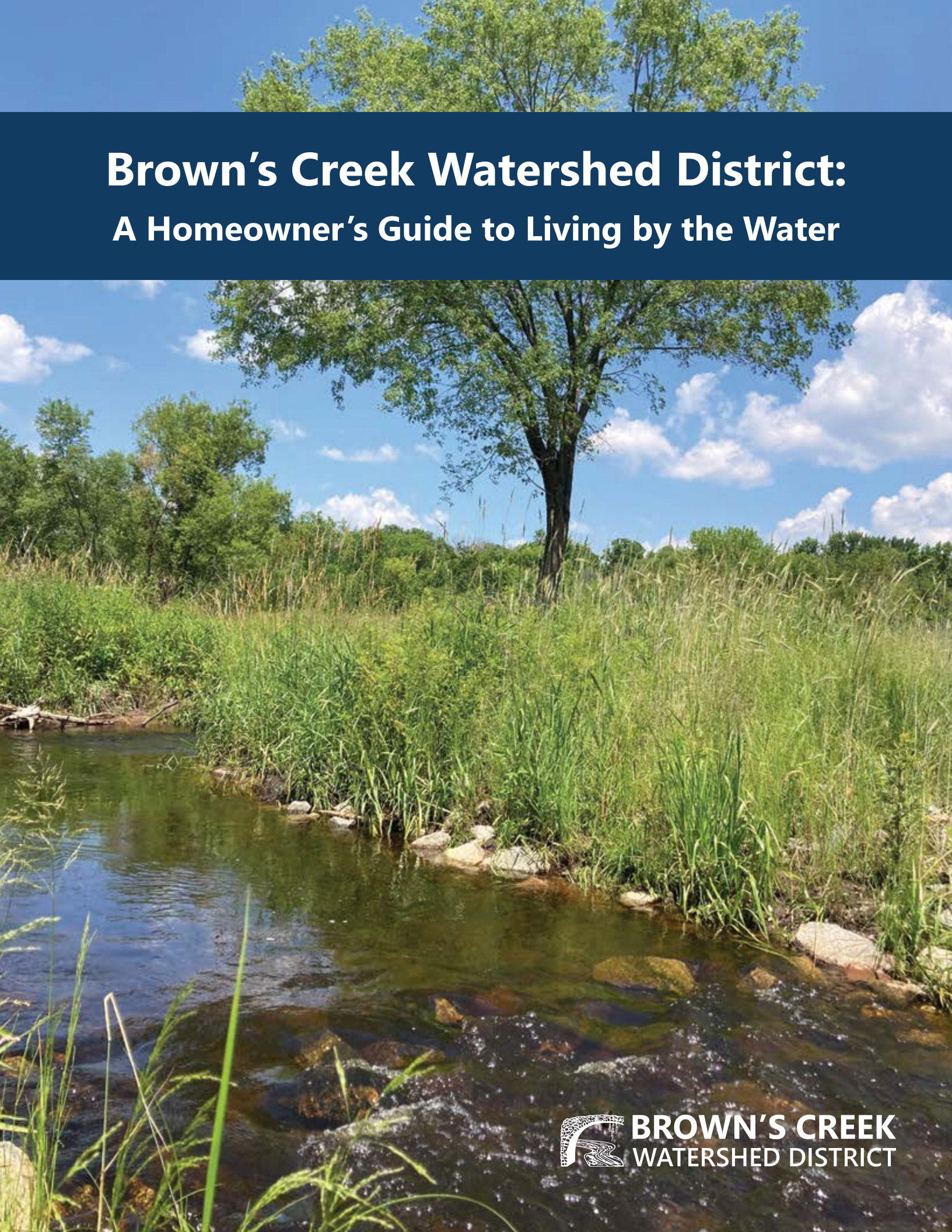
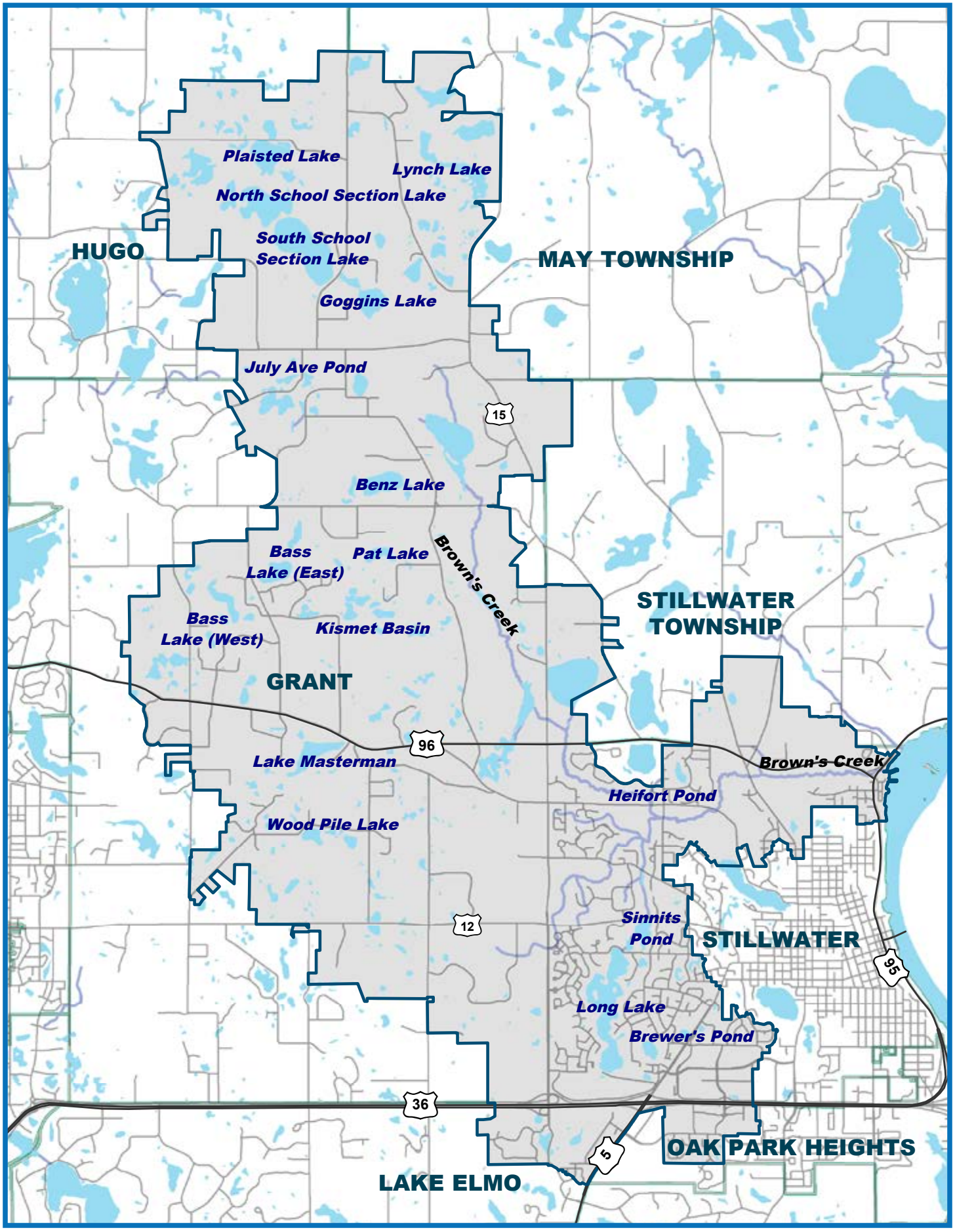
Brown's Creek Watershed District:

A Homeowner's Guide to Living by the Water



BROWN'S CREEK
WATERSHED DISTRICT



Map of the Brown's Creek Watershed

What is Brown's Creek Watershed District?

Watershed districts are local units of government based on hydrologic boundaries (where the water flows) to conserve natural resources. Brown's Creek Watershed District (BCWD) includes parts of Stillwater, Oak Park Heights, Lake Elmo, Grant, Hugo, Stillwater Township, and May Township.

BCWD's mission is to protect and improve water resources through adaptive management, education, and community engagement. Its main programs include monitoring and data collection, capital improvement projects, land conservation, permitting, education and outreach, and incentives and grants. BCWD's work is guided by a comprehensive watershed management plan, which is updated every 10 years. More information on BCWD and its programs can be found at bcwd.org.

Water Resources

The Brown's Creek watershed includes a few small shallow lakes and several large open water wetlands and ponds that are locally regarded as lakes. It contains rare and unique ecosystems including its namesake, Brown's Creek, a cold-water trout stream, and other groundwater-dependent wetlands that support a variety of plants and animals. The watershed has four distinct landforms including the:

- **Headwaters Region:** predominantly lakes and wetlands
- **Brown's Creek Middle Reach:** predominantly wetlands
- **Long Lake Tributary:** routed to Lake McKusick
- **Brown's Creek Gorge:** where the creek flows into the St. Croix

These water resources provide water quality benefits, habitat for wildlife, and aesthetic qualities. The watershed is also part of the larger St. Croix River Watershed, as Brown's Creek outlets into the St. Croix River. Learn more about the water resources in the Brown's Creek watershed at bcwd.org/explore-our-waters.

Plants in the Watershed

The Brown's Creek watershed includes many plants and animals, some of which are unique to the area. Native species are are from Minnesota and adapted to the local climate. Invasive species are from another region and introduced to Minnesota, usually by human activity. Due to lack of predators in a new environment, invasive species can reproduce at an uncontrolled rate and outcompete native species. Non-native species are not always invasive but are less preferable to native species.

Native Species

There are many beautiful native flowers, grasses, sedges, shrubs, and trees that can be found and planted in the watershed. Native species have benefits including:

- Deep roots that hold and infiltrate water, improve soil, filter pollutants, and capture carbon.
- Reduced maintenance costs from less mowing and watering and no fertilizer or pesticides.
- Habitat for pollinators and other wildlife.
- Enhanced beauty and landscape resilience.

Common native species include coneflower, butterfly milkweed, little bluestem, black-eyed susan, and prairie smoke.


Coneflower


Black-eyed Susan


Butterfly Milkweed


Little Bluestem


Prairie Smoke

Aquatic Plants and AIS

Aquatic plant survey on Long Lake in Stillwater

Aquatic plants serve a critical role in healthy lakes, ponds, and wetlands by absorbing nutrients, limiting algae growth, stabilizing shorelines to prevent erosion, and creating habitat for fish and wildlife. Many of the watershed's lakes are shallow, and plants, including lily pads, are indicative of high water quality.

However, aquatic invasive species (AIS) are a concern for many people. The primary invasive species in the watershed's lakes are curly-leaf pondweed and Eurasian watermilfoil. Curly-leaf pondweed has been found in Benz, Goggins, Pat, Plaisted, Long, South School Section, and Woodpile lakes. Eurasian watermilfoil has been found in Goggins, Long, Masterman, and South School Section lakes and Sinnets Pond. Species including flowering rush, purple loosestrife (a shoreline plant), and starry stonewort are not common in the watershed, but could potentially be found.

Brown's Creek Watershed District has an aquatic plant management policy for involvement in invasive plant management. In general, BCWD takes a holistic approach that aims to improve water quality and support growth of native plants. BCWD does not manage native or invasive aquatic plants for recreational or aesthetic purposes.

Learn more about aquatic plants and BCWD's aquatic plant management policy at bcwd.org/aquatic-plants.

Curly-leaf Pondweed

Eurasian Watermilfoil

Flowering Rush

Purple Loosestrife

Starry Stonewort

Terrestrial Invasive Species

Terrestrial invasive species, those that grow on the land, are a threat faced by upland habitats by reproducing without predation or competition. These are tree, vine, shrub, and other plant species that overwhelm native species and reduce the quality of habitat and food sources for wildlife such as birds and pollinators like bees and butterflies.

If you suspect you have invasive species on your property, sign up for a free site visit with our partners at the Washington Conservation District at mnwcd.org/site-visit-signup-form, and a professional will help identify and advise on management of invasive species.

Common terrestrial invasive species include buckthorn, black locust, Canada thistle, grecian foxglove, and wild parsnip.

Buckthorn

Black Locust

Canada Thistle

Grecian Foxglove

Wild Parsnip

Planting for Clean Water

The plants in your yard can directly affect local water bodies, even if you don't have a waterfront property. Planting deep-rooted native plants in a raingarden, pollinator garden, or shoreline buffer can help stabilize the soil and reduce pollution to water resources. If you want to beautify your property and protect clean water at the same time, do projects in your own yard using native plants rather than traditional turfgrass. BCWD can help you with many of the steps along the way to plant for clean water in your yard.

Getting Started

Getting started on a planting project in your yard is simple. BCWD partners with the Washington Conservation District to provide technical assistance for the initial design and installation of raingardens, native plantings, and shoreline restoration projects. Sign up for a free site visit with a conservation professional at mnwcd.org/site-visit-signup-form.

Financial Assistance

BCWD offers financial assistance in the form of stewardship grants and cost-share grants for residential, commercial, and community projects. Stewardship grants are used to reimburse the cost of native plants for small-scale projects. More information on BCWD's Stewardship Grant program can be found at bcwd.org/stewardship-grants. Cost-share grants, intended for larger-scale projects, are also available. More information on these grants can be requested during a site visit.

Raingardens

A raingarden is a bowl-shaped garden that is built where it will capture rain and snowmelt (stormwater runoff) before it reaches a storm sewer or nearby water body. You can plant a raingarden at home to catch runoff from your rooftop, driveway, or street. The runoff soaks into the garden within two days and is cleaned as it filters through the plants and soil.

Shoreline Buffers

Shoreline buffers are areas with densely planted native plants, shrubs, and trees. They provide many benefits, including helping to stabilize shorelines, capturing and filtering water pollutants, discouraging geese from congregating, and providing habitat for wildlife. Trees and native plants have long, deep roots that hold soil together and help prevent lakeshore or stream bank erosion. A dense buffer of these plants can filter water running off your property and clean it before it enters the water body.

Colorful native planting in a homeowner's yard

Native shoreline planting on Long Lake

Salt Use

Chloride pollution is an increasing concern for surface waters and groundwater. A common source is winter road salt, but water softeners can also have an impact. Excess salt usage can lead to:

- Impaired lakes, streams, and rivers.
- More salt in shallow wells and drinking water.
- Toxicity to fish, aquatic bugs, mussels, and amphibians.
- Damage to flooring and landscaping.

It only takes one teaspoon of salt to permanently pollute just five gallons of water, and more salt does not equal more safety. For road salt, best practices include:

- **Shovel first:** The more you shovel or snow blow, the less salt you will need.
- **Do not over apply**: Use less than one cup of salt per parking stall.
- **Use sand in colder temperatures:** Most salts stop working below 15°F.
- **Sweep the excess:** Sweep up and reuse extra sand and salt rather than letting it wash away.

Alternatives such as sand or chicken grit don't melt the snow but can be used for increased traction. If you hire a snow removal service, find a contractor who is trained in smart salting.

For water softeners, consider softening just hot water, using less salt, and/or upgrading to a more efficient system.

People shoveling snow and sweeping excess salt to reduce chloride pollution from excess salt use

Permitting

Home and yard improvement activities may require a permit from BCWD and/or your local municipality. Permits may also be required from other agencies such at the Department of Natural Resources or through the Wetland Conservation Act. As the landowner, it is your responsibility to determine what permits are needed. Please contact BCWD to see if a permit is required before doing any of these activities:

- Grading or earthwork including excavation and/or filling
- Adding impervious (hard) surfaces such as driveways, sheds, pools, house additions, etc.
- Any activity in a water body or buffer area, including removal or mowing of plants
- Learn more about BCWD permits at bcwd.org/permitting.

FAQs: A comprehensive list of frequently asked questions (FAQs) is available at bcwd.org/permitting-faqs.

Adding impervious surface with a new driveway

Yard with native plants instead of a lawn

How to Get Involved

Start a Project at Home

The easiest way to get involved and improve your water resources is to start a project at home. The simplest first step might be starting with something smaller, like a rain barrel. If you are motivated to do a native planting like a raingarden or shoreline buffer, start with a free site visit from the Washington Conservation District for initial guidance, or check out the many great resources online through Blue Thumb: Planting for Clean Water at bluethumb.org.

Attend an Event

BCWD hosts and partners with other organizations on a variety of events each year. Primarily educational in nature, these events include tours and workshops, planting events, and our annual Community Watershed Celebration and Bird Festival. Upcoming events are posted on Facebook and at bcwd.org/calendar.

Volunteer

There are a few ways volunteers can get involved, from one-off opportunities to ongoing commitments. One-off opportunities can include helping with a native tree planting or helping out at an outreach event. Another opportunity is volunteering to collect lake water quality samples throughout the summer through a Citizen Assisted Monitoring Program (CAMP).

One of the best ways to get involved with BCWD is joining our Community Advisory Committee (CAC). CAC members assist BCWD by helping with education and outreach, doing surveys of plants and birds, and providing input to the board of managers on watershed plan updates, programs, and projects within the district, and outreach materials such as BCWD's yearly newsletter. Learn more about the CAC and apply at bcwd.org/cac.

Join the Board of Managers

Brown's Creek Watershed District is governed by a five-member Board of Managers who are appointed by the Washington County Board of Commissioners and serve staggered three-year terms. Managers must be voting residents of the watershed and cannot be a public officer of the county, state, or federal government, with the exception of a soil and water conservation district supervisor. Check for open positions at bcwd.org or washingtoncountymn.gov/300/Watershed-Districts.

Adopt a Drain or Raingarden

Adopt-a-Drain is a program where residents can adopt a storm drain in their neighborhood to help reduce water pollution to local water bodies. You can sign up at mn.adopt-a-drain.org.

Stillwater also has an Adopt-a-Raingarden program in partnership with Sustainable Stillwater MN and the Washington Conservation District to provide maintenance for city raingardens. Sign up to adopt at mnwcd.org/adoptaraingarden.

Using a rain barrel to capture water

Volunteers planting a tree

BROWN'S CREEK WATERSHED DISTRICT

Preserving the integrity of the watershed for future generations

www.bcwd.org | 455 Hayward Ave N, Oakdale, MN 55128 | 651-330-8220

Board of Managers

- **Klay Eckles,** President
- **Celia Wirth,** Treasurer
- **Griffin Brod,** Manager
- **Luke Mattson,** Manager
- **Vacant,** Vice President

Monthly board meetings are typically at 6:30pm on the 2nd Wednesday. See bcwd.org/calendar for the full schedule.

Old Stone Arch Bridge across Brown's Creek in Stillwater, MN

District Staff

- **Karen Kill**, Administrator
  kkill@mnwcd.org
  651-330-8220
- **Hannah Peterson**, Communications & Project Assistant
  hpeterson@mnwcd.org
  651-330-8220

District Consultants

- **Emmons & Olivier Resources,** District Engineer
- **Smith Partners,** Legal Council
- **Washington Conservation District,** Water Monitoring, Technical Assistance, and Project Maintenance

More information on BCWD and its programs can be found at bcwd.org or by scanning the QR Code