



**Prior Lake-
Spring Lake
Watershed
District**

Annual Report

2021



**PRIOR LAKE
SPRING LAKE
WATERSHED DISTRICT**

Mission: To manage & preserve the water resources of the Prior Lake-Spring Lake Watershed District to the best of our ability using input from our communities, sound engineering practices, and our ability to efficiently fund beneficial projects which transcend political jurisdictions.

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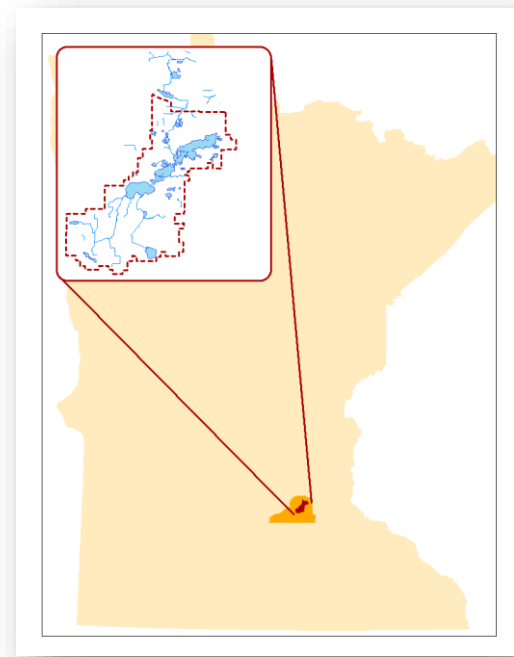
INTRODUCTION

This report has been prepared by the Prior Lake-Spring Lake Watershed District (PLSLWD, or District) and details the activities of the District through the calendar year 2021. The report will focus on the District's program and project accomplishments relative to the approved Capital Improvement Plan established in the 2020 PLSLWD Water Resources Management Plan and annual work plan. Annual reporting requirements listed in Minnesota Rules Chapter 8410.0150, Subpart 3 will also be included in this report.

ABOUT THE DISTRICT

The Prior Lake-Spring Lake Watershed District was established on March 4, 1970 by order of the Minnesota Water Resources Board (MWRB) under the authority of the Minnesota Watershed Act (Minnesota Statutes, Chapter 112). The order was in response to a petition filed by resident landowners within the watershed on June 24, 1969. This citizen petition sought establishment of the District for the purposes of wisely managing and conserving the waters and natural resources of the watershed.

The PLSLWD is approximately 42 square miles in size and located in north central Scott County, Minnesota, encompassing parts of the cities of Prior Lake, Shakopee, and Savage and parts of Sand Creek and Spring Lake Townships. In addition, a portion of the Shakopee Mdewakanton Sioux Community (SMSC) tribal lands are located within the District.



Location of PLSWD

BOARD OF MANAGERS

PLSLWD is administered by a five-person Board of Managers (Board) appointed by the Scott County Commissioners. All the District's policies, goals, and accomplishments are directed by the citizens who serve on the Board. The Board of Managers meets the second Tuesday of the month at 6:00 PM at the Prior Lake City Hall, located at 4646 Dakota St. SE, Prior Lake, MN 55372. As result of the Covid-19 pandemic, some of the 2021 Board meetings were held virtually and a meeting link was posted to allow the public to attend. Meeting notices, agendas and approved minutes are available on the District website at www.plslwd.org/meetings.

Board members serving during the calendar year 2021 are listed below.

<p><u>Curt Hennes</u> Vice President Term: 6/12/19-6/11/22 Resides in Prior Lake 17286 Sunset Trail SW Prior Lake, MN 55372 952-440-7443 clphennes@gmail.com</p>	<p><u>Steve Pany</u> Secretary Term: 7/14/20-3/2/22 Resides in Prior Lake 5561 Cedarwood Street NE Prior Lake, MN 55372 952-496-1138 C22steve@gmail.com</p>	<p><u>Frank Boyles</u> Manager Term: 7/26/20 - 7/25/23 Resides in Prior Lake 5153 Hope Street Prior Lake, MN 55372 952-292-0400 Frank10350@mchsi.com</p>
<p><u>Mike Myser</u> President Term: 3/12/18-3/3/21 3/4/21-3/4/24 Resides in Prior Lake 3857 Island View Cir NW Prior Lake, MN 55372 651-341-5932 m.myser@mchsi.com</p>	<p><u>Bruce Loney</u> Treasurer Term: 3/3/19-3/2/22 Resides in Prior Lake 5870 Shannon Circle SE Prior Lake, MN 55372 952-769-7408 bruceloney1972@gmail.com</p>	

CITIZEN ADVISORY COMMITTEE

The Prior Lake-Spring Lake Watershed District formalized its Citizen Advisory Committee (CAC) in 2011. The CAC consists of residents who provide input and recommendations to the Board on projects, reports, prioritization, and act as the primary interface for the Board to integrate the current issues of concern of the local citizens.

The CAC meets monthly on the last Thursday of the month at 6:30 PM at the Prior Lake City Hall, located at 4646 Dakota St. SE, Prior Lake, MN 55372. As a result of the coronavirus pandemic, a portion of the 2021 CAC meetings were conducted via video conferencing or in a hybrid format where some of the members met in person and several members participated virtually.

Citizen Advisory Committee members that served during the calendar year 2021 are listed below.

Matt Newman

Resides in Prior Lake

Term: 06/2020 – 03/2023

Christian Morkeberg

Resides in Spring Lake Township

Term: 07/2019 – 03/2022

Woody Spitzmueller

Resides in Prior Lake

Term: 04/2019 – 03/2022

Loren Hanson

Resides in Spring Lake Township

Term: 04/2021 – 03/2024

Christopher Crowhurst

Resides in Prior Lake

Term: 05/2020 – 03/2023

Ben Burnett

Resides in Prior Lake

Term: 09/2020 – 03/2023

Maureen Reeder

Resides in Spring Lake Township

Term: 05/2021 – 03/2024

Jim Weninger

Resides in Prior Lake

Term: 01/2020 – 03/2022

Matt Tofanelli

Resides in Prior Lake

Term: 04/2021 – 03/2024

David Hagen

Resides in Prior Lake

Term: 7/2021 – 3/2024

STAFF

Day-to-day operations of the Prior Lake-Spring Lake Watershed District are managed by a District Administrator and staff. All staff can be contacted through the main District phone number, 952-447-4166, or at the District Office, 4646 Dakota Street SE, Prior Lake, MN 55372.

Joni Giese
District Administrator
(as of 3/1/21)
jgiese@plslwd.org

Maggie Karschnia
Water Resources Project
Manager (3/1/21 – 8/11/21)
Interim District Administrator
(until 3/1/21)

Jaime Rockney
Water Resources Project
Manager (as of 9/1/21)
Water Resources Specialist
(until 9/1/21)
jrockney@plslwd.org

Jeff Anderson
Water Resources
Coordinator (as of 9/1/21)
Water Resources Technician
(until 9/1/21)
janderson@plslwd.org

Shauna Capron
Water Resources Specialist
(as of 9/1/21)
Water Resources Assistant
(until 9/1/21)
scapron@plslwd.org

Elizabeth Frödén
Water Resources Assistant
(as of 10/25/21)
efroden@plslwd.org

Patty Dronen
Administrative Assistant
(as of 2/23/21)
pdronen@plslwd.org

Amy Tucci
Administrative Assistant
(until 1/29/21)

Kathryn Keller-Miller
Outreach Specialist
(until 6/15/21)

CONSULTING SERVICES

The following are the consulting firms selected in 2019 for 2020/21 consulting services:

Abdo, Eick and Meyers, LLP

Audit Services

Andy Berg

Phone: 952-835-9090

www.aemcpas.com

Smith Partners, PLLP

Legal Services

Charles Holtman

Phone: 612-344-1400

www.smithpartners.com

Emmons and Olivier Resources, Inc

Engineering Services

Carl Almer

Phone: 651-770-8448

www.eorinc.com

The following consulting firm was selected in 2020 for 2021/22 consulting services:

CliftonLarsonAllen (CLA)

Accounting Services

Christopher Knopik

Phone: 612-376-4500

www.claconnect.com

WATER RESOURCES MANAGEMENT PLAN

The Minnesota Board of Water and Soil Resources (BWSR) approved the District’s fourth generation Water Resources Management Plan (WRMP) on June 24, 2020, and the District Board adopted the plan at its July 14, 2020 meeting. A copy of the WRMP is available on the District website or by request, or in hard copy format at the District office.

THREE PRIORITY CONCERN AREAS

During discussions and meetings for the WRMP, three recurring priority concerns were identified. PLSLWD used these three priority concerns to develop three guiding principles with nine underlying policies and 23 measurable goals.



WATER QUALITY

Maintaining or improving the water quality in the PLSLWD’s resources with most emphasis on lakes that have public access and are most widely used.



AQUATIC INVASIVE SPECIES

Continued monitoring and management of existing AIS (curly-leaf pondweed, Eurasian water milfoil, zebra mussels and common carp), as well as prevention of new AIS.



REDUCE FLOODING

Making strides toward flood reduction goals on Prior Lake (e.g. upstream storage) and reducing the impacts of flooding in other areas in the District.

PRIMARY ISSUES

Within the Priority Concern Areas above, the PLSLWD identified several associated issues:

WATER QUALITY ISSUES:

- External Loading
- Internal Loading
- Low Plant Diversity
- High Phosphorus Levels
- Insufficient Information Available
- Loss of Wetland Quality
- Loss of Wetland Quantity
- Streambank Erosion & Slumping
- Erosion along the Prior Lake Outlet Channel
- Groundwater Quality and/or Contamination

AQUATIC INVASIVE SPECIES ISSUES:

- New AIS Can Reduce Water Quality
- Common Carp Reduce Water Quality
- Overgrowth of Invasive Plants
- Recreational & Ecological Hazards

REDUCE FLOODING ISSUES:

- Current Flooding Risks on Prior Lake
- Historical Flooding on Prior Lake
- Future Increased Runoff
- Insufficient Information to Inform Projects
- Need to Assess Flood Reduction Goals

PRIORITY GOALS

Within the Priority Concerns above, there are a total of 23 goals. While all these goals are intended to be accomplished in this ten-year WRMP, there were four that were of highest priority. These include:

WATER QUALITY MAIN GOALS:

- **GOAL WQ2:** Meet the state water quality standards for aquatic recreation on Spring Lake.
- **GOAL WQ3:** Meet the state water quality standards for aquatic recreation on Upper Prior Lake.

AQUATIC INVASIVE SPECIES MAIN GOALS:

- **GOAL AIS1:** Develop and implement an Aquatic Invasive Species (AIS) Response and Prevention Plan in coordination with Scott County to help prevent new AIS from entering Tier 1 lakes.

REDUCE FLOODING MAIN GOALS:

- **GOAL RF1:** Achieve the first-tier priority flood reduction goal to reduce the flood level on Prior Lake (from 905.62) to 905.5 feet for the 25-year return period.

ASSESSMENT OF THE 2021 WORK PLAN

The following is a summary of the activities completed in 2021 organized by District’s 2020 WRMP.

- | | |
|-------------------------------|------------------------------|
| 1. Capital Projects | 5. Regulation |
| 2. Operations and Maintenance | 6. Education and Outreach |
| 3. Planning | 7. Prior Lake Outlet Channel |
| 4. Monitoring and Research | 8. Administration |

CAPITAL PROJECTS

FISH LAKE SHORELINE & PRAIRIE RESTORATION PROJECT

Fish Lake Park is located on the northwest corner of Fish Lake at Spring Lake Town Hall and is owned by Spring Lake Township. The project enhanced a section of shoreline along Fish Lake behind the town hall and created a prairie restoration on the north side of the property.



The restorations will improve habitat for wildlife and pollinators and act as a demonstration site for landowners interested in completing restorations on their own properties, giving them an opportunity to view an example of a rain garden (existing project), prairie and shoreline restoration all in one, easily accessible location. This project is a frequent site for events and is home to Spring

Lake Township's main park. This project is a partnership between Spring Lake Township and the Prior Lake-Spring Lake Watershed District.

The initial site restoration was completed in 2019. Invasive species, including reed canary grass and buckthorn, along shoreline were controlled; existing turf grass in the prairie restoration area was terminated and the prairie and shoreline areas were seeded with native plant species in fall 2019. Additional vegetation maintenance occurred at the site in 2020 and 2021. In 2022, some final seeding will be done and plant plugs installed. Design began on interpretative signs explaining the restoration project in 2021, with sign installation scheduled for 2022.

SUTTON LAKE OUTLET STRUCTURE

In 2021 the District completed the construction of the Sutton Lake Outlet Structure. Sutton Lake is at the headwaters of County Ditch 13 (CD13), which outlets into Spring Lake. The primary purpose of the outlet structure is to increase storage and slow the flow of water downstream. This will decrease the likelihood of flooding along CD 13.

The Sutton Lake Outlet Structure was originally identified in the Prior Lake Stormwater Management & Flood Mitigation Study as a possible project with high flood damage reduction potential.

Now that the structure is completed, the next step moving into 2022 is to develop a lake management plan in order to maximize wildlife habitat benefit on Sutton Lake and potentially some minor flood reduction benefit.



OPERATIONS AND MAINTENANCE

CARP MANAGEMENT

In 2021 the District moved into its sixth year with its Carp Management Program in Spring and Prior Lakes. In 2020 the District received the Minnesota Association of Watershed District's Program of the Year award for the program. The District's carp management work was partially funded through a 319 grant from the Minnesota Pollution Control Agency (MPCA) and a Watershed-based Implementation Funding grant from BWSR. 2021 was the third and final year of the grant funding provided through both funding sources. Final reporting will be submitted in early 2022.

The District continued its Accelerated Carp Management Strategies (ACMS) plan in 2021, which was created in 2020 to accelerate the removals of carp in Spring and Upper Prior Lakes. A major component in the ACMS was to increase removal efforts and diversify methods. Some of those methods included a migration trap called a “Push Trap” and the use of underwater speakers to train and move carp into seining areas.

The management program as a whole aims to improve the water quality of Spring and Upper Prior Lakes by decreasing total phosphorus concentrations using an Integrated Pest Management Plan (IPM). The program has several different components, including tracking movement and population of carp, removing seine obstructions, completing carp removals, installing carp barriers at strategic locations, and engaging local community through outreach materials and events.

In 2021 the District continued to actively track the movement of 22 carp that were implanted with radio-tags in Spring Lake and Upper Prior Lake using a Yagi antenna. In total 38 tags were implanted between 2019 and 2021, with 10 of those having been implanted in 2021. Radio-tags have a two to four-year lifespan, and not all tags are still active. The District is trying to keep up a manageable radio-tag count with older radio-tags becoming unresponsive; the plan for 2022 is to add 10 new radio tags. Carp location maps were developed based on the tracking data, which were posted on the District’s website so that the public could see their locations.



The District also continued to track carp through Passive Integrate Transponder (PIT) tags that are implanted into the carp. By the end of 2021, approximately 560 PIT tagged carp remain in the waterbodies. PIT tags are used to track movement of carp through a specific channel where a receiver is installed. This is a more economical way of tracking carp but has its limitations as the carp can only passively be tracked when they pass through a specific location.

In 2021 the District installed seven receiver devices to study the movement of PIT tagged carp throughout different waterbodies which helped document movement and determine the effectiveness of installed carp barriers. The receivers were installed at the Pike Lake inlet, Jeffers Daylight Pond outlet, Arctic Lake West channel, Tadpole Pond outlet, Northwoods Pond outlet, Spring Lake outlet, and downstream of the ferric chloride weir.

Telemetry surveys were conducted on Spring Lake and Prior Lakes to determine aggregation areas and migration routes. These surveys guided timing and location of seine (carp removal) events and identified carp barrier locations. In addition to continuing this standard practice in 2021, the District conducted some more in-depth analysis on aggregations and migrations using GIS.

The District worked with its consultants and three commercial netters to complete under ice and open water seines on Upper Prior Lake and Spring Lake. Additional removal efforts, including those supported under the ACMS plan, resulted the following:

Upper Prior Lake (2021)

REMOVAL METHOD:	# INDIVIDUAL CARP:	TOTAL WEIGHT (lbs):
Seines	160	2297
Electrofishing	*760	9879
Gill Netting	231	2605
Micro-hauls	*122	1585
TOTAL:	1,273	16,366

*calculated based on total weight at a rate of 13 lbs/carp (final total is approximate)

Spring Lake (2021)

REMOVAL METHOD:	# INDIVIDUAL CARP:	TOTAL WEIGHT (lbs):
Seines	1239	7506
Electrofishing	115	699
Gill Netting	5	31
TOTAL:	1,359	8,236

In 2021 Upper Prior Lake's overall carp biomass decreased from 250.8 kg/ha to 211.7 kg/ha while Spring Lake's overall carp biomass decreased from 240.5 kg/ha to 225.9 kg/ha.

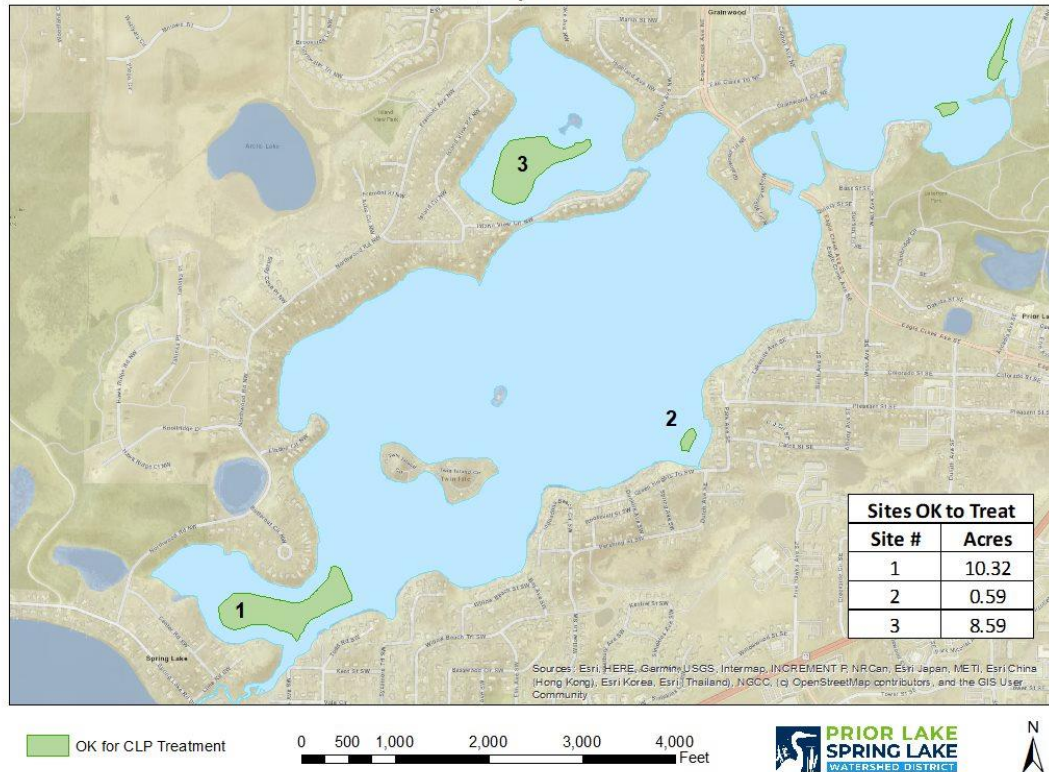
Going into 2021 there were five pre-existing carp barriers: 12/17 Wetland, Desilt Pond, FeCl Weir, and Arctic Lake outlet. Based on the tracked movement of carp from radio tags and PIT tags, the decision was made to add a sixth barrier at the Northwoods Pond in 2021.

The District's goal in 2022 is to continue effective carp management by following the Integrated Pest Management Plan for Common Carp and incorporating techniques developed through the Accelerated Carp Management Strategies.

AQUATIC VEGETATION MANAGEMENT

Aquatic vegetation management for curly-leaf pondweed (CLP) occurred on Spring, Upper Prior, and Lower Prior Lakes in 2021. 4.6 acres on Lower Prior, 19.5 acres on Upper Prior, and 22.6 acres on Spring Lake were treated by PLM Lake and Land Management Corporation with the chemical, Diquat. The image on the next page shows an example of a treatment map for one of the lakes (Upper Prior).

Upper Prior Lake Curlyleaf Pondweed Treatment Areas
May 2021



COST SHARE

The District has a cost share incentive program for residents and agricultural producers coordinated with the Scott Soil and Water Conservation District (SWCD). The Scott SWCD received requests and provided follow-up assistance to 74 landowners in the watershed. There were 20 projects approved and 21 cost share projects completed. Cost share projects completed in 2021 include 200 feet of shoreline protection, 0.6 acres of filter strip, and 34 acres of nutrient management. Turf conversion was a new cost share practice in 2021, consisting of projects implemented through BWSR’s “Lawns to Legumes” grant program. This practice was applied to 7,960 square feet in a total of 10 projects, which included pocket plantings, raingardens, natural shoreline buffers, and “bee lawns.”



FARMER-LED COUNCIL

The Farmer-Led Council (FLC) was created in 2013 to help the District reduce nutrient loading to Spring Lake to levels that meet or exceed state water quality standards. Agricultural lands make up the majority of the landscape in the Spring Lake and Upper Prior Lake watersheds. As such, farmers are the most important stewards of the land, and their active input and participation is critical to achieving water quality goals.

Represented by local leaders in the farming community, the role of the FLC is to develop and guide the implementation of strategies that PLSLWD will use to accomplish agriculture's share of the nutrient reduction goal. Specifically, the FLC aims to:

- Inform decision makers and the general public about practical issues and opportunities related to soil and water conservation on agricultural lands.
- Identify base-level and site-tailored practices that are available and needed.
- Define the approach for engaging with and assisting farmers to implement practices.
- Establish a schedule with reasonable milestones and timelines for progress.
- Identify potential barriers to implementation, along with tools and resources that are needed to overcome them.

The District held four FLC meetings in 2021 where a variety of agricultural topics related to water quality were discussed. In 2021 the FLC continued with its inlet protection program which included offering free Agri-Drain water quality inlets to farmers.

The Lake-Friendly Farm program was first piloted by two FLC members in 2017. Since then, over a dozen farms have been certified into this program aimed at targeting phosphorus reduction in the upper watershed. In 2021, two additional farms were certified through the Lake-Friendly Farm program. Since 2018, 784 acres have been certified through the Lake Friendly Farm program. Approximately 13.6% of cropland in the District has been certified as "Lake-Friendly."

In 2018, the FLC developed a new Cover Crop Initiative Program. Nearly 580 acres were enrolled in the program in 2021. Scott SWCD helped to coordinate the aerial seeding on most of the fields, with a couple of farmers opting to interseed the mixes directly on their fields. In addition to no-cost seeding, the program also provided free rental of the no-till and interseeder equipment to ten landowners to aid in implementation. The program is anticipated to continue in 2022 with the hopes of getting additional farmers incorporating cover crops in the upper watershed.

FERRIC CHLORIDE TREATMENT FACILITY

A desiltation pond was built in 1978 to capture phosphorus before the stormwater from County Ditch 13 reaches Spring Lake. In 1998 a ferric chloride plant was constructed to use this chemical upstream of the desiltation pond to bind with phosphorus and preventing it from entering the lake.

In 2013, the system was redesigned to release the ferric chloride (FeCl_3) solution into a desiltation basin, rather than the stream, per a MPCA permit requirement. The initial targets for design parameters, with input and agreement by regulatory agencies, was to allow flows up to approximately 30 cubic feet per second (cfs) into the desiltation pond for normal operations. High flows were to overtop a high flow bypass weir east of the existing pond which flows directly to Spring Lake to prevent possible resuspension and flushing within the desiltation pond.

In September 2018 the pump was programmed to dose ferric chloride based on a relationship with stream height. The maximum treatment dose rate is 4 gallons per hour when the depth over the ferric chloride weir is 0.50 feet. Once the depth is greater than 0.50 feet, the pump will continue dosing at 4 gallons per hour based on the maximum flow calculations of the desilt pond diversion culvert.

In 2021 the desiltation pond treated water with ferric chloride from **March 10 to August 24**, and again from **September 30 to November 4**. The gap in treatment was due to dry conditions and no water flow in the stream. Samples were taken weekly during treatment to analyze efficiency of the treatment system. On average, the treated water decreased the concentration of **total phosphorus by 25% and dissolved phosphorus by 58%**.

The Annual Ferric Chloride Report, which include the results of the 2021 sampling, will be posted to the District [website](#) by June 1, 2022.

RAYMOND PARK

In 2020 the District restored shoreline and habitat to create a demonstration site for four different habitat types at Raymond Park: beach restoration, oak savanna restoration, shoreline restoration and low maintenance turf grass at the City of Prior Lake's park. A walking trail was added at the park which winds through the oak savanna restoration allowing residents to explore the park and view the restoration. The initial restoration work was completed in 2017 with partial funding received from a Conservation Partners Legacy grant and Great River Greening.

In 2020 vegetation maintenance work was done at the park and volunteers removed additional buckthorn at the park adjacent to the original restoration area. Maintenance responsibilities were transferred to the City of Prior Lake in 2020. Interpretive signs explaining the restoration project were designed for the park in 2020 and installed in 2021.

RESTORATION PROJECTS MAINTENANCE

The District conducted vegetation maintenance on a Spring Lake shoreline restoration project that was previously installed.

PLANNING

2020 WATER RESOURCES MANAGEMENT PLAN

In 2020 the District completed its Water Resources Management Plan, meeting with stakeholders, conducting public meetings and adding final revisions before its approval. The updated ten-year management plan laying out the District's goals and activities for 2020 - 2029 was successfully completed and approved in 2020. The plan served as a framework for District activities in 2021 and will continue to do so in 2022.

LOWER PRIOR LAKE SUBWATERSHED 6 & 36 RETROFIT FEASIBILITY STUDY

In 2011 the District received a grant from the MPCA to perform a diagnostic and feasibility study of Lower Prior Lake. Over the Summer of 2011, EOR:

- Collected numerous water quality samples at a variety of locations in Lower Prior Lake and at various stormwater discharge points to the lake
- Conducted a shoreline survey
- Compiled the data they had collected

This resulted in the “Lower Prior Lake Diagnostic Study and Implementation Plan” dated April 13, 2013. Monitoring results from the diagnostic study revealed that Subwatersheds 6 and 36 contribute relatively high pollutant loads to Lower Prior Lake. The District received a BWSR Watershed Based Funding grant in 2019 to determine the feasibility of implementing water quality improvement practices in the Lower Prior Lake Subwatershed 6 & 36 study area.

The study was completed in 2021 and concluded with the recommendation for four BMPs within the study area to be implemented in conjunction with future road improvement projects. The feasibility report was approved by the Board of Managers in 2021. Copies of the plan were shared with partner roadway implementing partners, including the City of Prior Lake, Scott County and MnDOT.

UPPER WATERSHED BLUEPRINT

The Upper Watershed is a 12,760-acre tributary to Spring Lake, Upper Prior Lake and Lower Prior Lake that represents approximately 67 percent of the total tributary to these lakes. In 2021 the District managers approved the Upper Watershed Blueprint study, which provides a stormwater management and implementation approach for PLSLWD and local partners to improve water quality conditions and reduce flooding in the Upper Watershed over the next ten years.

The Upper Watershed Blueprint resulted in the identification of 14 potential water quality projects and three potential flood reduction projects that could help the District meet its 10-year goals. These projects will help the District meet the annual phosphorus reduction goal of 2,959 pounds set in the Total Maximum Daily Load (TMDL) study for Spring and Upper Prior Lakes to improve water quality in the lakes.

Subsequent to the study approval, the Board of Managers selected six projects from the study to focus on for near-term implementation:

- Sutton Lake Iron-Enhanced Sand Filter (IESF) – 735 lbs/yr estimated phosphorous reduction
- Swamp Lake Iron-Enhanced Sand Filter (IESF) – 223 lbs/yr estimated phosphorous reduction
- Buck Lake East Wetland Enhancement – 100 lbs/yr estimated phosphorous reduction
- Spring West Iron-Enhanced Sand Filter (IESF) – 249 lbs/yr estimated phosphorous reduction
- Buck Lake Chemical Treatment System – 793 lbs/yr estimated phosphorous reduction
- County Ditch 13 Chemical Treatment System – 1,062 lbs/yr estimated phosphorous reduction

The amount of phosphorus reduction may be different if multiple projects are completed in series because an upstream capture of phosphorus will mean less phosphorus is available to be captured downstream. If all six projects listed above are completed, the total annual phosphorous reduction would be approximately 2,712 pounds.

The District moved forward with feasibility studies for two of the water quality projects identified in the Upper Watershed Blueprint in 2021: Spring West IESF and Sutton Lake IESF. The studies were substantially complete in 2021 and will be wrapped up in 2022.

MONITORING AND RESEARCH

Monitoring was conducted in accordance with the Prior Lake-Spring Lake Watershed District Long Term Monitoring Plan and included a mix of staff, volunteer, and contract work, which incorporated in-lake monitoring, stream water quality & flow measurements, precipitation, and aquatic vegetation monitoring. Partners included Metropolitan Council Environmental Services, Three Rivers Park District, Shakopee Mdewakanton Sioux Community (SWCD), Scott Soil and Water Conservation District (SWCD), Blue Water Science, and Emmons and Oliver Resources (EOR). District seasonal interns also assisted with monitoring activities.

STREAM MONITORING DATA

STREAM CHEMISTRY SAMPLING

Stream chemistry samples were collected at 12 locations around the watershed by PLSLWD staff. Water temperature, conductivity, pH, turbidity, and dissolved oxygen were also measured at these locations using a YSI EXO1 multi-parameter sonde:

- Three sites were sampled weekly to fulfill the MPCA permit requirements for the Ferric Chloride site (FC_CD1, FC_CD2, FC_CD3).
- The District Monitoring Program included eight sites (ST_11, ST_14, ST_19, ST_24, ST_26A, ST_40, ST_5D, and DLO). These sites were monitored biweekly.
- One agricultural monitoring site was monitored biweekly for the Farmer-Led Council program (B3). B3 is a tributary of Fish Lake and located approximately 100 feet before entering Fish Lake.

STAGE AND FLOW MONITORING

Continuous stage and flow monitoring occurred in conjunction with the stream chemistry and lake monitoring. Stage and flow monitoring consisted of level loggers that continuously recorded stage and flow measurements. By combining chemistry and stage/flow monitoring results, loads can be calculated using the FLUX modeling software. The sites mentioned in the stream chemistry section above all had level loggers. In addition to those sites, stage and flow were monitored on the outlets of Fish, Sutton, Crystal, and Prior Lakes (sites ST_o8, Sutton, CRY_OUT, PL_OUT respectively).

Flow measurements were collected by PLSLWD and Scott SWCD. The flow meter used was a Sontek Flowtracker2.

Continuous stage was recorded using level loggers, including pressure transducers, an ultrasonic distance sensor and an area velocity meter.



Stream Monitoring

LAKE MONITORING DATA

TELEMETRY LEVEL LOGGERS

Three telemetry level loggers were installed to monitor the lake levels on Spring, Prior, and Pike Lakes. The loggers were programmed to log the lake level every 15 minutes and then transmit the data to the PLSLWD website once per hour which was accessible to the public. Two additional telemetry loggers were placed at Fish and Buck Lakes, but they function as regular loggers and data was downloaded manually.

DNR STAFF GAGES

Five staff gages were monitored for the DNR on Buck, Fish, Pike, Spring and Lower Prior Lakes. Staff gages are surveyed in every year by the DNR to tie the results to Mean Sea Elevation.

THREE RIVERS PARK DISTRICT

Three Rivers Park District monitored five lakes in 2021: Fish, Pike, Upper Prior, Lower Prior and Spring Lakes. These lakes are monitored 13 times per year, and where possible, profile samples are collected.

CAMP VOLUNTEER LAKE MONITORING

The Citizen Assisted Monitoring Program (CAMP) program was coordinated by Metropolitan Council, and locally coordinated by PLSLWD. Volunteers collected samples on eight lakes through the CAMP program in 2021.

Lake	Volunteer(s)
Lower Prior (site 2)	Amy Card
Haas	Tom Chaklos
Buck Lake	Steve Beckey
Cates	Paula Thomsen
Little Prior	PLSLWD staff
Fish	Jon Haferman
Crystal	Scott Thulien
Sutton	PLSLWD staff

Samples are typically collected every other week during ice-free conditions. Sampling includes parameters such as Secchi depth, phosphorus, and chlorophyll-a.

AQUATIC VEGETATION SURVEYS

Using a point-intercept survey (evenly-spaced sampling locations around the lake), Blue Water Science conducted summer aquatic vegetation surveys on five lakes – Buck Lake, Pike Lake, Upper Prior Lake, Lower Prior Lake and Spring Lake. These surveys include the type and abundance of vegetation at predetermined sampling locations throughout the lakes during summer, which is the time most vegetation is present.

Curly-leaf pondweed (CLP) surveys were completed in springtime on Fish Lake, Upper Prior Lake, Lower Prior Lake, and Spring Lake to determine if treatment was needed. Aquatic vegetation management for curly-leaf pondweed occurred on Spring, Lower Prior and Upper Prior Lakes in 2021.

AQUATIC VEGETATION DENSITY MAPPING

Using a fish finder, the density of aquatic vegetation in District lakes was mapped using BioBase software. BioBase creates whole-lake maps of aquatic vegetation density, bathymetry, and bottom hardness, connecting the points collected in the aquatic vegetation surveys. BioBase mapping is used to fill in the gaps and compliment the work of the vegetation surveys.

Volunteers and staff mapped all or parts of Lower Prior Lake, Upper Prior Lake, and Spring Lake in 2021.

The benefits of this project include:

- A better understanding of density of vegetation in lakes
- A better understanding of plant area coverage in lakes (percentage of lake bottom growing plants)
- More accurate bathymetric maps
- Lake bottom sediment composition maps
- Improved implementation and analysis of curly-leaf pondweed treatments
- Greater understanding of lake ecology and sediment deposition rates
- Better management of fisheries including for sports fishing

Table 1 Percent of Lake Bottom Growing Aquatic Vegetation

Lake	Plant Area Coverage %	Year
Arctic	6	2019
Buck	47	2016
Cates	99	2018
Crystal	31	2020
Fish	24	2020
Jeffers Fish Pond	83	2020
Little Prior	50	2016
Lower Prior	46	2021
Spring	29	2021
Upper Prior	52	2021

PRECIPITATION

One volunteer, Richard Schultz, collected rain and snowfall data daily in 2021. District staff recorded daily precipitation at the office location. The District also has a weather station at Spring Lake Town Hall which logged and transmitted data to Weather Underground.

BOAT INSPECTIONS (AIS)

IN-PERSON INSPECTIONS

In-person boat inspections were conducted within the District by Waterfront Restoration at the launches of Upper Prior, Lower Prior, Spring, and Fish Lakes. A total of 4,817 inspections occurred between the four lakes between May 14 and September 25, 2021.

A total of 39 entering violations were identified, the majority of which were drain plug violations. There were findings of significance on 104 exiting watercrafts, but because they were found and resolved before exiting the launch, they were not classified as violations.

INTERNET LANDING INSTALLED DEVICE SYSTEM (I-LIDS)

An I-LIDS station was installed at the Spring Lake boat launch in 2021 as a pilot project. I-LIDS is a motion-activated recording system that monitors boats as they enter and leave the water. It also issues an automatic audio reminder to people to check the boat and trailer for invasive species. The goal of the system is to increase Minnesota aquatic invasive species law compliance rates.

I-LIDS recorded 1,086 launches and captured one violation. Modifications continue to be made to improve the operations of the system. The pilot project will be extended through 2022.

WETLAND HEALTH ASSESSMENT MONITORING (WHAM)

In the summer of 2021, five wetlands were assessed for overall health: Fish Point Wetland, Northwoods Pond, 12/17 Wetland, Geis Wetland, and Sandey Wetland. The assessment process included macroinvertebrate sampling, as they are sensitive to different levels of human influence and pollution, and their abundance and diversity can be used to determine wetland health.

Another component of wetland assessment was vegetation surveys. Due to their sensitivity to changes in water quality and quantity, the abundance and diversity of vegetation species are another good indicator of overall wetland health.

The results of the macroinvertebrate sampling and vegetation surveys were used to calculate the Index of Biological Integrity (IBI) scores for each wetland, which is a scoring system that measures the responses to human disturbance or pollution in wetlands. An “Excellent” IBI score ranges from 23-30. A “Moderate” score ranges from 15-22, and a “Poor” score ranges from 6-14. The IBI score for each of the wetlands sampled in 2021 are as follows:

- Sandey Wetland – Moderate (16 out of 30)
- 12/17 Wetland – Poor (14 out of 30)
- Northwoods – Poor (8 out of 30)
- Geis Wetland – Poor (12 out of 30)
- Fish Point Wetland – Poor (8 out of 30)

REGULATION

EASEMENT INSPECTIONS

The District holds many conservation easements and development agreements over wetland and watercourse buffer strips that were acquired through permit activity or capital project construction. These buffer strips and associated easement and agreement restrictions provide water quality benefits by protecting District water resources. The District's conservation easement program contains three components to ensure protection of its investments: yearly monitoring inspections, effective communication with landowners and a strong enforcement policy.



In 2021 staff inspected the District's 48 conservation easements. The District's conservation easements are on property owned by 184 landowners. Inspections were not performed in 2020, due to the pandemic. In 2021 65% of properties were in compliance, which is a reduction of the 2019 compliance rate, indicating the need for on-going annual inspections. Of those sites with violations, most of the easements had only minor violations of the easement terms. Staff are working with landowners that have larger violations to resolve the violations and bring their easement area into compliance. Many landowners with violations have made improvements, correcting some, if not yet all, of the easement violations on their property.

Staff wrote letters to landowners advising them of the violations and offering to provide them further assistance to ensure the violations would not continue. The most common easement violations were mowing, yard waste, storage (wood etc.), dumping/trash, landscaping, and planting non-natives. During the 2022 inspections, staff will concentrate on monitoring the violating properties and working with landowners to resolve issues.

PERMIT ACTIVITY

The District inspected active permits to ensure that conditions of the permit were being met. The District issued two new permits in 2021:

- 21.01 Fish Point Road
- 21.02 MnDOT TH13

Weekly permit inspections began in April and went through November 2021. Inspections also continued from previous years' open permits: 17.01, 18.02, 18.05, 18.06, 19.01, 20.01, 20.02, 20.03, and 20.04. The District continued to close out permits as the projects met requirements.

EDUCATION AND OUTREACH

CITIZEN ADVISORY COMMITTEE

PLSLWD staff facilitates and attends monthly Citizen Advisory Committee (CAC) meetings. CAC meeting minutes were included in monthly Board meeting packets. Manager Loney is the assigned Board of Managers liaison to the CAC. In this role, Manager Loney helps develop CAC meeting agendas and attends the CAC meetings. On July 29, 2021, the District hosted a joint Board of Managers and CAC meeting, which provided an opportunity for the managers and CAC members to share thoughts on District priorities. The joint meeting was deemed a success and the intent is to turn it into an annual event.

The CAC researched and provided feedback to staff and recommendations to the Board of Managers on several topics in 2021, including fish stocking and the Internet Landing Installed Device System (I-LIDS), a tool for reminding boaters to inspect their boats to prevent the spread of aquatic invasive species (AIS). The CAC reviewed and updated their bylaws in 2021 and started the development of a new CAC member orientation packet. Finally, the CAC focused on topics within its five subcommittees: Shoreline Restoration; Fish Stocking; AIS; Water Storage; and Lake Life and Water Quality.

COMMUNITY INVOLVEMENT

The District partnered with the Scott SWCD through the Scott County Clean Water Education Program (SCWEP) to provide public outreach and education opportunities. The District and the Scott SWCD hosted a cover crop workshop, a native prairie workshop, and a shoreline workshop in 2021.

As part of the Lake Friendly Farm Awards luncheon in 2021, the District retained Jodi DeJong-Hughes, a University of Minnesota Extension educator to provide an education program focused on reduced tillage farming research. A Growing Healthy Soils event originally planned for 2021 was postponed to early 2022 due to the pandemic.

The District conducted a tour of the Sutton Lake Outlet project area. After taking a year off in 2020 due to the pandemic, the District hosted an informational booth at a City of Prior Lake community celebration, Chamberfest.

The District and the City of Prior Lake typically coordinate Clean Water Clean-Up events. In the fall of 2021, the event was to stencil signage by stormwater drains within the watershed district reminding people that stormwater eventually ends up in local lakes and to keep litter away from them. There were approximately 40 participants in the stenciling event.

In 2021, the District made presentations at the annual meetings of the Prior Lake and Spring Lake Associations. The District also made presentations to the Prior Lake Rotary Club and the City of Prior Lake's Community Engagement Committee. Finally, the District led educational activities at two

events geared towards children. The first event was with Twin Oaks Middle School and had 250 participants. Students were taught about sources of pollution in a watershed, the importance of wetlands, and about the macroinvertebrates that are indicators for wetland health. The youth event at Pike Lake Kiciyapi camp was a collaboration with the SMSC and YMCA and had approximately 40 to 60 participants. SMSC students and YMCA kids were taught about a wide variety of aquatic plants and their importance to lake health.

PLSLWD 50TH ANNIVERSARY



In 2020 the Prior Lake-Spring Lake Watershed District celebrated its 50th Anniversary. Although most of the 50th anniversary activities were completed in 2020, the Hike the Watershed event continued into 2021.

The Hike the Watershed challenge was developed to get local residents involved and help them explore some of the lesser-known waterbodies in the District. The challenge highlighted 11 different hikes and turned out to be an activity very well suited for the pandemic. The challenge was publicized with an article in the local newspaper, on the District website and social media. Flyers with maps of the hikes were placed at parks around the District and periodically rotated around to other parks. The District hosted organized tours of three locations within the watershed: Jeffers Pond, Lakefront Park, and Spring Lake Park, with a total of 27 participants between the three tours.



PRESS AND SOCIAL MEDIA

The District submitted 8 articles to be published in the Scott County Scene and the Prior Lake American. Over 20 articles were also posted to the District's website. In addition, other media outlets and newsletters were used to publicize District events and initiatives.

Lake levels for Prior, Spring, and Pike Lakes were updated automatically on the website during the growing season. Facebook, Twitter, and Instagram posts were made on a wide variety of topics. Four videos were published on the District's YouTube channel, in addition to the video recordings of the District's 2021 Board of Managers meetings.

PRIOR LAKE OUTLET CHANNEL

OUTLET STRUCTURE

The Prior Lake Outlet Structure was constructed in 1983 to address high lake level issues on Prior Lake, which does not have a natural outlet. The structure received a major update in 2010 to incorporate an improved design.

PRIOR LAKE OUTLET CHANNEL (PLOC)

The Prior Lake Outlet Channel (PLOC) is utilized by the District and other partners in managing lake levels on Prior Lake as well as providing a 7-mile stormwater conveyance system for the surrounding communities. There is a Memorandum of Agreement between the Cities of Prior Lake, Shakopee, the Shakopee Mdewakanton Sioux Community and the District that specifies operation and maintenance as well as cost-sharing.

The PLOC is considered an MS4 municipal stormwater conveyance system and the District must secure permits and submit annual reports. When complete, the annual report will be available on the [PLSLWD website](#), which includes a summary of all activities that were completed along the channel.

Some of the recurring annual activities included channel inspections, flow and chemistry monitoring, and invasive terrestrial vegetation management.



CHANNEL MAINTENANCE AND REPAIR

In 2021, planning and design work was initiated on two channel repair projects. The first project entails the removal of accumulated sediment from a widened section of the channel just upstream from Dean Lake in the City of Shakopee. This channel segment was intentionally designed to collect sediment prior to water entering Dean Lake. An assessment of the channel determined the sediment collection area was full and that it was time for sediment removal maintenance activities.

The second project includes the enhancement of approximately 1,100 linear feet of stream corridor via bank stabilization, revegetation, and reconnection to floodplain. Stabilization activity will be split between four locations within the cities of Prior Lake and Shakopee.

These projects are planned for construction in 2022.

WETLAND BANKING PROGRAM

The Prior Lake-Spring Lake Watershed District does not have a locally adopted wetland banking program within its jurisdiction.

STATUS OF LOCAL PLAN ADOPTION AND IMPLEMENTATION

Minnesota Rule 8410 required that local units of government complete their Surface Water Management Plans and Comprehensive Plans by December 31, 2018. The District has previously reviewed and/or approved: the Scott WMO's Comprehensive Water Resources Management Plan; Lower MN River Watershed District's Watershed Management Plan; the City of Savage's Local Water Plan; the City of Shakopee's Surface Water Management Plan and Prior Lake's Local Surface Water Management Plan. In 2021, no local plans were submitted to PLSLWD for review.

EVALUATION OF PROGRESS

The following are major projects and programs completed since 2016 PRAP Level II Report:

- The Prior Lake Stormwater Management and Flood Mitigation Study (2016 Flood Study) was completed. Two of the three recommendations of the Flood Study were also completed:
 - The City of Prior Lake completed a Flood Response Policy to coordinate temporary protection measures during flood events.
 - The District updated its Management Policy and Operating Procedure and received approval by the Minnesota Department of Natural Resources (MnDNR) to open the low-flow gate at its own discretion, by following the Procedure.
 - The third recommendation was to meet the first-tier, high priority Prior Lake protection level of 905.5 for the 25-year return period. In 2021 the District completed construction of its first flood storage project, the Sutton Lake Outlet Structure, which is designed to moderate high flows and provide flood reduction benefits downstream on Spring and Prior Lakes.
- FEMA-funded projects resulting from the 2014 flood are now complete. Nearly \$1 million in damages to the Prior Lake Outlet Channel included stream bank erosion, downed trees, sediment delta and culvert replacements.
- Four Lower Prior Lake Retrofit Implementation Projects were completed which will reduce phosphorus by 33 pounds per year or 10% of the total drainage area phosphorus load to Lower Prior Lake. In addition, the Fish Point Park Water Quality Improvements Project was completed and was expected to reduce phosphorus from entering Lower Prior Lake by 34 pounds per year.

- The Farmer-Led Council (FLC) was created in 2013 to develop and guide the implementation of strategies the District will use to accomplish agriculture’s share of the nutrient reduction goal. The FLC has expanded to include more area farmers who participate in regular meetings, attend workshops, participate in new incentive programs like the Lake Friendly Farm and Cover Crop Incentive Program. Between 2019 and 2021, 1,721 acres of cover crop were installed through the FLC resulting in approximately 954 pounds of phosphorus reduction for those years. Since 2018, 784 acres have been certified through the Lake Friendly Farm program resulting in an annual phosphorus reduction of 284 pounds. Approximately 13.6% of cropland in the District has been certified as “Lake-Friendly.”
- Carp management has grown from sponsoring carp tournaments and occasional seines to implementing a comprehensive Integrated Pest Management Plan (IPM Plan) that includes population estimates, installing carp barriers, large open and closed water seines and an Accelerated Carp Management Plan that focused upon innovative techniques to reduce the carp population in Spring and Upper Prior Lakes.
- Two demonstration shoreline restoration projects were completed on Spring Lake—on the District’s property and at the City of Prior Lake’s property, Raymond Park. Restoration work occurred on a shoreline enhancement and prairie restoration project in 2019 on Fish Lake.
- Conservation easements were not a high priority of the District prior to 2015. All 48 conservation easements, which represent 184 landowners, are being inspected annually and most landowners with easement violations have responded by correcting problems or making improvements.
- The Citizen Advisory Committee meets monthly. In 2019, they initiated a new action plan for CAC-sponsored activities and work for 2020 and beyond, such as fish stocking, AIS/Signage, shoreline restoration and the District’s 50th Anniversary.

FINANCIAL REPORT

The 2021 PLSLWD Audit was completed by Abdo and will include both the District’s Annual Financial Report and the Independent Auditor’s Report on Compliance with Minnesota Legal Compliance Guide for Local Governments for the year ended December 31, 2021. A copy of the 2021 Annual Audit will be available for review on the District website and at the District office after May 10, 2022, when it is scheduled to be approved by the Board of Managers.

2021 FINANCIAL SUMMARY

Values presented in the chart and graph below are unaudited. Please refer to the 2021 Annual Audit for more details, which can be found at www.plslwd.org

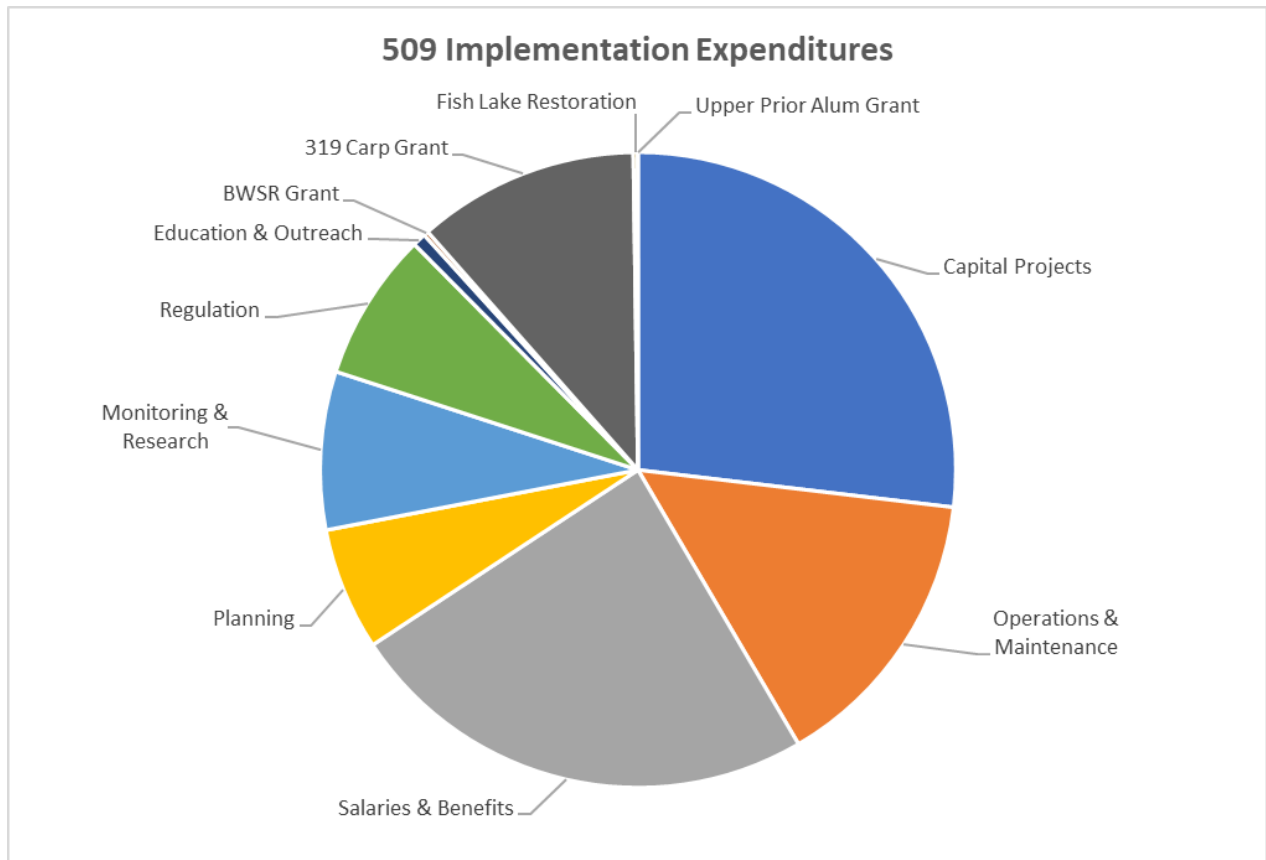
2021 Project Expenditures

2021 FINANCIAL SUMMARY

Fund	Starting Balance	Approved Budget	Tax Levy Revenue *	Additional Revenue **	Transfers To/(From)	Expenditures	Ending Balance
General	\$ 341,083	\$ 166,126	\$ 167,416	\$ 4,554	\$ -	\$ 239,307	\$ 273,746
509 Implementation	650,030	1,895,506	1,627,444	264,071	(27,624)	1,241,839	1,272,082
MOA/JPA Funds	462,448	-	-	159,097	27,624	277,513	371,656
Bond Debt Service	-	-	-	-	-	-	-
Total	\$ 1,453,561	\$ 2,061,632	\$ 1,794,860	\$ 427,722	\$ -	\$ 1,758,659	\$ 1,917,484

* Tax levy revenues shown are actual tax levy dollars collected. The 2021 tax levy was \$1,749,632

** Additional revenue is comprised of permit fees, investment income, and grant funding.



GRANTS

Grants obtained by the District that were active in 2021 were as follows:

- Internal Loading BMPs in Spring and Prior Lakes grant***
Goal: Utilize integrated pest management principles to effectively manage the common carp population and manage aquatic vegetation to reduce the levels of phosphorus in Spring and Prior Lakes.
Funding Source: 319 Grant through the MPCA
Total Grant Amount: \$80,300
Effective: February 14, 2019 to December 31, 2021
- Metro Watershed Based Implementation Funding – Lower Minnesota River South Watershed Area***
Goal: Two feasibility studies will be conducted to determine suitability for possible future projects.
Funding Source: BWSR
Total Grant Amount: \$39,575
Effective: April 14, 2021 to December 31, 2023

- Watershed-based Implementation Funding grant
Goal: Utilize integrated pest management principles to effectively manage the common carp population and aquatic vegetation to reduce the levels of phosphorus in several District lakes and wetlands including Spring Lake, Prior Lake, Pike Lake, the Geis wetland and the Northwoods wetland. The District's Farmer-Led Council will hold two meetings for the District's agricultural community to discuss new and innovative conservation practices within Scott County. Two feasibility studies will be conducted to determine suitability for possible future projects.
Funding Source: BWSR
Total Grant Amount: \$185,000
Effective: May 15, 2019 to December 31, 2022
- Fish Lake Shoreline & Prairie Restoration Project grant
Goal: Enhance the shoreline and reconstruct a prairie on Fish Lake at Spring Lake Town Hall.
Funding Source: Conservation Legacy Partners through the DNR
Total Grant Amount: \$13,800
Effective: April 4, 2019 to June 30, 2022
- Sutton Lake Outlet Structure Project grant
Goal: Install outlet structure on Sutton Lake to control high flows and reduce downstream flooding.
Funding Source: DNR – Flood Damage Reduction grant
Total Grant Amount: \$207,000
Effective: July 1, 2020 to December 30, 2022

2022 WORK PLAN

The following is a summary of implementation activities planned to be completed in 2021 and the amount budgeted for that activity.

Implementation Fund	\$2,190,435
General Fund	\$246,200

CAPITAL PROJECTS

In 2022 the District will complete construction on the Sutton Lake Outlet Structure project and the Fish Lake Shoreline & Prairie Restoration project.

OPERATIONS AND MAINTENANCE

The Cost Share and Residential Incentives programs and Farmer-Led Council will be continued. Operation and maintenance of the ferric chloride facility will continue. The District will be performing a study to better understand the lifespan of the existing ferric chloride tank and to better plan for its replacement. Aquatic vegetation treatment may occur in Prior and Spring Lakes, depending upon the survey reports. Vegetation maintenance will continue on restoration projects like the District’s Spring Lake parcel The I-LIDS pilot project will be extended into 2022, and the District will continue to perform AIS inspections at boat launches on Spring, Upper Prior, Lower Prior and Fish Lakes.

The Carp Management Program will continue with its three main components: track, block and remove. The carp will be tracked using PIT tags, radio tags, and visual observations. The District plans to stock bluegills in two wetlands where carp are known to spawn to reduce carp reproductive success. The District will attempt to remove a significant population of carp from Spring and Upper Prior Lakes in 2022.

PLANNING

The District will move forward with projects identified in the Upper Watershed Blueprint, including finishing up feasibility studies for two water quality projects identified and pursuing additional feasibility studies for other identified projects.

MONITORING AND RESEARCH

The District will continue its monitoring program in 2022, which includes stream chemistry monitoring, flow monitoring, lake quality, lake level, plant surveys, and plant density monitoring. The District will also migrate its water quality database to a new platform due to its outdated nature. This will increase reliability of the database and efficiency in the data pipeline.

REGULATION

Annual conservation easement inspections will be performed. The District will complete an MS4 Annual Report. Construction inspections for existing and new permits will continue to occur.

The District's rules were last substantially revised in 2003. A decade later, planning was undertaken by the District and its municipal partners to advance rule revisions, but ultimately, the District decided not to move forward with finalization and adoption of a new set of rules. The new rule for Illicit Discharge, Rule P, was adopted by the District on December 10, 2013. Four rules were revised and adopted to meet MS4 requirements on October 13, 2015 in order to meet MS4 permit requirements: A (Definitions), D (Stormwater Management), E (Erosion & Sediment Control) and P (Illicit Discharge). The District convened a Rules TAC in August of 2017 and rule revisions are expected to be completed in 2022. The District will continue enforcing its Rules, inspecting permit sites and monitoring conservation easements.

EDUCATION AND OUTREACH

The District will continue its education and outreach program to meet the requirements of its MS4 permit and improve understanding of local water resources and practices among all stakeholders in the District. The District will continue working with the Scott County Clean Water Education Program and will be participating in public outreach and education opportunities. Updating the website and writing articles for submittal to local newspapers will continue. The full 2022 Education and Outreach plan is available on the District website.

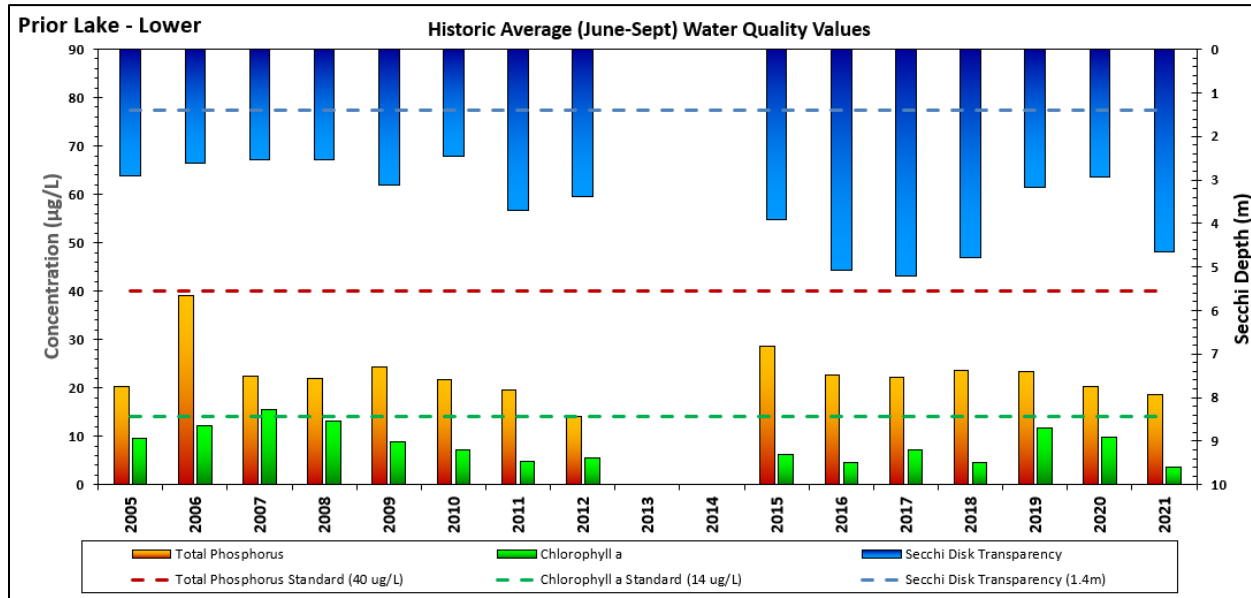
PRIOR LAKE OUTLET CHANNEL

Recurring annual operations such as inspections and vegetation management will continue in 2022. Repair work to fix major damage to the channel from 2014 flooding was completed in 2020 with funding from FEMA and the State of Minnesota, however other bank erosion issues remain that were not caused by the flood. Repair for these bank erosion projects will be engineered in 2021, with construction planned for 2022. A segment of the channel designed to collect sediment is full. Sediment will be removed from the channel at this location in 2022. Projects and other maintenance will be discussed and decided upon by the Technical Advisory Committee and the Cooperators (Memorandum of Agreement) members.

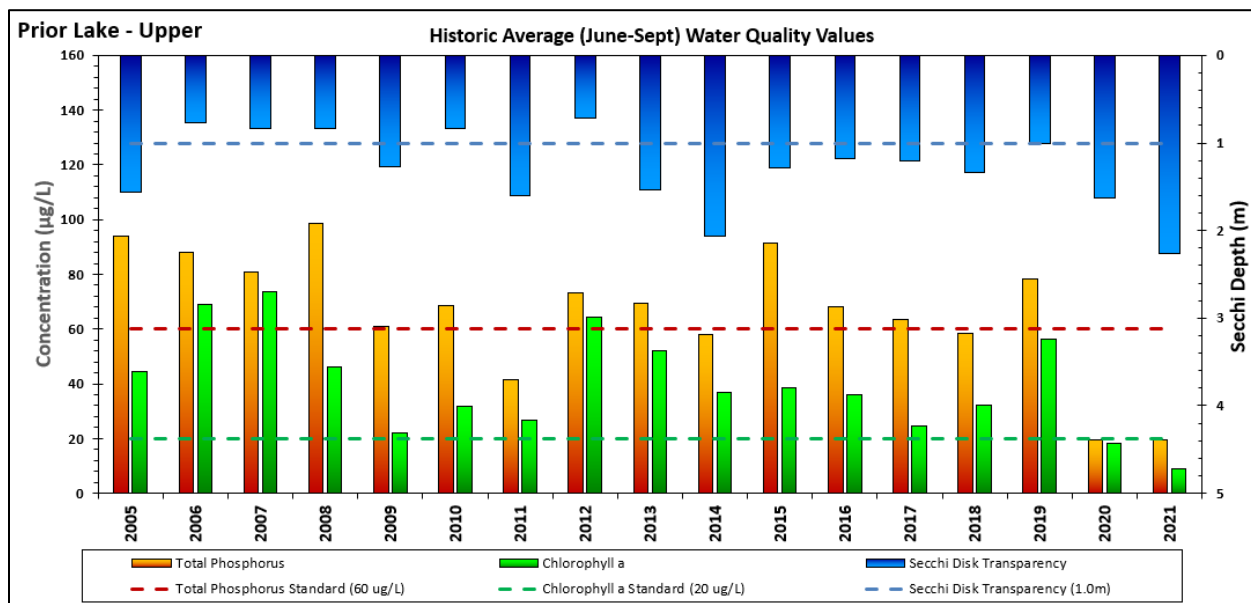
WATER QUALITY GRAPHS

The following graphs indicate the status of the District’s monitoring efforts on District lakes since 2004.

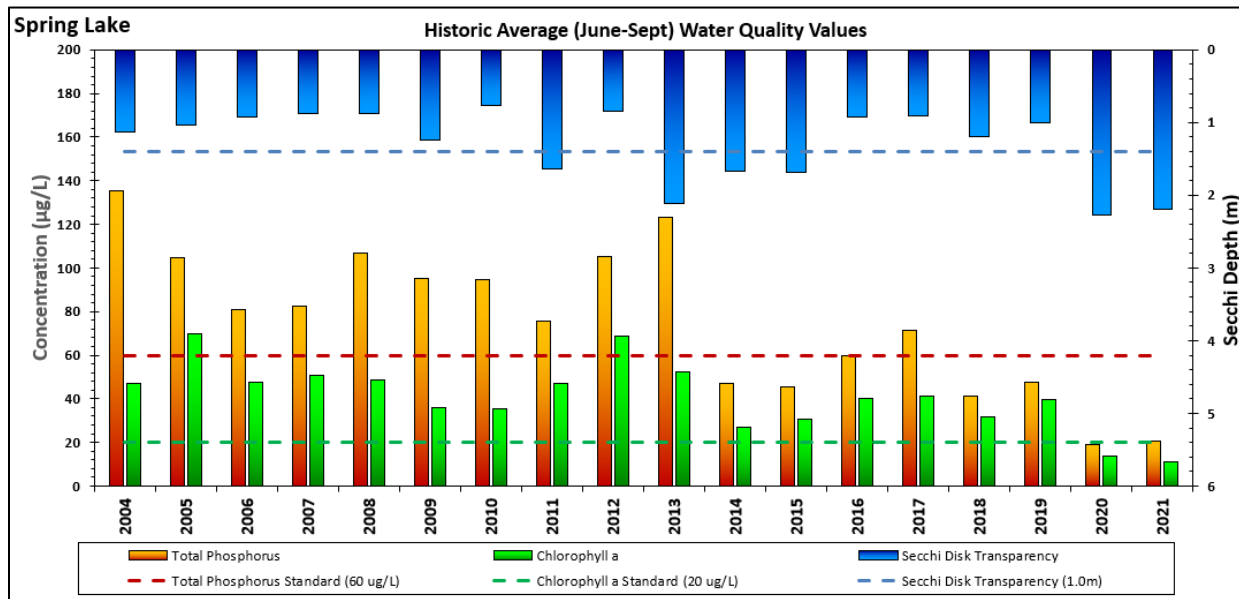
Lower Prior Lake



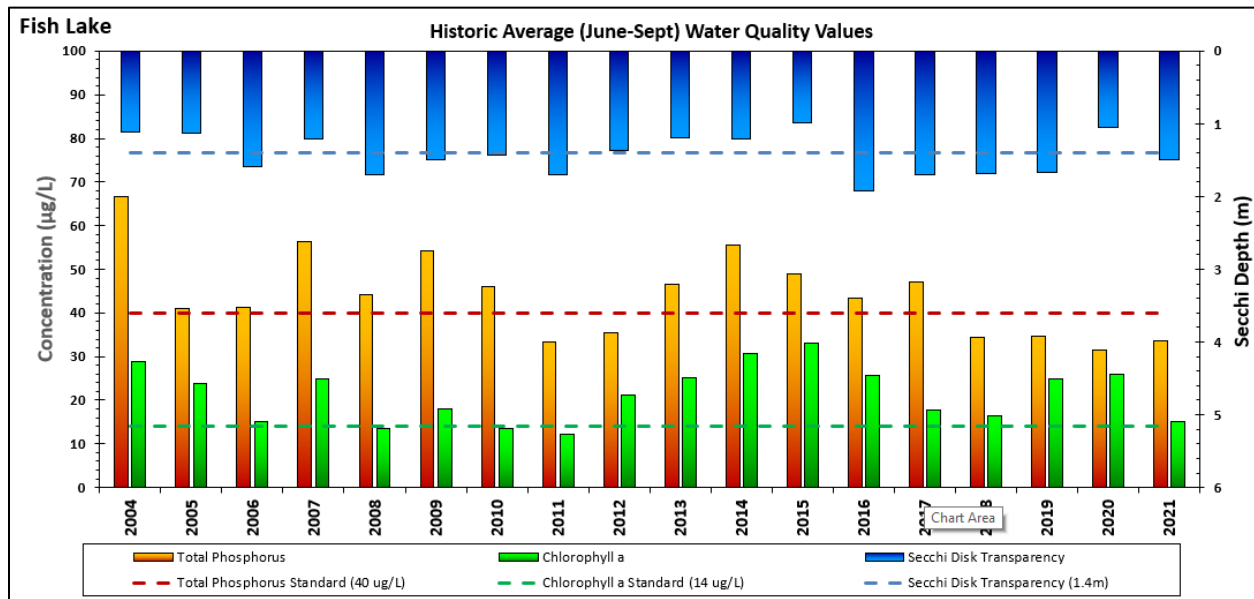
Upper Prior Lake



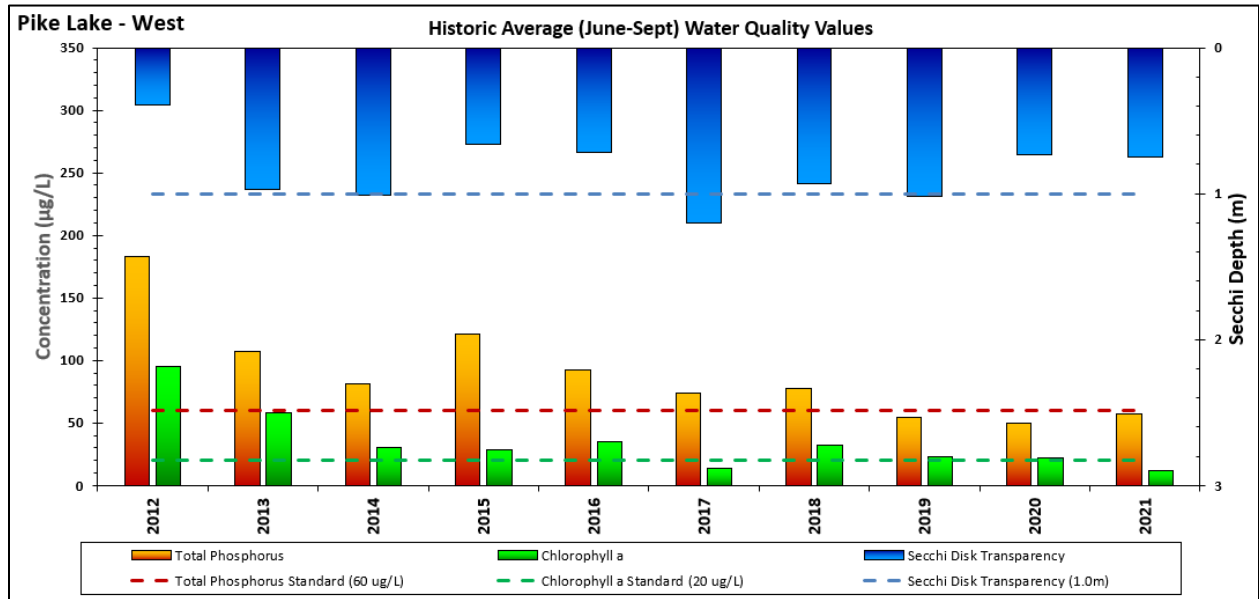
Spring Lake



Fish Lake



Pike Lake - West



Pike Lake - East

