

News from the Water Resources Department's Well Construction and Compliance Section

Articles

Page 1

Meet Our Three New Well Inspectors
Department Budget News

Page 2

Exempt Groundwater Recording Requirements Rulemaking
Ground Water Advisory Committee
2010 License Exam Dates

Page 3

Safety Reminder
H1N1 And Water
Healthy Housing

Page 4

Safe Water
Well Disinfection
Naturally Occurring Sources of Pollution
Put a Salmon on Your Plate!

Page 5

Photos

Page 6

Region Office Directory
Well Construction and Compliance Section Staff Directory

Celebrating 100 years of the Oregon Water Code.



MEET OUR THREE NEW WELL INSPECTORS

Jon Unger has returned to the Northwest Region office in Salem, replacing Lorraine Ramsey as the Northwest Region Water Well Inspector. Jon, who recently returned from a two-year Peace Corps commitment, was previously the Northwest Region Monitoring Well Inspector and also worked in the Department's Water Rights Section. Jon can be contacted at (503) 986-0895.



David Poe is the new Northwest Region Monitoring Well Inspector in Salem. David previously worked for the Department as Watermaster in Lake County and as the Northwest Region Hydrologic Technician. David can be reached at (503) 986-0802.

Alan Ome is now the Southwest Region Well Inspector in Grants Pass. Alan has been with the Department for five years processing water right transfers and as part of the Oregon Watershed Enhancement Board Review Team for the region. Alan can be

reached at (541) 471-2886 ext. 228.

DEPARTMENT BUDGET NEWS

The State of Oregon uses a two-year (biennial) budget cycle that starts on July 1st of odd numbered years. The Oregon Legislature met from January through June of 2009 to develop and approve budgets for state agencies for the 2009 to 2011 budget. With the current economic climate, the general fund was not sufficient to fund agencies at the same level as the previous budget. The legislature reduced the Department's general fund by about \$3.7 million and then increased fees by \$2.3 million to cover a portion of the reduction.

General Fund Reduction

The Legislature removed more than \$1.4 million that was not replaced by new fees in the Department's general fund budget, resulting in:

Loss of six staff positions:

- 2 water measurement technicians
- 1 water use reporting position
- 2 Oregon Plan for Salmon & Watersheds positions
- 1 information technology position

Additional program reductions, not involving staff reductions:

- \$200,000 from Klamath Adjudication
- \$50,000 from Groundwater Studies
- \$300,000 from Water Development Loan Fund
- \$100,000 from water measurement equipment
- \$50,000 from legal budget

New / Increased Fees

Exempt Groundwater Recording Fee (new)

The Legislature established this recording fee of \$300 during 2009 for each new, exempt-use well. These funds are for evaluating groundwater supplies, conducting groundwater studies, carrying out groundwater monitoring, and processing groundwater data. The funds collected are not being used for new services, but to replace general fund reductions. The fee is primarily being used to pay for six existing Hydrogeologists in the Groundwater Section.

Start Card Fee (increase)

As of July 22, the Start Card fee was increased to \$225. Start Card revenue is used for well inspectors and to support activities related to well construction. The increase will help maintain the inspection program. Even so, reduced well construction activity has resulted in a shortage of dollars to meet the current budget, and the Department is holding one of the six well inspector positions vacant until revenues increase.

Geotech Report Fee (new)

Geotechnical holes are drilled to collect data about subsurface conditions. Examples include holes drilled for closed loop geothermal, seismic shot, or slope stability purposes (see Table 240-1 in the Division 240 rules). The Legislature established this fee to collect, enter, and post data related to geotechnical holes. Since 1995, the Department has been using the General Fund to pay for the

processing of this information. The Department's general fund budget was reduced by an amount equal to the projected revenues from this new fee. The fee is \$25 for the first report and \$10 for each additional report at a project site within a seven day period.

New and Increased Application Fees

Traditionally, the Department has recovered about 28% of the true costs associated with processing water applications and other customer transactions. The general fund budget traditionally has covered the remaining 72% of those transaction costs. In 2009, the Legislature directed the Department to establish or increase fees to ensure a cost recovery rate closer to 50%.

Increase in "other" (non-general fund) monies

Despite the deep reductions in the Department's general funds and operating budget, its overall budget increased from \$34.8 million last biennium to \$46.2 million in the 2009-11 biennium. This is because of a significant increase—nearly \$13 million—in "pass-through" funds, destined for Oregon communities in the form of grants and loans for the implementation of water resource projects.

EXEMPT GROUNDWATER RECORDING REQUIREMENTS RULEMAKING

At its November 19, 2009, meeting, the Oregon Water Resources Commission adopted Division 190 Administrative Rules that

provide the guidance and standards necessary for landowners to meet the exempt groundwater use recording requirements of Senate Bill 788. These rules replace Division 180 (Temporary Rules) to implement provisions of the bill that requires the owner of land to record new exempt-use well(s). Recording involves submission of a map showing the exact location of the well on the tax lot, along with the statutory recording fee of \$300.

The Department is in the process of developing a means for landowners or their driller to electronically submit the required map information. Some drillers have been helping their customers prepare and submit a map that meets the requirements.

GROUND WATER ADVISORY COMMITTEE

The Ground Water Advisory Committee (GWAC) is the nine-member committee appointed by the Water Resources Commission to advise the Commission and Department on matters relating to rules for the development, securing, use and protection of groundwater, licensing of well constructors, and reviewing the proposed expenditures of the start card revenue. Members represent a range of interests and expertise, with at least three actively engaged in some aspect of the well drilling industry.

Each November the terms for three positions expire. On November 20, the

Water Resources Commission appointed Bill Blair to a first term, and reappointed Lynne Paretchin and Bob Jones to second terms beginning December 1, 2009. Bill Blair is a licensed and bonded well constructor and the owner of Dickerson Well Drilling operating out of Dallas. Lynne Paretchin is an attorney with Perkins Coie in Portland practicing environmental, natural resource, and water law. Bob Jones is a registered geologist with the Medford Water Commission.

The committee meets on a three-month schedule and at other times as needed. The first GWAC meeting in 2010 is tentatively scheduled for January 29. Questions about GWAC should be directed to Arla Heare at (503) 986-0829.

2010 LICENSE EXAM DATES

The exam dates for 2010 are January 11, April 12, July 12, and October 11. Applications for the well constructors license exam and exam fee must be submitted in advance. The study packets for the exams are available on the Department's web site. Questions about well constructor license examinations should be directed to Tracy Fox at (503) 986-0856.

Well Said Newsletter

Available on the web at: http://www.wrd.state.or.us/OWRD/GW/forms.shtml#Well_Said_Newsletters

Please share with others at your organization.

Well Said is a production of the Oregon Water Resources Department's Well Construction and Compliance Section and is designed to inform the drilling industry and the public about program activities and other items of interest. Questions or suggestions about this newsletter can be directed to Kristopher Byrd at (503)986-0851 or Kristopher.R.BYRD@wrd.state.or.us.

“Serving the public by practicing and promoting responsible water management.”

SAFETY REMINDER

Drilling wells can be a dangerous profession. Every year a number of drillers in the United States are seriously hurt or killed while drilling. An Ohio oil and gas well driller was killed recently when he was crushed in a well-drilling accident. In June 2009, Kenneth Geog, 37, of Brinkhaven, Ohio, was killed when he was caught between a control box and the drilling rig. Geog was part of a crew drilling exploratory holes for oil and gas wells for R&B Enterprise, of Millersburg, Ohio. The state police and federal Occupational Safety and Health Administration investigated the accident. Accidents are a painful reminder that safe operating practices are necessary to reduce the chances of injury or worse.

H1N1 AND WATER

According to the U.S. Department of Health and Human Services (DHHS) on their flu website, (Flu.gov), tap water that has been treated by conventional disinfection processes does not likely pose a risk for transmission of influenza viruses. DHHS notes that current drinking water treatment regulations provide a high degree of protection from viruses, although no research has been completed on the

susceptibility of the H1N1 flu virus to conventional drinking water treatment processes. Recent studies, however, have demonstrated that free chlorine levels typically used in drinking water treatment are adequate to inactivate highly pathogenic H5N1 avian influenza and it is likely that other influenza viruses such as H1N1 would also be similarly inactivated by chlorination. Finally, the DHHS indicates that, to date, there have been no documented human cases of influenza caused by exposure to influenza-contaminated drinking water.

HEALTHY HOUSING

According to the U.S. Department of Health and Human Services and the U.S. Department of Housing and Urban Development's "Healthy Housing Reference Manual" many smaller communities use groundwater as their only drinking water source. In addition, according to the last census with data on water supply systems, 15% of people in the United States are on individual water supply systems. In some sections of the country, there may be a choice of individual water supply sources that will supply water throughout the year. Other areas of the country may be limited to one source. The various sources of water could include drilled wells, driven wells, jetted wells, dug wells, bored wells, springs, and cisterns. Regardless of the choice for a water supply source, special safety precautions must be

taken to assure the potability of the water. Drainage should be away from the well and the casing of the well should be sealed with grout, or another appropriate material, to ensure that surface water does not seep along the well casing to the water source. Additionally, research suggests that a minimum of 10 feet of soil is essential to filter unwanted biologic organisms from the water source. However, if the area of well construction has any sources of chemical contamination nearby, the local public health authority should be contacted. In areas with karst topography (areas characterized by a limestone landscape with caves, fissures, and underground streams), wells of any type are a health risk because of the long distances that both chemical and biologic contaminants can travel. When determining where a water well is to be located, several factors should be considered:

- The groundwater aquifer to be developed
- Depth of the water-bearing formations
- The type of rock formations that will be encountered
- Freedom from flooding
- Relation to existing or potential sources of contamination

The overriding concern is to protect any kind of well from pollution and bacterial contamination. Groundwater found in sand, clay, and gravel formations is more likely to be safer, according to the "Healthy Housing Reference Manual" than groundwater extracted from limestone and other fractured rock formations. Whatever the strata, wells should be protected from:

Put A Salmon On Your PLATE

Help Oregon streams, parks, and fish.

Learn more at the Oregon Plan for Salmon and Watersheds website: www.oregon-plan.org

Everyone can benefit. Anyone can help.

- Surface water entering directly into the top of the well,
- Groundwater entering below ground level without filtering through at least 10 feet of earth
- Surface water entering the space between the well casing and surrounding soil

Also, a well should be located in such a way that it is accessible for maintenance, inspection, and pump or pipe replacement when necessary. If you would like a copy of the "Healthy Housing Reference Manual", it can be downloaded for free at:

<http://www.cdc.gov/nceh/publications/books/housing/housing.htm>

SAFE WATER

Most well owners with drinking water wells do not have the resources to test their water for all possible contaminants, however, by testing their water for the presence of E.coli, Coliform, and Nitrate, once a year, owners will have a good idea about the condition of their water and well. If there is ever a change in the water color or taste then it should be tested immediately. If there is a reason to suspect specific contamination problems, such as a leaking underground storage tank or a chemical spill, then the water should be tested for those chemicals. An owner

with good tasting water sometimes will get complacent, but taste is not a good indicator of safe water. Wonderful-tasting, sparkling-clear water can carry disease organisms or toxic chemicals just like foul tasting water, and bad-tasting water may be safe to drink. The best thing well owners can do is test their well water at least once every year even if they do not suspect a problem. Well owners should contact a local water testing laboratory about costs and sampling procedures. Local well constructors or pump installers may also be contacted for assistance.

WELL DISINFECTION

The Oregon Department of Human Services, Drinking Water Section publishes a Technical Bulletin with step by step instructions on disinfecting a well. This is good information to keep available and share with customers that may be having well contamination problems. It is available at the following website.

<http://www.oregon.gov/DHS/ph/dwp/docs/notices/WellDisinfection.pdf>

NATURALLY OCCURRING SOURCES OF POLLUTION

According to the U.S. Environmental Protection Agency, the first step to protect your health and the health of your family is learning about what may

pollute your source of drinking water. Contamination can occur naturally or as a result of human activity. Some naturally occurring contamination sources are:

Microorganisms: Bacteria, viruses, parasites and other microorganisms are sometimes found in water. Shallow wells, those with water close to ground level, are at most risk. Runoff, or water flowing over the land surface, may pick up these pollutants from wildlife and soils. This is often the case after flooding. Some of these organisms can cause a variety of illnesses. Symptoms include nausea and diarrhea. These can occur shortly after drinking contaminated water. The effects could be short-term yet severe (similar to food poisoning) or might recur frequently or develop slowly over a long time.

Radionuclides: Radionuclides are radioactive elements such as uranium and radium that may be present in underlying rock and ground water.

Radon: Radon is a gas that is a natural product of the breakdown of uranium in the soil that can pose a threat. Radon is most dangerous when inhaled and contributes to lung cancer. Although soil is the primary source, using household water containing radon contributes to elevated indoor radon levels. Radon is less dangerous when consumed in water, but remains a risk to health.

Nitrates and Nitrites: Although high nitrate levels are usually due to human



We're on the Web!
See us at:
www.wrd.state.or.us

activities they may also be found naturally in groundwater. They come from the breakdown of nitrogen compounds in the soil. Flowing groundwater picks them up from the soil. Drinking large amounts of nitrates and nitrites is particularly threatening to infants (for example, when mixed in formula).

Heavy Metals: Underground rocks and soils may contain arsenic, cadmium, chromium, lead, and selenium. However, these contaminants are not often found in household wells at dangerous levels from natural sources.

Fluoride: Fluoride is helpful in dental health, so many water systems add small amounts to drinking water. However,

excessive consumption of naturally occurring fluoride can damage bone tissue. High levels of fluoride occur naturally in some areas. It may discolor teeth, but this is not a health risk.

In some cases it may be possible to treat drinking water for these naturally occurring contaminants. A water treatment professional should be contacted to discuss specific problems.



Water Well With a Duct Tape Repair.



Drill Rig With It's Front End Up In The Air.



We're on the Web!
See us at:
www.wrd.state.or.us

Region Office Directory

Western

Phone: (503)986-0900
Fax: (503)986-0903

Southwest

Phone: (541)471-2886
Fax: (541)471-2876

South Central

Phone: (541)388-6669
Fax: (541)388-5101

North Central

Phone: (541)278-5456
Fax: (541)278-0287

Eastern

Phone: (541)523-8224
Fax: (866)214-3493

Well Construction and Compliance Section Staff Directory

Juno Pandian, Manager
juno.g.pandian@wrdd.state.or.us
(503) 986-0852

Kristopher Byrd,
Well Construction Program
Coordinator
kristopher.r.byrd@wrdd.state.or.us
(503) 986-0851

Tracy Fox, License and
Compliance Officer
tracy.l.fox@wrdd.state.or.us
(503) 986-0856

Codi Holmes, Well ID
Program Coordinator
codi.n.holmes@wrdd.state.or.us
(503) 986-0854

Laurie Norton, Well Log
Review Coordinator
laurie.k.norton@wrdd.state.or.us
(503) 986-0850

Well Construction and
Compliance Section Fax
(503) 986-0902



OREGON WATER RESOURCES DEPARTMENT
725 SUMMER ST NE, SUITE A
SALEM, OR 97301

