

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

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INTEGRATED WATER RESOURCES STRATEGY UPDATE

The Water Resources Department is entering the final phase of a three-year project to develop Oregon's first Integrated Water Resources Strategy. The Strategy, scheduled for adoption by the Water Resources Commission in August of 2012, will include actions aimed at better understanding and meeting Oregon's instream and out-of-stream water

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needs, specifically addressing water quantity, water quality, and ecosystem needs.

Earlier this year, the Project Team drafted recommended actions in twelve issue areas that address several water-related issues Oregon is now facing, and may be facing in the near future. Of these actions, several touched upon groundwater. They include increased investment in groundwater studies, conjunctive management of surface water and groundwater, and gathering better information on exempt use wells and underground

injection control systems (UIC's). The recommended actions also call for improved educational resources related to testing, monitoring, and treatment for owners of domestic wells and septic systems.

This past summer, the Project Team invited public comment on these draft recommended actions. With input from nearly fifty different individuals and organizations, the Project Team is revamping the recommended actions and putting together a discussion draft of the Strategy, with plans of releasing it in late December for a final round of public review and comment.

The first quarter of 2012 will be devoted to gathering input from the public and from boards and commissions of various natural resource agencies. If you would like an opportunity to review or comment on the upcoming discussion draft, consider joining the Department's electronic mailing list. A notice will be sent out to subscribers, with links to the discussion draft and instructions for submitting comments. To join, visit <http://listsmart.osl.state.or.us/mailman/listinfo/iwrs>.

PRIVIES AND SETBACKS

Water Supply Well Constructors and landowners constructing a well should check the property for open bottom privies. The open bottom

privy has the same setback as an existing septic drainfield. Wells may not be constructed closer than 100 feet from an existing open bottom privy without prior special standard approval from the Water Resources Department. Questions about well placement setbacks should be directed to Kristopher Byrd at (503) 986-0851 or by e-mail at kristopher.r.byrd@wrdd.state.or.us.



USDA RURAL REPAIR AND REHABILITATION LOANS AND GRANTS

(Adapted from information at http://www.rurdev.usda.gov/HAD-RR_Loans_Grants.html)

The United States Department of Agriculture's (USDA) Very Low-Income Housing Repair Program provides loans and grants to low-income homeowners to repair, improve, or modernize their dwellings or to remove health and safety hazards. To obtain a loan, homeowner-occupants must be unable to obtain

affordable credit elsewhere and must have very low incomes, defined as below 50 percent of the area median income. In addition, they must need repairs and improvements to make the dwelling safe and sanitary or to remove health and safety hazards. Grants are only available to homeowners who are 62 years old or older and cannot repay a low interest loan. A grant/loan combination may be made if the applicant can repay part of the cost. Repaired properties do not need to meet other Housing and Community Facilities Programs (HCFP) code requirements, but the installation of water and waste systems and related fixtures must meet local health department requirements. Water supply and sewage disposal systems should normally meet HCFP requirements, however, not all the health and safety hazards in a home must be removed with these funds, provided that major health and safety hazards are removed. In addition, all work must meet local codes and standards, including State requirements for water well construction. For more information about USDA's Rural Repair and Rehabilitation Loans and Grants, contact the local Rural Development office in your area or go to their web site at http://www.rurdev.usda.gov/v/HSF_SFH.html.

HYDROFRACTURING, EARTHQUAKES AND DRINKING WATER (Adapted from March 1, 2011 OregonLive.com article titled "Earthquake activity in Arkansas gaining national attention" and from information at EPA.gov.)

Hydrofracturing occurs when high pressure liquid, sand, packers or other material is injected into a well to open or widen fractures in an attempt to increase well yield. In Arkansas, injection wells used by the natural gas industry to pump waste water that was used for hydrofracturing are being studied by scientists to determine whether or not there is a connection between hydrofracturing and local earthquakes. Some scientists believe that the injection wells are a contributing factor causing earthquakes. In January, 2011, a moratorium was put into place on injection wells in the area so that the relationship between the wells and the earthquakes could be studied.

On a national level, the Environmental Protection Agency (EPA) is researching hydrofracturing to try and determine it's potential impact on drinking water. The EPA will monitor the hydrofracturing process for wells in Louisiana and Pennsylvania. They will also look back at previous data from hydrofracturing work in North Dakota, Texas, Pennsylvania and Colorado.

In Oregon, hydrofracturing of water supply wells is a well alteration and is regulated by the Water Resources Department under Oregon Administrative Rule (OAR) 690-210-0065. Questions about hydrofracturing water supply wells in Oregon should be directed to Kristopher Byrd at (503) 986-0851 or by e-mail at kristopher.r.byrd@wr.d.state.or.us.

STATE OF WYOMING NOW REQUIRES

LICENSES (Adapted from June 2008 National Driller article titled "Wyoming Now Requires Licensing")

Wyoming was the last State to require licensing for well constructor's. Until 2008 Wyoming was the only state within the lower 48 that did not require some form of license, certification or registration to be a water well contractor. Prior to 2008, Wyoming had a voluntary certification program for water well contractors and then in 2008 the governor signed a bill requiring licensing and creating a fund to run the licensing board. The fund uses money from permit fees that are charged by the State Engineer's Office. Along with the licensing requirements, the new law establishes criteria for renewals, continuing education requirements and enforcement.



LOCATING BURIED WELLS

The Department often receives calls about existing wells that cannot be located. The wells are usually old monitoring wells on remediation sites or water supply wells on construction sites. When a well is lost, the landowner is required to find the well and have it either properly repaired or permanently abandoned. Methods most often used to locate the wells include excavators, metal detectors, shovels and ground penetrating

Well Said Newsletter

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

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@wr.d.state.or.us.

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

radar (GPR) devices. The condition of the well and the depth it is buried help to determine the method that is used to locate it. Questions about wells that are lost should be directed to Kristopher Byrd at (503) 986-0851 or by e-mail at kristopher.r.byrd@wrdd.state.or.us.

HUMAN HEALTH TOXICS WATER QUALITY STANDARDS

(Adapted from October 17, 2011 DEQ Fact Sheet.)

The U.S. Environmental Protection Agency recently approved Oregon Department of Environmental Quality's (DEQ's) proposed water quality standards for toxic pollutants. These standards establish goals for Oregon's surface waters, including protecting sources of drinking water and helping ensure that fish from Oregon's waters are safe to eat. These standards may affect industrial facilities and larger municipal sewage treatment facilities operating under wastewater discharge permits. DEQ's revised water quality standards incorporate a fish consumption rate that reflects the range of fish consumed by Oregonians. DEQ developed this rate after an extensive review of relevant fish consumption studies by a panel of public health professionals and feedback from public workshops. The fish consumption rate is an important factor for developing human health standards. The more fish, shellfish and water people consume containing toxic pollutants, the more they're at risk for developing illnesses such as cancer, cardiovascular disease,

neurological and behavioral disorders and kidney disease. The revised standards reflect pollutant levels that are considered safe to consume. For more information about the new standards go to DEQ's website at <http://www.deq.state.or.us/wq/standards/humanhealth.html>.

DECLINING WATER LEVELS IN MOSIER

Mosier is a small community located in the Columbia River Gorge 65 miles east of Portland along Interstate 84. Mosier's economy is centered around fruit orchards and recreational tourism. In the Mosier area, groundwater levels have been declining since significant irrigation pumping began in the 1960's. The water levels in some wells have declined as much as 120 feet. In 2005, the Mosier Watershed Council, in partnership with the Water Resources Department, U.S. Geologic Survey, and others initiated a geologic study and ground modeling process to determine Mosier's sustainable groundwater yield. The study evaluated the feasibility of implementing Artificial Recharge (AR) or Aquifer Storage and Recovery (ASR) to maintain a sustainable yield. Hydrogeological, physical, regulatory, ecological and economic feasibilities of AR or ASR and other alternatives were considered. The study concluded that aquifer storage is not currently a feasible strategy for meeting Mosier's water needs, but that it could possibly become an effective means of boosting Mosier's aquifer levels in the future. For more information about the sustainability study go to

http://or.water.usgs.gov/pr/ojs_dir/mosier/index.html and for information about Mosier go to <http://www.mosieroregon.com>.

WICK DRAINS

Wick drains are used on construction sites to remove water from the earth for soil compaction and consolidation. These prefabricated vertical drains greatly reduce the distance water must move to reach a free drainage path and greatly increase the settlement rate. Water flows through the filter fabric of the drain and into the channels of the drain core where it can flow vertically out of the soil. This flow may be either up or down to intersecting natural sand layers or to the surface where a sand drainage blanket or prefabricated strip drains are provided. The water in the soil has only to travel the distance to the nearest drain to reach a free drainage path. As a result of this method of accelerating the consolidation process, uneven post-construction settlement can be virtually eliminated. Since the purpose of wick drains is for soil compaction and consolidation, the Water Resources Department considers them "other holes" as described in Oregon Administrative Rule (OAR) 690-240-0030. The ground water resource is protected because the water is squeezed up and out of the soil rather than drawing contamination down into the aquifer. Questions about other holes should be directed to Kristopher Byrd at (503) 986-0851 or by e-mail at kristopher.r.byrd@wrdd.state.or.us.

Reasonable Vault Request.



Old Well By Bathroom.



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House Built Over Well.



Dug Well Abandonment.



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