



Applying knowledge to improve water quality

# Pacific Northwest

## Regional Water Program

A Partnership of USDA NIFA  
& Land Grant Colleges and Universities

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PNWWATER 169

### Enhancing our Water Resources:

## Ten Years of Regional Progress

We achieve positive change through education. We are one of many groups (Extension) working in the region to achieve voluntary change by our clientele – the 12,000,000 residents of the Pacific Northwest. We are one of the region's most important educational groups addressing water resources. Although we cannot take the lion's share of credit for all of the positive changes our citizens make, we are a very important cog in the educational team responsible for many of these observed voluntary changes.

Our regional program has now been active for 10 years. We have and will continue to address both water quantity and water quality issues in the Pacific Northwest. From a water quantity standpoint we have both surface and groundwater concerns. In Alaska, Idaho, Oregon, and Washington surface water resources are at least 25 percent over-appropriated. From a groundwater perspective water tables are significantly dropping in over 30 percent of the region's aquifers. From a water quality standpoint over 1,500 stream segments in the region do not meet designated beneficial uses. In addition nitrates, pesticides, and/or industrial chemicals are found in more than 50 percent of our aquifers. To address these issues our team has set short term, medium term, and long-term outcome goals. This update highlights several of our team's short and medium term outcome successes in our region.

#### Short-term outcomes

##### Goal 1: Improve short-term consumer knowledge about water issues.

###### Outcomes:

- ◆ Over 90 percent of Pacific Northwest residents consider clean drinking water, clean rivers, and clean groundwater as high priority issues.
- ◆ 77 percent of adults say that having enough water for agriculture is high priority despite the fact that over 85 percent of Pacific Northwest residents live in urban areas.
- ◆ Over two-thirds of Pacific Northwest residents indicate that prevention of salmon extinction, preservation of wetlands, watershed restoration, and water for power generation are also high priority items.
- ◆ Water for economic development is considered high priority by almost two-thirds of residents, while slightly less than 50 percent of PNW residents consider water for recreation a high priority item.

##### Goal 2: Improve awareness of the capabilities of land grant colleges to address water issues.

###### Outcomes:

- ◆ Over 80 percent of state legislators sitting on environment, education, and/or agriculture subcommittees recognize land grant institutions as significant sources of water resource information.
- ◆ Land grant institutions in the region have received over \$170,000,000 in water resources research/education contracts since 1999 from federal, state, and local sources.
- ◆ County (boroughs in Alaska) Extension offices provide water resources information to NGOs, citizens, and local government entities.

##### Goal 3: Improve public motivation and awareness about water issues.

###### Outcomes:

- ◆ Over 800,000 PNW residents have directly received water resources information from educators at land grant institutions since 1999 (through programs, workshops, 4-H, conferences, newsletters, etc).
- ◆ Over 4,000,000 PNW residents have indirectly received resources information from educators at land grant institutions since 1999 (through television programs, newspaper articles, radio programs, etc).



**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.html>

**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:  
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**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/>

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**Medium-term outcomes**

**Goal 1: Improve cooperation between states.**

**Outcomes:**

- ◆ The region's five land grant institutions routinely cooperatively develop and deliver water educational programs across state lines.
- ◆ Our educational programs are now delivered on an eco-region basis (region I – west of the Cascades and southeast Alaska; region II – eastern Washington, eastern Oregon, and Idaho; region III – interior Alaska).

**Goal 2: Improve partnerships with local, state, and regional organizations.**

**Outcomes:**

- ◆ We have partnered with NGOs, local, state, and regional agencies to develop and deliver state-of-the-art video conferences on watershed management and storm water management. Over 3,000 people have attended these conferences in the last eight years.
- ◆ We have partnered with state agencies (agriculture, water resources, environment) and the EPA to develop and deliver four major research and Extension regional conferences in the last eight years. Topics have included policy, moving science into action, and groundwater. Over 1,000 people have attended these conferences.
- ◆ We have greatly improved working relationships with state agencies specializing in water quality, water quantity, agriculture, and the environment.

**Goal 3: Get citizens to voluntarily make wise choices to protect water resources.**

**Outcomes:**

- ◆ A majority of Pacific Northwest residents have addressed water resource issues since 1999 by taking individual actions.
- ◆ WATER QUALITY - Over 46 percent of the region's residents have changed how they dispose of household wastes.
- ◆ WATER QUALITY – 31 percent of residents have changed the amounts of or how they use pesticides and fertilizers in their yards.
- ◆ WATER QUALITY - Over 29 percent of PNW residents are now disposing of used motor oil in a more water quality friendly manner than they were in 1999.
- ◆ WATER QUANTITY - A majority of residents (58.8 percent) have installed or used a water saving appliance in their residence since 1999.
- ◆ WATER QUANTITY – 46 percent of residents reported that they have changed how they use water in their yard.
- ◆ WATER QUANTITY - Almost 43 percent of the region's adults reported changes in household water use (conservation) since 1999.
- ◆ WATER QUANTITY - Almost one-third of residents have reduced the amount of water used when washing their vehicles.

**Goal 4: Help policy makers enact legislation to enhance the quality and quantity of water resources.**

**Outcomes:**

- ◆ We have educated local citizens who have in turn provide appropriate guidance to politicians to protect the region's water resources.

**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

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