



Applying knowledge to improve water quality

Pacific Northwest

Regional Water Program

A Partnership of USDA CSREES
& Land Grant Colleges and Universities

Summer 2004
PNWWATER 040

Groundwater Outreach Success Stories in Oregon



Gail Andrews discussing well care at the Lane County Fair, Eugene, Aug 2003.

For the past nine years, Gail Glick Andrews has coordinated the Oregon State University (OSU) Extension Well Water Program. This program began as part of the national Farm*Home*A*Syst project, but has evolved into much more. Oregon Home*Home*A*Syst is a set of worksheets to help rural residents evaluate structures and practices on their property that pose a potential risk to the groundwater. Topics include wells, septic systems, pesticide storage and handling facilities, petroleum storage and handling, and several manure-related topics.

There are over 400,000 households in Oregon using individual wells and septic systems. These residents bear complete responsibility for insuring that their well water is safe to drink and their waste water is not posing a health risk. Unfortunately, these rural homes usually don't come with instruction manuals for the water systems. Many of these residents don't know where to start—sometimes they don't even know that they have a well and septic system!

With these rural and semi-rural residents in mind, the mission of the OSU Well Water Program is to help Oregonians protect the groundwater supplying their drinking water through education. Through the years a number of educational strategies have been delivered throughout the state. Here are some highlights:

◆ Rural Living Basics: Well Water & Septic Tanks

A two-hour class for homeowners on how to maintain these systems. Promotional material says: "Protect your family's health, your homestead investment, and our community's groundwater." Taught in about 40 different communities throughout the state, some repeated year after year; more than 3,000 households have participated so far. Follow-up surveys indicate that more than half the people attending the class share what they learned with more than two other households, and most people take at least one action as a direct result of the class.

◆ Well Water Clinics

Booths at fairs, festivals and farmers markets; help desks in County Extension offices; open house style events before Rural Living Classes. A team of trained volunteers and local professionals offers free nitrate screening of well water, answers questions, performs well water risk assessments, and presents displays and publications.

◆ Groundwater-Friendly Gardening Training for Master Gardeners

Master Gardener volunteers often deal with clients who have wells and septic systems. If these clients reveal in their conversations something that indicates a risk to the safety of the groundwater—intention to plant an orchard over a drain field, for instance—it is critical that the Master Gardener representing OSU Extension Service recognize this risk and offer appropriate assistance. New Master Gardeners in many counties receive training in Gardening with a Well and Septic System; Managing Nitrogen Fertilizers to Protect Water Quality; Storing and Handling Garden



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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/index.html>

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: Michael Cochrane:
360-392-4299

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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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Chemicals; Drip Irrigation; and other topics related to water quality protection. Many Master Gardeners now include water quality protection displays and nitrate testing at plant sales and other events.

◆ Pesticide Storage and Handling to Protect Water Quality for Applicators

A class based on the Oregon Home*A*Syst Pesticide Worksheet is offered as part of the core training for licensed pesticide applicators. About 800 applicators have participated in this training. Oregon Department of Agriculture has also approved awarding an extra hour of credit for applicators who complete the worksheet for their property.

◆ Well Water Team Training

An intensive one- or two-day workshop for volunteers and professionals who want to help deliver well and septic system outreach programs to the public as part of the Well Water Team. Offered one or two times a year in various locations around the state, with 8-24 people participating. Each class has a field trip and many hypothetical cases to help the team get comfortable working with the real world issues they will face with their clients.

◆ Well Water web site at <http://wellwater.oregonstate.edu/>

This site has grown over the years to include all the materials used in the Well Water program and links to answers for most of the questions that are asked by well and septic system owners in Oregon. County Extension offices, as well as other agencies, frequently refer their callers to this site for answers.

◆ Groundwater Stewardship web publication at <http://groundwater.oregonstate.edu/>

Designed as a resource for citizens who want to learn more about protecting their community's groundwater resource, sections include: Groundwater Basics; Protecting Groundwater; Regulations and Agencies; and Community Action.

To learn more about groundwater outreach in Oregon, contact Gail Andrews at glickg@odin.orst.edu, 541-737-6294 or visit the Well Water web site at: <http://wellwater.oregonstate.edu/>.



Well Water training field trip with well contractor.



Gail Andrews discusses well water concerns with client.

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.