Fall 2002
PNWWATER 003

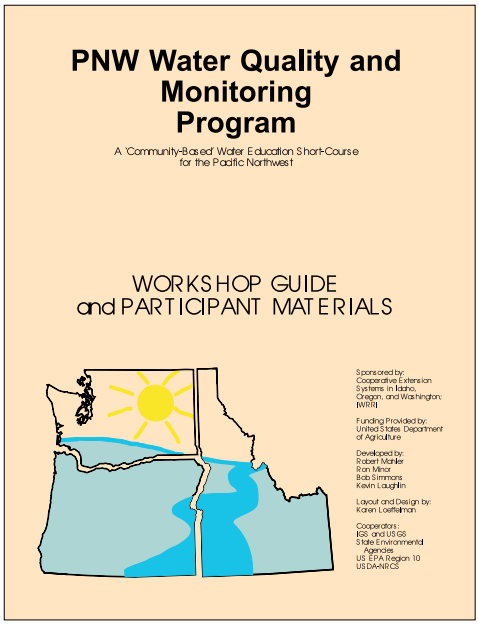
Applying knowledge to improve water quality

Pacific Northwest Regional Water Program

A Partnership of USDA CSREES & Land Grant Colleges and Universities

Voluntary Monitoring Education

The Cooperative Extension Systems in Idaho, Oregon and Washington have developed a community-based water quality and monitoring educational program for residents of the Pacific Northwest. This program is designed to be offered in local communities and is supported by a 431 page manual.



This program was developed in 2000 and was then piloted in six Idaho, Oregon and Washington counties.

The goal of this program is to educate and distribute water quality and monitoring information to a broad group of water users, educators and leaders in Pacific Northwest communities. This model can be used as a springboard to action in local communities by service organizations, commodity groups, and other organizations with existing local, state, regional, or national water quality assessment and monitoring programs.

We believe this program will improve public understanding about environmental issues and impact new or unreached segments of our northwest population involved in natural resource management. The short-course may also increase public involvement in the potential range of solutions to those water quality issues identified in this curriculum. One major objective of this effort is to foster critical thinking, problem solving, and effective decision making skills with individuals, community groups, citizen leaders, and teachers that have practical application in the water resources managed in the region.

This short-course consists of 15 hours of structured training plus follow-up provided by the local extension educator. This short-course is designed to meet at each location for four consecutive days. The pilots were conducted Wednesday through Friday in the evenings (3 hours each) and all day Saturday (8 hours). It can also be conducted during the day, in the evening over successive weeks, or over successive weekends. Prior to starting the short-course attendees will complete registration as well as a water primer pre-test.

The short-course is designed to be targeted to specific segments of the natural resource, conservation, education, and environmental community. The local community will have significant input on the emphasis areas of each program.

The short-course is broken into five parts:

1. Water, Watersheds and Beneficial Uses of Water
   - Learn, plan and act on local water quality issues.
   - Understand key terms and legislation about water and watersheds.
   - Identify the beneficial uses of water and TMDLs.
   - Survey local water uses/resources in your community.

Washington State University
Oregon State University OSU
University of Idaho
A LEGACY OF LEADING
Northwest Indian College
UAF University of Alaska Fairbanks
United States Environmental Protection Agency
CSREES Education Research Extension USDA

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
mcochrane@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

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, indivudual 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.

2. Ground, Drinking and Surface Water
   - Identify drinking and ground water standards.
   - Recognize opportunities and responsibilities for individual community involvement in water monitoring efforts.
   - Understand why and how water quality monitoring is done.
   - Research specific local water issues of concern in your community.
3. Key Indicators of Surface Water Quality
   - Examine the nine key indicators of water quality: temperature, dissolved oxygen, pH, BOD, fecal bacteria, phosphates, nitrates, turbidity, and total solids.
   - Recognize and review components of water chemistry test kits, sources of these kits, and where kits might be found in a local community.
   - Understand physical indicators and approaches to examining surface water quality.
   - Understand biological indicators and approaches to examining surface water quality.
4. Experience Surface Water Monitoring
   - Conduct a biological, physical and chemical evaluation on a selected stream.
   - Conduct a biological, physical and chemical evaluation on a selected lake.
5. Spread the Word!
   - Recognize monitoring opportunities.
   - Develop contacts with state and local agencies and interested citizens.
   - Recognize links and resources that are valuable to citizen monitors.

If you would like this program in your community please contact:
R. L. Mahler, University of Idaho (208-885-7025; bmahler@uidaho.edu).

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.