Hennepin County Landowner Guide

for Conserving Natural Resources

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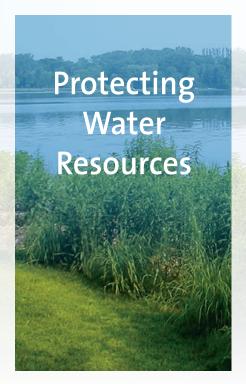
This guide is intended to help landowners care for their land and the natural resources on their property. The guide recommends practices that can be implemented to protect and enhance natural systems. Each section also suggests resources and publications that offer additional, more specific information for each subject area.

This guide provides information regarding natural areas such as prairies, wetlands, water resources and woodlands. Information about the control of noxious weeds and invasive plants, management of pastures and livestock, maintenance of private wells and septic systems, care of wildlife habitat, and management of household wastes is also included. By promoting environmental stewardship, we hope to preserve and enhance the environment in Hennepin County for current and future generations.

This resource was produced by Hennepin County Environmental Services in partnership with the University of Minnesota Extension Service of Hennepin County.







Minnesota is known for its abundance of water resources. Hennepin County has about 200 lakes, three major rivers – the Mississippi, Minnesota and Crow - and multiple streams and ponds. Protecting the health of streams, rivers and lakes is important for recreation, water quality, wildlife habitat and tourism.

The quality of water resources in Minnesota is threatened by increasing development and pollution. A variety of human activities can be harmful to water resources. Sources of water pollution include:

- Improper agricultural practices and mismanagement of pastures and manure.
- Leaking septic systems.

- · Destruction of wetlands and other natural areas.
- Runoff from lawns, roads, croplands and construction sites.
- · Litter and improper disposal of waste.
- Aquatic invasive species.
- Direct discharge from industry.

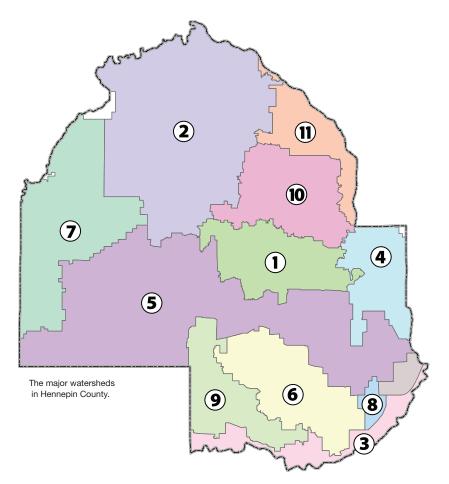
Landowners can take a variety of actions to protect water quality.

Determine your watershed

A watershed is an area of land that drains to a common lake, river, stream or wetland. Water resources are managed based on their watershed, which allows communities to work together to prevent and solve water-related problems.

Watersheds are managed by either a watershed district or watershed management organization, which are special units of local government that work to solve and prevent water-related problems. Watershed organizations regulate land-disturbing activities, perform capital improvement projects and provide environmental education related to water issues.

It is important to know which watershed your property is in as you may need to obtain a permit or submit for review certain projects on your land that affect water resources. Contact Hennepin County for assistance in determining the watershed for your property.



- **1.** Bassett Creek Watershed Management Commission www.bassettcreekwmo.org
- 2. Elm Creek Watershed Management Commission www.elmcreekwatershed.org
- 3. Lower Minnesota River Watershed District www.watersheddistrict.org
- 4. Middle Mississippi River Watershed Management Organization www.mwmo.org
- 5. Minnehaha Creek Watershed District www.minnehahacreek.org
- 6. Nine Mile Creek Watershed District www.ninemilecreek.org

- 7. Pioneer-Sarah Creek Watershed Management Commission www.pioneersarahcreek.org
- **8.** Richfield-Bloomington Watershed Management Organization www.rbwmo.com
- 9. Riley Purgatory Bluff Creek Watershed Commission www.rileywd.org
- 10. Shingle Creek Watershed Management Commission www.shinglecreek.org
- 11. West Mississippi River Watershed Management Commission www.shinglecreek.org

Take care of your shoreline

Shoreline areas play a critical role in protecting water quality and providing habitat for fish and wildlife. Stabilizing your shoreline with native plants has many benefits.

Preventing erosion – Runoff from precipitation, waves and foot traffic all contribute to shoreline erosion. Sediment that erodes into bodies of water can reduce water clarity, carry phosphorous and other pollutants into the water, and destroy or bury habitats. The deeper root structure of tall grasses and certain native plants will help reduce erosion and provide stabilization to the soil on your shore.

Reducing runoff – The plants along your shoreline will absorb runoff and pollutants, such as chemicals, paint, oil, leaves and grass clippings. This helps to protect water quality.

Providing habitat for wildlife -

Fish and wildlife are highly dependent on vegetated shorelines as they provide critical habitat for feeding, resting and mating.

Serving as a barrier to geese -

Geese prefer shorelines that are mown to the water's edge because they can keep an eye out for predators. Taller vegetation, including certain native grasses, will discourage geese from coming onto your shore.

To take care of your shoreline:

- Don't mow down to the lake or stream. edge. Instead, maintain a buffer of native plants between your lawn and the water's edge.
- · Plant a variety of native species along your shoreline. They will provide wildlife habitat and their deep root structures will help to stabilize your shore.

The Minnesota Department of Natural Resources has an interactive website that will help you design a native planting for your lakeshore. Visit www.dnr.state. mn.us/shorelandmgmt/index.html.

Avoid or control invasive aquatic species

Invasive aquatic plants and animals threaten Minnesota's water resources because they can clog waterways, outcompete native species, infiltrate water treatment plants and negatively impact water-based recreation.

Common invasive aquatic species in Minnesota include:

- -Zebra mussel
- -Purple loosestrife
- -Eurasian watermilfoil
- -Spiny water flea
- -Round goby
- -Curly leaf pondweed

Landowners can help prevent the spread of invasive species by taking the following actions.

Remove any aquatic plants and animals from the propeller and underside of your boat and trailer every time you move your boat from one body of water to another. This will prevent invasive species from being transported to other bodies of water.

Drain bilge water when removing your boat from a body of water to avoid transporting infested water to another location.

Know which lakes and rivers are **infested.** The Minnesota Department of Natural Resources maintains a list of infested waters, available at www.dnr. state.mn.us/eco/invasives.html.

Dispose of any unwanted bait in the garbage instead of in bodies of water.

Use desirable plants in your pond and along your shoreline to suppress the growth of invasive species that can alter and dominate ecosystems.

Never release aquatic pets or plants into the wild. It is illegal in Minnesota to release aquarium pets including fish, amphibians and turtles into the wild because they can expose native fish to diseases and parasites.

Keep septic systems working properly

Maintaining a healthy septic system will help protect the quality of nearby water resources. Establish and follow an appropriate maintenance schedule, and have your system inspected regularly. (See Maintaining Septic Systems, pg. 42, for more information.)

Modify your landscaping practices

How you take care of your lawn can impact water resources. Phosphorous from leaves, grass clippings, pet waste and fertilizers can cause rapid growth of algae in lakes, which turns lakes green and can be unsafe for pets. Stormwater running over driveways and lawns can carry pollutants like oil, paint and chemicals into nearby streams and rivers.

There are a few simple steps you can take to minimize the impact that your lawn care practices have on water quality.

- · Keep storm drains clear of debris and pollutants.
- Reduce runoff by utilizing rainwater plant a rain garden, install a rain barrel, and direct downspouts so that they pour into gardens or onto your lawn.
- Don't rake leaves into a body of water and avoid piling leaves along shorelines or in wetlands.

For more information

- · Minnesota Department of Natural Resources Lakefinder www.dnr.state.mn.us/lakefind
- Metro WaterShed Partners www.cleanwatermn.org
- Habitattitude Information about keeping aquatic pets and plants out of waterways. www.habitattitude.net
- A Quick Reference Guide to Earth-Friendly Home Landscaping Hennepin County Environmental Services. More information on lawn care practices that help protect water quality. www.hennepin.us/sustainablelandscaping.
- · A Citizens' Guide to Lake Protection Minnesota Pollution Control Agency, St. Paul, Minnesota. 1985.
- Lakescaping for Wildlife and Water Quality Hendersen, Carroll, Carolyn Dindorf and Fred. Rozumalski. Minnesota Department of Natural Resources, St. Paul, Minnesota. 1999.
- Shoreline Alterations: Natural Buffers and Lakescaping. Minnesota Department of Natural Resources, St. Paul, Minnesota. files.dnr.state.mn.us/publications/waters/ shoreline_alterations_lakescaping.pdf



Resources

- Hennepin County Environmental Services www.hennepin.us/naturalresources 612-348-3777
 - Hennepin County provides a variety of information and technical assistance for managing your land.
- University of Minnesota Extension -Hennepin County www.extension.umn.edu/county/hennepin 612-596-2110

The University of Minnesota Extension provides outreach for the University of Minnesota and delivers educational programs and technical assistance on a variety of land management topics.

• Minnesota Department of Agriculture www.mda.state.mn.us 651-201-6000

- Minnesota Department of Natural Resources (DNR) www.dnr.state.mn.us 651-296-6157
- USDA Natural Resources Conservation Service www.mn.nrcs.usda.gov 763-241-1150, ext. 3
- · Minnesota's bookstore www.minnesotasbookstore.com Minnesota's bookstore sells a variety of publications from Minnesota state agencies including many of the publications listed in this guide.
- · Midwest Plan Services www.mwps.org Midwest Plan Services, based out of Iowa State University, sells a variety of low-cost agricultural publications.

Books & publications

- · A Quick Reference Guide for Earth Friendly Home Landscaping Hennepin County Environmental Services. www.hennepin.us/sustainablelandscaping
- Beyond the suburbs A landowner's guide to conservation management Preece, Kathleen. Minnesota Department of Natural Resources, St. Paul, Minnesota. 2001.
- · Guide to Rural Living University of Minnesota Extension, St. Paul, Minnesota. 2001. www.extension.umn. /ruralliving
- · Living on Acreages Carroll, Natalie and Don Jones. Midwest Plan Services, Ames, Iowa. 2006.
- · Small Scale/Small Field Conservation NRCS, Washington, D.C. landcare.sc.egov.usda.gov



Hennepin County Environmental Services 612-348-3777

www.hennepin.us/landownerguide

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