

LIVING BY WATER

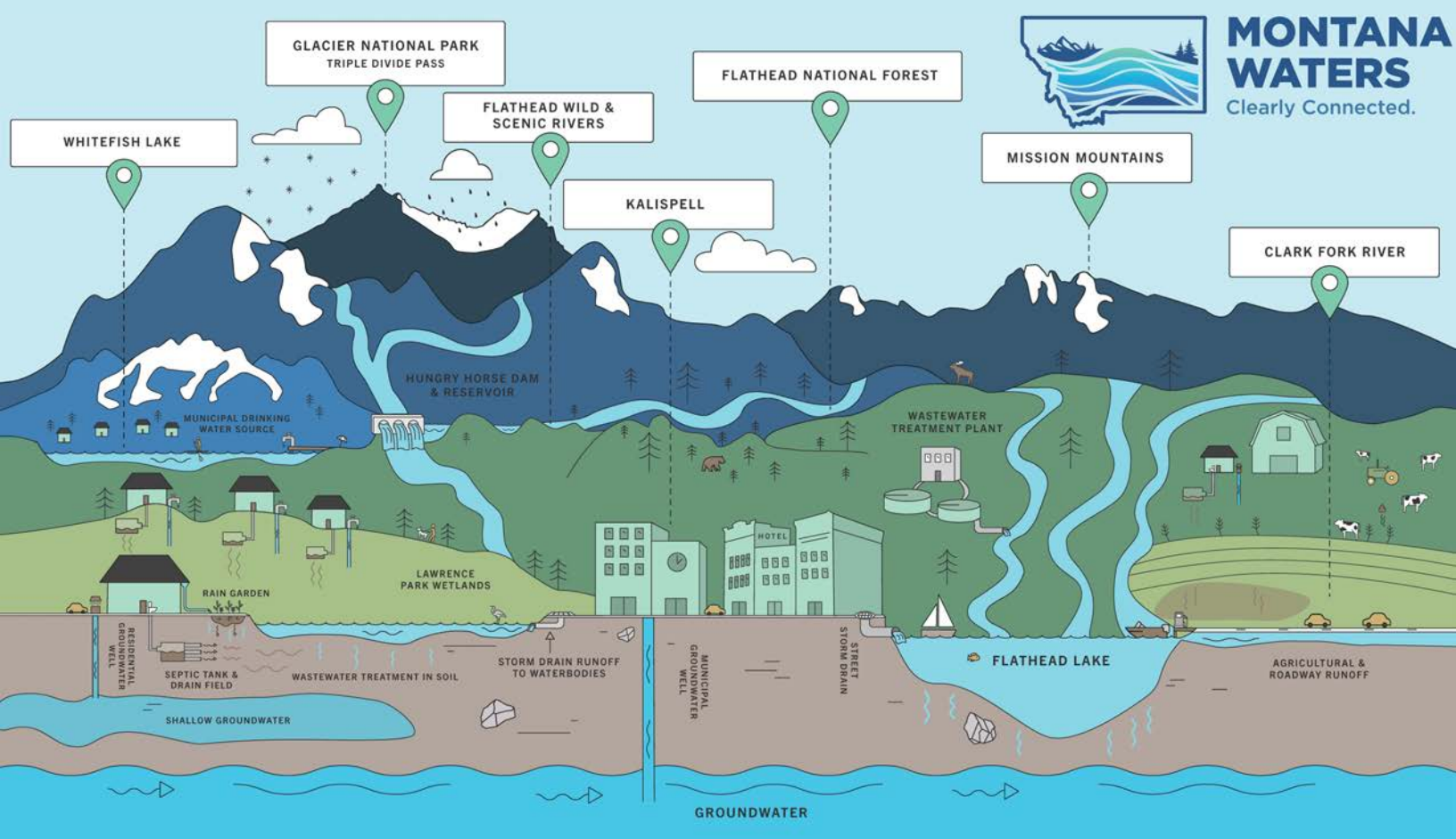


LIVING IN FLATHEAD

A NEIGHBOR'S GUIDE TO
LIVING RESPONSIBLY IN THE FLATHEAD

WWW.LIVINGINFLATHEAD.ORG/LIVING-BY-WATER

Photo by Chris Saulit



The Flathead Watershed

We all live in and impact a watershed

Clean water is one of our most valued – and most threatened – natural resources. Our lakes, rivers, and streams provide recreation, drinking water, scenic value, and habitat for fish and other wildlife. Despite these critical roles, few fully understand how their daily activities can impact the health of our freshwater.

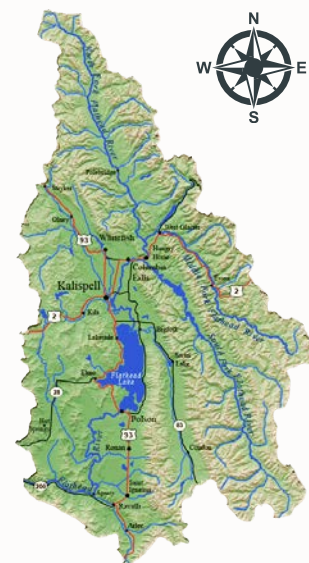
Even if you live miles from a lake, your actions can directly affect water quality.

As a resident of northwest Montana, you live within the Flathead Watershed. This means that all the water around you eventually drains into Flathead Lake and the Clark Fork River, before continuing on to the Columbia River and Pacific Ocean.

The waters of the Flathead, Stillwater, Whitefish, and Swan rivers all join in Flathead Lake, the largest natural freshwater lake west of the Mississippi River. Altogether, the Flathead Watershed drains six million acres of scenic landscapes.

Everyone can help protect our precious clean water.

Living here, it is important to understand that our actions can pollute streams, rivers, lakes, and groundwater.



Explore the
Flathead Watershed

www.livinginflathead.org/living-by-water

Whether you are a new resident, a long-time landowner, or a visitor, this Guide is an introduction to responsible land and water stewardship.

Read on for what you can do to protect our clean water.



CLEAN. DRAIN. DRY.

HELP STOP THE SPREAD OF AQUATIC INVASIVE SPECIES



Flathead Lake and Watershed are at risk for an accidental introduction of aquatic invasive species. Our region's scenic beauty is a magnet for visitors from out of state.



QUAGGA MUSSELS ON ABS PIPE FROM LAKE MEAD

Invasive mussels are one of the most damaging aquatic organisms to invade the US. Early detection of invasive mussels is paramount to preventing an infestation. Once mussels are established, it is impossible to get rid of them.

Zebra and quagga mussels are voracious filter feeders, removing substantial amounts of phytoplankton from the base of the food web.

As a result, we could see dramatic changes in the Flathead Watershed ecosystem, including crashing fish populations, losing native flora and fauna, declining water quality, and increasing frequency of toxic algal blooms.

Keep aquatic hitchhikers, like the zebra mussel, out of Flathead waters by cleaning your boat and gear, and stopping at all watercraft inspection stations.

FIND AN INSPECTION STATION

fwp.mt.gov/ais  406.444.2440



CLEAN off visible aquatic plants, animals, and mud from all equipment before leaving water access.

- Rinse equipment and boat hulls (with high pressure, hot water when possible)
- Rinse interior compartments of boats with low pressure, hot water (120°F)
- Flush motor with hot water (120°F) for 2 minutes (or according to owner's manual).

DRAIN motor, bilge, livewell, and other water-containing devices before leaving water access.

DRY everything for at least five days OR wipe with a towel before reuse.

LANDSCAPE

FOR CLEAN WATER



Check out these strategies to help keep nutrients in the soil and out of storm drains, streams, and lakes. Beautiful buffer gardens help reduce flooding, replenish our aquifers, and protect aquatic life

4. COMPOST OR MULCH YOUR YARD WASTE.

Keep leaves and grass off storm drains, sidewalks, streets, and streams. Clogged storm drains can flood the streets and harm aquatic life.



5. RETAIN OR PLANT BEAUTIFUL LAKESHORE AND RIPARIAN BUFFER GARDENS.

Use a diversity of native plants, including trees, shrubs, and grasses, instead of lawns – these need less water, and once established, and have deep roots which help retain water in the soil, filter pollution, and prevent erosion. To maintain your view, plant tall, deep-rooting species along the sides of your view and shorter plants in the middle.



6. USE NATURAL YARD CARE SOLUTIONS & LIMIT FERTILIZERS.

Leave grass 3-4 inches tall so less water and fertilizer are needed. A mulch mower provides nutrients to lawns and retains more water.

Limit fertilizers and do not fertilize within 20 feet of water. Consider using organic fertilizers which are safer for people, pets, and wildlife.



1. AVOID MOWING ALONG THE WATER'S EDGE.

Avoid mowing along the water's edge to prevent loss of essential root mass and maintain a 15 to 50 foot buffer of native plants.



2. BUILD ON UPLAND AREAS.

Build on upland areas away from the water's edge and the outer edge of river bends where erosion is more likely.



3. COVER EXPOSED SOIL.

Cover exposed soil with wood chips or mulch to reduce erosion and protect the soil.



BUILD A RAIN GARDEN.

7. Rain gardens capture, filter, and absorb runoff from roofs and pavement. They also reduce erosion and flooding while providing habitat for birds and insects and enhancing beauty.

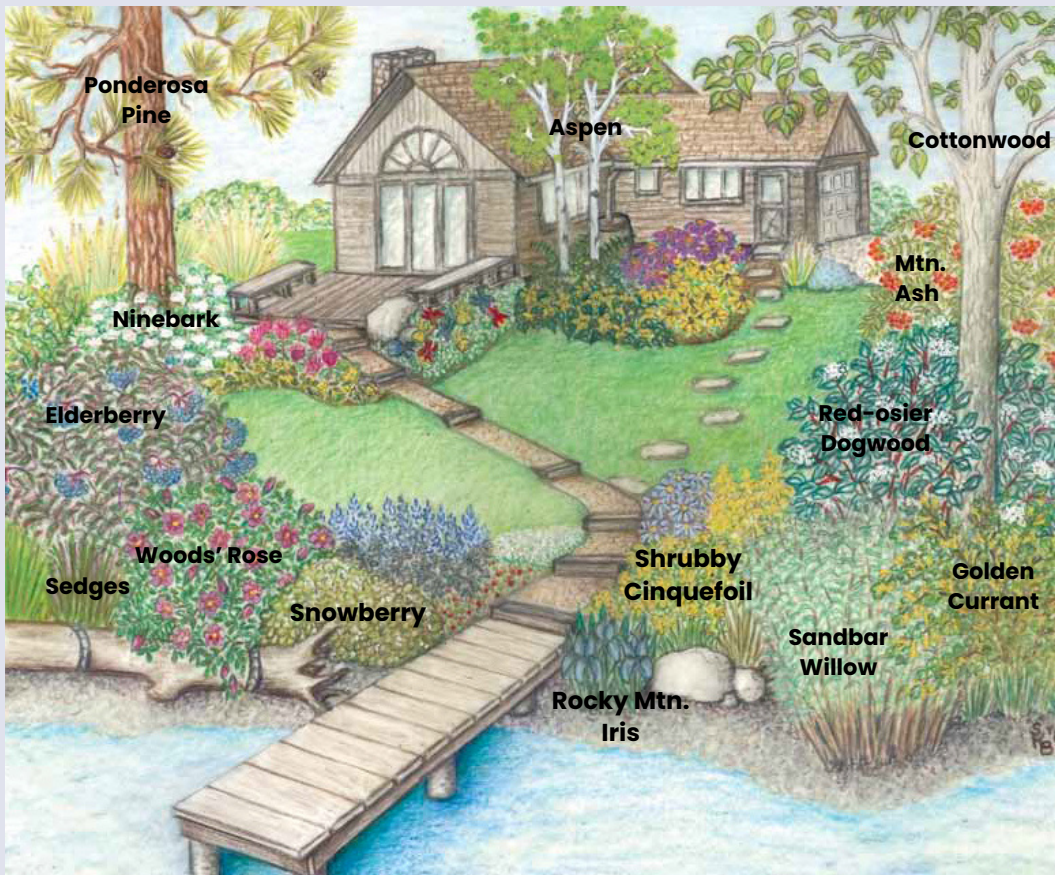
8. BE WATER WISE. Reduce how much water you use in the garden. Sprinkle at dawn and dusk every other day, use soaker hoses, versus sprinklers, and don't water while it's raining.

WATERFRONT LANDSCAPES

Keep the view plus a whole lot more



Save time and money, and enjoy clean water and scenic beauty by adding native plant landscapes to your waterfront property.



- Retain existing native plants along shore
- Plant native vegetation that includes trees, shrubs, forbs, and ground cover
- Select native plants that match your site conditions
- Plant taller trees and shrubs at edge of the property; transition to shorter plants where you want to focus your view
- Keep turf grass areas small and near house
- Mulch, water, and weed until plants are well established



Why Native Landscapes Add Value To Your Waterfront Property:

- Protect your property from erosion
- Protect privacy and enhance scenic beauty
- Keep sediment and pollutants out of water
- Protect and recharge groundwater

Why Native Species are Best:

- Their deep root systems help stabilize shorelines and river banks
- Use less water once established
- Provide food and shelter for wildlife
- Are low maintenance once established
- Resist fire and deer damage

If you are planning to work in or near a stream, you must get a 310 permit first.

It's the Law. Contact your local Conservation District for information and assistance.

When working in or near a lake, county, tribal, or state permits may be required.



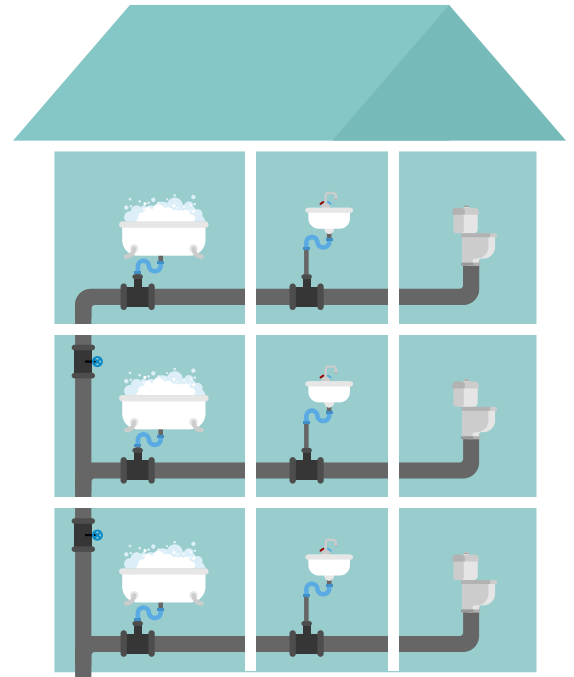
Maintain Your Septic System

You can protect Montana's clean, clear, cold and connected waters

Septic systems hold, treat, and dispose of household wastewater. Wastewater contains bacteria, viruses, household chemicals, and nutrients which can cause health problems and pollute groundwater and surface water.

Prevent contamination of our waters:

- Pump and inspect your septic system every 3 to 5 years. It can help your system run longer, save money, and protect water quality.
- Aging septic systems must be replaced every 20-25 years (depending on use, size, and condition). Contact your County Environmental Health Department for more information.



"Watch what you toss down the drain! toilet, or storm drain—stuff like oil, paints, pesticides, household chemicals, meds, hygiene products, diapers, wipes (even the 'flushable' ones), and coffee grounds can mess up the microbes that septic systems need to work."

Be a Responsible Septic System Owner



Visit **www.WasteNotProject.org** for ways to dispose of hazardous waste in the Flathead.

Inspect your septic system every 3 to 5 years.

Be very selective about what goes down the drain.

Clean with biodegradable cleaning products.

Limit or don't use a sink garbage disposal.

Avoid compacting soil over the drainfield.

For more information contact your County Environmental Health Department

Visit www.epa.gov/septic





Photo by Gravity Shots

Stop Pollution at its Source

What is Nonpoint Source Pollution?

Pollution that originates from numerous sources across the landscape is known as nonpoint source pollution. It can end up in rivers, lakes, and groundwater when it rains or snow melts.

What you can do

A few simple steps you can do to reduce nonpoint source pollution and your impact on the Flathead Watershed:

Apply fertilizers and pesticides sparingly, sweep up any excess from driveways and sidewalks

Collect and dispose of pet waste in the trash.

Dispose of oil and household chemicals properly, never dump anything in a storm drain.

Use a commercial car wash and maintain your car.



NONPOINT SOURCE POLLUTION SOURCES INCLUDE:

- Excess fertilizers, herbicides and insecticides from residential and agricultural areas.
- Oil, grease, antifreeze and other toxic chemicals from urban runoff.
- Sediment from eroding stream banks and improperly maintained construction sites, croplands and forest lands.
- Failing or aging septic systems, pet waste, yard waste and trash.

LEARN MORE
www.livinginflathead.org

Consider anything that can be washed down the drain and end in our rivers, lakes, or groundwater.





IS OUR WATER QUALITY AT RISK?

While the Flathead Watershed has some of the cleanest waters in the country, many of our lakes and rivers are experiencing declining water quality. Algae blooms can be caused by underperforming septic systems, fertilizers from lawns and farms, polluted stormwater runoff from roofs and streets, warmer water temperatures, and more. These can be toxic to humans, pets, and wildlife.

How we use water, recreate, treat the land, and what we leave on the landscape affects water quality.

It's everyone's responsibility to understand how we can protect our clean water.

DO YOU KNOW WHERE YOUR DRINKING WATER COMES FROM? AND, IS IT CLEAN?

Drinking water in the Flathead Watershed comes from public and private groundwater wells and surface waters. For example, the City of Whitefish utilizes surface water from Haskill Basin and Whitefish Lake, while the City of Kalispell sources water from numerous deep wells.

Public drinking water systems are regularly monitored and more strictly regulated than bottled water. If you are on a private well, it is your responsibility to protect and test the water to ensure it is clean. The aquifer you tap into is shared with your neighbors.

WHO OWNS THE WATER?

In Montana, all waters are owned by the state. A water right allows the permit holder, in a specific location, to use a certain amount of water in a prescribed manner.

If a water right is attached to your land purchase, an ownership update must be registered with the Department of Natural Resources, Water Rights Bureau. Search, apply for, or update a water right at [DNRC Water Rights](#).

Montana has 18 negotiated Water Rights Compacts. These are water rights held by Indigenous American Reservations, National Parks, and Montana Fish, Wildlife and Parks. Learn more about the history and current status of reserved water rights at [Montana Water Right Compacts](#).



WATER RESOURCES

Access these resources and more on our website

www.livinginflathead.org/living-by-water

MONTANA WATERS



Did you know?

Montanans highly value and rely on the quality of our natural resources. There are protections in place that help prevent pollution and safeguard water quality.

If you work near water, it's important to be aware of the following regulations and Best Management Practices to ensure clean water.

PERMITS

Conservation Districts Stream Permits

Flathead (406) 751-8130

Lake County (406) 747-0895

Planning & Zoning Departments

Floodplain and shoreline permits

Flathead County (406) 751-8200

Lake County (406) 883-7235

Confederated Salish & Kootenai Tribes

Shoreline Protection Program

CSKT (406) 675-2700

csktnrd.org/ep/shoreline-protection

DNRC Water Rights - Flathead & Lake Co.

Kalispell Regional Office (406) 752-2288

dnrc.mt.gov/licenses-and-permits

Montana Dept. of Environmental Quality

Water and other permits

406-444-2544

deq.mt.gov/Permitting

- A Homeowner's Guide to Septic Systems
- Recycling and Hazardous Waste Disposal
- Car Washing
- Lawn & Garden Care, Rain Gardens
- Pet Waste
- Voices of Our Lakes
- Montana Lake Book
- Flathead Lake Swim Guide
- Northwest Montana Lakes Network
- Monitoring Montana Waters
- Lake, Stream, and other Permits

LIVING BY WATER CONTRIBUTORS



Disclaimer: The Living by Water handout is merely informative and not a regulatory document. The information provided is not intended to constitute legal advice. All information, content, and materials available are for general informational purposes only.

Notes

Actions



A Neighbor's Guide

LIVING IN FLATHEAD

Living on the Land

Living with Fire

Living with Wildlife

Living Locally

LEARN MORE

www.livinginflathead.org

The Right to a “clean and healthful environment” come with responsibilities.

“We the people of Montana grateful to God for the quiet beauty of our state, the grandeur of our mountains, the vastness of our rolling plains, and desiring to improve the quality of life, equality of opportunity and to secure the blessings of liberty for this and future generations do ordain and establish this constitution.”

“The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations.”

— [Montana Constitution](#)