crop to residential is estimated to actually result in reduced phosphorus and sediment loading to Birch Lake. The District will continue to monitor Birch Lake in order to determine whether upstream improvements to Bone Lake result in reduced phosphorus concentrations in Birch Lake.

5224 School Lake Summary

School Lake 2025 Water Quality Grade: C+

Excellent	Good	**Average**	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	**C** **Some samples meet or are near desired threshold**	D Many samples do not meet the desired threshold	F Most samples do not meet the desired threshold

School Lake Goals & Status Summary

Table 22. School Lake Goals & Status Summary

	Long-Term Goal/ State Standard	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤60 µg/L	39 µg/L	No load reduction goal set
5-Year Average Secchi Depth	≥3.3 ft	5.9 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2024 Shoreland Inventory	≥75% of parcels	96% of parcels	Currently meeting goal

School Lake is located downstream of Birch Lake and, similarly to Birch Lake, will see improvements resulting from upstream improvements to Bone Lake. Additionally, the District is in the process of working with a rural landowner in the School Lake direct drainage area to implement best management practices to reduce phosphorus and sediment loading from a cattle feedlot. School Lake is classified as a shallow lake, and therefore the state standard is 60 µg/L for phosphorus concentration and 3.3 feet for Secchi depth.

School Lake Progress Toward State Standards

School Lake is nutrient impaired for aquatic recreation.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

✓ **#1 – Water Quality Samples:** School Lake meets criterion #1 for de-listing because seasonal averages of at least two years out of the last 10 years meet phosphorus, chlorophyll-a, and Secchi standards. Additionally, the 10-year average is below the state standard. However, state standard exceedances occurred within the last two years; MPCA also considers this factor in delisting evaluations.

Table 23. School Lake Water Quality Sample Evaluation

School Lake Phosphorus Shallow Lake State Standard ≤ 60 µg/L 10-Year Average: 44 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average		**51**	**53**		**49**	**40**	**28**	**28**	**66**	**41**
Sample 1		54	38		49	52	37	28	60	60
Sample 2		53	40		49	39	29	28	82	25
Sample 3		41	49		64	72	14	24	71	30
Sample 4		59	125		34	17	27	20	49	58
Sample 5		34	62			70	33	20		60
Sample 6		31	56			30		22		37
Sample 7		116	40			27		38		21
Sample 8		40	48			21		42		

School Lake Secchi Shallow Lake State Standard ≥ 3.3 feet 10-Year Average: 4.9 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average		**2.8**	**2.5**		**4.8**	**5.3**	**6.1**	**7.1**	**5.4**	**5.1**
Sample 1		4.5	4.0		3.0	7.5	7.4	9.2	6.6	3.9
Sample 2		2.5	3.0		3.3	5.6	6.6	7.5	4.6	11.2
Sample 3		1.0	2.0		6.6	7.2	5.2	7.5	5.6	5.6
Sample 4		1.5	1.0		6.2	4.3	5.9	6.2	4.9	4.3
Sample 5		3.0	1.5			3.8	5.6	9.2		4.6
Sample 6		3.5	1.5			4.3		6.9		4.6
Sample 7		3.0	4.0			4.3		4.6		6.6
Sample 8		3.0	3.0			4.6		5.6		

School Lake Chlorophyll-a Shallow Lake State Standard ≤ 20 µg/L 10-Year Average: 21 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average		**31**	**50**		**24**	**12**	**14**	**9**	**10**	**18**
Sample 1		24	46		38	4	13	6	14	35
Sample 2		42	22		29	4	14	4	6	2
Sample 3		61	44		17	5	16	8	8	11
Sample 4		56	69		13	17	19	20	11	24
Sample 5		19	75			16	10	7		32
Sample 6		19	54			15		7		18
Sample 7		38	47			17		9		6
Sample 8		32	46			17		10		

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

✓ **#2 Trend/Management:**
Several management activities are in place for Bone Lake which is located upstream of School Lake and Birch Lake. Phosphorus, chlorophyll-a, and Secchi disk trends are improving. School Lake meets criterion #2 for de-listing.

Trends:

Table 24. School Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Moody Lake	Improving Trend	Improving Trend	Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

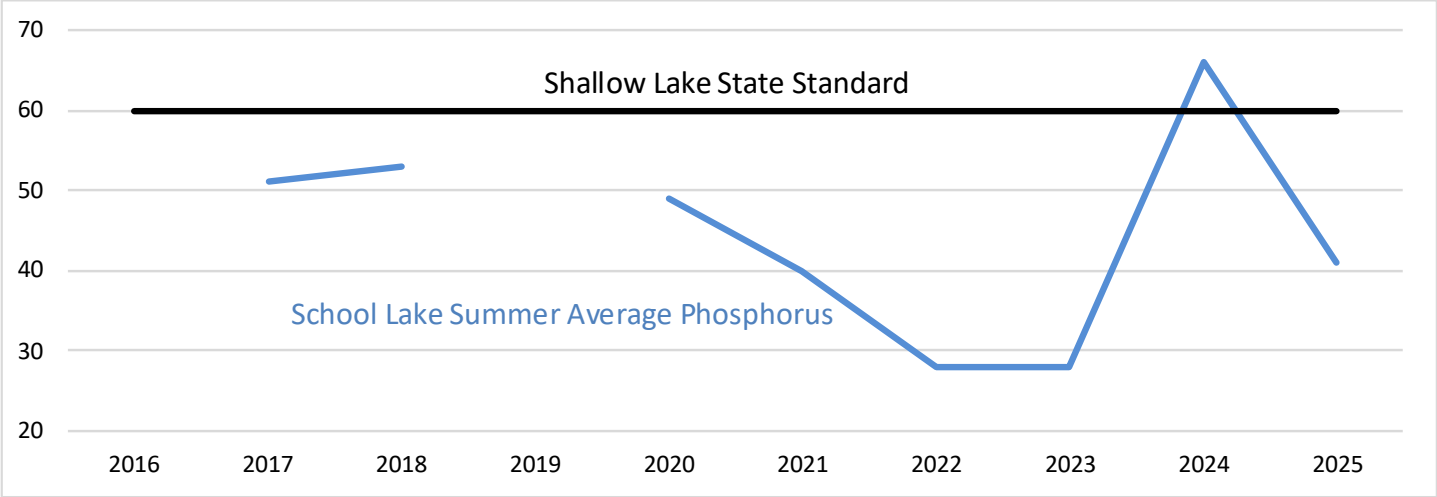


Figure 12. School Lake Phosphorus Concentration History

Management Activities:

- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- Project currently in-progress: School Lake Agricultural BMPs (61 lb/yr phosphorus reduction)

✓ **Conclusion:**
School Lake qualifies for de-listing at this time. However, water quality readings are still close to and occasionally exceeding state standards**.** The District will undergo a more detailed data review with MPCA prior to requesting delisting.

5225 Little Comfort Lake Summary

Little Comfort Lake 2025 Water Quality Grade: C+

Excellent	Good	**Average**	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	**C** **Some samples meet or are near desired threshold**	D Many samples do not meet the desired threshold	F Most samples do not meet the desired threshold

Little Comfort Lake Goals & Status Summary

Table 25. Little Comfort Lake Water Quality Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤30 µg/L	35 µg/L	336 lb/yr phosphorus load
5-Year Average Secchi Depth	≥7 ft	6.9 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2025 Shoreland Inventory	≥75% of parcels ≥25 parcels	80% of parcels 27 parcels	[maintain]

Table 26. Little Comfort Lake Phosphorus Reduction Goals

5225 Little Comfort Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 30 µg/L: (based on 2004 benchmark of 72 µg/L; 10% margin of error = 84 lbs)	**839**
Load reduction progress through 2025	503
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**336**

Little Comfort Lake Project Implementation Progress

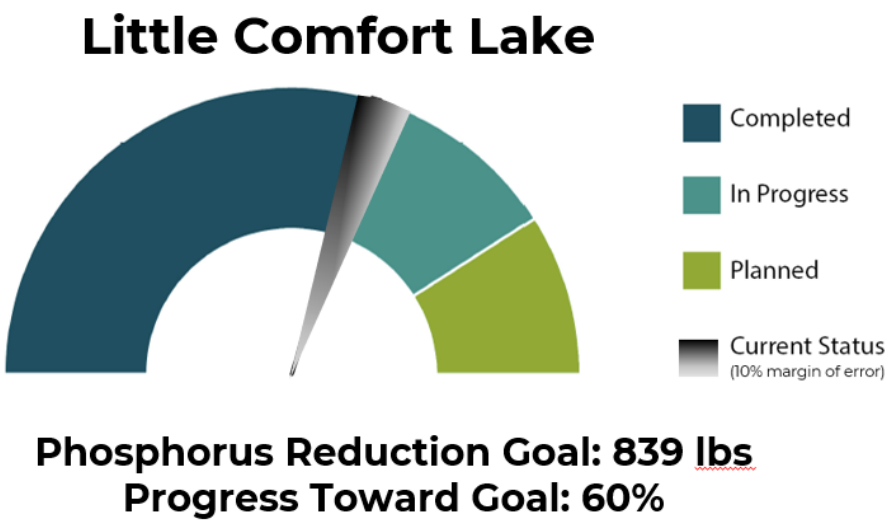


Figure 13. Little Comfort Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Little Comfort Lake Progress Toward State Standards

Little Comfort Lake is nutrient impaired for aquatic recreation.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

✓ **#1 – Water Quality Samples:** Little Comfort Lake meets criterion #1 for de-listing because seasonal averages of at least two years out of the last 10 years meet phosphorus, chlorophyll-a, and Secchi standards. However, state standard exceedances occurred within the last two years, and the 10-year average is still above the state standard; MPCA also considers these factors in delisting evaluations.

Table 27. Little Comfort Lake Water Quality Sample Evaluation

Little Comfort Lake Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 41 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**68**	**43**	**50**	**56**	**34**	**43**	**23**	**23**	**53**	**34**
Sample 1	28	19	33	74	33	54	24	17	58	31
Sample 2	176	42	33	37	29	86	24	19	79	33
Sample 3	44	26	45	41	44	34	31	22	66	57
Sample 4	50	63	114	76	30	12	26	13	60	35
Sample 5	61	71	52	113	36	22	24	22	47	40
Sample 6	56	34	50	39		34	17	18	36	24
Sample 7	71	36	33	29		100	12	26	42	32
Sample 8	92	50	43	39		24	10	24	33	33

Little Comfort Lake Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 5.6 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**3.5**	**3.6**	**4.2**	**4.5**	**5.8**	**8.4**	**7.5**	**6.9**	**5.4**	**5.6**
Sample 1	5.0	3.5	6.0	5.5	5.7	9.8	8.5	5.9	5.6	7.2
Sample 2	2.5	3.0	4.5	4.5	4.8	9.8	8.2	7.2	5.9	5.2
Sample 3	4.0	1.5	3.0	5.5	6.2	9.5	7.2	3.3	5.2	4.3
Sample 4	3.0	2.0	2.5	2.0	5.6	10.2	7.1	7.9	5.6	6.1
Sample 5	2.5	3.0	3.0	3.5	6.6	7.2	7.5	9.8	3.9	4.9
Sample 6	4.0	3.5	3.5	4.8		5.9	6.9	9.2	5.9	3.6
Sample 7	3.0	5.0	4.5	5.5		4.6	8.5	6.2	6.2	6.2
Sample 8	4.0	7.0	7.0	4.5		7.2	7.2	8.5	5.2	7.2

Little Comfort Lake Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 16 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**47**	**26**	**26**	**27**	**13**	**7**	**7**	**10**	**7**	**14**
Sample 1	19	29	5	15	23	3	3	11	12	6
Sample 2	43	26	7	13	16	3	7	8	3	11
Sample 3	27	44	30	19	12	4	7	36	3	15
Sample 4	36	28	41	30	10	3	7	5	4	15
Sample 5	51	20	43	35	2	13	8	6	11	16
Sample 6	31	23	24	36		15	6	2	11	14
Sample 7	90	19	28	27		12	6	5	9	17
Sample 8	77	17	27	41		10	8	3	7	23

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

✓ **#2 Trend/Management:**
Little Comfort Lake meets criteria #2 for de-listing because phosphorus trends are improving. However, the District is putting additional management activities into place to protect water quality.

Trends:

Table 28. Little Comfort Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Little Comfort Lake	Improving Trend	Improving Trend	Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

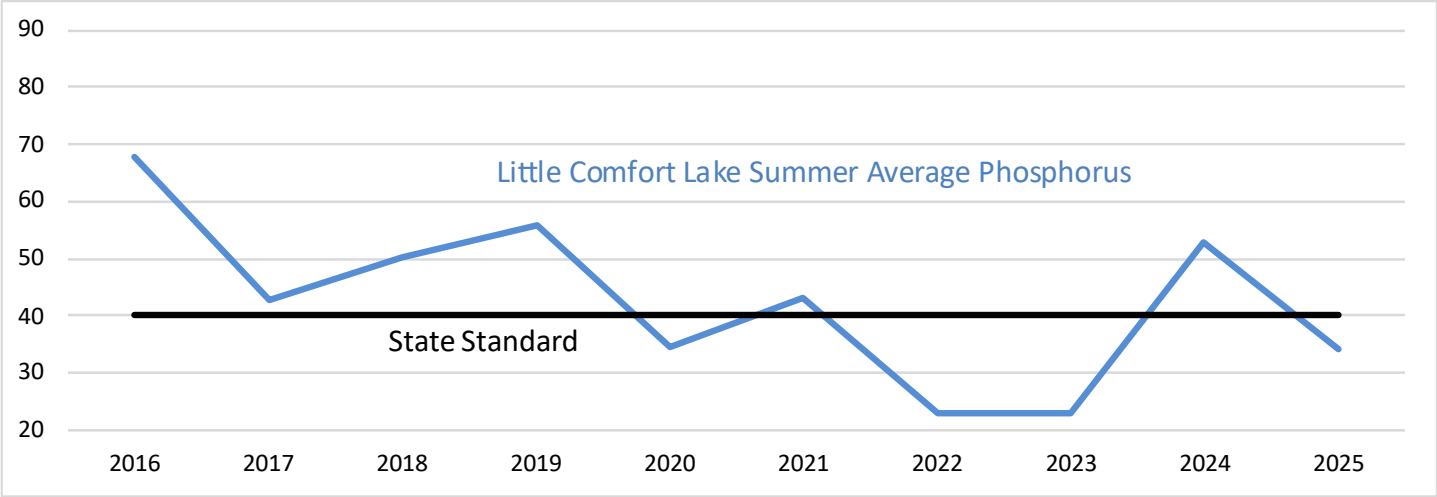


Figure 14. Little Comfort Lake Phosphorus Concentration History

Management Activities:

- Curly-leaf Pondweed Surveys (performed annually by CLFLWD, treatment usually not warranted- due to low density growth)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- In progress projects:
  - School Lake Agricultural BMPs (estimated 61 lb/yr phosphorus reduction for upstream School Lake)
  - Heath Ave Iron Enhanced Sand Filter (estimated 75-86 lb/yr phosphorus reduction)
- Potential future projects:
  - Livestock Management
  - Whole Lake Alum Treatment (estimated 59 lb/yr phosphorus reduction)

✓ **Conclusion:**
Little Comfort Lake qualifies for de-listing at this time. However, water quality readings are still close to and occasionally exceeding state standards**.** Completion of water quality projects will protect water quality, and more years of monitoring data should reflect the improving long-term trends. In all cases, the District will undergo a detailed data review with MPCA prior to requesting delisting.

5226 Shields Lake Summary

Shields Lake 2025 Water Quality Grade: D+

Excellent	Good	Average	**Marginal**	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	C Some samples meet or are near desired threshold	**D** **Many samples do not meet the desired threshold**	F Most samples do not meet the desired threshold

Shields Lake Goals & Status Summary

Table 29. Shields Lake Water Quality Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤60 µg/L	56 µg/L	Goal achieved
5-Year Average Secchi Depth	≥4.26 ft	6.0 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2024 Shoreland Inventory	≥75% of parcels	94% of parcels	Currently meeting goal

Table 30. Shields Lake Phosphorus Reduction Goals

5226 Shields Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 60 µg/L: (based on 2006-2015 benchmark of 241 µg/L; 10% margin of error = 102 lbs)	**1,023**
Load reduction progress through 2025	1,023
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**Goal achieved**

Shields Lake Project Implementation Progress

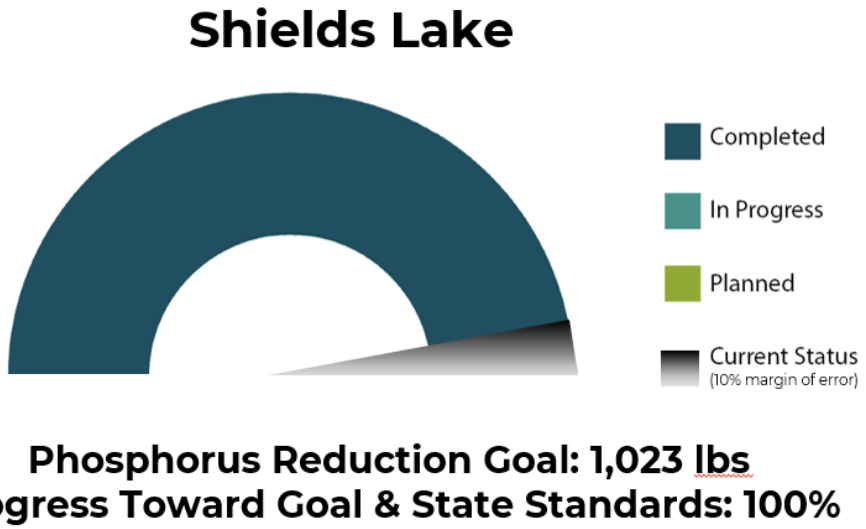


Figure 15. Shields Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: curly-leaf pondweed management in 2019, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Shields Lake Progress Toward State Standards

Shields Lake is nutrient impaired for aquatic recreation.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

✓ **#1 – Water Quality Samples:** Shields Lake meets criterion #1 for de-listing because seasonal averages of at least two years out of the last 10 years meet phosphorus, chlorophyll-a, and Secchi standards. However, state standard exceedances occurred within the last two years, and the 10-year average is still above the state standard; MPCA also considers these factors in delisting evaluations.

Table 31. Shields Lake Water Quality Sample Evaluation

Shields Lake Phosphorus Shallow Lake State Standard ≤ 60 µg/L 10-Year Average: 103 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**194**	**191**	**180**	**128**	**54**	**38**	**27**	**20**	**104**	**93**
Sample 1	121	74	222	102	19	27	22	18	99	42
Sample 2	238	170	210	150	45	27	33	16	171	85
Sample 3	317	262	283	212	66	28	32	11	91	73
Sample 4	241	300	201	141	81	25	23	19	66	244
Sample 5	153	203	174	138	75	104	21	24	119	140
Sample 6	128	226	149	93	65	36	36	24	102	86
Sample 7	190	190	122	82	24	51	22	20	114	56
Sample 8	168	118	76	114		23	14	22	72	39

Shields Lake Secchi Shallow Lake State Standard ≥ 3.3 feet 10-Year Average: 4.3 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**2.7**	**2.2**	**1.9**	**2.5**	**3.7**	**8.4**	**6.5**	**5.9**	**4.5**	**4.3**
Sample 1	5.0	6.5	4.0	5.5	5.9	13.6	7.9	7.5	4.3	5.2
Sample 2	3.0	4.5	0.5	2.0	3.6	14.4	6.6	4.6	3.0	2.3
Sample 3	2.5	1.0	1.0	1.5	5.2	14.4	5.2	6.2	4.3	3.6
Sample 4	2.5	1.0	1.5	3.2	3.3	8.4	5.9	6.6	5.2	3.6
Sample 5	2.0	1.5	1.7	0.5	2.5	2.6	6.9	4.6	4.3	3.6
Sample 6	1.5	1.5	1.5	2.0	2.0	6.6	6.6	3.6	5.6	5.6
Sample 7	2.5	1.0	2.0	2.0	3.6	4.3	7.9	6.9	4.9	3.9
Sample 8	3.5	2.0	3.0	2.5		5.9	6.9	8.9	4.6	6.9

Shields Lake Chlorophyll-a Shallow Lake State Standard ≤ 20 µg/L 10-Year Average: 36 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**52**	**64**	**67**	**52**	**31**	**6**	**7**	**7**	**22**	**50**
Sample 1	22	7	21	25	14	1	9	9	44	10
Sample 2	37	35	160	88	25	2	1	8	21	130
Sample 3	76	160	99	52	13	4	5	4	34	38
Sample 4	82	97	56	28	48	9	7	5	14	180
Sample 5	59	92	68	62	45	9	8	12	28	47
Sample 6	41	55	47	68	58	10	7	6	8	14
Sample 7	51	58	52	73	13	5	5	2	15	13
Sample 8	65	39	36	51		14	5	7	13	11

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

✓ **#2 Trend/Management:**
Management activities are in place to maintain improved chlorophyll-a and Secchi observations in Shields Lake. The phosphorus trend is improving. Shields Lake meets criterion #2 for de-listing.

Trends:

Table 32. Shields Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Shields Lake	Significantly Improving Trend	Improving Trend	Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

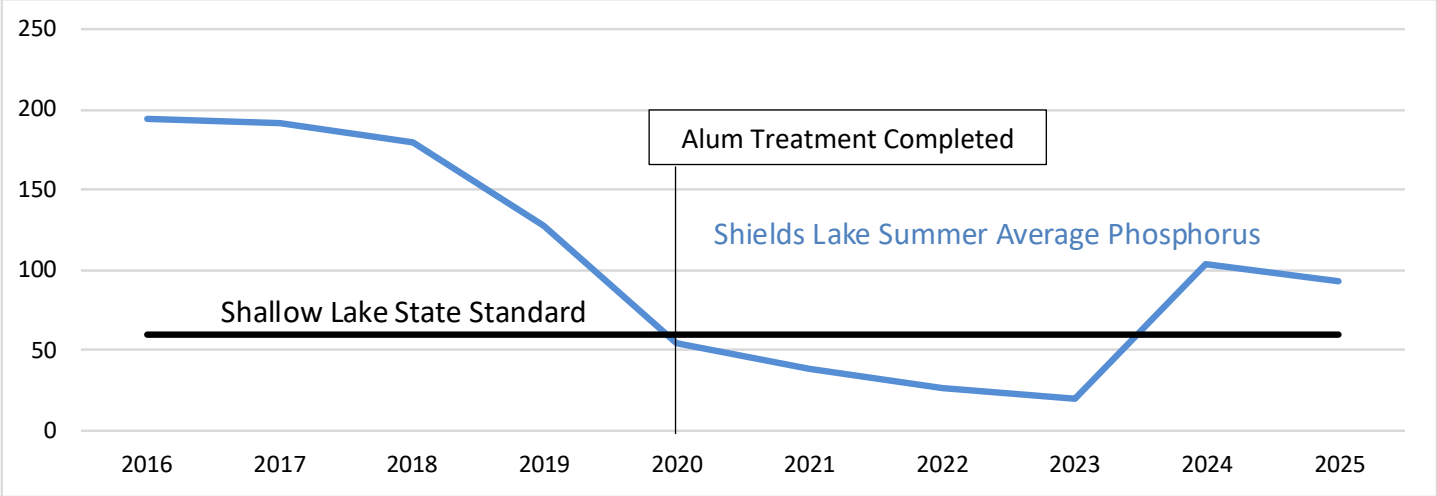


Figure 16. Shields Lake Phosphorus Concentration History

Management Activities:

- Stormwater Harvest & Irrigation Reuse System (94 lb/yr phosphorus reduction completed in 2018)
- Whole Lake Alum Treatment (913 lb/yr, completed in 2020 – split application between fall '19 and fall '20)
- Winter Aeration System (upgraded in 2021, operated annually by CLFLWD)
- Downstream Fish Barriers (operated annually by CLFLWD)
- Curly-leaf Pondweed Treatments (performed annually by CLFLWD)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)

✓ **Conclusion:**
Shields Lake qualifies for de-listing at this time. However, several recent water quality readings exceed state standards. Shallow lakes like Shields Lake are sensitive to changes in the environment and may show large swings in water quality as a result. The District is investigating the surrounding watershed to determine if there are external factors that need to be addressed.

5227 Lake Keewahtin Summary

Lake Keewahtin 2025 Water Quality Grade: A

Excellent	Good	Average	Marginal	Poor
A All or most samples meet the desired threshold	B Many samples meet or are near the desired threshold	C Some samples meet or are near desired threshold	D Many samples do not meet the desired threshold	F Most samples do not meet the desired threshold

Lake Keewahtin Goals & Status Summary

Table 33. Lake Keewahtin Water Quality Goals & Status Summary

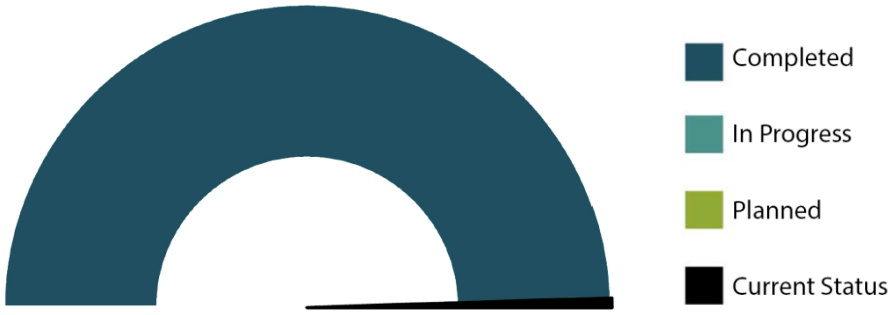
	Long-Term Goal	Current Status*	Remaining
5-Year Average Phosphorus Concentration	≤20 µg/L	12 µg/L	0 lb/yr phosphorus load*
5-Year Average Secchi Depth	≥10 ft	15 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2016 Shoreland Inventory	≥75% of parcels ≥57 parcels	67% of parcels 50 parcels	8% of parcels 7 parcels

*Currently meets goal, no further reductions needed until the next round of diagnostic monitoring.

Table 34. Lake Keewahtin Phosphorus Reduction Goals

5227 Lake Keewahtin	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 20 µg/L: (based on 2004 benchmark of 20 µg/L)	**0**
Load reduction progress through 2025	0
2025 Remaining Load Reduction	**0**

Lake Keewahtin Project Implementation Progress



Reduction Goal: 0 lbs

Progress (Completed + In Progress Projects): N/A

Figure 17. Lake Keewahtin Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: cropland conversion cost-share projects, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

5228 Forest Lake Summary

Forest Lake 2025 Water Quality Grade Average: B-

West Basin: B- **Middle Basin: B-** **East Basin: B-**

Excellent	**Good**	Average	Marginal	Poor
A All or most samples meet the desired threshold	**B** **Many samples meet or are near the desired threshold**	C Some samples meet or are near desired threshold	D Many samples no not meet the desired threshold	F Most samples do not meet the desired threshold

Forest Lake Goals & Status Summary

Table 35. Forest Lake Water Quality Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤30 µg/L	27 µg/L	627 lb/yr phosphorus load
5-Year Average Secchi Depth	≥7 ft	6.2 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2023 Shoreland Inventory	≥75% of parcels ≥750 parcels	30% of parcels 300 parcels	45% of parcels 450 parcels

Table 36. Forest Lake Phosphorus Reduction Goals

5228 Forest Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 30 µg/L: (based on 2007-2016 benchmark of 35 µg/L; 10% margin of error = 145 lbs)	**1,450**
Load reduction progress through 2025	1,350
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**100 (within margin of error)**

Forest Lake Project Implementation Progress

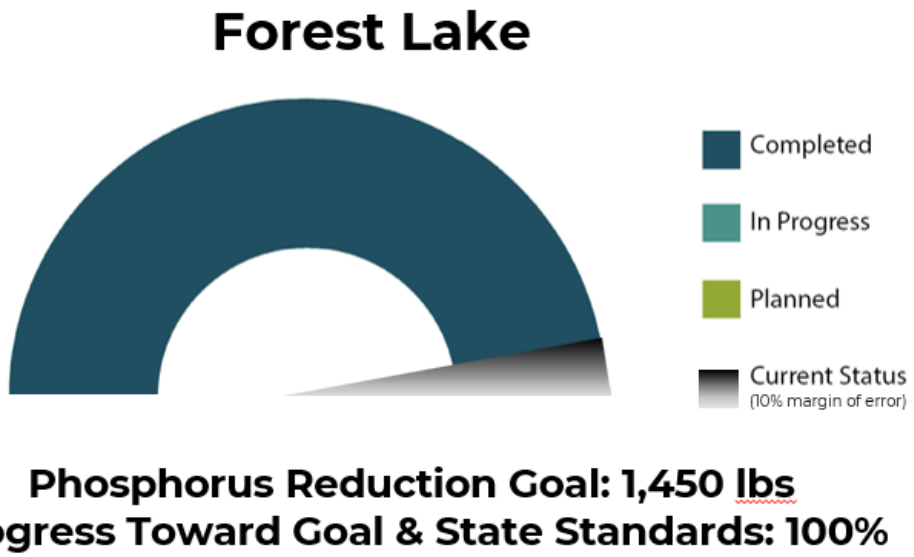


Figure 18. Forest Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: cost-share projects, educational storm drain stenciling, annual curly-leaf pondweed management, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Forest Lake State Standards Status

Forest Lake is **not** nutrient impaired for aquatic recreation, but water quality readings are sometimes close to or exceed the state standard. Forest Lake is impaired for polychlorinated biphenyls (PCBs) in fish tissue.

Forest West State Standards Status

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

Table 37. Forest Lake West Water Quality Sample Evaluation

Forest Lake West Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 26 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**40**	**25**	**37**	**26**	**27**	**24**	**20**	**23**	**25**	**25**
Sample 1	24	22	46	13	21	24	25	30	20	17
Sample 2	29	27	44	23	26	38	22	24	22	18
Sample 3	27	23	35	24	26	19	23	32	25	19
Sample 4	30	28	45	30	38	17	22	24	19	17
Sample 5	35	30	39	38	32	19	20	26	24	32
Sample 6	44	26	31	26	22	19	21	20	30	38
Sample 7	90	21	30	25	32	24	17	15	27	36
Sample 8	45	25	29		19	28	12	24	30	26

Forest Lake West Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 5.9 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**4.3**	**6.2**	**4.9**	**7.1**	**5.7**	**7.5**	**7.3**	**6.7**	**5.9**	**5.6**
Sample 1	6.5	6.5	5.0	12.0	8.2	11.2	8.5	4.8	7.5	7.9
Sample 2	5.0	6.5	5.0	7.0	5.6	10.2	9.5	4.6	6.2	6.9
Sample 3	3.5	6.5	4.5	5.0	6.9	6.2	5.9	5.9	5.9	6.2
Sample 4	5.0	5.5	4.5	6.5	5.2	7.9	5.2	5.2	5.6	7.5
Sample 5	4.5	6.5	4.5	5.5	4.8	5.9	6.2	7.2	4.4	4.8
Sample 6	3.5	6.5	5.0	6.0	4.8	5.6	7.5	8.9	4.3	3.9
Sample 7	3.0	6.0	5.5	7.5	4.3	5.1	7.2	11.5	4.3	3.6
Sample 8	4.0	5.5	5.5		6.2	6.7	8.5	8.2	4.3	4.6

Forest Lake West Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 10 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**19**	**8**	**13**	**8**	**8**	**6**	**6**	**9**	**10**	**12**
Sample 1	7	6	13	2	4	2	3	11	4	4
Sample 2	11	8	9	6	4	2	3	13	8	6
Sample 3	14	6	15	8	6	6	5	10	11	5
Sample 4	12	6	15	6	8	7	8	11	5	5
Sample 5	13	8	15	13	10	8	8	8	9	17
Sample 6	23	9	11	9	10	8	7	6	17	23
Sample 7	53	10	12	9	12	11	9	2	17	22
Sample 8	22	9	11		7	6	5	1	18	15

Forest Middle State Standards Status

#1 – Water Quality Samples: If seasonal averages of the last two years of data (minimum of 8 samples) meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

Table 38. Forest Lake Middle Water Quality Sample Evaluation

Forest Lake Middle Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 34 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**41**	**34**	**35**	**61**	**42**	**36**	**31**	**16**	**29**	**26**
Sample 1	28	27	21	23	23	19	53	11	18	20
Sample 2	23	29	35	97	30	32	33	15	22	24
Sample 3	22	31	25	39	36	31	34	22	23	28
Sample 4	71	25	51	44	58	21	21	19	28	26
Sample 5	40	51	63	103	33	28	30	11	37	30
Sample 6	35	37	28	50	35	38	30	20	40	30
Sample 7	39	35	29	91	56	57	20	15	35	28
Sample 8	65	35	26	41	64	47	29	13	32	30

Forest Lake Middle Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 6.4 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**5.7**	**8.2**	**7.7**	**7.1**	**5.7**	**6.9**	**5.0**	**9.2**	**5.2**	**4.4**
Sample 1	8.0	13.0	11.0	15.0	12.1	12.8	6.2	8.2	9.2	5.6
Sample 2	6.5	8.0	10.0	12.0	9.5	9.2	5.6	8.9	7.9	6.2
Sample 3	5.5	9.5	7.5	8.0	6.2	6.9	4.4	8.5	7.2	4.9
Sample 4	6.0	9.5	10.0	5.5	3.9	6.6	5.6	6.9	5.2	4.3
Sample 5	6.0	7.5	5.0	4.0	3.6	5.9	4.6	9.2	3.0	3.9
Sample 6	5.0	5.5	6.5	4.0	2.6	5.2	3.6	8.5	3.0	3.3
Sample 7	4.0	6.0	5.5	4.0	3.0	4.9	4.9	15.1	3.3	3.6
Sample 8	5.5	7.0	6.0	4.0	4.3	5.2	5.2	10.2	3.6	3.9

Forest Lake Middle Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 15 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**17**	**13**	**15**	**20**	**24**	**9**	**13**	**5**	**21**	**17**
Sample 1	6	4	3	1	3	3	2	5	4	6
Sample 2	10	10	10	8	12	1	12	6	5	8
Sample 3	9	9	10	9	15	7	16	4	6	11
Sample 4	12	5	12	14	32	6	16	5	15	16
Sample 5	11	11	33	28	38	7	11	4	33	23
Sample 6	16	23	18	34	30	12	23	10	45	31
Sample 7	29	21	21	32	36	16	11	4	32	23
Sample 8	20	23	12	31	22	11	12	3	24	22

Forest East State Standards Status

#1 – Water Quality Samples: If seasonal averages of the last two years of data (minimum of 8 samples) meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

Table 39. Forest Lake East Water Quality Sample Evaluation

Forest Lake East Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 31 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**44**	**46**	**36**	**34**	**26**	**34**	**38**	**17**	**33**	**28**
Sample 1	22	18	24	26	19	13	21	26	20	22
Sample 2	22	38	25	28	19	28	46	22	24	24
Sample 3	24	46	30	31	20	50	48	12	22	27
Sample 4	87	44	39	28	32	29	48	13	31	27
Sample 5	26	51	57	28	40	26	35	17	40	30
Sample 6	56	51	28	39	27	41	38	16	42	35
Sample 7	55	53	47	47		38	34	20	45	26
Sample 8	53	65	37	43		43	36	11	37	34

Forest Lake East Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 6.8 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**5.7**	**8.1**	**6.4**	**7.3**	**9.6**	**8.1**	**4.7**	**8.5**	**4.9**	**5.0**
Sample 1	8.5	14.0	9.0	14.5	11.8	18.0	9.7	6.6	7.7	7.2
Sample 2	8.0	13.0	9.5	12.0	21.3	14.8	5.9	7.9	6.6	6.2
Sample 3	7.5	8.5	7.5	9.0	6.2	6.6	4.6	8.9	6.2	4.9
Sample 4	7.0	6.5	7.5	6.0	5.2	6.6	3.6	9.2	4.9	4.9
Sample 5	5.0	5.5	4.5	4.5	3.6	4.9	3.3	8.2	3.9	3.9
Sample 6	3.0	6.0	4.5	4.5		4.9	3.0	8.2	3.6	3.6
Sample 7	3.5	6.0	4.5	4.0		4.9	3.9	7.2	3.3	4.6
Sample 8	4.5	5.0	4.5	4.0		4.1	3.6	13.8	3.9	4.9

Forest Lake East Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 17 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**22**	**23**	**22**	**18**	**14**	**14**	**22**	**7**	**21**	**15**
Sample 1	5	7	5	3	3	1	3	16	5	5
Sample 2	10	12	9	5	10	12	9	8	8	6
Sample 3	7	15	11	9	9	14	20	6	9	7
Sample 4	13	26	20	13	34	8	32	5	19	13
Sample 5	23	25	45	29		16	20	5	27	13
Sample 6	45	28	31	34		16	32	4	40	34
Sample 7	33	27	33	24		20	26	6	37	21
Sample 8	24	45	25	25		28	32	4	24	20

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

Trends:

Table 40. Forest Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Forest Lake West	Significantly Improving Trend	Significantly Improving Trend	Improving Trend
Forest Lake Middle	Significantly Improving Trend	Declining Trend	Declining Trend
Forest Lake East	Improving Trend	Improving Trend	Declining Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

Figure 19. Forest Lake West, Middle, East Phosphorus Concentration History

Management Activities:

- County Road 50 Iron Enhanced Sand Filter (97 lb/yr phosphorus reduction)
- WJD-6 Wetland Restoration (20 lb/yr phosphorus reduction)
- Shields Lake Improvement Projects (531 lb/yr)
- Hilo Lane Stormwater Retrofit (12 lb/yr phosphorus reduction)
- 3rd Lake Pond Wetland Treatment Basin (56 lb/yr phosphorus reduction)
- Enhanced Street Sweeping Program (72 lb/yr)
- Stormwater Management Permits (10 lb/yr)
- Cost-Share Projects (16 lb/yr)
- North Shore Circle Improvements Roadside BMPs (3.4 lb/yr phosphorus reduction)
- Curly-leaf Pondweed Treatment (performed annually by CLFLWD)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- Forest Lake Alum Treatment (527 lb/yr)
- Additional projects that are currently in-progress or planned for future:
    - Castlewood Agricultural BMPs (estimated 5 lb/yr phosphorus reduction)
    - Direct Drainage Retrofits (estimated phosphorus reduction TBD)

Conclusion:

Forest Lake is **not** nutrient impaired for aquatic recreation, but water quality readings are sometimes close to or exceed the state standard. The District will continue to implement management activities to improve water quality in Forest Lake and monitor in-lake water quality annually.

5229 Comfort Lake Summary

Comfort Lake 2025 Water Quality Grade: B-

Excellent	Good	Average	Marginal	Poor
A All or most samples meet the desired threshold	**B** **Many samples meet or are near the desired threshold**	C Some samples meet or are near desired threshold	D Many samples no not meet the desired threshold	F Most samples do not meet the desired threshold

Comfort Lake Goals & Status Summary

Table 41. Comfort Lake Water Quality Goals & Status Summary

	Long-Term Goal	Current Status	Remaining
5-Year Average Phosphorus Concentration	≤30 µg/L	26.0 µg/L	193 lb/yr phosphorus load
5-Year Average Secchi Depth	≥7 ft	6.4 ft	
10-Year Average Bottom Water Chloride	≤230 mg/L	TBD	TBD
% of Parcels with ≥75% Natural Shoreline Source: 2023 Shoreland Inventory	≥75% of parcels ≥94 parcels	59% of parcels 74 parcels	16% of parcels 20 parcels

Table 42. Comfort Lake Phosphorus Reduction Goals

5229 Comfort Lake	**Phosphorus Reduction (lb/yr)**
Load Reduction to Achieve Long-term Goal of 30 µg/L: (based on 2004 benchmark of 42 µg/L; 10% margin of error = 83 lbs)	**825**
Load reduction progress through 2025	697
2025 Remaining Load Reduction (cross-referenced w/ in-lake data and trends)	**128**

Comfort Lake Project Implementation Progress

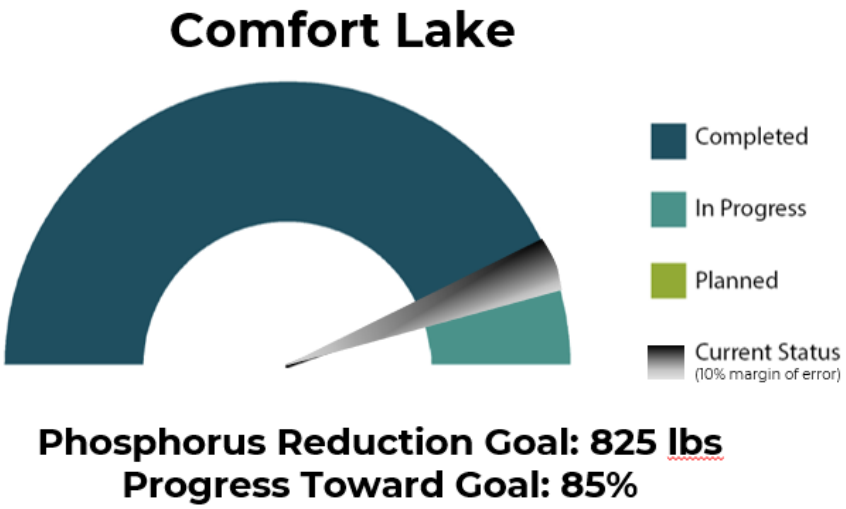


Figure 20. Comfort Lake Phosphorus Reduction Goals and Project Progress Graph

Additional notable projects: cost-share projects, permitting oversight (e.g., erosion control, stormwater management, and waterbody buffer requirements).

Comfort Lake Progress Toward State Standards

Comfort Lake is nutrient impaired for aquatic recreation.

#1 – Water Quality: If seasonal averages of at least two years (minimum of 8 samples) within the last 10 years meet the total phosphorus standard, and either the Secchi or chlorophyll-a standard, then the lake meets criterion #1 for de-listing.

✓ **#1 – Water Quality Samples:**
Comfort Lake meets criterion #1 for de-listing because seasonal averages of at least two years out of the last 10 years meet phosphorus, chlorophyll-a, and Secchi standards. Additionally, the 10-year average is within the state standard.

Table 43. Comfort Lake Water Quality Sample Evaluation

Comfort Lake Phosphorus Deep Lake State Standard ≤ 40 µg/L 10-Year Average: 28 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**34**	**33**	**32**	**26**	**31**	**20**	**28**	**16**	**35**	**26**
Sample 1	16	18	51	57	21	31	26	10	29	22
Sample 2	27	67	20	22	13	44	34	13	71	23
Sample 3	86	27	34	24	17	20	38	25	38	26
Sample 4	28	55	38	20	16	8	25	10	31	37
Sample 5	32	23	24	30	73	12	25	16	32	27
Sample 6	29	23	22	33	45	15	15	22	29	29
Sample 7	29	17		19	30	16	24	17	24	18
Sample 8	27	18		23	18	15	33		26	21

Comfort Lake Secchi Deep Lake State Standard ≥ 4.6 ft 10-Year Average: 5.9 ft	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**5.5**	**5.8**	**7.7**	**5.3**	**6.0**	**8.4**	**5.9**	**7.4**	**4.4**	**5.6**
Sample 1	8.0	7.5	14.0	7.5	6.6	9.8	8.2	5.6	4.9	7.9
Sample 2	6.0	6.5	8.5	6.0	9.5	9.8	6.6	7.9	3.9	7.2
Sample 3	6.5	6.0	7.0	5.5	7.5	8.9	4.6	8.5	4.3	5.6
Sample 4	6.0	4.5	4.5	5.0	5.6	10.2	5.2	7.7	5.2	4.6
Sample 5	3.0	4.5	6.0	4.0	6.0	7.9	4.6	8.0	4.6	4.3
Sample 6	4.5	6.0	6.0	4.5	5.7	9.2	5.9	5.2	3.6	3.9
Sample 7	4.0	5.5		5.5	5.5	6.2	6.9	9.0	3.9	6.2
Sample 8	4.5	6.0		6.0	4.9	5.6	5.6	7.2	4.6	5.6

Comfort Lake Chlorophyll-a Deep Lake State Standard ≤ 14 µg/L 10-Year Average: 12 µg/L	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Summer Average	**16**	**12**	**14**	**16**	**10**	**4**	**10**	**5**	**15**	**14.5**
Sample 1	7	9	4	9	5	4	2	6	8	6
Sample 2	10	1	9	13	7	7	8	3	10	9
Sample 3	9	13	10	21	6	2	16	3	5	14
Sample 4	14	17	33	21	8	1	10	3	15	16
Sample 5	31	13	12	15	16	3	13	8	19	17
Sample 6	22	13	14	27	10	4	8	3	28	25
Sample 7	25	13		20	11	8	8	6	14	13
Sample 8	23	21		15	12	6	13		20	11

#2 Trend/Management: If there is either an improving trend in total phosphorus or management activities in place to maintain improved chlorophyll-a or Secchi observations, then the lake meets criterion #2 for de-listing.

✓ **#2 Trend/Management:**
Phosphorus trend is improving in Comfort Lake. Several management activities are in place to maintain improved chlorophyll-a or Secchi observations in Comfort Lake. Comfort Lake meets criteria #2 for de-listing.

Trends:

Table 44. Comfort Lake Trend Evaluation

Lake	Total Phosphorus Trend	Chlorophyll-a Trend	Secchi Disk Trend
Comfort Lake	Improving Trend	Improving Trend	Improving Trend

**Trends that are not "significantly" improving or declining are not statistically significant.*

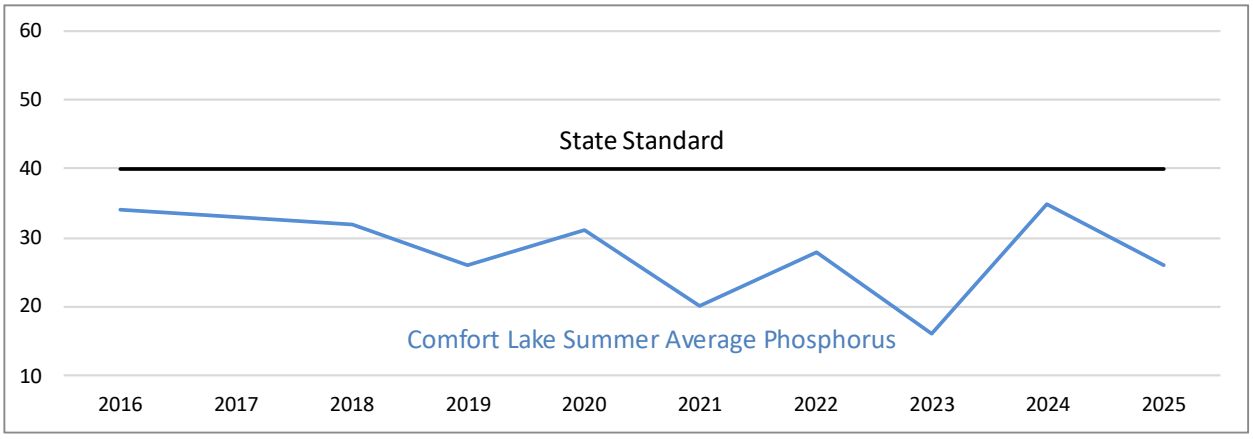


Figure 21. Comfort Lake Phosphorus Concentration History

Management Activities:

- Sunrise River/Hwy 61 Wetland Restoration – Chisago Co. Petitioned Project (estimated 65 lb/yr phos. reduction)
- Bixby Park Water Quality Improvement Project – Chisago Co. Petitioned Project (92 lb/yr phosphorus reduction)
- Target Big Box Retrofits (5 lb/yr phosphorus reduction)
- Stormwater Management Permits (43 lb/yr)
- Curly-leaf Pondweed Surveys (annually by CLFLWD, treatment usually not warranted- due to low density growth)
- CLFLWD Rules and Permitting (ongoing program resulting in erosion prevention, stormwater management practices, native buffers, etc. for development projects)
- Additional projects that are currently in-progress or planned for future:
    - Little Comfort Lake Improvement Projects (estimated 64 lb/yr phosphorus reduction)
    - East Comfort Pond Green Infrastructure Project (estimated 2-4 lb/yr phosphorus reduction)
    - Flood Resiliency Practices and Shoreline Restorations (estimated phosphorus/sediment reduction TBD)

Sediment Loading

The District monitors sediment loading at several tributary points entering Comfort Lake each year. Sediment loading is within the normal range for a lake of Comfort Lake's size and its watershed size.

✓ **Conclusion:**
Comfort Lake is slated to be removed from the impaired waters list for nutrient impairment in April 2026 when the next Impaired Waters List is published by the Environmental Protection Agency.

5300 RIVERS & STREAMS

5300 Progress Evaluation Metrics

Stream chloride concentrations and statistical trend analyses.
Stream total suspended solids flow-weighted mean concentrations and statistical trend analyses.
Percent of streambank parcels with at least 75% natural shoreline condition.
District program outputs may include: Number of stream buffer site visits performed, buffer practices installed, grant applications received, applications approved for funding.

Table 45. River/Stream Goals and Starting Point

Water Resource	Parameter	2021 Starting Point	10-year (2031) Measurable Goal
Sunrise River	10-Year Mean Total Suspended Solids	TBD[4]	≤30 mg/L
	10-Year Mean Chloride Concentration	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Streambank	TBD[3]	≥75%
Bone-Birch-School-Little Comfort (BBSLC) Tributary	10-Year Mean Total Suspended Solids	TBD[4]	≤30 mg/L
	10-Year Mean Chloride Concentration	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Streambank	TBD[3]	≥75%
Washington Judicial Ditch 6	10-Year Mean Total Suspended Solids	TBD[4]	≤30 mg/L
	10-Year Mean Chloride Concentration	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Streambank	TBD[3]	≥75%
Meadowbrook Tributary	10-Year Mean Total Suspended Solids	TBD[4]	≤30 mg/L
	10-Year Mean Chloride Concentration	TBD[4]	≤230 mg/L
	% of Parcels with ≥75% Natural Streambank	TBD[3]	≥75%

5300 Evaluation in 2025

Goal 1 (High Priority): Adaptively manage District streams to achieve annual total suspended solids (TSS) flow-weighted mean concentrations less than the Ecoregion standard of 30 mg/L.

- 2025 Evaluation: The 2025 water monitoring report includes TSS monitoring.

Goal 2 (High Priority): Confirm the headwaters of the Sunrise River.

- 2025 Evaluation: The longest stream reach length and largest drainage area associated with a reach of the Sunrise River is located in the CLFLWD, supporting the idea that the Sunrise River headwaters is in fact located in the CLFLWD.

  In 2021 District staff had multiple communications with state agencies on this topic. All of the state agencies indicated that they do not have a procedure for officially naming an area "headwaters." Staff also corresponded with state agencies and did not find any grant programs that give special consideration to headwaters designations. In 2021 District Engineer, Emmons & Olivier Resources (EOR) conducted a GIS analysis of watercourse length and drainage area of the major tributaries of the Sunrise River to provide supporting data for the determination of the headwaters of the Sunrise River. Washington Judicial Ditch 6 extending south from the east basin of Forest Lake has the longest watercourse length and drainage area of the major tributaries of the Sunrise River. In addition, the Comfort Lake-Forest Lake Watershed recently updated the hydrologic boundary of WJD-6 and determined it extends beyond the MN DNR minor subwatershed layer, further supporting that WJD-6 has the largest drainage area of the major tributaries of the Sunrise River. District staff updated Wikipedia to reflect these findings.

Goal 3 (High Priority): Adaptively manage District streams to achieve stream chloride concentrations less than the State standard of 230 mg/L.

- 2025 Evaluation: The 2025 water monitoring report includes chloride monitoring. Long-term trend establishment is in progress. In 2025, lake and stream chloride concentrations were generally low throughout the monitoring season.

Goal 4 (Medium Priority): Promote natural, deep rooted, native vegetation buffers to ensure at least 75% of streambank parcels have at least 75% natural shoreline condition. Quantified streambank buffer goals will be assessed and established.

- 2025 Evaluation: No stream buffers were implemented in 2025. The District continued implementation of both its regulatory permitting program and its voluntary cost-share program in 2025.

Goal 5 (As Opportunities Arise): Restore abandoned drainage systems to natural conditions (wetlands, bogs, fens, etc.) as opportunity arises.

- 2025 Evaluation: The following CLFLWD projects restored ditched wetland systems, improved natural hydrology, and restored native plant communities:
  - Southeast Meadowbrook Wetland Restoration: located on a ditched tributary system flowing to Bone Lake, completed in 2021.
  - Sunrise River/Highway 61 (Tax Forfeit) Wetland Restoration: located on a ditched tributary system flowing to the Sunrise River and Comfort Lake, completed in 2023.
  - WJD-6 Wetland Restoration: Located along a tributary to the Washington Judicial Ditch 6 (WJD-6), completed in 2024.

5400 WETLANDS

5400 Progress Evaluation Metrics

Acres of wetland restoration or enhancement that support water quality treatment, flood attenuation and storage, and wildlife habitat and recreational opportunities.

District program outputs may include: number of wetland buffer permits issued and cost-share grants awarded.

5400 Evaluation in 2025

Goal 1 (High Priority): Restore or enhance at least 400 acres of wetlands that support water quality treatment.

- 2025 Evaluation: The following projects result in wetland restoration to support water quality treatment:
  - Sunrise River/Highway 61 (Tax Forfeit) Wetland Restoration: 22.1 ac
  - Bone Lake Northeast Legacy Wetland Restoration: 2.0 ac
  - WJD-6 Wetland Restoration: 3.7 ac
  - Moody Lake Capstone Projects: 0.5 ac
  - Bone Lake South Wetland Restoration & Enhancement: (38 ac to begin in 2026)
  - **TOTAL: 28.3 ac**

Goal 2 (High Priority): Restore or enhance at least 200 acres of wetlands to support flood attenuation and storage.

- 2025 Evaluation: The following projects result in wetland restoration to support flood attenuation and storage:
  - Sunrise River/Highway 61 (Tax Forfeit) Wetland Restoration: 22.1 ac
  - Bone Lake Northeast Legacy Wetland Restoration: 2.0 ac
  - WJD-6 Wetland Restoration: 3.7 ac
  - Moody Lake Capstone Projects: 0.5 ac
  - Bone Lake South Wetland Restoration & Enhancement: (38 ac to begin in 2026)
  - **TOTAL: 28.3 ac**

Goal 3 (High Priority): Preserve existing wetland buffers and encourage the establishment of buffers for water quality and habitat benefits through District Programs.

- 2025 Evaluation: In 2025 the District issued one wetland buffer permit (permit number #24-013) which will result in 1.4 total acres of restored/protected wetland buffer. The District received two new wetland buffer permit applications in 2025, which are still in the application review process. The District continued implementation of both its regulatory permitting program and its voluntary cost-share program in 2025.

Goal 4 (Medium Priority): Restore or enhance at least 80 acres of wetlands to support wildlife habitat and recreational opportunities.

- 2025 Evaluation: The following projects result in wetland restoration to support wildlife habitat:
  - Sunrise River/Highway 61 (Tax Forfeit) Wetland Restoration: 22.1 ac
  - Bone Lake Northeast Legacy Wetland Restoration: 2.0 ac
  - WJD-6 Wetland Restoration: 3.7 ac
  - Moody Lake Capstone Projects: 0.5 ac
  - Bone Lake South Wetland Restoration & Enhancement: (38 ac to begin in 2026)
  - **TOTAL: 28.3 ac**

5500 UPLAND RESOURCES

5500 Progress Evaluation Metrics

Establishment of at least 1 new park open space.
Establishment of partnerships with agencies and municipalities within at least 1 continuous greenway corridor.
Annual coordination meeting with partnering agencies and municipalities to discuss upland forest cover protection.

5500 Evaluation in 2025

Goal 1 (Medium Priority): Partner with municipalities to establish at least 1 new natural park open space within a Lake Management District (LMD) priority area (see LMD profiles).

- 2025 Evaluation: Two properties acquired by the District will serve as natural park open spaces.
  - Bone Lake South Property Acquisition - In 2025 the District acquired three parcels with a combined total of 238 acres south of Bone Lake in Scandia. The site contains approximately 122 acres of wetland, 105 acres of restorable prairie/oak savanna, and 11 acres of open water, all of which provide significant habitat for a variety of terrestrial and aquatic species. Now under public ownership, this parcel may be utilized as a natural park open space within the Bone Lake Management District. In 2026, the District is slated to receive a Lessard-Sams Outdoor Heritage Fund grant to restore and enhance the wetlands and other habitats on this site.
  - Forest Lake North Shore Trail Nature Area – The District acquired this 19-acre shoreline property in 2022, creating a natural park open space within the Forest Lake Management District. From 2023-2025 the District worked with Great River Greening to enhance the vegetation on this site.

Goal 2 (Medium Priority): Establish partnerships with agencies and municipalities within 1 greenway corridor in the District as identified in the Greenway Corridor Visioning and Assessment (5120B).

- 2025 Evaluation: The District held several meetings with cities and counties regarding greenway corridor visioning since adoption of the Watershed Management Plan in 2021. Once finalized, the Floodplain Resilience Action Plan will provide additional direction for this effort by prioritizing sites for flood storage. In 2026, the District is slated to receive a Lessard-Sams Outdoor Heritage Fund grant to purchase properties and conservation easements in the Sunrise River Headwaters Corridor.

5600 GROUNDWATER

5600 Progress Evaluation Metrics

Number of best management practices implemented to protect groundwater (drinking water) from nitrate contamination in three areas of high aquifer vulnerability.

Number of groundwater dependent natural resources (GDNRs) with groundwater supply as baseflow protected through District programs or projects.

Number of GDNRs protected from degradation through District programs or projects.

5600 Evaluation in 2025

Goal 1 (Medium Priority): Implement best management practices to protect groundwater (drinking water) from nitrate contamination in three areas of high aquifer vulnerability in order to maintain or improve groundwater quality.

- 2025 Evaluation: The District's cost-share program offers financial and technical assistance for landowners to protect and conserve groundwater. Cropland conversion projects result in reduced nitrogen inputs from not using fertilizer, reduced sediment runoff due to the perennial vegetation stabilizing the soil, and carbon sequestration.

  Groundwater protection projects between 2022-2025 included:
  - **Bone Lake Cropland Conversion**: Maintained 30 acres of cropland conversion to perennial cover. In addition to groundwater protection, this project reduces phosphorus loading by 34 lbs/yr.
  - **Lake Keewahtin Hay/Pasture Planting**: Provided technical assistance for the conversion of 31 acres of cropland to hay and forage production. In addition to groundwater protection, this project is estimated to reduce 5.6 lbs/yr phosphorus and 3.27 tons/yr total suspended solids.
  - **Lake Keewahtin Prairie Planting**: Converted 1 acre of row crops to conservation cover. In addition to groundwater protection, this project is estimated to reduce 1.2 lbs/yr phosphorus and 0.6 tons/yr total suspended solids.
  - **Heims Lake Irrigation Control System**: This project is estimated to reduce groundwater consumption by 300,000 gallons/yr.
  - **Shields Lake Irrigation Reuse:** Partnered with Forest Hills Golf Club to maintain the stormwater harvest and irrigation reuse system, reducing groundwater consumption by up to 26 million gallons/yr.
  - **Mini Grant Lawn Conversions:** Technical and financial assistance was provided to convert ¼ acre of turfgrass to native prairie in areas of increased pollution sensitivity.

Goal 2 (Medium Priority): Complete a groundwater dependent natural resource (GDNR) inventory.

- 2025 Evaluation: This activity was completed in 2023 including mapping of groundwater elevation contours and groundwater dependent lakes, wetlands, streams and springs.

6000 LAND ACQUISITION & MANAGEMENT

6000 Progress Evaluation Metric

Success in using this program will be judged by a qualitative assessment of how the District has used it for cost-effective support of its capital projects and programs, and in collaboration with its cities and towns in pursuit of complementary public goals. Each year, the District administrator will report to the Board of Managers on the implementation of management plans; carrying costs; and recommendations for potential project siting, continued holding or disposition of District properties.

6000 Goals & Evaluation in 2025

- Goal 1: Implement the Land Acquisition & Management Program to cost-effectively support District capital projects and programs.
    - 2025 Evaluation: In 2025 the District continued its ongoing Land Acquisition & Management Program to support projects and programs including:
        - Bone Lake South Property Acquisition: 238 acres purchased in fee title in 2025. Restoration and enhancement projects planned for 2026-2031.
        - Heath Iron Enhanced Sand Filter: 2.75 acres purchased in fee title in 2025. Iron enhanced sand filter project planned for 2026-2027.
        - North Shore Trail Nature Area: 19 acres purchased in 2022. Site enhancement completed in 2023-2025 in partnership with Great River Greening.
        - Greenbelt & Open Space: Easement and acquisition program to begin in Sunrise River Headwaters Corridor under Lessard-Sams Outdoor Heritage Fund grant in 2026-2030.

APPENDICES

Appendix A - Clean Water Fund Grant Awards (FY 2014-2025)

Grant program from 2008 MN constitutional amendment. Projects and Practices category only. Projects and Practices grant program switched to biennial basis in 2026.

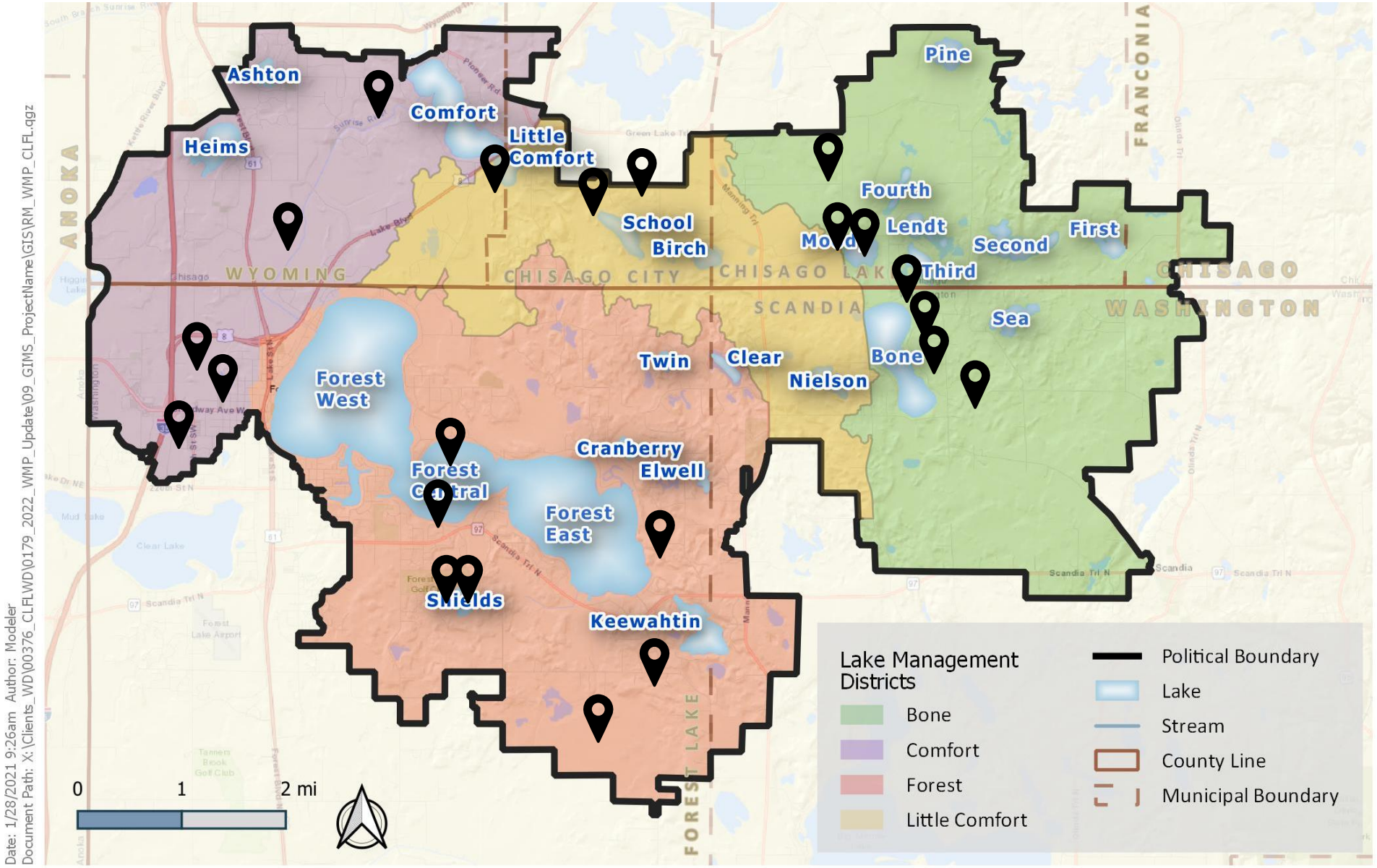
	Organization	Total Projects and Practices Grants Awarded (FY 2014-2025)
1	**Comfort Lake-Forest Lake WD**	**$6,656,334**
2	Becker SWCD	$5,233,710
3	Benton SWCD	$3,658,210
4	Bois de Sioux WD	$3,355,010
5	Crow Wing SWCD	$3,335,000
6	Coon Creek WD	$3,094,023
7	Vermillion River JPB/JPO	$3,023,950
8	Chisago SWCD	$2,952,500
9	Rice Creek WD	$2,732,104
10	Anoka Conservation District	$2,477,200
11	Stearns SWCD	$2,369,737
12	Pope SWCD	$2,361,300
13	Shingle Creek WMC	$2,057,550
14	Red Lake SWCD	$2,042,261
15	Bassett Creek WMC	$1,900,000
16	Capitol Region WD	$1,835,000
17	Douglas SWCD	$1,666,908
18	City of Anoka	$1,662,146
19	Pomme de Terre River Association	$1,635,325
20	Wilkin SWCD	$1,541,000
21	Buffalo-Red River WD	$1,500,000
22	Lower Mississippi River WMO	$1,472,000
23	Pelican River WD	$1,470,108
24	Minnehaha Creek WD	$1,400,240
25	Okabena-Ocheda WD	$1,398,312

	Organization	Total Projects and Practices Grants Awarded (FY 2014-2025)
26	Middle St. Croix River WMO	$1,370,450
27	Carlton SWCD	$1,341,444
28	Dakota County	$1,295,724
29	Dakota SWCD	$1,285,000
30	Pennington SWCD	$1,255,142
31	Valley Branch WD	$1,216,000
32	Cedar River WD	$1,208,000
33	Middle Fork Crow River WD	$1,176,250
34	**City of Forest Lake**	**$1,107,000**
35	Scott SWCD	$1,101,430
36	Prior Lake-Spring Lake WD	$1,082,675
37	Redwood-Cottonwood Rivers Contr	$1,048,880
38	Carnelian-Marine-St. Croix WD	$996,481
39	Isanti SWCD	$950,055
40	Wright SWCD	$928,375
41	Brown's Creek WD	$927,950
42	Martin County	$882,000
43	Pioneer-Sarah Creek WMC	$821,000
44	Clearwater River WD	$812,906
45	Fillmore SWCD	$804,385
46	Mississippi WMO	$800,000
47	Renville SWCD	$773,133
48	Nine Mile Creek WD	$750,000
49	Todd SWCD	$745,260
50	Wild Rice WD	$700,000
	Total	**$88,209,468**

WD = Watershed District SWCD = Soil and Water Conservation District CA = Control Area
WMB = Watershed Management Board WMC = Watershed Management Commission WMO = Watershed Management Org.

CLFLWD assisted the City of Forest Lake with its FY18 CWF grant proposal for Forest Lake Enhanced Street Sweeping Implementation (award = $220,000) by performing the comprehensive street sweeping study and report in 2017 and assisting with the FY18 grant proposal and work plan. CLFLWD also assisted the City of Forest Lake with its FY17 CWF grant proposal for Forest Lake High School Stormwater Reuse (award = $505,000) by performing initial coordination with the Forest Lake High School and project engineers.

Appendix B – Portfolio of Completed & In-Progress Projects

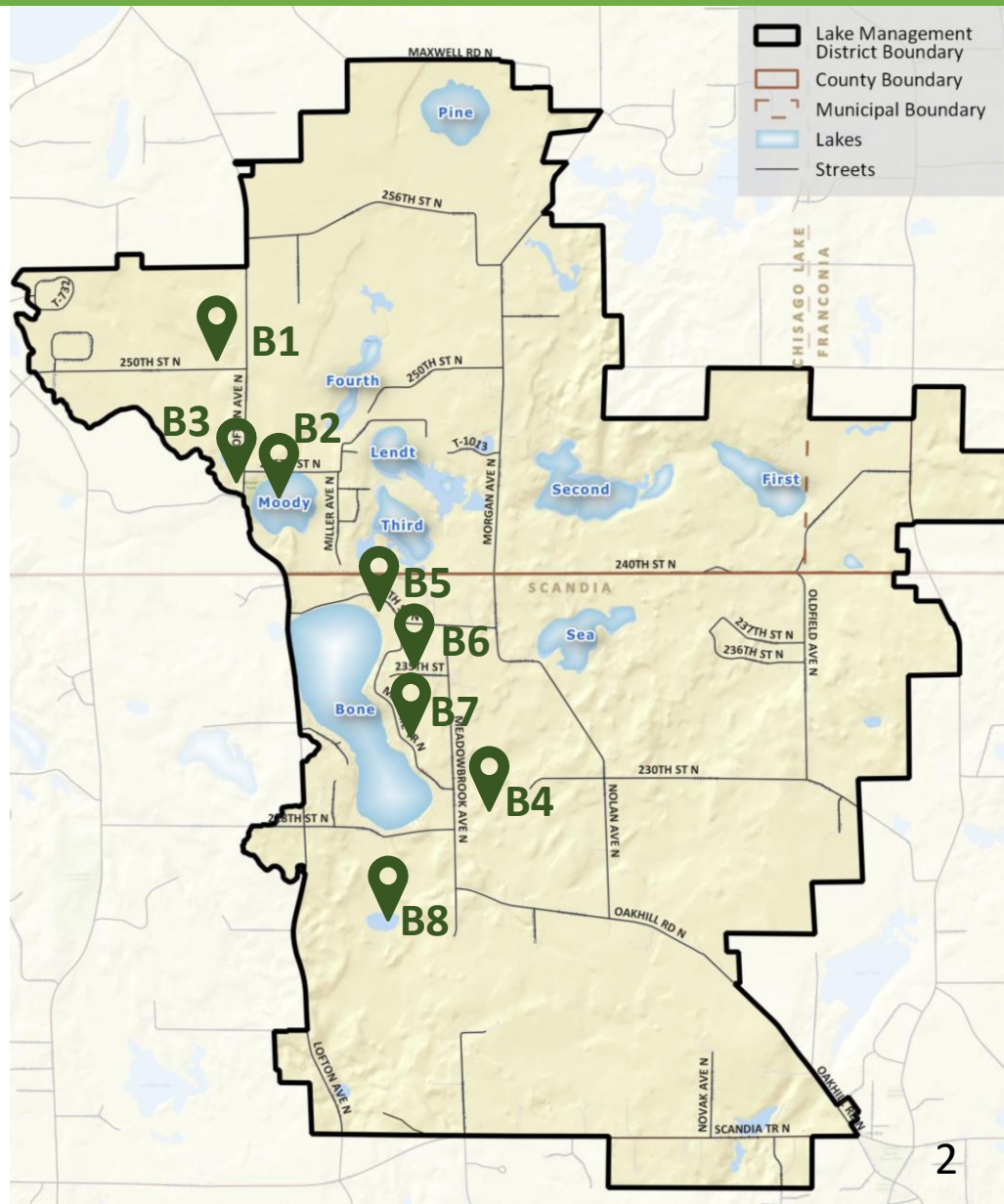


This appendix summarizes programs and projects undertaken by the District and its partners. It is not an exhaustive list of all projects and practices within the watershed, but is merely a summary of some of the activities resulting in significant progress toward nutrient reduction goals.

Bone Lake Management District Completed & In Progress Projects

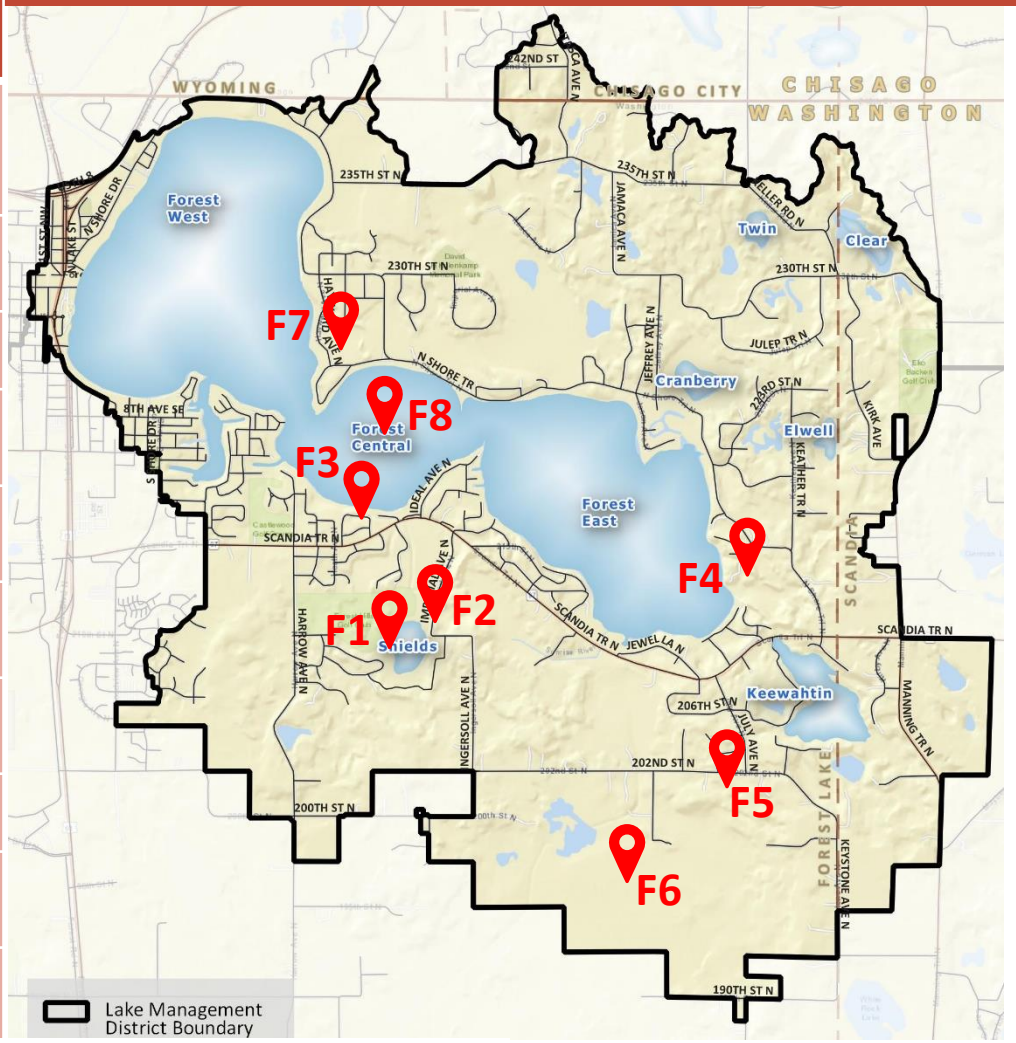
Completed and In-Progress Projects	Outcomes at Moody or Bone Lake (reductions)	Outcomes at Edge of Project (reductions)
B1: Moody Wetland Rehabilitation - Completed	455 lb/yr phosphorus (P) 457,120 lb/yr TSS	455 lb/yr P 457,120 lb/yr TSS
B2: Moody Lake Alum Treatment - Completed	324 lb/yr P	324 lb/yr P
B3: Moody Lake Capstone Projects – In Progress	60 lb/yr P 2,140 lb/yr TSS	60 lb/yr P 2,140 lb/yr TSS
B4: Bone Lake Southeast Drained Wetland Restorations - Completed	35 lb/yr P 324,640 lb/yr TSS	35 lb/yr P 324,640 lb/yr TSS
B5: Bone Lake NE Wetland Resto – Completed	15 lb/yr P	15 lb/yr P
B6: Melanie Trail Cropland Conversion – Ongoing	34 lb/yr P 27,600 lb/yr TSS	34 lb/yr P 27,600 lb/yr TSS
B7: Melanie Trail Roadside Practices – Completed	2 lb/yr P	2 lb/yr P
B8: Bone Lake South Restoration/Enhancement – In Progress	TBD for P, TSS, flood storage, habitat	TBD for P, TSS, flood storage, habitat
Fish Barriers & Rough Fish Harvest – Completed	Necessary to maintain water quality	Necessary to maintain water quality
Moody/Bone Ag Practices – In Progress	83 lb/yr P 177,293 lb/yr TSS	147 lb/yr P 314,000 lb/yr TSS
TOTAL	1,010 lb/yr P or 504,900 lbs of algae growth	910 lb/yr P

*Many projects result in multiple additional benefits such as wildlife habitat and flood storage creation.
*Literature values indicate 1 lb of phosphorus can support up to 500 lbs of algae growth.
*See TSS Footnotes slide after project summary slides.



Forest Lake Management District Completed and In Progress Projects

Completed and In Progress Projects	Outcomes at Forest Lake (reductions)	Outcomes at Edge of Project (reductions)
F1: Shields Lake Stormwater Reuse & Alum - Completed	531 lb/yr phosphorus (P) to Forest Lake	1,000 lb/yr P to Shields Lake (edge of project) 185 lb/yr TSS
F2: Shields Lake Fish Barrier, Aerator, Shoreline Restoration - Completed	Necessary to maintain water quality	Necessary to maintain water quality
F3: Hilo Lane Stormwater Retrofit - Completed	12 lb/yr P	12 lb/yr P
F4: 3rd Lake Pond Restoration - Completed	56 lb/yr P 1,696 lb/yr TSS	56 lb/yr P 1,696 lb/yr TSS
F5: CR50 Iron Enhanced Sand Filter – Completed	97 lb/yr P 3,000 lb/yr TSS	97 lb/yr 6,000 lb/yr TSS
F6: Washington Judicial Ditch 6 Wetland Restoration – Completed	20 lb/yr P 5,558 lb/yr TSS	20 lb/yr 5,558 lb/yr TSS
F7: N. Shore Circle BMPs (City Forest Lk) – Completed N. Shore Circle Shoreline Restoration – Completed	6 lb/yr P	6 lb/yr P
F8: Forest Lake Alum Treatment – Completed	527 lb/yr P	527 lb/yr P
Enhanced Street Sweeping – Ongoing	≤ 72 lb/yr P ≤ 190,824 lb/yr sediment	143 lb/yr P 381,648 lb/yr sediment
TOTAL**	1,321 lb/yr P or 660,300 lbs of algae	1,745 lb/yr P

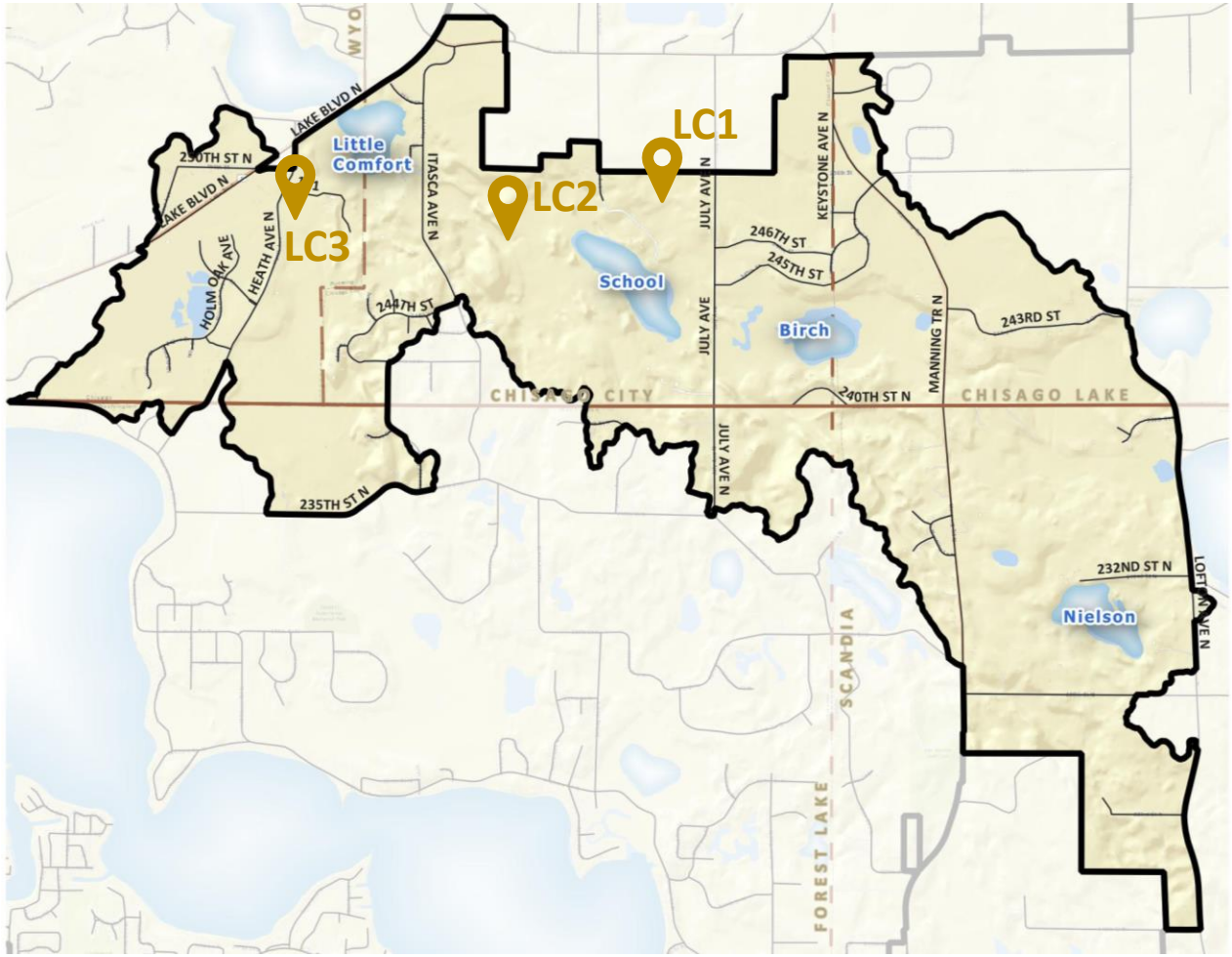


*Many projects result in multiple additional benefits such as wildlife habitat and flood storage creation.
*Literature values indicate 1 lb of phosphorus can support up to 500 lbs of algae growth.
*Street sweeping estimates are based on material removed from the street surface and do not reflect total load reductions to the downstream lakes. The actual load reduction to downstream water resources is generally 50% or less than the total load recovery and depends on the number and type of BMPs along the treatment train.
*See TSS Footnotes slide after project summary slides.

Little Comfort Lake Management District Completed and In Progress Projects

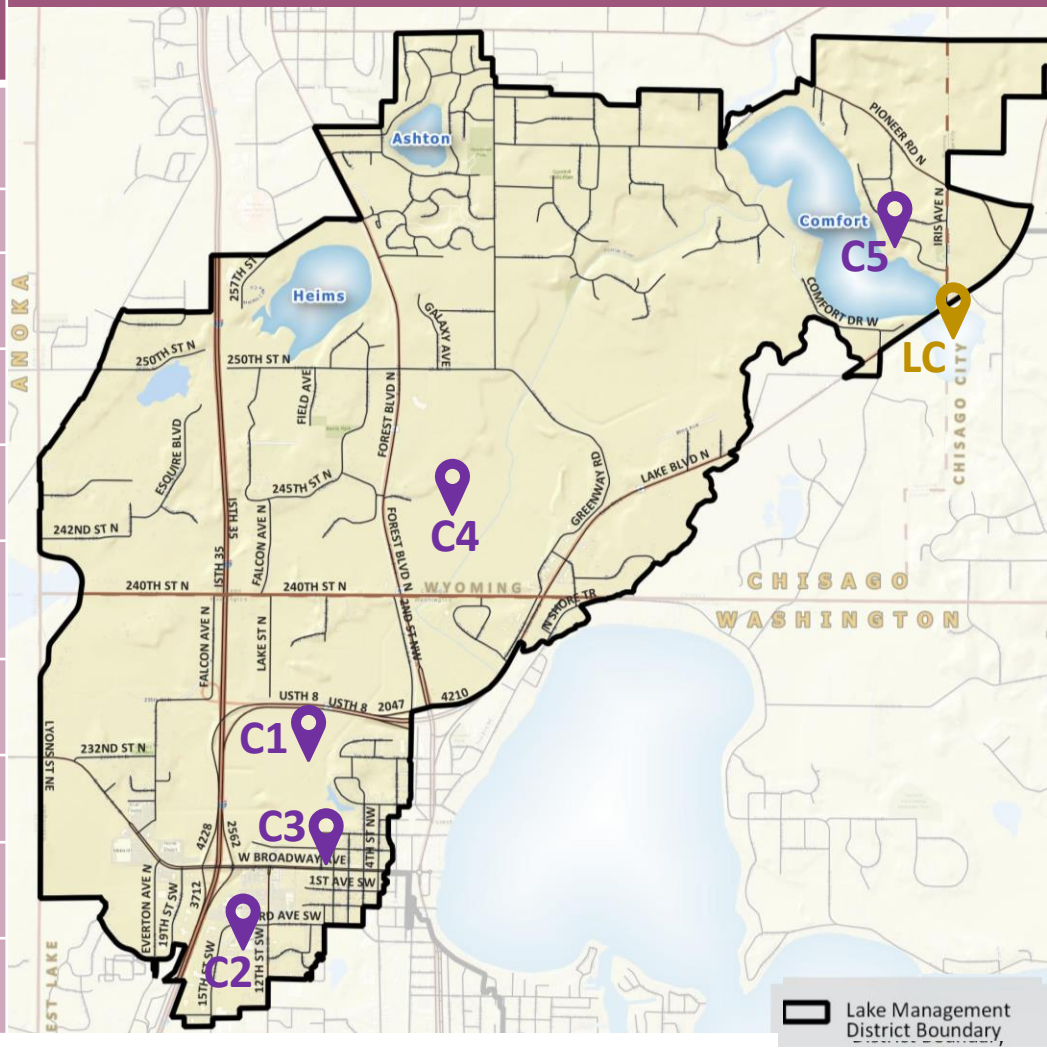
Completed and In-Progress Projects	Outcomes at Little Comfort Lake (reductions)	Outcomes at Edge of Project (reductions)
LC1: School Lake Ag BMPs – In Progress Wetland Restorations – Future	45 lb/yr phosphorus	61 lb/yr phosphorus
LC2: School Lake Outlet Channel Improvements – In Progress	TBD pending feasibility	TBD pending feasibility
LC3: Heath Iron Enhanced Sand Filter– In Progress	86 lb/yr phosphorus	86 lb/yr phosphorus
Little Comfort Alum Treatment – On Hold Until Other Projects Complete	TBD	TBD
TOTAL	131 lb/yr P or 40,000-50,000 lb of algae growth	147 lb/yr phosphorus

*Many projects result in multiple additional benefits such as wildlife habitat and flood storage creation.
*Literature values indicate 1 lb of phosphorus can support up to 500 lbs of algae growth.
*See TSS Footnotes slide after project summary slides.



Comfort Lake Management District Completed and In Progress Projects

Completed and In Progress Projects	Outcomes at Comfort Lake (reductions)	Outcomes at Edge of Project (reductions)
C1: Bixby Park Wetland Enhancement (Chisago Co. Petition) - Completed	93 lb/yr phosphorus (P) 5,546 lb/yr TSS	206 lb/yr P 55,458 lb/yr TSS
C2: Target Retrofits - Completed	5 lb/yr P	11 lb/yr P
C3: Broadway Ave Iron Sand Filter – Completed, iron-sand media replacement pending	15 lb/yr P 683 lb/yr TSS	33 lb/yr P 6,834 lb/yr TSS
C4: Sunrise River Hwy 61 Wetland Enhancement (Chisago Co Petition) – Completed	65 lb/yr P 18,630 lb/yr TSS	89 lb/yr P 51,740 lb/yr TSS
C5: East Comfort Pond Stormwater Treatment Project – In Progress	5 lb/yr P 1,424 lb/yr TSS	5 lb/yr P 1,424 lb/yr TSS
Enhanced Street Sweeping (Cities of Forest Lake & Wyoming) – Ongoing	≤ 37 lb/yr P ≤ 83,407 lb/yr TSS	70 lb/yr P 159,814 lb/yr TSS
Regional Treatment Facility (Location TBD) – In Progress	TBD	TBD
Stormwater Permits (Multiple Locations)	28 lb/yr P	33 lb/yr
LC: Little Comfort Lake Projects – In Progress	64 lb/yr to Comfort Lake	(See Little Comfort Lake Management District)
TOTAL**	301 lb/yr P or 150,600 lbs of algae growth	499 lb/yr P



*Many projects result in multiple additional benefits such as wildlife habitat and flood storage creation.
*Literature values indicate 1 lb of phosphorus can support up to 500 lbs of algae growth.
*Street sweeping estimates are based on material removed from the street surface and do not reflect total load reductions to the downstream lakes. The actual load reduction to downstream water resources is generally 50% or less than the total load recovery and depends on the number and type of BMPs along the treatment train.
*See total suspended solids (TSS) Footnotes slide after project summary slides.

Total Suspended Solids (TSS) Footnotes

The following notes accompany the total suspended solids (TSS) loading figures on the previous slides

- The District monitors sediment loading annually. View the latest monitoring report at www.clflwd.org/monitoring.php. View the presentation on Comfort Lake sediment loading from the 3/24/22 regular board meeting here.
- Moody Lake Wetland Rehabilitation: TSS loading estimated from RUSLE raster layer created by EOR. Assumes 80% TSS removal for the wetland and 85% for the buffer. Removal due to buffer was subtracted from load to wetland (the drainage area to the latter includes that for the former).
- Moody Lake Capstone Projects: TSS loading estimated from RUSLE raster layer created by EOR. Value is for buffer establishment only assuming 85% removal. Not enough information on the gully repair to estimate TSS benefits at this time.
- Bone Lake Southeast Drained Wetland Restorations: TSS loading estimated from RUSLE raster layer created by EOR. Assumes 80% TSS removal for each of the wetland restoration projects.
- Shields Lake Stormwater Reuse Project: TSS loading estimated from modeled flows and TSS grab samples. Ponds immediately upstream and downstream significantly reduce the TSS load reduction impact of this pond on the lake.
- 3rd Lake Pond Restoration: TSS loading estimated from RUSLE raster layer created by EOR. Assumes 80% TSS removal for the immediate drainage area only due to the pond immediately upstream.
- CR50 Iron Enhanced Sand Filter: TSS load reductions from the feasibility report. Assumes a 50% impact reduction factor due to the downstream wetland.
- WJD-6 Wetland Restoration: TSS loading estimated from measured flows and TSS grab samples from 2018. Assumes 80% TSS removal.
- Bixby Park Wetland Enhancement (Chisago Co Petition): TSS load reductions from the P8 model. Assumes a 90% impact reduction factor due to the distance from the lake.
- Broadway Avenue Iron Enhanced Sand Filter: TSS loading using the simple method, Met Council Generalized Land Use, and unit area loading values from the MN Stormwater Manual. Assumes 100% TSS removal and a 90% impact reduction factor due to the distance from the lake.

*Disclaimer: These values represent rough approximations of sediment load reductions based on generalized land use and land cover characteristics and limited monitoring data.

APPENDIX C – PROGRESS AT A GLANCE

The following table provides an overview of progress toward the goals set out in the Watershed Management Plan (WMP). See the full Progress Report for a detailed description of progress toward each goal.

Progress Rating Key: ☐ = not started ○ = in-progress ⊘ = ongoing activity w/ milestones achieved ☑ = completed/target met ⇨ = see other line item

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
3000	**Programs**			
3001 Rules	Goal 1: Ensure fair and effective implementation of District Rules through the Permitting Program (see goals under 3002 Permitting).	High	⊘	Permitting Program is active.
3001 Rules	Goal 2: Review and update District Rules and standards at least once every ten years, or more often as needed.	High	○	Rule 9 updated in 2025. Broader rule review and update planned 2026-2027.
3002 Permitting	Goal 1: Hold a meeting prior to permit approval for 100% of stormwater management permit applications to maximize efficiency of the application process and reduce variance requests.	High	⊘	Held pre-permit meetings and correspondence for 100% of stormwater management permits in 2025.
3002 Permitting	Goal 2: Inspect 90% or more of active permits at least once every two weeks.	High	⊘	Inspected all active permits.
3002 Permitting	Goal 3: Inspect 90% or more of permitted best management practices (BMPs) associated with maintenance instruments at least once a year.	High	○	Inspected 86% of sites with maintenance instruments.
3002 Permitting	Goal 4: Work with permittees to maintain compliance with District rules to achieve an average annual inspection compliance rating of at least 90%.	High	⊘	Average compliance rating in 2025 was 96%.
3002 Permitting	Goal 5: Work with maintenance instrument holders to maintain compliance with BMP maintenance instrument requirements to achieve an average annual inspection compliance rating of at least 90%.	High	⊘	Average compliance rating in 2025 was 91%.
3002 Permitting	Goal 6: Obtain 90% or more annual reports from permitted BMP maintenance instrument holders.	High	○	Received 19% of self-reporting from maintenance instrument holders.
3003 Monitoring	Goal 1: Annually perform water monitoring in accordance with the Comprehensive Monitoring Plan to inform future management actions, identify water quality improvement opportunities, and evaluate progress toward goals.	High	⊘	Annual monitoring program ongoing with prioritized data collection.

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
3004 NPS Abatement	Goal 1: Implement program to achieve shoreline and streambank restoration and maintenance goals under sections 5200 Lakes and 5300 Streams.	High	○	Comprehensive Shoreline Program is underway. Completed updated shoreland inventories for all priority lakes. 6 out of 9 priority lakes are meeting shoreline goals.
3004 NPS Abatement	Goal 2: Reach out to 100% of high priority agricultural landowners identified in District diagnostic studies.	High	☑	Reached out to 100% of high priority ag landowners.
3004 NPS Abatement	Goal 3: Establish a farmer-led council to inform and influence agricultural land management practices.	High	✓	Established farmer-led council and continue to hold meetings regularly.
3004 NPS Abatement	Goal 4: Annually coordinate with District communities on potential Municipal Stormwater Remediation project partnerships.	High	✓	Meet with local municipalities regularly to coordinate non-point source pollution abatement efforts.
3005 Education	Goal 1: Increase public knowledge of and appreciation for human impacts to surface water, groundwater and natural resources to increase target audiences' behaviors that positively impact water resources.	High	✓	Education & Outreach metrics tracked and reported on annually in yearend report.
3005 Education	Goal 2: Communicate District programs, projects and other initiatives to the public in a clear, consistent and equitable manner.	High	✓	Education & Outreach metrics tracked and reported on annually in yearend report.
3006 Interagency	Goal 1: Coordinate efforts with partners to ensure the most efficient and cost-effective use of funds for water resource management.	High	✓	Continued participation in multiple interagency work groups and meetings.
3006 Interagency	Goal 2: Act as the local office for facilitating public input on water resource-related issues, react in a timely manner to the concerns of citizens and operate in an open and transparent manner.	High	✓	Ongoing with examples provided in Progress Report.
3006 Interagency	Goal 3: Participate in the evaluation of Total Maximum Daily Load (TMDL) studies and implementation of projects and programs to address impairments of waters within the District.	High	✓	Several TMDL projects implemented in recent years and progress toward impairment delisting tracked. Bone Lake delisted in 2024. Comfort Lake slated for delisting in 2026.
3006 Interagency	Goal 4: Work with Lower St. Croix (LSC) River partners to achieve the goals of Lower St. Croix One Watershed One Plan, including associated TMDLs and WRAPS.	High	✓	Continued participation in LSC Watershed Partnership to coordinate watershed protection and improvement efforts.
3007 Research	Goal 1: Initiate, advance or support at least one research initiative each year.	High	✓	Participated in University of MN alum treatment research project in 2025.

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
3007 Research	Goal 2: Provide at least four updates to the Board of Managers on research topics, whether initiated by the District or other organizations, each year.	High	✓	Provided nine research updates to the Board of Managers in 2025.
3008 Measure	Goal 1: Annually complete a detailed Progress Report evaluating the previous year's progress toward all goals and metrics in this Plan.	High	✓	Completed.
3008 Measure	Goal 2: Every five years perform a comprehensive review of District goals and metrics to evaluate achievability and course-correction actions, if needed.	High	○	Performance Review & Assistance Program (PRAP) Evaluation in progress. Plan amendments possible in 2026.
3009 Grants	Goal 1: Obtain grant awards in an amount at least equal to 25% of the District's levy, as measured on a 3-year average.	High	✓	Latest 3-year average grant awards equal to 110% of 3-year average levy.
3009 Grants	Goal 2: Research and apply to at least one new grant program each year.	High	✓	Applied to 7 new grant programs in 2025.
3009 Grants	Goal 3: Complete grant reporting in accordance with grant contracts to ensure timely disbursement of grant funds.	High	✓	Completed grant reporting and maintained compliance for 100% of grants.
3010 O&M	Goal 1: Ensure all District projects and facilities achieve their designed lifespan.	High	✓	All projects inspected/tracked under O&M Program.
3010 O&M	Goal 2: Develop a Comprehensive Operations & Maintenance Plan.	High	☑	Comprehensive O&M Plan completed. Updated annually.
3010 O&M	Goal 3: Complete inspections and maintenance in accordance with the Comprehensive Operations & Maintenance Plan.	High	✓	Completed inspections in accordance with O&M Plan in 2025.
3011 AIS	Goal 1: Continue use and refinement of the District's prevention and early detection & rapid response initiatives to reduce the risk of new invasive species introductions to District waterbodies and prevent the spread of existing infestations to other waterbodies.	High	✓	Prevention and early detection occurs primarily through ongoing watercraft inspection program and public outreach.
3011 AIS	Goal 2: Manage existing populations of AIS to reduce internal phosphorus loading.	High	✓	Managed nuisance growth curly-leaf pondweed in 2025.
3011 AIS	Goal 3: Manage existing populations of AIS to improve native plant diversity by managing AIS populations that pose a risk to native plant health.	High	✓	Managed nuisance growth curly-leaf pondweed, flowering rush, and purple loosestrife.
3011 AIS	Goal 4: Ensure ecological integrity is protected by providing guidance and technical support to other organizations and residents who manage AIS for recreational benefits.	High	✓	Maintained communications with local residents, lake associations, and MN Department of Natural Resources.

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
3012 Land Acq.	See 6000 Series			
3013 Resiliency	Goal 1: Incorporate climate and flooding resiliency into annual District planning and budgeting efforts.	High	☑	Floodplain Resilience Action Plan to be finalized in 2026. Coordination with interagency partners, grant seeking, and project development ongoing.
3013 Resiliency	Goal 2: Develop an emergency response plan for the District.	High	☑	Crisis Communication Plan completed. Reviwed annually and updated as necessary.
5000	**Projects**			
5100 Floodplain	Goal 1: Reduce or mitigate flooding in areas with known flooding and/or high water problems by achieving the interim measurable goal of increasing water storage by an additional 99 ac-ft (or 0.16 inches over 7,397 acres of upland) over the next 10 years (2022-2031) based on the Lower St. Croix 1W1P. The District will determine LMD-specific measurable goals from modeling floodplain conditions under future rainfall scenarios.	High	○	Completed projects have added 39.8 acre feet of storage to date. Project development underway through Water Quality & Storage grant in 2026.
5100 Floodplain	Goal 2: Maintain and improve community preparedness and emergency response capacity to flooding and/or high water problems by sharing floodplain modeling and mapping results under future climate conditions with counties and District communities.	Medium	☑	Shared floodplain modeling and mapping results with local municipalities. Will finalize Floodplain Resilience Action Plan in 2026 and perform public outreach under Water Quality & Storage grant.
5200 Lakes	Goal 1: Adaptively manage District lakes to reduce phosphorus loads and de-list impaired lakes with Total Maximum Daily Loads (TMDLs) to achieve state water quality eutrophication standards (total phosphorus, Chlorophyll-a and Secchi).	High	○	Bone Lake delisted in 2024. Comfort Lake to be delisted in 2026 once EPA publishes Impaired Waters List. Water quality improvement projects underway for remaining impaired lakes.
5200 Lakes	Goal 2: Adaptively manage District lakes to improve water quality by achieving the 10-year (2031) total phosphorus and Secchi goals. See Table 4-3.	High	○	Water quality has generally improved in recent years, and most lakes have improving long-term water quality trends. See Progress Report for detailed analysis of progress toward lake water quality goals.
5200 Lakes	Goal 3: Partner with agencies to manage District lakes for healthy fish and aquatic plant communities.	High	☑	Continued coordination with MN Department of Natural Resources to manage rough fish populations and protect populations of native fishes.

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
5200 Lakes	Goal 4: Establish bottom water chloride trends in District lakes and provide resources to salt applicators on ways to reduce chloride inputs. See Table 4-3.	Medium	○	Long-term trend establishment in progress. In 2025, lake and stream chloride concentrations were generally low throughout the monitoring season.
5200 Lakes	Goal 5: Promote natural, deep rooted, native vegetation buffers to ensure at least 75% of lakeshore parcels have at least 75% natural shoreline condition. For example, in its last shoreline survey 55% of parcels on Bone Lake were covered in at least 75% natural shoreline vegetation; the goal is to ensure 75% of parcels are vegetated thusly. See Table 4-3.	Medium	○	Comprehensive Shoreline Program is underway. Completed updated shoreland inventories for all priority lakes. 6 out of 9 priority lakes are meeting shoreline goals.
5300 Streams	Goal 1: Adaptively manage District streams to achieve annual total suspended solids (TSS) flow-weighted mean concentrations less than the Ecoregion standard of 30 mg/L. See Table 4-3.	High	○	TSS monitored in 2025, but insufficient data to calculate loads and trends.
5300 Streams	Goal 2: Confirm the headwaters of the Sunrise River.	High	☑	CLFLWD contains the longest reach of contributing streams to the Sunrise River and can therefore be considered the headwaters.
5300 Streams	Goal 3: Adaptively manage District streams to achieve stream chloride concentrations less than the State standard of 230 mg/L. See Table 4-3.	Medium	○	Long-term trend establishment in progress. In 2025, lake and stream chloride concentrations were generally low throughout the monitoring season.
5300 Streams	Goal 4: Promote natural, deep rooted, native vegetation buffers to ensure at least 75% of streambank parcels have at least 75% natural shoreline condition. Quantified streambank buffer goals will be assessed and established.	Medium	○	Cost-share program is available for stream buffers as well as lake buffers. Program has primarily focused on lake buffers to date.
5300 Streams	Goal 5: Decommission abandoned drainage systems to restore natural hydrology as opportunity arises (e.g., reconnecting ditched streams to their floodplains).	As Opportunities Arise	○	Implemented three projects in recent years that restored abandoned drainage systems to natural conditions.
5400 Wetlands	Goal 1: Restore or enhance at least 400 acres of wetlands that support water quality treatment.	High	○	Completed projects to restore 28.3 acres of wetland for water quality treatment, flood storage, and habitat benefits. Implemented regulatory wetland buffer rule through permitting program.
5400 Wetlands	Goal 2: Restore or enhance at least 200 acres of wetlands to support flood attenuation and storage.	High	○	
5400 Wetlands	Goal 3: Preserve existing wetland buffers and encourage the establishment of buffers for water quality and habitat benefits through District Programs.	High	○	

WMP Code	Goal	Priority Level	2025 Progress Rating	2025 Progress Description
5400 Wetlands	Goal 4: Restore or enhance at least 80 acres of wetlands to support wildlife habitat and recreational opportunities.	Medium	○	
5500 Uplands	Goal 1: Partner with municipalities to establish at least 1 new natural park open space within a LMD priority area (see LMD profiles).	Medium	○	CLFLWD acquired two properties which will serve as natural park open spaces.
5500 Uplands	Goal 2: Establish partnerships with agencies and municipalities within 1 greenway corridor in the District as identified in the Greenway Corridor Visioning and Assessment (5120B).	Medium	○	Greenbelt & Open Space acquisition and easement grant awarded for 2026.
5600 Groundwater	Goal 1: Implement best management practices to protect groundwater (drinking water) from nitrate contamination in three areas of high aquifer vulnerability and high pollution sensitivity of near surface materials.	Medium	○	Cost-share programs offered and several projects implemented to protect and conserve groundwater.
5600 Groundwater	Goal 2: Complete a groundwater dependent natural resource (GDNR) inventory.	Medium	☑	Groundwater Dependent Natural Resource inventory technical memo completed.
6000	**Land Acquisition & Management**			
6000 Land Acquisition & Management	Goal 1: Implement the Land Acquisition & Management Program to cost-effectively support capital and other projects.	High	⊘	Acquired two new properties in 2025 and continued maintaining existing CLFLWD-owned natural park space.