

Celebrating 50 years of protecting our water resources!



**PRIOR LAKE
SPRING LAKE**
WATERSHED DISTRICT | **50
YEARS**

District History

The Prior Lake-Spring Lake Watershed District (PLSLWD) was established on March 4, 1970 under the authority of the Minnesota Watershed Act in response to a petition filed by resident landowners within the watershed. The residents sought to establish the District to wisely manage and conserve the waters and natural resources of the watershed.

PLSLWD: Your Watershed District

The Prior Lake-Spring Lake Watershed District is a special-purpose local government that protects 42 square miles of water resources along with the plants and critters who live here and the people who love them.

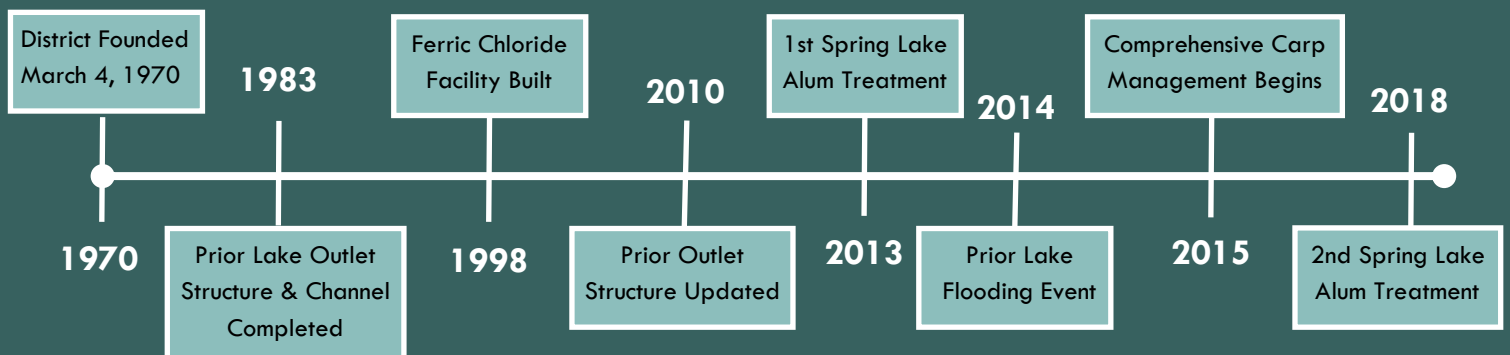
The District's boundaries are based on the physical watershed of the land which drains into Spring Lake

and Prior Lake including portions of the cities of Prior Lake, Savage and Shakopee, as well as Spring Lake and Sand Creek Townships.

How We Protect Your Resources

- Improve water quality in our lakes and waterbodies through capital projects, best management practices and citizen engagement.
- Reduce flooding impacts through operation of the Prior Lake Outlet and the creation of upstream stormwater retention areas.
- Monitor water resources to identify threats and opportunities to reduce or eliminate problems.
- Provide educational opportunities to promote an informed and engaged community.
- Partner with other organizations to maximize staff and financial resources.

50 YEARS OF WATERSHED PROTECTION: PRIOR LAKE—SPRING LAKE WATERSHED



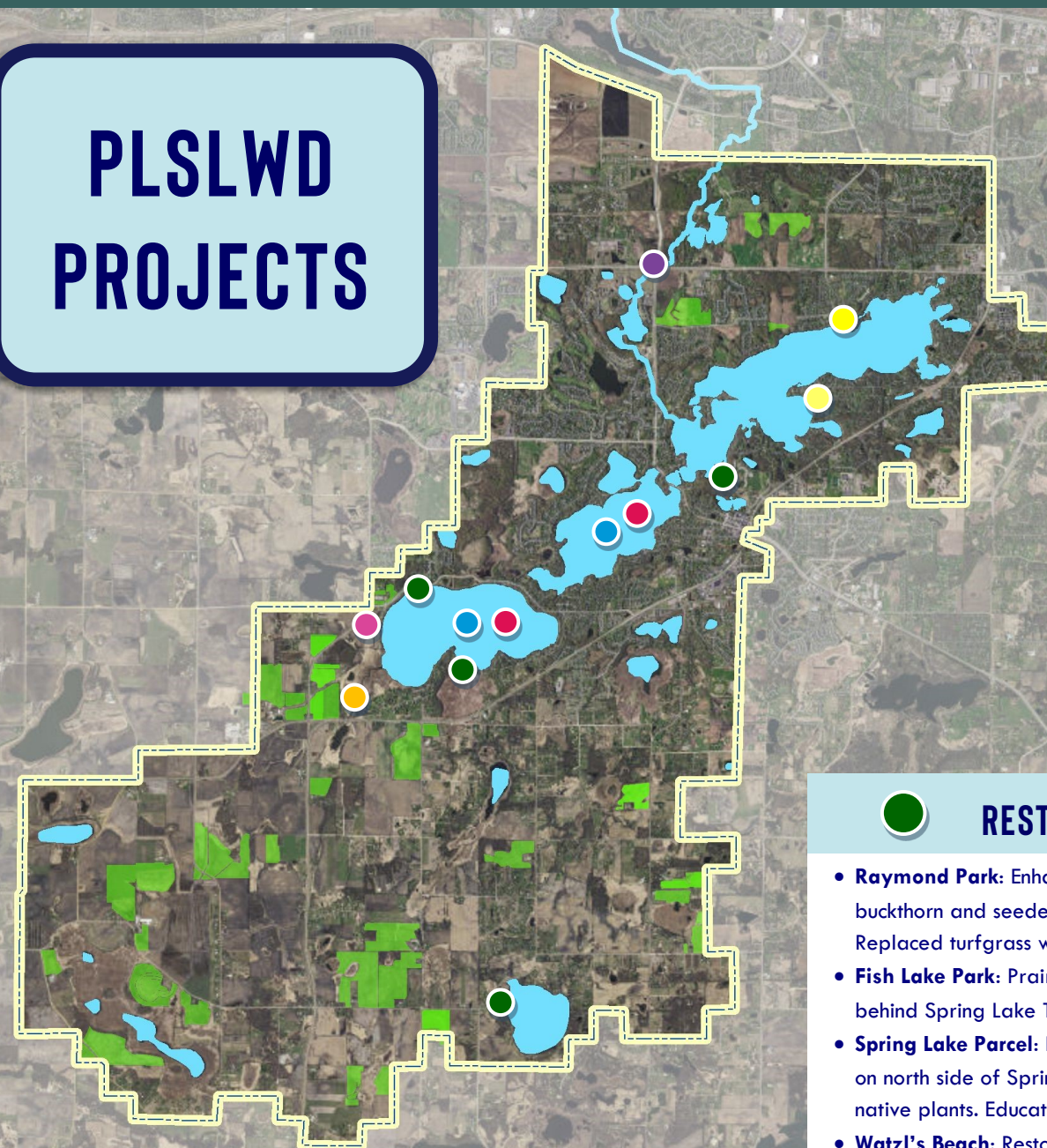
MONITORING PROGRAM

District-wide, the program includes monitoring of the following:

- **Streams:** Monitor flow and water quality to determine pollutant levels.
- **Lakes:** Monitor lake levels, water quality, aquatic vegetation, aquatic invasive species and ice in/out dates.
- **Projects:** Monitor projects for effectiveness once installed.

Data is used to track lake/stream health, identify problem areas and measure the effectiveness of projects to improve water quality. Data can be found at www.plslwd.org.

PLSLWD PROJECTS



PRIOR LAKE OUTLET CHANNEL

- Prior Lake outlet structure & channel completed in 1983. Prior to that Prior Lake had no natural outlet.
- The **7-mile outlet channel** leaves from the north side of Lower Prior Lake through the **outlet structure**, traveling through a half-mile pipe before 'daylighting' near Jeffers Pond. The channel flows through several lakes before it **flows into the Minnesota River**.
- In 2010 the original outlet structure was replaced with the current structure which has an accordion-shaped fixed crest weir and low-flow gate.
- The 2014 flood damaged the channel and repair work was completed with help from FEMA.

IRON-ENHANCED SAND FILTERS

Iron-enhanced sand filters capture phosphorus from stormwater before it enters our lakes!

- **Fish Point Park:** Wetland restoration, iron-enhanced sand filter & prairie restoration
- **Sand Point Beach Park:** Iron-enhanced sand filter, stormwater pond enhancement and prairie restoration

COST-SHARE PROJECTS

- The District partners with landowners and Scott SWCD to fund water quality projects.
- **Residential projects:** Install raingardens, native prairie and shoreline restorations.
- **Agricultural practices:** Cost share projects include buffer strips, cover crops, nutrient management, sediment control basins, contour strips and more.

RESTORATION PROJECTS

- **Raymond Park:** Enhanced shoreline on Spring Lake, removed thick buckthorn and seeded native plants to restore oak savanna. Replaced turfgrass with low-maintenance grass.
- **Fish Lake Park:** Prairie restoration & shoreline enhancement behind Spring Lake Town Hall as a demonstration site.
- **Spring Lake Parcel:** Restored 350 feet of District-owned shoreline on north side of Spring Lake. Removed buckthorn, seeded site with native plants. Educational signage added for outreach.
- **Watzl's Beach:** Restored the shoreline with native prairie plants at this popular beach destination on Prior Lake.

FARMER LED COUNCIL (FLC)

- **FLC Overview:** The goal of the FLC is to develop & guide the implementation of strategies that the District will use to accomplish agriculture's share of the nutrient reduction goal.
- **FLC Initiatives:** The farmers and the PLSLWD work together to develop win-win programming in partnership with Scott SWCD. These include the Cover Crop Initiative, No-Till Program, Lake Friendly-Farm Program, etc.

FERRIC CHLORIDE FACILITY

- Installed in 1998 to remove phosphorus from stormwater entering Spring Lake from County Ditch 13, one of Spring Lake's main inflows.
- The ferric chloride system removes 60% of dissolved phosphorus, the form most readily available for algae to use.
- Prevents more than 500 pounds of phosphorus from entering Spring Lake on average each year.
- One pound of phosphorus can produce up to 500 pounds of algae!



ALUMINUM SULFATE TREATMENTS

- Aluminum sulfate (alum) is used to reduce the phosphorus levels in lakes with high existing & incoming levels of phosphorus. The alum binds with phosphorus, inactivating it and making the phosphorus unavailable for algae.
- Spring Lake was treated in 2013 and 2018. Both Spring & Upper Prior Lakes will be treated in 2020.

COMPREHENSIVE CARP MANAGEMENT

- **Common carp** are a non-native, invasive species which harm water quality, stirring up sediment and releasing phosphorus which feeds algae in our lakes. Our carp management program aims to reduce carp populations below lake-damaging levels by:
- **Removing carp from the lakes.** Several carp seines (netting removals) have removed large amounts of carp from Spring Lake and Upper Prior Lake over the last several years (2011-present).
- **Carp barriers** installed in many locations to keep carp out of prime spawning areas including: Arctic Lake, County Road 12/17 wetland, Geis wetland and Northwoods wetland.
- **Tracking carp** helps us find the fish to remove them, identify spawning grounds and travel patterns.
- **Testing new technology and strategies** such as using speakers to 'herd' the carp and stocking bluegills which eat carp eggs.

12/17 WETLAND RESTORATION

- Restored a ditched farm field into a wetland complex that treats runoff from major roads and 60 acres of agricultural land.
- Enhances flood storage capacity and captures phosphorus and sediment before water enters Spring Lake.
- Native prairie restoration surrounds the wetlands and provides wildlife habitat and filters runoff.
- Carp barriers prevent carp from spawning in the wetlands.

The Prior Lake-Spring Lake Watershed District was founded in 1970 and has worked to conserve, protect and manage water resources within the watershed for fifty years.

District Fast Facts:

- Local, independent unit of government
- Board of Managers – 5 citizen members
- Funded by property tax levy, state grants, & local partnership contributions

By the Numbers...

- 42 square miles
- 3 cities, 2 townships
- 14 lakes
- 730 wetlands
- 7-mile outlet channel



Partnerships:

Many thanks go to all of the District's partners including local citizens, farmers, volunteers, cost-share participants and agency partners! The District works with many partners to protect and improve our water resources including:

- Cities of Prior Lake, Shakopee, Savage and Spring Lake Township & Sand Creek Township
- Scott Soil & Water Conservation District, Scott County and the Shakopee Mdewakanton Sioux Community
- State agencies: BSWR, MPCA and DNR

How YOU Can Help Protect Our Lakes!

Did you know? Your everyday actions at home affect water quality. It doesn't matter where you live—what you do in your yard affects the health of local bodies of water, even if you don't live directly on a lake, stream or wetland. The good news? That means that you can be part of the solution at home:

- **Reduce stormwater runoff.** Collecting, reusing and infiltrating rainwater on your property helps protect water quality & reduce flooding. Redirect downspouts off pavement, add rain barrels & raingardens.
- **Plant Native!** Native flowers & grasses make a beautiful addition to your yard, support pollinators and have long roots that can reduce erosion, soak up runoff and stabilize shorelines.
- **Restore your shoreline - prevent erosion.** A native plant buffer will hold your shoreline in place and filter fertilizer and runoff from your lawn, keeping our lakes and streams cleaner.
- **Reduce winter salt use.** Salt permanently impairs the water quality in lakes and streams. To reduce salt use: Shovel first. Only add salt where needed. Sweep up salt after ice melts. Four cups covers a two car driveway.
- **Pick up after pets.** Pet waste contains harmful bacteria and nutrients that can harm lakes & feed algae.

Technical design support and financial assistance is available to residents interested in a project such as a shoreline restoration, raingarden or native prairie patch on their property. Contact the **Scott SWCD** at **952-492-5425**.

