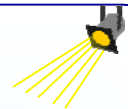


News from the Water Resources Department's Well Construction and Compliance Section

## WELL SAID NEWSLETTER GOING PAPERLESS

In order to help the environment and reduce costs, the Water Resources Department is moving forward with plans to make the *Well Said Newsletter* paperless. The Well Construction and Compliance Section will be using the email addresses currently associated with well constructor licenses. Please contact Laurie Norton at (503) 986-0856 or by email at [laurie.k.norton@oregon.gov](mailto:laurie.k.norton@oregon.gov) to add or update your email address. Well constructors not interested in receiving the Well Said via email should contact the department and their name will be removed from the list. The Well Said will also be available in printed form upon request. Those interested in continuing to receive a printed version of the newsletter should contact the department and their name will be added to the printed copy distribution list. To continue to receive a printed copy of the newsletter, contact Joel Jeffery at (503) 986-0852 or by email at [joel.w.jeffery@oregon.gov](mailto:joel.w.jeffery@oregon.gov).

## Staff Spotlight



### MEET HYDROGEOLOGIST AURORA BOUCHIER

Aurora Bouchier, a hydrogeologist in the department's Groundwater Section, spends much of her time collecting and analyzing water-level data, determining groundwater availability, and investigating well-to-well interference concerns. Additionally, she processes the recorder data from nearly 100 observation wells across the state, while also finding time to perform groundwater reviews on water right applications.

Aurora has been with the Water Resources Department (WRD) for more than two years. She earned her Bachelor of Science degree in Geology from Fort Lewis College in Colorado, and her Masters of Science degree in Hydrology from the Colorado School of Mines. Prior to joining WRD, Aurora worked for the South Florida Water Management district as a hydrogeologist, a well inspector, and a water well drilling license contact. She also worked as an environmental scientist for Tetra Tech, and with Norwest Corporation as a field supervisor, where she was involved with an aquifer testing program related to the extraction of oil from the oil sands in northern Alberta Canada, and from the oil shales in western Colorado.

Summertime finds Aurora spending time with her family while participating in outdoor activities, such as mountain biking, kayaking and sailing. Aurora's experience, enthusiasm, skills, energy, and dedication to the management of Oregon's water resources make her a valuable member of the Water Resources Department family.

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## OCTOBER WELL CONSTRUCTOR EXAM LOCATION

The Water Resources Department would like to let well constructor license applicants know that the Well Constructor License Exam is temporarily moving to the Oregon Employment Department's auditorium at 875 Union St NE, Salem, Oregon.

**LOCATION CHANGE!**



This **temporary** move only applies to the October 9, 2017, Well Constructor License Exam. The Oregon Employment Department building shares a parking lot with the Water Resources Department and is just south of the Water Resources Department's main building entrance.

Questions about the exam should be directed to Laurie Norton at (503) 986-0856 or by email at [laurie.k.norton@oregon.gov](mailto:laurie.k.norton@oregon.gov).

## CONTINUING EDUCATION APPROVAL

Licensed Water Supply Well Constructors that take a class that they want to count towards their biennial continuing education requirement are reminded that there may be a delay in receiving a renewed license if the course has not been previously approved by the Continuing Education Committee. The Committee needs to review documentation associated with the course before any credit can be assigned.

In some cases, there will be no credit assigned, or the amount of approved credit will be different than what is provided on the certificate of completion. Some individuals that are also licensed in other states may be accustomed to taking certain online courses that are accepted by their home state, but have not yet been approved by Oregon. If this is the case for you or your company, feel free to contact the Oregon Water Resources Department for help in obtaining course approval.

Questions should be directed to Laurie Norton at (503) 986-0856 or by email at [laurie.k.norton@oregon.gov](mailto:laurie.k.norton@oregon.gov).

## DEQ ISSUES TWO PENALTIES FOLLOWING IRRIGATION WELL PROJECT

In January, 2017, the Oregon Department of Environmental Quality (DEQ) issued two civil penalties related to an irrigation well construction project in Eastern Oregon that resulted in the discharge of sediments to a creek. The DEQ penalized the well construction company \$43,200.00, and the landowner \$43,526.00.

DEQ described the location of the well as being uphill from the creek. DEQ also noted that during the well construction activity, the drilling production water was discharged to the ground surface where it traveled downhill, picking up sediment along the way, and then flowed into the creek. When DEQ staff investigated the bottom of the creek, they reported a sediment deposit that was up to two feet thick. In order to remedy the situation, DEQ cited both the well constructor, and the landowner, for discharging wastes to waters of the State without a permit, and for violating water quality standards.

Drill cuttings are considered a pollutant when allowed to enter the waters of the state. These cuttings can increase stream turbidity and negatively impact fish and wildlife. Drilling companies should monitor the discharge of drill cuttings during operations to ensure compliance with pollution regulations.

Questions about DEQ's regulations should be directed to (503) 229-5696 or by email at [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).

**Drill Cuttings**



# GROUNDWATER *Study*

## DEQ SEEKS PARTICIPANTS FOR GROUNDWATER STUDY IN MID-WILLAMETTE

Residents in the Mid-Willamette Valley can have their wells tested for **free** by the Oregon Department of Environmental Quality as part of a groundwater study DEQ is conducting in the area.

DEQ's Statewide Groundwater Monitoring Program started seeking volunteers for the study in early 2017 and hopes to conclude recruitment around August. This year sampling will take place in the spring and fall. The groundwater monitoring program conducts such studies to identify areas around the state that are vulnerable to groundwater contamination, update its understanding of trends in groundwater quality in Oregon and inform groundwater users of potential risks.

DEQ's groundwater monitoring program conducts two regional groundwater studies a year. The study areas are selected based on a variety of data including nitrate data collected during real estate transactions. DEQ selected the Mid-Willamette Valley as a study area using data on vulnerable aquifers, information on geology and soils, data from historical real estate transactions, gaps in available water quality data, and input from local stakeholders.

Samples will be collected by DEQ staff from an active outdoor spigot, as close to the well as possible. Sampling staff will flush the system by hooking up a hose to the spigot and running the water for several minutes before taking the sample. The whole process should take 30-45 minutes and the homeowner does not need to be present as long as they provide clear directions on where to sample. DEQ will send test results to well owners and residents at the property. Property owners can then decide what, if any, actions to take.

DEQ will analyze the water for the presence of nitrate/nitrite, arsenic, pesticides and herbicides (legacy and current use), hardness (ion concentrations), select metals, coliform bacteria and E. coli, pharmaceuticals, personal care products and volatile organic chemicals.

To be considered for this study, please email [Groundwater.Monitoring@deq.state.or.us](mailto:Groundwater.Monitoring@deq.state.or.us) or call (503) 693-5736 to provide your well address. DEQ will send you a form with questions about your well.

DEQ will select participants based on location and well characteristics.

More information is available at:

<https://www.oregon.gov/deq/FilterDocs/welltestflyer.pdf>.



### WELL SAID NEWSLETTER

Available on the web at [www.oregon.gov/owrd/pages/gw/forms.aspx](http://www.oregon.gov/owrd/pages/gw/forms.aspx). Please share with others at your organization.

*Well Said* is a production of the Oregon Water Resources Department's Well Construction & 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 may be directed to Kristopher Byrd at (503) 986-0851 or [kristopher.r.byrd@oregon.gov](mailto:kristopher.r.byrd@oregon.gov)



For Well Construction & Compliance resources, log onto [http://www.oregon.gov/owrd/Pages/gw/wcc\\_index.aspx](http://www.oregon.gov/owrd/Pages/gw/wcc_index.aspx)

## KEEP AN EYE OUT FOR LOCATE MARKS



Buried underground utilities are a constant threat when drilling, boring, augering, excavating, or digging. Because of this, caution should always be used when constructing a well due to the danger of hitting these underground utilities. As an example:

In December, 2016, a drilling contractor from out of State was working on a new access road in Eastern Oregon. Although a utility locate had been done for the project, the contractor did not pay attention to the locate marks. The result was that the contractor ended up hitting and breaking an underground water line. In order to fix the mistake, a repair crew had to be brought in to repair the line so that work on the project could be completed. This mistake caused the project to be delayed and it also cost the contractor time and money.

In this case, the contractor was lucky that they hit a buried water line and not an electrical, or fiber optic line. Mistakes can happen to anyone, but with care and diligence, accidents like the one noted above can be prevented and work can continue without delay.

For more information about utility locates, contact the Oregon Utility Notification Center at (800) 332-2344 (or 811) or visit their website at <http://callbeforeyoudig.org/oregon/index.asp>.



## PREVENT HEAT ILLNESS FOR WORKERS IN HOT WEATHER

According to the Occupational Safety and Health Administration (OSHA), exposure to heat can lead to headaches, cramps, dizziness, fatigue, nausea, vomiting, seizures, or even death. In fact, from 2011 to 2016, 36 people received benefits through Oregon's workers' compensation system for heat-related illnesses.

Oregon OSHA stresses the need for employers and workers to be attentive to the dangers of high heat. This is especially important here, where workers tend to be used to working in mild weather and are generally not acclimated to high heat during summer months.

Some tips for preventing heat-related illness include:

- Perform the heaviest, most labor intensive work during the coolest part of the day.
- Use the buddy system (work in pairs) to monitor the heat.
- Drink plenty of cool water.
- Wear light, loose fitting, and breathable clothing
- Avoid caffeine and alcoholic beverages, to avoid dehydration.

To help those suffering from heat exhaustion:

- Move them to a cool shaded area. Do not leave them alone.
- Loosen and remove heavy clothing.
- Provide a limited amount of cool water if they are not feeling sick to their stomach.
- Try to cool them down by fanning them or spraying with misted water.
- If they do not feel better in a few minutes, call 911 for emergency services.

Heat stroke is a more severe condition than heat exhaustion and can result in death. Immediately call for emergency help if you think the person is suffering from heat stroke.

Oregon OSHA has a booklet available in both English and Spanish that includes information about the risks of exposure to high temperature and high humidity. For more information contact OSHA at (503) 378-3272.



## PHOTOS FROM THE FIELD



Construction of a well in progress.



Water well with a large gravel fill tube next to it.

Damaged water supply well in Eastern Oregon.



Drill cuttings on the ground flowing towards a creek (in the background).



WCC: "Protecting water resources through appropriate prevention and enforcement."





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