

## WHAT'S IN THIS ISSUE:

- 1 Mandatory E-Filing  
WARRF Update
- 2 Geotechnical Hole  
Shopping Cart  
Start Card Refunds
- 3 Deepening Wells  
Properly Marked Drilling  
Machines  
Dug Well Abandonments
- 4 Pitless Adapters  
New Central Oregon  
Region Well Inspector
- 5 Casing Height in Flood  
Zones
- 6 Photos From the Field

## WELL SAID NEWSLETTER

Available on the web at OWRD home page, under Agency Spotlight > Well Said Newsletter. Please share with others at your organization. Well Said is a production of the OWRD Well Construction Section and is designed to inform the drilling industry and the public about program activities and other items of interest.

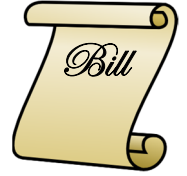
Questions or suggestions about this newsletter may be directed to Kristopher Byrd at (503) 991-2470 or email at [Kristopher.R.Byrd@water.oregon.gov](mailto:Kristopher.R.Byrd@water.oregon.gov)



Serving the public by practicing and promoting responsible water management.

## MANDATORY E-FILING COMING JULY 1, 2024

The passage of House Bill (HB) 2145 modernized and increased efficiency within the well construction program. This law focuses the Department on preventing well deficiencies that can lead to contamination or waste of groundwater, better protecting groundwater resources for Oregonians, and giving the well construction industry timely assurance that their work is being performed in a manner that is consistent with Oregon's Administrative Rules & Revised Statutes. Policy changes have been implemented in phases as required by the new law since 2021, with the most recent requirements going into effect on July 1, 2023.



The July 1, 2024, update to the modernization of Oregon's well construction program requires that all start cards and well reports be submitted electronically using the e-file system. Both the start card and well report e-file system are available for use and can be found on the "Resources for Well Constructors" web page: <https://www.oregon.gov/owrd/programs/GWWL/WCC/resourcesforwellconstructors/Pages/default.aspx>. OWRD has created videos on how to e-file start cards, well constructor notifications, and special standard requests, using the start card e-file system. The next video scheduled to be released will be on how to e-file a well report. Please visit the "Well Construction Program Video Tutorials" page to see the available and upcoming videos: <https://www.oregon.gov/owrd/programs/GWWL/WCC/resourcesforwellconstructors/Pages/WellConstructionProgramVideoTutorials.aspx>

For questions regarding the e-filing requirements, please contact Travis Kelly, Well Construction Compliance Coordinator, at (971) 304-5079 or by email at [Travis.N.Kelly@water.oregon.gov](mailto:Travis.N.Kelly@water.oregon.gov).

## WARRF UPDATE

The Well Abandonment Repair and Replacement Fund (WARRF) was established with the passage of House Bill 2145 (2021) and provided financial assistance for low to moderate income households in areas affected by drought or wildfire to repair, replace, and/or abandon wells. Through the legislature, WARRF received approximately \$5.4 million to award as grants to landowners across the state. Applicants could receive up to \$40,000 in reimbursement for the repair, replacement, and/or abandonment of wells. Beginning in June 2022, the Department began to receive applications, and in November 2023, had awarded all the funds available. Currently, the Department is no longer accepting WARRF applications.

Over the course of 17 months, 322 WARRF applications were received, with 195 of those applications being awarded grants. A total of 147 homes across 17 counties in Oregon had water restored, with an average grant amount of \$26,500. There are still 50 active grants the Department is managing, which requires the work to be completed followed by a post inspection by the regional well inspector.

Next steps for the WARRF program include continued work on program development, and conduct rulemaking in hopes of attaining additional funding. If you have any questions or want further information, please contact the Department at [owrd.well.funding@water.oregon.gov](mailto:owrd.well.funding@water.oregon.gov) or call (503) 779-5763.

# NOW AVAILABLE: GEOTECHNICAL HOLE SHOPPING CART

The Water Resources Department (OWRD) is excited to announce that Geotechnical Hole fees can now be paid through the well report e-file application by adding your reports to the shopping cart. Beginning **July 1, 2009**, geotechnical holes have been charged a recording fee of **\$25.00** for the first hole with subsequent holes being charged **\$10.00** per hole within a **7-day** period for the same project site.

Previously, the Department would mail an invoice upon receipt of the geotechnical hole reports. With updates to the e-file application, the fees may now be paid at the time of e-filing the geotechnical hole reports, similar to the process in place for paying the recording fee for new water supply wells. Invoices are available to be sent via mail for those who prefer paying by check or money order. To receive an invoice, you should click the "submit" button rather than the "add to cart" button.

As a reminder, geotechnical hole reports are required to be submitted within **30 days** after completion of the drilling if the hole is:

- Greater than **18 feet** deep;
- Within **50 feet** of a water supply or monitoring well
- Used to determine water quality and open less than **72 hours**; or,
- Drilled in an area known or reasonably suspected to be **contaminated** (ORS 537.880).

For more information regarding geotechnical holes, please contact Tommy Laird, Well Construction Program Coordinator, at (503) 302-8618 or email [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov)

## START CARD REFUNDS

This is a reminder that as of **July 1, 2023**, Start Cards must be submitted not earlier than **60 days** and not later than **72 hours** before beginning work on a well. In addition, Start Cards expire if work on the well does not begin within **60 days** of submission, though there is an opportunity for a one-time **30-day** extension in exigent circumstances. Along with this requirement, a Day of Drilling Notification must be submitted **on the day that construction actually begins**, and it must be received by OWRD **prior** to the Start Card expiration date. Please note that construction may take as long as necessary after beginning, as long as the initial day of drilling notification was timely filed.

If the commencement of work notification is not submitted within **60 calendar days**, the Start Card **expires** and a well report cannot be submitted using the expired Start Card.

Commencement of work notification may be submitted electronically on the OWRD website, or on the Well Constructor Notification Form available on the OWRD website at <https://www.oregon.gov/owrd/WRDFormsPDF/WellConstructorNotification.pdf>

Along with the notification requirements detailed above, well constructors should also be aware that Start Cards submitted on or after **July 1, 2023**, are **not** eligible for refunds, however, the fee may be **transferred** to a new Start Card. Start Cards with no associated fees, such as alterations and abandonments, are eligible to be voided. It is also important to note that **expired Start Cards are ineligible for fee transfers**. If the Start Card expires, a new one must be submitted as no well may be constructed, deepened, altered, abandoned, or converted without an active Start Card.

Questions about Start Card and notification requirements should be directed to Travis Kelly, Well Construction Compliance Coordinator, at [Travis.N.Kelly@water.oregon.gov](mailto:Travis.N.Kelly@water.oregon.gov) or (971) 304-5079.

# DEEPENING WELLS

The Department would like to remind well constructors who are planning to deepen a well that unless an approved special standard has been issued, **an original well report is required to deepen**. If an original well report is unavailable, the well must be recased and resealed to current minimum standards. Information about the original well construction, such as the borehole diameter, casing depth, seal depth, type and amount of seal material, and formations encountered are required for the Department to confirm that the well meets current minimum requirements.

**Prior to deepening**, well constructors should contact the regional well inspector where the well is located, or the well construction program coordinator, to **review the original well report**. For reconstruction, the replacement seal depth should be based on the lithology/formations encountered, and not on the original seal depth.

During the deepening process, it is important to note that if the well accesses a new aquifer, all previous aquifers shall be completely cased and sealed off. This includes aquifers that have gone dry or are low producing. For wells **associated with a water right permit**, it is important to **review the permit conditions prior to deepening**.

For more information regarding deepening wells, please contact Tommy Laird, Well Construction Program Coordinator, at (503) 302-8618 or by email at [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov).

# PROPERLY MARKED DRILLING MACHINES

Oregon Administrative Rules require that well drilling machines be properly marked with either the bonded Water Supply Well Constructor's license number, the name of the bonded Water Supply Well Constructor, or the name of the well drilling business. These markings need to be permanently affixed on each side of the machine and must be in good quality paint or commercial decal letters and numbers. The markings may not be done with chalk, marking keel, or any other temporary marking material.

Drillers that obtain a drilling machine that is still marked with information from the previous owner must remove that information prior to taking the drilling machine to a site for well construction work.

*Continued above right*

## Marking Drilling Machines, Cont'd

When a machine is found without the proper markings, the Department will contact the well constructor and work with them to get it properly marked. Those who choose not to comply will be subject to formal action, including the assessment of civil penalties.

For more information about drilling machine requirements, please contact Tommy Laird, Well Construction Program Coordinator, at (503) 302-8618 or by email at [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov).

# DUG WELL ABANDONMENTS

Old dug wells can turn up on properties unexpectedly. News articles about people or animals falling into forgotten or improperly covered wells are becoming more and more common. Not only do they pose a major safety risk, but they are also a potential conduit for contamination to the groundwater. Landowners with unused dug wells on their property are encouraged to have their wells properly abandoned, and when abandoning these wells, remember there are a few extra steps required.

Prior to beginning work, a department approved abandonment plan is required. This is done by either submitting a paper special standard request form to Tommy Laird, Well Construction Program Coordinator, or submitting an electronic special standard request through the start card e-file system. In the request, the proposed method of abandonment and seal material is required. Additional information required is the borehole depth, static water level, well diameter or dimensions (if it is not round), and casing material such as bricks, formed concrete, etc. If the borehole shape is not uniform to the bottom, then this should also be included because it can affect the calculated volume of sealing material required.

Before abandonment begins, it must be verified that the well bore is clear of debris and foreign material. If there is water present in the well, consider pumping the water out to be able to visually verify the borehole is clear. This can also help with sealing operations and limit the amount of water displaced onto the job site as the dug well is abandoned. If anything is in the well bore, then it must be removed before the well can be abandoned.

Not only are pumps, liners, and water system components often found in dug wells, but also trash and other debris are commonly encountered if the well was not properly covered.

*Continued on next page*



## Dug Well Abandonments, Cont'd

Removing these types of items often requires equipment not normally used in well construction, such as excavators, bucket cranes, or even vacuum trucks.

After the abandonment is finished, a well report is required to be submitted. On the report, make sure to completely describe the original construction of the dug well, the type and amount of sealing material used, and the method of placement. The calculated amount is also required and is based on the borehole dimensions.

For more information regarding dug well abandonments, please contact Tommy Laird, Well Construction Program Coordinator, at (503) 302-8618 or [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov).

## PITLESS ADAPTERS

A pitless adapter is a commercially manufactured unit designed to attach to a well casing to allow water service pipes to pass through the wall of the well casing and prevent entrance of contaminants into the well and the groundwater.

Installing a pitless adapter does not require an Oregon water well constructors license and may be done by a pump installer or landowner. If the landowner plans on having a pitless adapter installed, then the rules require that the sealing interval be sealed with unhydrated bentonite. This requirement is in place because a cement grout seal would be damaged or destroyed if altered during a pitless adapter installation.

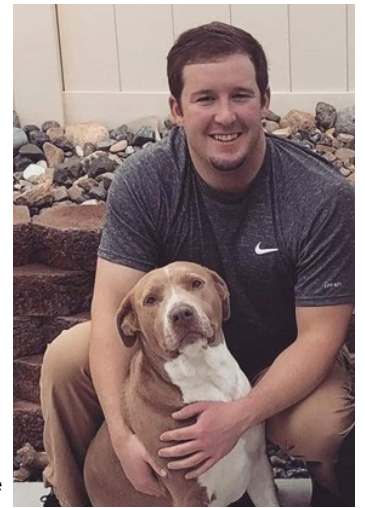
Because well inspectors have recently inspected wells where the landowner has installed a pitless adapter and not properly replaced the seal, the department would like to ask the well construction industry that if they know that a well owner is planning to have pitless adapter installed, that they either recommend to the well owner that they contact a professional well driller, or they recommend that the well owner contact the Department. This way either the installation will be done properly by the licensed driller, or the Department can inform the landowner of the requirements.

For more information regarding pitless adapters, please contact Tommy Laird, Well Construction Program Coordinator, at (503) 302-8618 or by email at [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov).

## MEET DUSTEN LISH: CENTRAL REGION WELL INSPECTOR

Dusten Lish is originally from Soda Springs, Idaho, where he learned to enjoy nature and numerous outdoor activities. After graduating from high school, Dusten enlisted in the U.S. Army and was stationed at Fort Campbell, Kentucky, where he was assigned to the highly decorated 502<sup>nd</sup> Infantry Battalion of the 101<sup>st</sup> Airborne Division. He was deployed to Kandahar, Afghanistan, from 2010 – 2011, as part of the troop surge to aid counter-insurgency efforts in the middle east.

Upon completion of his military service, Dusten moved back to Idaho where he earned a Bachelor of Science in Geology degree at Idaho State University (ISU) in Pocatello. While he was an undergraduate student, he worked as a field assistant collecting information about sediment deposition in agricultural streams and canals. He also became a licensed unmanned



aircraft system (UAS) pilot, conducting field work for Dr. Donna Delparte as an under-graduate research assistant. Dusten planned and conducted flights using UAS with high res remote sensors to detect and study viruses in potato plants. The data was used to identify and eliminate the disease in seed plant fields to reduce the number of diseased seeds that were distributed to the rest of the state.

Upon graduation from ISU, Dusten began to work as a geologist on projects in the gold mining industry. He first worked as the field mapping geologist for Kinross Gold Corporation at their Curlew Basin Project near Republic, Washington. He then moved to Elko, Nevada, to specialize in collecting data used for borehole geophysics and hydrophysics working for Colog, Inc. Prior to coming to OWRD, Dusten most recently worked as a Mine Geologist at the Goldstrike Underground Mine north of Carlin, Nevada. He was responsible for planning and managing the grade control drilling programs across multiple deposits and ore bodies.

In his free time, Dusten likes to ride mountain bikes, snowboard, play golf, watch sports on television, and spend time outdoors with his family and dogs. Dusten is in the Bend office and may be reached at (503) 798-3196 or [Dusten.L.Lish@water.oregon.gov](mailto:Dusten.L.Lish@water.oregon.gov).

# CASING HEIGHT IN FLOOD ZONES

When a well constructor leaves a drilling site after completing a well, the well construction standards require that the casing height extends a minimum of 12-inches above the finished ground surface or pumphouse floor, and a minimum of 12-inches above the local surface runoff level, which includes the 100-year FEMA flood elevation. In order to check if a property is in a flood zone, drillers are encouraged to refer to the following link for detailed flood elevation maps: <https://msc.fema.gov/portal/search?AddressQuery>

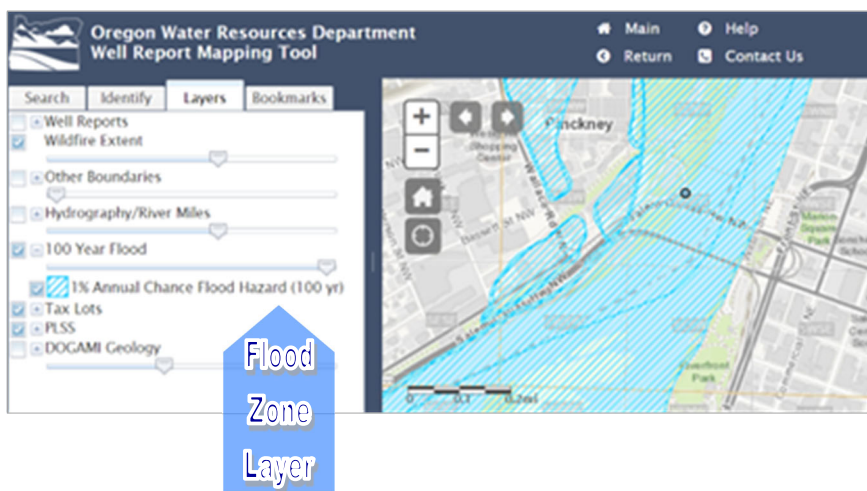
To inform well constructors that a well is located within a 100-year flood zone, the Department has added a new layer, and an alert, to the proposed well location section of an e-filed start card. When GPS coordinates are entered into the e-file system and the driller clicks calculate TRS, the e-file system will provide an alert if the well is located within a 100-year flood zone. Additional warnings will also appear if the well is located within a special well construction standards area, or a groundwater restricted area.

Drillers filing a start card within the 100-year flood zone are encouraged to contact the regional well inspector, well construction program coordinator, or well construction compliance coordinator, so that a minimum casing height determination can be made.

The screenshot shows the 'Proposed Well Location' form. It includes fields for 'Street address of well, if not assigned, nearest address:', 'Location Description' (with latitude/longitude input), and 'TRS-OO' (Township, Range, Section, QGID). Below these are checkboxes for 'Special Well Const. Standards Area', 'Groundwater Restricted Area', and '100 Year Flood Zone: Yes'. The '100 Year Flood Zone: Yes' checkbox is highlighted with a red circle. A map below the form shows a red 'X' marking a well location within a blue-shaded flood zone.

**Flood Zone Warning**

In order to help simplify the planning for drilling projects, the 100-year flood zone layer has also been added as an option to the Well Report Mapping Tool (shown below) at [https://apps.wrd.state.or.us/apps/gw/wl\\_well\\_report\\_map/Default.aspx](https://apps.wrd.state.or.us/apps/gw/wl_well_report_map/Default.aspx)



Since GPS coordinates are now required on all start cards and well reports, the Department can offer additional tools to the drilling community to make their drilling projects more efficient. Whether that means tracking down a legal description, reviewing a special well construction standards area, or discovering that a drill site is in a flood zone, the Department has tools to help and is actively pursuing additional tools as they become available.

For more information, please contact Travis Kelly, Well Construction Compliance Coordinator, at (971) 304-5079 or [Travis.N.Kelly@water.oregon.gov](mailto:Travis.N.Kelly@water.oregon.gov).



# PHOTOS FROM THE FIELD



A deficient well seal in eastern Oregon.



A monitoring well in northwest Oregon.



A flowing artesian well in south central Oregon



Drilling a well in south central Oregon.



**WELL CONSTRUCTION SECTION**  
**OREGON WATER RESOURCES DEPARTMENT**  
725 SUMMER ST NE, SUITE A  
SALEM, OR 97301

## WELL SAID NEWSLETTER - Oregon Water Resources Dept

Jan 2024 - Issue 74

### Well Construction Section Staff Directory

Kristopher Byrd, Manager  
[Kristopher.R.Byrd@water.oregon.gov](mailto:Kristopher.R.Byrd@water.oregon.gov)  
(503) 991-2470

Travis Kelly, Well Construction  
Compliance Coordinator  
[Travis.N.Kelly@water.oregon.gov](mailto:Travis.N.Kelly@water.oregon.gov)  
(971) 304-5079

Tommy Laird, Well Construction  
Program Coordinator  
[Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov)  
(503) 302-8618

Buffy Madrigal-Adams, License and  
Compliance Specialist  
[Buffy.M.Madrigal-Adams@water.oregon.gov](mailto:Buffy.M.Madrigal-Adams@water.oregon.gov)  
(971) 287-8305

Ladeena Ashley, Well ID Program  
Coordinator  
[Ladeena.K.Ashley@water.oregon.gov](mailto:Ladeena.K.Ashley@water.oregon.gov)  
(971) 287-8218

Linda Walker, Well Report Review  
Coordinator  
[Linda.K.Walker@water.oregon.gov](mailto:Linda.K.Walker@water.oregon.gov)  
(971) 287-8201

Scott Kudlemyer, Well Program  
Specialist  
[Scott.B.Kudlemyer@water.oregon.gov](mailto:Scott.B.Kudlemyer@water.oregon.gov)  
(971) 287-8360

WCC Section Fax: (503) 986-0902

### Region Office Directory

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

Southwest  
Phone: (541) 774-6880  
Fax: (541) 774-6187

Central  
Phone: (541) 591-2115

South Central  
Phone: (971) 375-5424

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

Eastern  
Phone: (541) 523-8224 x231  
Fax: (541) 550-3898

