Applying knowledge to improve water quality



Pacific Northwest

Regional Water Program

A Partnership of USDA NIFA & Land Grant Colleges and Universities

Testing Your Home Drinking Water

Over 75 percent of Pacific Northwest residents get their drinking water by simply turning on the faucet in their residence and making a monthly payment to their municipal or other local water system. These residents use public water supplies in which individual households are connected to the same water system. Public systems are regulated by the Safe Drinking Water Act and are regularly tested for contaminants that may adversely affect human health. Consequently, if you get your drinking water from a public system your water is guaranteed to be safe. However, between 20 and 25 percent of Pacific Northwest residents get their drinking water from individual (private) sources. This water is not regulated (required to be tested) by the federal government. Consequently, the safety of the drinking water is the responsibility of the individual resident. Water from these individual, or private systems, should be regularly tested.

Public Water Supplies

Drinking water supplied by municipal systems is considered safe as your local water authority tests your water for microbial pathogens, inorganic chemicals, organic chemicals, radionuclides, and suspended sediment. The federal government has set primary drinking water standards for these water contaminants. If these contaminants are present, your municipality removes them from the water prior to delivery to your home. Thus your drinking water is considered safe.

Despite the fact that your drinking water is safe, there are other contaminants that are not harmful to you but may adversely affect the taste of your drinking water. These contaminants are referred to as secondary standards and include



things like color, odor, pH, non-harmful chemicals such as iron, calcium and sodium, and hardness. In many cases you can improve the quality of your home drinking water by the addition of filters to your faucets to remove these chemicals. Prior to buying a filter you should have your water tested for the above chemicals so that you purchase the proper device. There are many private companies that offers this service free of charge.

Private Water Supplies

If you get your water from your own private well or you share a water source with less than 15 other residences your water supply is not regulated by the federal government. Consequently, you assume responsibility to ensure that your water is safe to drink. You should test your water routinely for the following contaminants:

- Once each year, test for coliform bacteria, nitrate, pH, and total dissolved solids (TDS). The best times to test for these contaminants are during the spring or summer following a rainy period. These tests should also be conducted after repairing or replacing an old well or pipes and after installing a new pump.
- Every three years, test for sulfate, chloride, iron, manganese, lead, hardness, and corrosion index.
- If a new baby is expected in the household, it is a good idea to test for nitrate in the early months of pregnancy, before bringing the infant home, and again during the first six months of the baby's life.

Where you live, and what is next to where you live, can also sometimes affect the quality of your water. If someone in your family becomes ill or if the taste, odor, or color of your water changes, your water supply may be contaminated.















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

<u>Oregon</u>

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 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 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, 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.

Testing Services

- Public water supply systems are tested regularly for primary contaminants including coliform bacteria, inorganic and organic chemicals, and turbidity (in surface water sources).
- Private testing laboratories are listed in the yellow pages of the telephone book. Make sure they are certified by your state health department.
- County and state health laboratories, departments of health, and local hospital laboratories often provide water-testing services.
- Water treatment companies and plumbing supply stores may offer certain free tests in your home.
- Be wary of companies offering, "free home water testing." Some of them may be interested only in selling you a water treatment device, whether or not you need it.



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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