



Applying knowledge to improve water quality

Pacific Northwest

Regional Water Program

A Partnership of USDA NIFA
& Land Grant Colleges and Universities

Summer 2010
PNWWATER 187

10 Years of Regional Progress:

Watershed Management/Education

Community-based watershed management is an approach to water resource protection that allows individuals, groups, and institutions to work with each other to identify and address local issues that affect their watershed. The PNW region's land grant universities are active in research and directly assisting communities in their watershed management efforts through partnerships with federal and state agencies, involvement with planning councils, and developing educational materials. Research and science-based educational materials and programs cover land use management, conservation techniques, and water management model programs.

The PNW Water Program has made addressing water quality and quantity at the watershed scale a priority. Over the past decade the program has reached tens of thousands of people in the Pacific Northwest and beyond. The program has accomplished this through training hundreds of other professionals on water issues, developing internet accessible video programs, developing key publications targeting specific water issues, sponsoring bi-annual conferences reaching over 1,000 water resource professionals with leading edge water research, knowledge, and outreach techniques, as well as a host of other activities to lead to changes on the ground.

One key strategy has been to train other professionals that provide outreach and education so that they can incorporate water issues into their program efforts. These training opportunities have included 2 3-day water quality monitoring programs, a two day training on the use of GIS mapping strategies to identify and educate about water issues, a series of 3 daylong workshops on salmon habitat protection and restoration techniques, use of integrated pest management to protect water quality, and a two day program on public outreach techniques that lead to more widespread adoption of practices that protect water resources.

To help people understand the critical role that riparian areas play in protecting water quality and in providing habitat, a series of short fact sheets were developed, each one targeting a specific land use, from rural and urban residential land uses to farming and recreational land uses. These were used across the region at public events, festivals, and workshops. One of the goals of the programs and fact sheets was to make 'riparian' a household word.

In an effort to reach a broader audience using web based technologies, watershed educational materials presented in a "Welcome to Your Watershed" framework were revised for regional use and will soon be downloadable from the PNW website.

A recent program success was the development and facilitation of a "Water Circle Study Course: Our Watershed" to educate residents about their watersheds and create an understanding that individual behavior and actions critically affect the health of our regional watersheds. A study circle is a group of 5 to 15 people who meet informally in their homes for a series of sessions to grapple with a complex issue in depth. They use expert opinion and selected published articles as a way to inform their ideas and choices. Seven session topics and related articles provide the basis for the



Rain garden landscape feature designed to capture and soak in rainfall before it becomes runoff that carries pollutants to streams and bay. (photo: Erica Guttman)



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

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<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 National Institute of Food and Agriculture (NIFA).

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.

participants' discussions. The study circle framework bonds participants and a high percentage continue to work together on watershed related issues after completion of the course.

The program also sponsors well attended bi-annual conferences on key water resource issues where participants share leading edge research, knowledge, and outreach techniques amongst their colleagues, peers, and others. The goal is to connect current research with practitioners working to implement sound land use strategies in the region. Conference titles include:

- ◆ *Research and Extension Regional Water Quality Conference 2002*
- ◆ *Getting It Done: The Role of TMDL Implementation in Watershed Restoration*
- ◆ *Groundwater Under the Pacific Northwest: Integrating Research, Policy & Education*
- ◆ *Water in the Pacific Northwest: Moving Science into Policy and Action*
- ◆ *Water and Land Use in the Pacific Northwest: Integrating Communities and Watersheds*

In the communities of the Pacific Northwest there are numerous organizations providing environmental education to meet their own specific objectives. To prevent duplication of efforts and more effectively educate the region's residents, who are the key to protecting and improving water quality, the PNW Water Resources program has established environmental education networks. These formalized networks have participation from non-profit organizations, government agencies, school teachers, and businesses. Through regular meetings the networks have provided collaboration, coordination, and synergy amongst the diverse groups that are providing outreach to their larger communities.

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.*