# Taking Care of Our Coeur d'Alene Lake System...

# What You Can Do To Help

Whether you live on the lake, in town, or out in the surrounding countryside, some of your daily activities may be adversely affecting the water quality of your lake.

A delicate balance exists between lakes and their surrounding watersheds. Our lakes are affected by their land-based activities.

This guide offers local residents and users practical tips that can preserve clean water in our lakes.

**Published by the Clean Lakes Coordinating Council, local lake associations and the Idaho Water Resources Research Institute, University of Idaho in cooperation with the Clark Fork Coalition.**

# YARD CARE

Lawn and garden fertilizers are high in nitrogen and phosphorus. If applied incorrectly, these powerful nutrients can leach into the lake. *Remember: if it makes your lawn green, it can make your lake green too!*

If you don't have a lawn, consider natural landscaping or other low maintenance ground cover instead of grass.

## Fertilizers

- Get a soil test to determine your soil's condition, and use fertilizer with the minimum amount of phosphorus suggested. Soil test kits and help are available from your local Cooperative Extension System Office.
- Follow package directions.
- Don't over fertilize. This can actually harm your lawn.

## Pesticides and Herbicides

- Minimize use. They can harm your lake.
- Encourage natural pest predators.
- Don't apply near or into surface waters.
- Don't apply in windy conditions.

If you live in town keep fertilizers, pesticides and herbicides from washing into the street. Once the water hits the blacktop or concrete, it often flows freely into the nearest body of water, carrying these contaminants with it.

If you live on the lake or next to a stream, keep a non-fertilized strip next to the water's edge.

Don't burn leaves or other refuse on beaches or stream banks. Ashes wash into the lake and provide a quick source of nutrients for aquatic plant growth.

# SEPTIC SYSTEM CARE

A faulty septic system is a threat to the water quality of our lakes and nearby streams. Excess nutrients such as nitrogen and phosphorus can leach from overloaded or improperly installed drain fields and cause unwanted algae in the lake.

Too much algae makes the lake less appealing for recreational use, and can adversely affect aquatic life by robbing the water of life sustaining oxygen.

## Do's and Don't's of Proper Use

- Use phosphate-free detergents.
- Use water saving showers and toilets.
- Don't use a garbage disposal.
- Don't dump grease down the drain. Keep plastics, paper diapers, solvents and other chemicals out of the system.
- Don't use septic cleaning compounds. They may actually harm the system.
- Plant shrubs over drain fields to help extract moisture and nutrients.
- Don't drive or park over a septic system.

## Maintenance

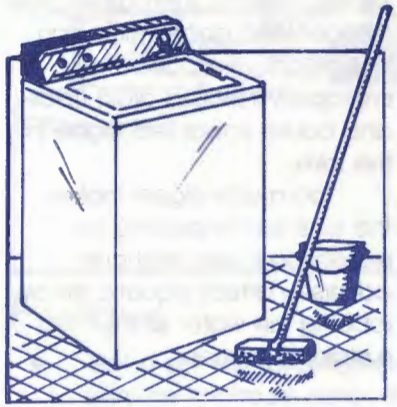
- Have your septic tank pumped every three to five years.

## Warning Signs of System Problems

- Slow running toilet and drains
- Sewage surfacing over drain field area

Questions about your system should be directed to the Panhandle Health Department.

# LAUNDRY AND HOUSEHOLD CLEANING



The phosphate in some laundry detergents eventually reaches many of our lakes. Once there it acts as a fertilizer and can cause excessive growth of algae. An effective way to reduce phosphorus in the lake is to simply use non-phosphate detergents. The packages of most products tell you how much phosphate is in the contents. Many communities in the Idaho Panhandle and the Spokane area have banned the sale of phosphorus detergents.

If your community does not have such a ban, check the label and use those products with less than .5% phosphorus. Some low phosphate cleaning products are:

**Granular Laundry Products:** Ajax, All, Arm & Hammer, Cold Power, Derma-Safe, Ivory Snow, Par, Purex, Shur Saving, Trend, Western Family.

**Dish Soaps:** Dawn, Dermassage, Ivory, Joy, Lux, Palmolive, Sunlight.

**Household Cleaners:** Ajax, Bar Keeper's Friend, Bon Ami, Comet liquid, Fantastik, 409, Glass Plus, Janitor In A Drum, Lysol, Lysol Basin & Tub Cleaner, Mr. Clean, Murphy Oil Soap, Parson's, S.O.S, Scrub Free, Soft Scrub, Spic N Span Liquid, Tilex, Windex.

**All Liquid Detergents.**

**Mention of trade names does not constitute endorsement.**

# EROSION CONTROL

Erosion is the wearing away of land by wind or water. In our basins where steep slopes meet waterways, water erosion can be a significant problem. Sediment washed from lake and stream banks contributes to excess loading of phosphorus and nitrogen, fills in the lake and stream beds and damages fragile fish habitat.

- Stabilize steep slopes with ground cover, mulches, or stone.
- Create a "buffer zone" of natural vegetation between buildings and the water. Trees, grasses, and shrubs will stabilize shorelines.
- If ground has been disturbed, place an erosion barrier such as straw bales at the bottom of slopes. This will retain sediments while ground cover is being re-established.
- Consult with the Cooperative Extension System Office for advice on landscaping for erosion-control.

# ANIMALS NEAR THE WATER

Keep animals from congregating near the shoreline. This will minimize the amount of soil and manure reaching the lake. Use fences or provide watering troughs to protect streams and lakes.

# PRESERVING WETLANDS

Besides providing outstanding habitat for waterfowl and other wildlife, wetlands filter water-borne pollutants and have been known to dramatically reduce phosphorus loading to lakes. These areas should not be drained or filled. Special care should be taken to preserve our wetland areas.

# EURASIAN MILFOIL

## The Problem

Eurasian milfoil is an aggressive non-native aquatic weed that grows and spreads rapidly in rivers and lakes. It forms dense weed beds, interferes with swimming, boating and fishing, and degrades fish habitat and water quality. A tiny fragment of stem or root is enough to start the weed growing in a new body of water. Once Eurasian milfoil is in place, THERE IS NO FEASIBLE WAY TO ERADICATE IT.

At this time, there are no known infestations in North Idaho lakes, however the weed is prolific in some Washington lakes and rivers (see map). It has been identified near the Idaho border in the Pend Oreille River. The best control method we have is preventing the weed from spreading to new areas.

## Identifying Milfoil

Four (4) feather-like leaves at each stem section

Plant fragments break away, and grow new roots

extremely dense growth where established

HOW TO DISTINGUISH EURASIAN FROM NATIVE MILFOIL

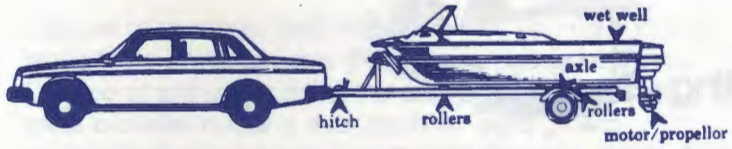
The Eurasian leaf has 12 to 24 pairs of divisions; native milfoil only has 6 to 9 pairs

- The upper portion of the plant often develops a reddish cast
- Eurasian leaves collapse around the stem when removed from water
- Eurasian has a finer, more feathery appearance

## How You Can Help

The first infestation of milfoil almost always takes place at a public boat ramp.

- ALWAYS remove plant fragments from your boat, trailer, motor, and anchor before launching and after leaving the water.
- DISPOSE of plant fragments in the trash or on high, dry ground.




**Locations where aquatic weeds are often found.**

- CLEAN fishing tackle and any other equipment that has made contact with weed beds.
- PAY particular attention to cleaning your boat of weeds if you use your boat in any of the following areas:

Areas of Major Milfoil Infestation


- SPREAD the word to neighbors and friends who use our lakes.
- START a *"Milfoil Watchers"* volunteer program on your lake.
- Call your lake association if you believe you have identified Eurasian milfoil.

For more information call your lake association, the U.S. Army Corps of Engineers or Cooperative Extension System Office.

# OUT ON THE WATER

Many of us who live and vacation here love to spend time on the lake fishing, waterskiing or boating. The following tips will help reduce recreational impacts on lake water quality.

## Boating

- Reduce boat speed in bays and shallow areas to prevent stirring up bottom sediment.
- Don't use jet skis in shallow areas.
- Don't spill gas or oil into the lake.
- Don't pump bilge into the lake.
- Use only liquid phosphate-free detergents on ski bindings.

## Boat Maintenance

- Keep your boat's engine in top performing condition.
- Don't overfill your fuel tanks; doing so results in gasoline overflow and toxic slicks in the water.
- Drain old oil and anti-freeze into a container for onshore disposal.
- Keep use of engine cleaners to a minimum; their chemical ingredients are highly toxic.
- Don't bathe yourself, or your pets in the lake.
- Wash your boat before putting it in the water. Avoid washing it in the lake.
- Don't use waxes, paints, or thinners while your boat is in the water.
- Don't use anti-fouling paints containing TBT (Tributyltin), which works by releasing toxic chemicals from the boat hull into the water.


## Marine Sanitation

- Dispose of garbage onshore; make sure you have a trash receptacle on board and that all garbage goes there.
- Dispose of greywater (from the sink) properly. Dumping it into our lakes provides nutrients that promote algal growth.
- NEVER DUMP ON-BOARD TOILETS INTO THE LAKE. Waste should be disposed of in your home or in on-shore holding tanks.

Public pump-out facilities are provided at marinas on the larger lakes at the following locations:

**COEUR D'ALENE**•Northwest Resorts at the end of 11th Street, and the 3rd Street dock in Coeur d'Alene, Carlin Bay Marina, Rockford Bay Marina, Gateway Marina at Harrison, and Conkling Park Marina.

**PEND OREILLE**•Eagle Marina at Farragut State Park, MacDonald's Hudson Bay Resort, and Scenic Bay Marina, all in the Bayview area; Sandpoint Marina, Sandpoint; Pend Oreille Shores, Hope; and Sunset Beach Resort, Garfield Bay.

**PRIEST**•Bishop Marina, Coolin; Elkins Resort and Priest Lake Marina on the west side.

**For future reference:** Any marina providing moorage for vessels with on-board waste-water facilities must provide disposal facilities adequate to clean the largest boat that can reasonably use the moorage (Panhandle Health Environmental Code). For further information contact your county's Parks, Recreation, and Waterways Supervisor or Waterways Commission. Material discharged from a boat holding tank into the lake's water is untreated sewage which can be a major hazard to public health and water quality.

# CONSERVING WATER

The amount of water we use also affects water quality. Home water use not only consumes our supply of clean, fresh water, but also results in water reaching the lake from Saturday car washes, daily lawn watering, and other activities that can increase water pollution and speed up the lake's aging process.

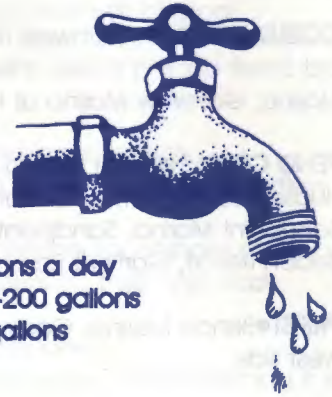
## Lawns

These practices not only save water, but they are also better for lawns because the water is delivered more efficiently:

- Water early in the morning. This allows water to penetrate the soil before the sun is at its hottest.
- Water thoroughly once per week.
- Keep grass clipped at 2 inches or higher. This allows grass to protect its own water supply.

## In The Home

Learn to conserve water inside too! These typical consumption rates are surprising:



**One leaky faucet-20 gallons a day**
**One 20-minute shower-140-200 gallons**
**One full bathtub-50 gallons**

*Home water conservation tips include:*

- Using low-flow faucet aerators.
- Installing flow restrictive devices in shower heads.
- Placing a plastic bottle filled with pebbles into the toilet holding tank.

# *HOW TO GET INVOLVED*

- Join your local lake association. Contact the Clean Lakes Coordinating Council for information on the association on your lake.
- Work with others who care about your lake. If you don't have a local lake association -- form one!
- Be an information source to your neighbors; share what you know!
- Become politically active. State and local leaders must recognize and address serious water quality issues. Let them hear from you.
- Actively encourage state and federal agencies to protect your lake's water quality.

INFORMATION AND ASSISTANCE IS AVAILABLE FROM THE FOLLOWING AGENCIES:

**Clean Lakes Coordinating Council.** Responsible for public education, development of lake management plans and interagency coordination of lake/watershed protection activities. (208) 667-3481

**U.S. Army Corps of Engineers.** Regulates construction activity in and over navigable waters as well as dredge or fill activities in all waters of the U.S. (including wetlands). Permits required. (208) 765-7237

**Panhandle Health Department.** Responsible for septic tank permits, private water system evaluations and a variety of other environmental health programs. (208) 667-3481

**County Planning, Zoning, and Building Departments.** Varies from county to county. Establishes zoning and variances and grants building permits along lakeshores and streams.

**Department of Lands.** Regulates all encroachment activities into public waters. Permits are required for any activity below the high water mark such as water line, piling or breakwater installation or any activity requiring dredge or fill. (208) 664-2171

**Department of Water Resources.** Regulates alterations to stream channels below the mean high water mark and pumping of water from streams and lakes. Permits required. (208) 765-4639

**Division of Environmental Quality.** Responsible for protecting Idaho's surface and groundwater through monitoring, and development and enforcement of state water quality protection rules and regulations. (208) 667-3524

## IDAHO CLEAN LAKES PROGRAM

The Clean Lakes Act passed by the 1989 Idaho Legislature has resulted in new opportunities for the public and local government to help protect lake water quality in Idaho's five northern counties. The program is directed by the Clean Lakes Coordinating Council, a seven-member group appointed by the governor. Program activities include public education, lake prioritization and study, lake management plan development and interagency coordination to ensure comprehensive lake management.


**Clean Lakes Coordinating Council**

2195 Ironwood Court
Coeur d'Alene, Idaho 83814