



Applying knowledge to improve water quality

Pacific Northwest

Regional Water Program

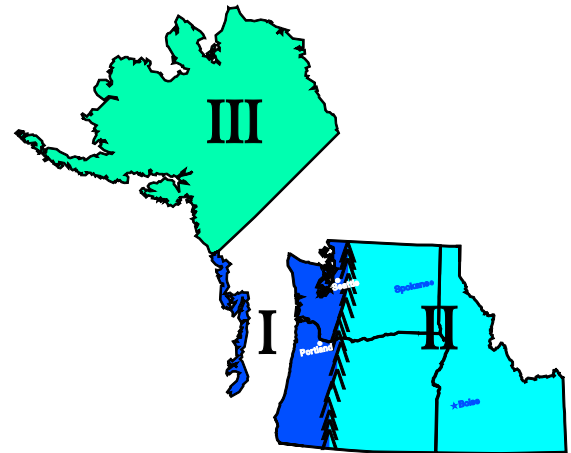
A Partnership of USDA CSREES
& Land Grant Colleges and Universities

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The Pacific Northwest:

Four States, Three Ecoregions

The states of Alaska, Idaho, Oregon, and Washington comprise a region known as the Pacific Northwest. This region consists of 920,000 square miles or 26 percent of the USA's land area. The population is approximately 12,000,000 or 4.5 percent of the USA's population. Within the region are five land grant institutions: Northwest Indian College, Oregon State University, University of Alaska, University of Idaho, and Washington State University. Surveys have repeatedly shown that water is considered to be the most important natural resource issue in the region. Over 90 percent of the adult population considers clean drinking water, clean rivers, and clean drinking water extremely important.



The Pacific Northwest regional water quality coordinating team has been active for over 100 months. We have developed a tradition of working together well. We realize that as individual states we cannot meet all the water research, Extension, and educational needs that exist. Each state has lost several water-related positions in the last 15 years. However, working as a region we can pool our efforts, minimize redundancies, set regional priorities based on thematic areas, and efficiently and effectively meet the needs of people in the region. Our regional team has forged a strong working relationship with EPA Region 10 and improved working relationships with USDA-NRCS, state, and local agencies. Our philosophy is to provide science-based information so that people can make decisions in their lives that will improve and/or protect water quality. Perhaps our most important accomplishment is that we think as a region instead of as separate states when it comes to Extension water quality programming. In the research area we are beginning to think more like a region—much more so than before this project began.

Table 1. General geographic and demographic characteristics of the three ecoregions in the Pacific Northwest states of Alaska, Idaho, Oregon, and Washington.

Ecoregion	Population	Description	Annual precipitation	Temperature regime
I	7,000,000	western WA western OR southeast AK	35 to 200 inches	Cool, wet winters; Mild summers
II	3,000,000	eastern WA eastern OR Idaho	8 to 30 inches	Cool or cold winters; Hot, dry summers
III	450,000	Alaska (excluding the southeast)	Less than 40 inches	Cold winters; Cool summers



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 Dan Burns:
360-392-4328

dburns@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/>

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The Project

Land Grant Universities, Water Research Institutes, and EPA Region 10 have formed a partnership to provide research and education to communities about protecting or restoring the quality of water resources. This partnership is being supported in part by the USDA's Cooperative State Research, Education, and Extension System (CSREES).

Our Goal and Approach

The goal of this Project is to provide leadership for water resources research, education, and outreach to help people, industry, and governments to prevent and solve current and emerging water quality and quantity problems. The approach to achieving this goal is for the Partners to develop a coordinated water quality effort based on, and strengthening, individual state programs.

Our Strengths

The Project promotes regional collaboration by acknowledging existing programs and successful efforts; assisting program gaps; identifying potential issues for cross-agency and private sector collaboration; and developing a clearinghouse of expertise and programs. In addition, the Project establishes or enhances partnerships with federal, state, and local environmental and water resource management agencies, such as by placing a University Liaison within the offices of EPA Region 10.

Ecoregions

For programming we have eliminated state boundaries and targeted our programs to be delivered on an ecoregion basis. We have divided the Pacific Northwest into three ecoregions (Table 1). Ecoregion I consists of Washington and Oregon west of the Cascades and southeastern Alaska. Approximately 7,000,000 people live in this wet ecoregion that is characterized by high annual precipitation (>35 inches), cool, wet winters and mild summers. Ecoregion II consists of Idaho and all of Washington and Oregon east of the Cascades. This ecoregion is relatively dry as annual precipitation ranges from 8 to 30 inches. Approximately 3,000,000 people call this region home that has cool or cold winters and hot, dry summers. Alaska, excluding the southeastern panhandle is ecoregion III. This region is relatively dry and has cool summers and cold winters.

Water resource programming by ecoregion is an efficient use of land grant institution resources. For instance, when we develop a programming effort on the use of rain gardens to reduce storm water runoff, this program can be delivered throughout the wet ecoregion I. All the costs and infrastructure involved in the development and delivery of a single program effectively meets the needs in parts of three states (Washington, Alaska, Oregon). In addition, a web page developed about effective irrigation management in agriculture can be effectively targeted at people in ecoregion II. Thus, we can deliver educational information at one time to people managing the 6,000,000 irrigated acres of farmland in Idaho, Oregon and Washington.

Programming on an ecoregion basis will allow us to more effectively reach a larger percentage of the public in Alaska, Idaho, Oregon, and Washington without increasing the need for additional 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 Cooperative State Research, Education, and Extension System.

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

CSREES is the Cooperative States Research, Education, and Extension Service, a sub-agency of the United States Department of Agriculture, and is the federal partner in this water quality program.