



Applying knowledge to improve water quality

Pacific Northwest

Regional Water Program

A Partnership of USDA CSREES
& Land Grant Colleges and Universities

Summer 2008
PNWWATER 137

Regional Survey Results:

Residential Yard Water Use



As part of the 2007 Pacific Northwest Regional Water Issues Survey we asked the public in Alaska, Idaho, Oregon, and Washington about water use in their yards. Over 1,000 randomly selected residents of our region completed this survey. Barbara J. Andersen, a Ph.D. graduate student in the Environmental Science Program at the University of Idaho, evaluated the yard water use data shown below.

Yard Water Use

Based on the survey results over 83 percent of Pacific Northwest residents water some part of their yards in the summer. Of the respondents that indicated that they water their yards, almost two-thirds (66 percent) water their lawns, more than half (53 percent) water their gardens, and almost half (48 percent) water their landscaping. State of residence had a significant effect on yard watering. Idaho residents were

the most likely to water their yards (96 percent), followed by Oregon (86 percent), Washington (80 percent), and Alaska (70 percent). Idaho residents were also most likely to water their lawns (90 percent) and landscaping (60 percent) in the summer compared to residents of Alaska, Oregon, and Washington.

The effect of state of residence on the practice of summer yard watering, summer lawn watering, and summer landscape watering.

State	Yard watering	Lawn watering	Landscape watering
	----- % -----		
Alaska	70	51	30
Idaho	96	90	60
Oregon	86	64	52
Washington	80	59	45



Water Conservation Practices

The regional survey was designed to gauge the use of water conservation practices in yards in Alaska, Idaho, Oregon, and Washington. The survey found that the majority of homeowners used at least three water conservation practices in their yards. The most frequently used water conservation practice was watering only in the evening or early morning (71 percent), followed by sweeping sidewalks, driveways, and decks instead of washing them down with water (57 percent), and less lawn watering (53 percent). Other water conservation practices frequently used by Pacific Northwest residents in their yards include: (1) using an irrigation system timer (34 percent), (2) using native or drought tolerant plants in their landscape (29 percent), (3) decreased lawn area (28 percent), and (4) the increased use of drip irrigation for gardens and landscaping (25 percent).



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.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 Dan Burns:
360-392-4328

dburns@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, 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.

The frequency of water conservation practices being employed by homeowners in the Pacific Northwest.

Conservation practice	Percent using practice
Watering only in the evening or early morning	71
Sweeping sidewalks, decks, and driveways	57
Less lawn watering	53
Irrigation system timer	34
Native or drought tolerant plants	29
Decreased lawn area	28
Drip irrigation	25

Summary

Most Pacific Northwest residents water some part of their yard, most often the lawn. However, many people in the region practice residential landscape water conservation. Because residential landscape uses of water compose a large portion of municipal water use, understanding current uses and conservation practices, motivations to conserve water, and obstructions to conserving water is essential. The findings indicate that climate matters—water conservation is more widely practiced in the drier parts of the Pacific Northwest (Idaho, eastern Washington, eastern Oregon). People are already using the most convenient and low-cost water conservation practices. Barriers to water conservation do not exist for most people.

One of our goals as the Pacific Northwest Water Resources Team is to develop appropriate educational programs using this survey information. This survey shows that homeowners are currently addressing water concerns on an individual basis in all four states of the region. The easy portion of home water conservation has already been done using these easy-to-use conservation practices. Our challenge is to continue to increase water conservation in urban areas as the region's population will continue to climb over the next several decades.

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.