

APPENDIX D:

BCWD Aquatic Plant Management Policy

Overview

Aquatic vegetation serves a critical role in healthy lakes. Aquatic plants absorb nutrients limit algae growth, stabilize shorelines to prevent erosion, and create habitat for fish and wildlife. Aquatic invasive plants are a concern for many members of the public. Brown's Creek Watershed District has developed a policy of implementing and supporting (e.g., through cost-share or technical support) aquatic plant management in BCWD lakes and wetlands to facilitate efficient decision-making and provide clarity to the public.

BCWD takes a holistic approach to aquatic plant management that aims to improve water quality and support growth of native vegetation that can effectively compete with invasive aquatic plants. BCWD does not manage native or invasive aquatic plants for recreational or aesthetic purposes. Management of aquatic vegetation in public waters is regulated by the Minnesota Department of Natural Resources, and generally, BCWD manages aquatic plants in the watershed in close collaboration with the agency, lakeshore property owners, and other stakeholders.

Background

Surveys of lakes, ponds, and wetlands have indicated the presence of both healthy native plant communities, including rare species, and aquatic invasive plants in the watershed. Historically, the BCWD has provided outreach to landowners with known rare native aquatic plant species along their shorelines and has been involved with invasive species management when there was a water quality benefit. This policy was developed to address aquatic vegetation concerns and meet the goals and objectives of the BCWD's Watershed Management Plan.

Aquatic Invasive Species

Aquatic invasive plants present within BCWD lakes and ponds include curly-leaf pondweed and Eurasian watermilfoil. This does not include invasive shoreline plants such as purple loosestrife and non-native phragmites.¹ Curly-leaf pondweed is present in Benz, Goggins, Pat, Plaisted, Long, South School Section, and Woodpile lakes. Eurasian watermilfoil is present in Goggins, Long, Masterman, and South School Section lakes and Sinnets Pond. Potential threats include starry stonewort and flowering rush, among others.²

The unique lifecycle of curly-leaf pondweed includes winter growth beneath the ice, with plant maturation and die-off by late June/early July. In some lakes, the mid-summer die-off can increase nutrient availability for algal blooms and reduce water quality. Treating dense curly-leaf pondweed in late spring may limit spread of curly-leaf pondweed and summer-die off events while minimizing impacts to native vegetation. BCWD has treated South School Section Lake to reduce presence of curly-

¹ Shoreline management is addressed through BCWD Shoreline and Streambank Alteration rule and various goals and implementation items in the Watershed Management Plan within Erosion Prevention and Sediment Control, Lake Management, Recreation, and Education/Outreach/Stewardship sections.

² See [Invasive aquatic plants | Minnesota DNR](#) and [Early detection of aquatic invasive plants | Minnesota DNR](#)

leaf pondweed to improve water quality, and has taken rapid-response steps to diminish small curly-leaf pondweed infestations in Goggins Lake.

Eurasian watermilfoil may grow intermixed with native vegetation with minimal detrimental impacts or form dense mats at the water surface that negatively impact native habitat and impede recreational access. Eurasian watermilfoil is not known to negatively affect water quality, although it is tolerant of poor clarity and thrives in moderately eutrophic lakes.

Native Aquatic Plant Communities

Based on aquatic vegetation survey data collected since 2021, the watershed appears to be home to unique and rare aquatic plant communities in at least seven lakes and small ponds. These plant communities include two populations of a state-endangered aquatic plant, several Washington County records (first observations), and species not observed in the county since the early 20th century. Many of the observations are the farthest south occurrences of the species in the state. These species all share an affinity for soft-water (low-pH) waters, although the underlying factors driving their apparent concentration in the watershed are not yet understood. Soft-water lakes are generally isolated from groundwater, providing a contrast to the many groundwater-dependent resources of the watershed and highlighting its distinctive landscape setting. Protecting these unique native plant communities is important to conserve their immense biodiversity value to the watershed, region, and state. BCWD is currently conducting outreach to partners on state and local levels to better understand these plant communities and the best protection measures for their conservation.

Management Plan Context

Brown's Creek Watershed District's 2027-2036 Watershed Management Plan includes specific goals related to aquatic plant management. These include:

Goal 4.4.D Lake Functions and Values

- Increase understanding of the distribution and growth of aquatic plant communities and how to manage them.

Goal 4.5 A Wetland Functions and Values

- Ensure no net loss of wetland functions and values within the watershed.

Goal 4.5 E Wetland Functions and Values

- Contain and reduce the spread of invasive wetland plants, including aquatic invasive species.

Goal 4.8 A Invasive Species Management

- Initiate and support AIS-management projects on private and public lands to improve water quality.

Aquatic Plant Management Policy

In general, BCWD takes a holistic approach to aquatic plant management that aims to improve water quality and environmental conditions favoring native vegetation that can compete with invasive aquatic plants.

The guiding principles include:

- **Primary focus to protect and improve water quality:** Good water quality supports more robust native plant communities and reduces the competitive advantage of certain invasive aquatic plants.
- **No aquatic native or invasive aquatic plant management for recreational or aesthetic purposes:** BCWD focuses on water and natural resources. Enhanced recreational value will be a secondary result, achieved through improved water quality and sound natural resources management.
- **Only manage curly-leaf pondweed for internal nutrient release, unless supported by a specific lake vegetation management plan:** Curly-leaf pondweed is widespread and impossible to eradicate. Research supports improved water clarity and healthy native plant communities as critical to reducing established curly-leaf pondweed infestations. Management is most effective in lakes that are not eutrophic and where a native plant community is present. BCWD will consider integrated management approaches as part of a lake vegetation management plan to improve water quality.
- **May manage aquatic plants to enhance plant diversity and wildlife habitat:** When clear management goals and outcomes are established and feasible, BCWD may engage in aquatic plant management for plant diversity and habitat enhancement.
- **May lead or engage with partner activities identified in the Washington County Aquatic Invasive Species plan:** This may include prevention and rapid response efforts or other activities identified in the plan.
- **Will use science-based control strategies and methods:** Aquatic plant management is an evolving field and require use of the latest scientific frameworks for decision making.
- **Will routinely monitor watershed lakes to assess existing invasive aquatic plant populations, search for new infestations, and evaluate the health of the native plant community:** Point-intercept surveys will be completed for watershed lakes on a minimum 5-10 year cycle. Managed invasive aquatic plant communities (e.g., South School Section Lake) may require more frequent monitoring.
- **Will rely on education and outreach as prevention strategies:** None of the lakes in the watershed have a public boat launch. However, it is important for lakeshore owners/users to understand best practices for minimizing risk of spreading invasive aquatic plants and the value of native plants.
- **Will not implement or fund chemical treatments if a state-listed rare aquatic plant is in a waterbody unless supported by a lake vegetation management plan:** Brown's Creek watershed is home to state-listed rare aquatic plants and unique aquatic plant communities. Presence of

unlisted soft-water indicator plants or water chemistry data may also warrant additional planning prior to management.

- **Will further assess rare aquatic plant populations and habitat with partner support:** Little is understood about the rare and unique soft-water plant communities found within the watershed. BCWD will work with partners such as the state Department of Natural resources and local government units to identify suitable environmental conditions and strategies to protect and enhance habitat for these communities.

State Regulation

All aquatic plant management actions by BCWD will comply with state law. Generally under Minnesota law, aquatic plants growing in public waters are the property of the state. Because of their value to lake ecosystems, aquatic plants may not be destroyed or transplanted unless authorized by the DNR (see Minnesota Rules chapter 6216). BCWD will obtain authorization for control methods from the Minnesota DNR.