

# **Prior Lake-Spring Lake Watershed District Aquatic Plant Management Policy**

Effective Date: July 12, 2022
Purpose and Background

Prior Lake-Spring Lake Watershed District (PLSLWD) 2020-2030 Water Resources Management Plan identifies three guiding principles, two of which directly connect to aquatic plant management:



## **GUIDING PRINCIPLE #1:** To maintain or improve quality of water resources (WQ)

Maintain or improve water quality in lakes, streams, and wetlands to support healthy ecosystems and provide the public with a wide range of water-based benefits and collaborate with others responsible for groundwater management and protection.



## <u>GUIDING PRINCIPLE #2:</u> To manage existing and prevent new Aquatic Invasive Species in the District (AIS).

Effectively manage existing aquatic invasive species (AIS) that adversely affect the quality of the lakes in the District with public access and take measures to help prevent new AIS from entering these systems.

PLSLWD's current confirmed aquatic invasive plants include Eurasian watermilfoil (EWM) and Curly-leaf pondweed (CLP). CLP is present in all four Tier 1 lakes (Fish, Spring, Upper Prior, Lower Prior) while EWM is in Spring, Upper and Lower Prior Lakes.

- Curly-leaf pondweed generally grows from the shoreline to water depths of 15 feet and can grow up to 15 feet tall. It tolerates low water clarity and will readily invade disturbed areas. Curly-leaf can be distinguished from native pondweeds by its unique life cycle. Turions sprout in the fall, and it is generally the first pondweed to come up in the spring. It typically flowers, fruits, and produces turions in June before dying back in mid-summer. Studies have shown that during summer die offs of CLP, the decomposition process and subsequent release of nutrients internally to the lake can lead to increased algal blooms and reduction in water quality. Since 2007, the District has been actively managing CLP through herbicide treatments and supporting the growth of native aquatic plants through various programs and projects. Treating CLP in late spring may help limit the spread of turions (seeds) and summer die-offs that have greater potential of nutrient release. Treating only dense CLP areas limits the impact on native species.
- Eurasian watermilfoil is a perennial plant that flowers twice a year, usually in mid-June and late-July. It can grow up to 20 feet tall, but typically only grows three to nine feet tall. It creates canopy-like

structures as it grows toward the water's surface. It primarily establishes through vegetative fragmentation—a fragment can break off, settle in the sediment, grow roots, and establish a new plant. The plant dies back in the fall, but the root system can survive the winter and begin growing again in the spring. EWM can be detrimental to native ecosystems by overtaking habitat and outcompeting native plants, however, EWM is not known to be detrimental to water quality and therefore PLSLWD has decided to not treat EWM, but continue to monitor it.

Alum treatments, Best Management Practices, the Ferric Chloride treatment system, and carp removals are additional efforts the District has made towards significant improvements in water clarity that has led to increased aquatic vegetation in District lakes.

#### **District Aquatic Plant Management**

The following outlines the District's approach for aquatic plant management. Prior Lake-Spring Lake Watershed District:

- Does not manage native or invasive aquatic plants for recreational or aesthetic purposes. While recreation and navigation are valued elements of our Tier 1 lakes, they are not in alignment with the PLSLWD priority of focusing District resources on improving water quality.
- Manage Curly-leaf pondweed for internal nutrient release only. PLSLWD will manage projected dense populations of CLP based on professionally performed CLP survey results.
- Does not treat aquatic plants within 150 feet of shore. State statute allows shoreline owners to
  treat aquatic plants 150 feet into the lake from their shoreline but requires PLSLWD to obtain
  consent from all shoreline owners within the treatment zones to treat aquatic plants within 150 feet
  of the shore. Given the logistic challenge of soliciting and obtaining approvals from numerous
  shoreline owners on a lake annually, PLSLWD does not seek shoreline owner consent or perform
  treatments within 150 feet from shore.
- May manage aquatic plants to enhance plant diversity and enhance wildlife habitat.
- Uses science-based control strategies and methods. Plant management is an evolving field. PLSLWD uses the latest scientific frameworks for decision-making.
- PLSLWD will provide education and outreach to residents and lake users to keep people
  informed how the increase in native aquatic vegetation supports enhanced water quality.

Lake Shoreline Owners and/or Lake Associations are:

- Responsible for aquatic plant management within the boundaries of their shoreline property and 150 feet from shore. Lake Associations and residents are asked to partner with PLSLWD should treatment plans extent beyond 150 feet from the shoreline.
- Responsible for shoreland cleanup of aquatic vegetation. Unrooted, segmented, and floating vegetation often builds up on shorelines. Shoreline owners are responsible for cleanup. See District Bog Policy for more information on bogs.

#### **State Regulations**

All aquatic plant management actions taken by PLSLWD are in accordance with the state law. Under Minnesota law, aquatic plants growing in public waters are the property of the state. Because of their

value to the lake ecosystem, they may not be destroyed or transplanted unless authorized by the Commissioner of the Department of Natural Resources (DNR) as stipulated in the Aquatic Plant Management Rules. Authorization for control methods used by the District will be permitted through the Minnesota DNR. The online DNR aquatic plant management guide is available here: <a href="https://www.dnr.state.mn.us/shorelandmgmt/apg/regulations.html">https://www.dnr.state.mn.us/shorelandmgmt/apg/regulations.html</a>.