



Applying knowledge to improve water quality

# Pacific Northwest

## Regional Water Program

A Partnership of USDA NIFA  
& Land Grant Colleges and Universities

Spring 2006  
PNWWATER 085

### Graduate Education:

## University of Idaho Develops New Water Resources Graduate Programs



As part of its strategic investment program, the University of Idaho is investing \$1,600,000 over five years in a project to develop, launch, and support a water resources graduate program. The project titled “Water of the West: Towards a Sustainable, Interdisciplinary Water Resources Program” is being developed by a team of over 50 University of Idaho faculty led by Dr. Jan Boll, an associate professor of Biological and Agricultural Engineering.

Water is considered to be the most important natural resource issue in the Pacific Northwest (Alaska, Idaho, Oregon, and Washington). Over 90 percent of the adult population considers clean drinking water, clean rivers, and clean groundwater very or extremely important issues in the region. Over two-thirds of the region’s adults also consider having enough water for agriculture, water for power generation, water for economic development, wetland protection, preservation of salmon, and watershed restoration to be of a high priority. The land grant universities in the region collectively generate over \$25,000,000 in grants and contracts on an annual basis to research high priority water resource issues. In addition to

the research, millions of dollars are annually spent to educate both the general public and students about surface and groundwater via college instruction and public outreach (Extension).

The University of Idaho has significant expertise in many water resource areas; however, until now a focus on interdisciplinary graduate studies has been lacking. This interdisciplinary program proposes a M.S./Ph.D in water resources and concurrent M.S. or Ph.D/J.D. degrees. These degrees in water resources/law will be jointly offered between the College of Graduate and Interdisciplinary Programs and the College of Law at the University of Idaho. These degree programs will be in Water Resources with emphasis in one of three tracks: (1) Law, Management and Policy; (2) Science and Management; and (3) Engineering and Science. The new programs include a core of integrated courses taken by all students.

This new interdisciplinary water resources program is centered in Moscow but will be linked to satellite campuses in the state. Faculty from six colleges (Agriculture and Life Sciences [CALs], Engineering [ENG], Law [LAW], Science [COS], Letters, Arts, and Social Sciences [CLASS], and Natural Resources [CNR]) are actively participating in this program.



**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/>

For more information contact Jan Seago at 206-553-0038 or [seago.jan@epa.gov](mailto:seago.jan@epa.gov)

Existing resources available within the University of Idaho system contain all the necessary elements to create a strong degree program in water resources in all but the College of Law. However, this new program will enhance water resource education by putting monetary resources in the three following areas: (1) the integration of research, service, and outreach within a case study that will transform what are currently multidisciplinary faculty into an interdisciplinary faculty, providing expertise for integrated education and research in water resources; (2) the resources necessary to bring the law component into the program; and (3) a director and grant writer who will guide the program to a sustainable future.

The new funding from the University of Idaho initiative will build the capacity of faculty and students to use and teach interdisciplinary approaches to water resource issues in Idaho, the region, and beyond. A survey of university programs of water resources across the USA suggests that such a program currently does not exist in the form proposed by the University of Idaho. Two unique features of the program are the inclusion of a water law component and the development of integrated water resources courses where all students in the program work in teams on real-life water resources issues in Idaho and beyond. Students accepted into the program will also collectively learn methods, applications, and issues of water resources measurement, for both bio-physical and socio-economic conditions and trends. This new water resources initiative will allow the creation of a program unique within the region.

For more information about this new University of Idaho initiative contact Dr. Jan Boll, Department of Biological and Agricultural Engineering, University of Idaho; e-mail: [jboll@uidaho.edu](mailto:jboll@uidaho.edu); phone: 208-885-7324.

<b>Water Resources Degrees</b>		
<b>Degree</b>	<b>Area</b>	<b>Emphasis</b>
M.S.	Water Resources	<ul style="list-style-type: none"> <li>◆ Law, Management, and Policy</li> <li>◆ Science and Management</li> <li>◆ Engineering and Science</li> </ul>
Ph.D	Water Resources	<ul style="list-style-type: none"> <li>◆ Law, Management, and Policy</li> <li>◆ Science and Management</li> <li>◆ Engineering and Science</li> </ul>
M.S. or Ph.D/J.D.	Water Resources	<ul style="list-style-type: none"> <li>◆ Law, Management, and Policy</li> <li>◆ Science and Management</li> <li>◆ Engineering and Science</li> </ul>

**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           | 5. Pollution Assessment and Prevention |
| 2. Drinking Water and Human Health   | 6. Watershed Management                |
| 3. Environmental Restoration         | 7. Water Conservation and Management   |
| 4. Nutrient and Pesticide 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.*