



Applying knowledge to improve water quality

# Pacific Northwest

## Regional Water Program

A Partnership of USDA NIFA  
& Land Grant Colleges and Universities

Winter 2011  
PNWWATER 199

### For the Recreationist:

## Protecting Riparian Areas

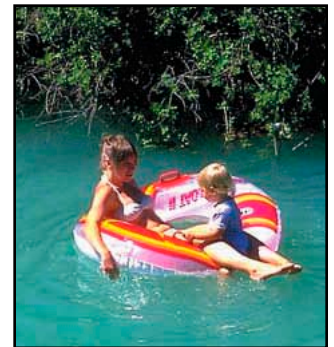
As a recreationist, you have a unique opportunity to help maintain or improve the health of streams and riparian areas. A riparian area is the land adjacent to a stream, lake, or wetland. Healthy riparian areas often have moist, fertile soils that support many types of plants. These plants provide food and shelter to numerous fish and wildlife.

The Pacific Northwest's growing population adds to the numbers of people accessing our waterways. Recreational uses include fishing, kayaking, bird watching, camping, biking, hunting, jet skiing, and more. Although designated access points are provided throughout the Northwest, many people access the water from public or private properties that lack proper access facilities. In these places, proper care of the riparian area will ensure a more pleasant experience for all users, as well as better conditions for fish and wildlife.

Enjoy and respect our streams.

When streams and riparian areas are not healthy, people feel the consequences.

- ◆ We lose recreational areas.
- ◆ Fish and wildlife decline, reducing opportunities for hunting, fishing, and wildlife viewing.
- ◆ Increased flooding may cause erosion and property damage.
- ◆ The region may lose economic opportunities because people avoid unattractive and unhealthy areas.



### What Can You Do?

#### Campers

- ◆ Set your camp away from the water's edge to prevent trampling of riparian vegetation and to protect yourself from varying stream flows.
- ◆ Use biodegradable detergents for washing, and wash away from streams and lakes.
- ◆ Reduce garbage by minimizing the amount of disposable items and prepackaged foods you use. Pack out and properly dispose of all garbage.
- ◆ Bring in your own firewood. Forest woody debris are an important part of the ecosystem, building soils when they decay, holding soil during floods, and providing habitat for wildlife, fish, and insects.
- ◆ Discourage dogs and people from walking in rivers or streams to protect salmon eggs and fry that may be hiding in bottom gravels.
- ◆ Bury human and dog fecal matter at least 6 inches deep and well away from riparian areas. Better yet, use a bucket for later disposal in a campground toilet.

#### Hikers and bikers

- ◆ Stay out of streams as much as possible and use designated stream crossings to prevent bank and stream degradation.
- ◆ Stay on designated trails to prevent off-trail damage to natural vegetation.
- ◆ Avoid hiking in restricted salmon areas to prevent stress to spawning fish.
- ◆ Check shoe soles and tire treads for weed seeds before and after using trails.
- ◆ Be aware of and respect private property boundaries.



## Pacific Northwest Regional Water Quality Coordination Project Partners

### Land Grant Universities

#### Alaska

Cooperative Extension Service  
Contact Fred Sorensen:  
907-786-6311

<http://www.uaf.edu/ces/water/>

University Publications:

<http://www.alaska.edu/uaf/ces/publications/>

#### Idaho

University of Idaho  
Cooperative Extension System  
Contact Bob Mahler: 208-885-7025

<http://www.uidaho.edu/wq/wqhome.html>

University Publications:

<http://info.ag.uidaho.edu/Catalog/catalog.htm>

#### Oregon

Oregon State University  
Extension Service  
Contact Mike Gamroth: 541-737-3316

<http://extension.oregonstate.edu/>

University Publications:

<http://extension.oregonstate.edu/catalog/>

#### Washington

Washington State University  
WSU Extension  
Contact Bob Simmons:

360-427-9670 ext. 690

<http://wawater.wsu.edu/>

University Publications:

<http://pubs.wsu.edu/>

Northwest Indian College  
Contact Charlotte Clausing:  
360-392-4319

[cclausing@nwic.edu](mailto:cclausing@nwic.edu) or

<http://www.nwic.edu/>

### Water Resource Research Institutes

Water and Environmental Research  
Center (Alaska)

<http://www.uaf.edu/water/>

Idaho Water Resources  
Research Institute

<http://www.boise.uidaho.edu/>

Institute for Water and  
Watersheds (Oregon)

<http://water.oregonstate.edu/>

State of Washington  
Water Research Center

<http://www.swwrc.wsu.edu/>

### Environmental Protection Agency

EPA, Region 10

The Pacific Northwest

<http://www.epa.gov/r10earth/>

Office of Research and Development,  
Corvallis Laboratory

<http://www.epa.gov/wed/>

### Pets and pack animals

- ◆ Keep all animals out of streams.
- ◆ Tether riding animals away from streams, wetlands, and lakes to prevent fecal matter from entering the water and to protect riparian plants from damage.
- ◆ Minimize the number of stock you use by packing less.

### Fishers and floaters

- ◆ Use officially established access points.
- ◆ Avoid driving to the water's edge, as this damages plants and habitat.
- ◆ Be careful not to damage habitat or litter.
- ◆ If you catch a hook in a tree, remove it and properly dispose of any tangled line.
- ◆ Do not release leftover live bait into streams.

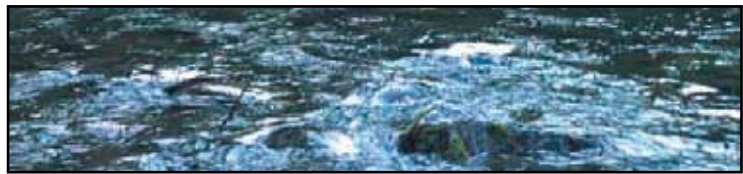
### Motorized craft users

- ◆ Maintain your boat in proper working condition.
- ◆ Do repairs and painting in dry dock, using tarps to contain spilled pollutants.
- ◆ Be sure your equipment is not leaking fuel or oils.
- ◆ Add fuel in a parking lot to minimize the chance of spills. Clean up any spills that do occur.
- ◆ Fill fuel tanks only 90 percent full; gas expands when warm.
- ◆ Check propellers and jets for exotic plant or animal species before launching boats and immediately after removing them from the water.
- ◆ Empty bilge and bait buckets away from the waterway to prevent introduction of nonnative species.
- ◆ Empty sewage only in approved dumping stations to prevent pollution of waterways.
- ◆ Identify and avoid nesting and spawning habitats before using watercraft in near shore areas.
- ◆ Watch your wake to prevent shoreline erosion.

### All campground and waterway users

- ◆ Pack out all cans, bottles, and garbage to protect humans and wildlife. Trash endangers wildlife and jeopardizes water quality and safety.
- ◆ Dispose of coolers or bait containers properly to prevent breakdown and distribution of Styrofoam beads.
- ◆ Keep pet wastes away from streams, riparian areas, and paved areas.

*The material presented in this newsletter was taken from the publication PNW 561 which is downloadable from the publication departments of Pacific Northwest Land Grant Institutions (OSU, WSU, UI, and UA).*



### National Water Quality Program Areas

The four land grant universities in the Pacific Northwest have aligned our water resource Extension and research efforts with eight themes of the USDA's National Institute of Food and Agriculture.

1. Animal Waste Management
2. Drinking Water and Human Health
3. Environmental Restoration
4. Nutrient and Pesticide Management
5. Pollution Assessment and Prevention
6. Watershed Management
7. Water Conservation and Management
8. Water Policy and Economics

*This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under Agreement No. 2008-51130-04734.*