



Applying knowledge to improve water quality

Pacific Northwest

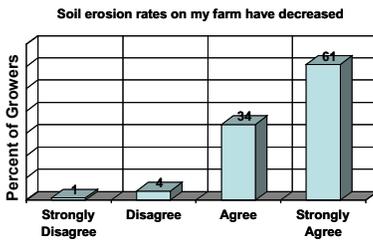
Regional Water Program

A Partnership of USDA CSREES
& Land Grant Colleges and Universities

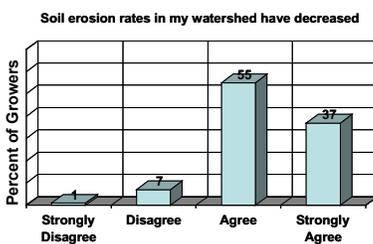
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The Inland Empire:

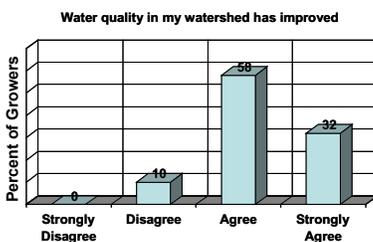
Growers Make Water Quality a High Priority



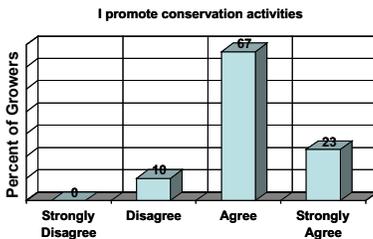
In 2004 USDA-CSREES awarded the University of Idaho a three-year grant through the Conservation Effectiveness Assessment Program (CEAP) to study the effectiveness of conservation practices to protect water quality in the Paradise Creek Watershed of northern Idaho. For the last three years under the leadership of University of Idaho Water Scientist Jan Boll, this project has evaluated conservation practices in this small watershed on a field by field basis. However, an important objective associated with this project is the ability to scale-up the findings from the Paradise Creek Watershed to the entire 15 to 25 inch annual precipitation cropping zone in eastern Washington and northern Idaho. As part of this scale-up effort the rural sociologist at the University of Idaho associated with this project, J. D. Wulfhorst, led a survey effort to determine the viability of conservation practices in the wider region to protect soil and water quality while maintaining agriculture as a sustainable system.



Over 425 randomly selected growers in eastern Washington and northern Idaho completed surveys as part of this scale-up study in early 2007. This PNW WATER UPDATE presents some of the early survey findings. Over 75 percent of the growers in eastern Washington and northern Idaho completing this survey indicated that they were on farm owner/operators. Nineteen, 56 and 25 percent of the growers described their overall farming practices for crops other than grass seed as no-till, conservation tillage and conventional tillage, respectively. Compared to the early 1970s when virtually all growers described themselves as using primarily conventional tillage, three quarters of operations have changed farming practices to prevent soil erosion and improve water quality.



The survey asked growers about their farming practices, the types of people that have the most influence on their operations (i.e., neighbors, conservation districts, Extension, etc.), factors important in their conservation decisions, preferred conservation options (i.e., programs: CRP, CSP, EQIP, etc), and the sustainability of their farming system. In this update we would like to share grower agreement and disagreement about survey statements made about the state of soil erosion and water quality.



A vast majority of growers (95 percent) in the 15 to 25 inch annual precipitation zone of eastern Washington and northern Idaho feel that soil erosion rates on their farms have decreased over the last several years. From a watershed standpoint, 92 percent of growers believe that soil erosion rates have decreased in their local watershed. Over 90 percent believe that the reduced soil erosion has improved water quality in their watershed.

The acknowledged reduction in soil erosion rates and improvement in water quality has however, come with economic and time commitment prices. Over 60 percent of growers



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:
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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 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.

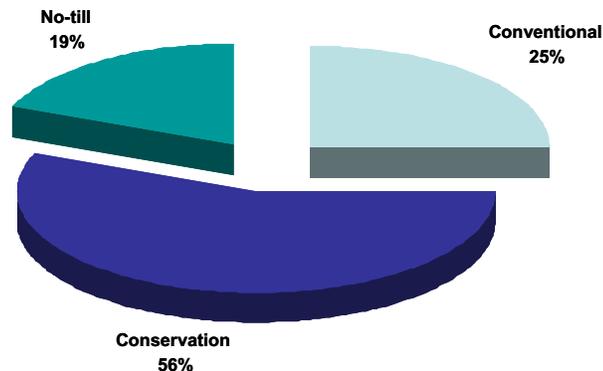
Our Strengths

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.

in the region agree that conservation structures have requirements that require effort and 86 percent agree that farmers are often burdened with on-site costs associated with conservation efforts. Never-the-less 90 percent of the growers surveyed indicate that they promote conservation activities. Consequently, over 65 percent of growers do not prefer to wait for government incentives to initiate conservation practices.

The data presented in this update is a small sample of the wealth of information about soil erosion prevention, conservation practices, and enhanced water quality in the dryland farming areas of eastern Washington and northern Idaho collected by scientists at the University of Idaho associated with the USDA CEAP project. The entire data set will be made available on the Pacific Northwest regional web site (<http://www.pnwwaterweb.com>) and through individual publications over the next 12 months. We will highlight some more of this data set in future issues of PNW WATER UPDATES.

What best describes your overall farming practices for crops other than grass seed crops.



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.