



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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EPA Region 10's Ag Sector:

Anderson Heads Agriculture Sector Team

The Environmental Protection Agency (EPA) is a major partner with our Pacific Northwest Regional Water Resources Team. We interact with EPA Region 10 in many ways; however, we consider EPA's Agriculture Sector Team to be our most important partner within EPA. Consequently, we work closely with the EPA agriculture sector team on many water-related issues in the Pacific Northwest. We physically meet with the EPA agriculture sector team on a quarterly basis. Because of this close working relationship the EPA leader of this team is also a member of our regional water team that is primarily composed of university personnel.

Karma Anderson was hired in January 2009 to be the Agriculture Sector Advisor for EPA Region 10. Karma is a Colorado native with degrees in agronomy (Colorado State University) and environmental policy (University of Denver). She has an excellent background in agriculture as she has worked for the New Mexico Environmental Department and the Natural Resources Conservation Service in Colorado.



Karma Anderson, new EPA Agriculture Sector Advisor.

Karma Anderson is replacing Dr. Karl Arne who retired last year as the EPA agriculture sector team leader. In the late 1990s Karl was asked to serve as Agricultural Sector Lead for the Region. As Ag Sector Lead, Karl has seen several changes through the years. This arose from an earlier effort, the Columbia River Plateau Agriculture Initiative, in which EPA staff representing several programs worked together with farmers and others in five eastern Washington counties. This effort, which promoted collaboration and cooperation as a means to attain environmental improvements, proved successful and encouraged the EPA staff that this approach was an important tool for EPA. This in turn led to the formation of an Ag Sector Team of EPA staff involved in agricultural issues. This effort was started by Dr. Chris Feise, when he served as Extension Liaison to EPA in the mid-1990s, and later taken over by Karl when Chris took over as director of the Center for Sustaining Agriculture and Natural Resources at WSU.

In addition to earning a BS degree in agronomy and a MS in Environmental Policy, Karma started a PhD program in environmental conflict resolution. Karma has extensive experience in western agriculture. She was the first agriculturalist employed by the New Mexico Environment Department. For six years she worked at this job doing compliance assistance and enforcement and worked on water quantity issues. She then worked for the USDA Natural Resource Conservation Service in the San Luis Valley in Colorado for two years. She



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.

followed this position with a job in the Colorado state Natural Resources Conservation Service (NRCS) office as the state Water Quality Specialist. In this job she was involved in watershed planning and worked on water quality in relation to AFOs and CAFOs. At this job she also gained experience in air quality issues, as she was involved in the Rocky Mountain Nitrogen Deposition Reduction Plan.

Her primary interest at EPA is to bridge the gap between the environment and agriculture. Karma is interested in EPA addressing agricultural issues in a non-regulatory way. She wants to improve relationships between agricultural producers and the Environmental Protection Agency. To do this it is important to improve EPA's understanding of agriculture. However, producers also need to be made more aware of and understand the regulatory requirements that EPA is mandated to address.

Karma feels that the agriculture industry in the Pacific Northwest faces major air quality and water quality issues. Atmospheric issues facing the agricultural industry in the region include dust (PM-10 and PM 2.5 standards) and greenhouse gasses (both nitrogen and carbon). In the water area CAFO (confined animal feeding operations), AFO (animal feeding operations), nutrient management plans, and pesticide application methods are all important regional issues. The cycling, waste management, and application of nitrogen to agricultural lands and associated nutrient management plans are major issues in many watersheds in the region. Under her leadership EPA is also very interested in developing alternative pesticide application methods which can reduce buffer area requirements.

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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