Applying knowledge to improve water quality
Pacific Northwest
Regional Water Program
A Partnership of USDA CSREES
& Land Grant Colleges and Universities

Spring 2005
PNWWATER 060

Oregon's Well Water Program and Household Well Limits

Afraid of your well going dry? Want to make the most of the water you have? Looking for extra water without paying a big price? If so, you are like many other homeowners in Oregon and the Pacific Northwest. To address these concerns, the Oregon State University Well Water Program now offers a new section (http://wellwater.oregonstate.edu/limitedwater.php) on their web site entitled: "Limited Water." This step marks the official transition of the OSU Well Water Program from a predominately water quality program to one that addresses both water quality and quantity.

The web and program expansion began as a response to the drought concerns earlier this year. However, the information is also targeted for residents with individual household drinking water wells who have concerns about running out of water even if it is not a drought year.

The "Limited Water" web section has the following pages:

CONSERVATION

Links to publications and other web sites on how to get by with less water. For many people concerned about limited water, the solution may be to make more efficient use of the water they have. Water savings through simple conservation measures can be substantial.

WATER STORAGE

Information about holding tanks, rainwater collection, and more. One way well water owners can supplement a low-producing well is with a storage tank. Water is pumped from the well day and night at a rate that can be sustained and stored for high-demand periods. Rain barrels are a great idea in the right climate, but they aren't a very practical solution for supplying water during the long dry summers of the Pacific Northwest. Just think about how many barrels of water you would need to collect during the spring to get you through the summer. The story is different for people in climates with occasional summer rains—they can fill the barrel, use it until the next rain and then fill it again—not so in the Pacific Northwest.

WELL GOING DRY?

There are many reasons why a well may produce less water than in the past, including problems with the well or pump, interference from nearby wells, drought, and even geological changes caused by earthquakes. In most cases the homeowner will need to have a professional help evaluate the situation and help with needed repairs. The key here is that you need to look at the big picture—the groundwater, your well, pump, and possibly even the plumbing system—and not jump to conclusions too quickly.

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/
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

MEASURING WELL WATER LEVEL

This process is more complex than you may expect. If you are thinking of monitoring your well, learn more about it. It takes four to six measurements per year over a period of at least five years to obtain useful data on water level trends. You also need to know what you are measuring: static water level, pumping water level, or recovery level. You don't need to measure your own well to obtain information about groundwater levels in your area. The Oregon Water Resources Department manages a number of observation wells throughout Oregon. The location of these wells, along with long-term trends in water levels are available from the web site.

GRAY WATER

Gray water is household wastewater other than toilet water (which is referred to as "black water"). Some states allow re-use of this water to irrigate lawns and gardens. At this time, ***IT IS ILLEGAL TO USE UNTREATED GRAY WATER IN OREGON***. Over the years, the public has expressed considerable interest in the use of gray water. Oregon Department of Environmental Quality has a team working on a Waste Water Reuse Initiative to explore possible changes to the rules. More information is available on this web page.

GROUNDWATER RESTRICTIONS

The Oregon Water Resources Department has designated certain geographic areas of the state as Critical Ground Water Areas or Ground Water Limited Areas. If you live in one of these areas, there are restrictions placed on new uses and possibly even on existing uses.

DROUGHT

Well owners are often concerned about drought conditions. This page provides links to several drought web sites that in turn provide links to others. When drought conditions exist, the OSU Well Water Program will post the most current information related to groundwater and wells in Oregon.

This section, like the entire OSU Well Water Web, is still growing. New information and links are always being added. Please send your ideas, suggestions, corrections, or general comments. And coming soon, there will be a new "Journal" section where well owners can share their stories.

The OSU Well Water Web Limited Water section can be found at **http://wellwater.oregonstate.edu/limitedwater.php**. Contacts are Gail Andrews, OSU Well Water Coordinator, at 541-737-6294 or Jacqueline Fern, Assistant Coordinator, at 541-737-6295 or the Well Water Program e-mail at **well.water@oregonstate.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.