



Applying knowledge to improve water quality

# Pacific Northwest

## Regional Water Program

A Partnership of USDA NIFA  
& Land Grant Colleges and Universities

Summer 2004  
PNWWATER 042

### Career of Protecting Water Quality:

## Bezdicek Retires after 31 Years at WSU



Soil microbiologist Dave Bezdicek is retiring after 31 years of research and teaching at Washington State University this September. Throughout his career Dave's research programs have made significant contributions that are helping to protect water quality in the Pacific Northwest.

Originally hired by WSU in 1973 to work on animal waste management he has worked with biosolids from municipal wastes, sustainable agriculture, soil quality, and cropping systems to reduce erosion from farmlands. All of these research areas provide benefits which protect water quality.



Most people know Dave for his work with soil quality. In large part soil quality is enhanced by protecting and enhancing soil organic matter in soils. Dave says "soil organic matter is the key to better water quality – the higher the soil organic matter content the less likely soils will move off fields into streams."

Dr. Bezdicek was the first director of WSU's Center for Sustaining Agriculture and Natural Resources. As director he promoted: (1) research and education on improved soil quality, (2) better communication between agriculture and urban stakeholders, (3) use of alternative crops, and (4) the acceptance of sustainability as part of WSU's institutional goals. He was also responsible for the establishment of WSU's composting facility. A key component of sustainability is the protection of soil, water, air, and mineral resources.



Dave has been active in the tristate Solutions To Environmental and Economic Problems (STEEP) program for over 20 years. For the past five years Dr. Bezdicek has administered and served as principal investigator for WSU on the USDA-STEEP program. As part of his program in this effort to protect water quality he has researched reduced tillage, direct seeding, nitrogen fixation, and cropping sequence issues. The STEEP program has been particularly effective at improving water quality because it is a regional, applied, grower-driven program.



Dave received the outstanding research award in WSU's College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) in 2004. He is known for his research efforts on an international level. He is recognized by his peers as a Fellow in the Soil Science Society of America and American Society of Agronomy.

Dr. Bezdicek has also been active in WSU's teaching program. He established courses in soil microbiology and composting. A unique aspect of his microbiology course is that he incorporates macro fauna and macro flora into soil ecosystem education along with the



## 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

[cclausing@nwic.edu](mailto:cclausing@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 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.

microbes. Dave led the effort to place multi-media equipment into classrooms in WSU's Crop and Soil Department.

Dr. Bezdicsek is the author of over 55 refereed journal publications, 32 book chapters and 18 proceedings. Over 25 graduate students have completed advanced degrees in Soil Science under his direction. His pioneering leadership in documenting and understanding the mysteries of the interactions of plants with microbes in the soil will be sorely missed at WSU and throughout the Pacific Northwest.



### 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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