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### 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, suggestions, or to subscribe to this newsletter, contact 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.*

## HOUSE BILL 2808 - WELL CONSTRUCTION PROGRAM FEE INCREASES

There are more than 280,000 water wells in Oregon, with approximately 3,000 new wells drilled annually. In 2021, the Department was resourced to implement new statutory obligations to complete a technical review of 100 percent of well reports submitted within 120 days of receipt (ORS 537.765). Additionally, those resources allow the department to conduct field inspections of about 30 percent of new wells drilled. There are a total of 18 staff members who work in or support the well construction program. These positions include well inspectors, licensing, program development and oversight, as well as information technology, administrative support and compliance.

To address a funding shortfall due to increasing program costs, the Oregon Legislature passed House Bill 2808 (2025), that increases program fees effective July 17, 2025.

Key fee increases to be aware of include:

Fee	Old Fee	New Fee
Start Card	\$350.00	\$490.00
Well Constructor License Examination Fee	\$20.00	\$25.00
Well Constructor License Fee	\$150.00	\$165.00
Well Constructor License Renewal Fee, if renewed on or before expiration	\$150.00	\$165.00
Well Constructor License Renewal Fee, if an expired license is renewed on or before 12 months of expiration	\$250.00	\$275.00
Landowner Well Constructor Permit Fee	\$500.00	\$550.00
Continuing Education Courses sponsored by OWRD - per credit hour	\$40.00	\$45.00
Continuing Education Courses sponsored by OWRD - total fees per day may not exceed	\$250.00	\$275.00

For more information on House Bill 2808 (2025), please visit our website at: <https://www.oregon.gov/owrd/programs/GWWL/WCC/resourcesforwellconstructors/Pages/default.aspx> or contact Bryn Hudson, Legislative Coordinator, at (503) 302-7584 or [Bryn.Hudson@water.oregon.gov](mailto:Bryn.Hudson@water.oregon.gov).

For questions about the Well Construction Program, please contact Travis Kelly at (971) 304-5079 or [Travis.N.Kelly@water.oregon.gov](mailto:Travis.N.Kelly@water.oregon.gov).

## OCTOBER 2025 WELL CONSTRUCTOR LICENSE EXAM

The next well constructor license exam is scheduled for October 13, 2025, at the Oregon Water Resources Department's (OWRD) office in Salem. To sign up for the exam, please complete the application located on the first two pages of the study guide. Once completed, mail the application and exam fee to the Salem office. The study guide and other exam materials, including practice exams and video tutorials, can be found on the OWRD website under [Licensing Exam Information](#).

Here are the results of the April well constructor license exam:

- Two water supply well license examinees passed the exam and were issued licenses after providing proof of their well drilling experience.
- Two monitoring well license examinees passed the exam and were issued licenses after providing proof of their well drilling experience.
- Three monitoring well license trainees were issued licenses after gaining and proving their well drilling experience.

Please contact Buffy Madrigal-Adams, Well Licensing Specialist, for questions regarding the exam or drilling experience requirements. She may be reached at [Buffy.M.Madrigal-Adams@water.oregon.gov](mailto:Buffy.M.Madrigal-Adams@water.oregon.gov) or (971) 287-8305.

## CONTINUING EDUCATION COMMITTEE SEEKS NEW MEMBERS

The Department's Well Constructors Continuing Education Committee is seeking two new members: one person with expertise in groundwater quality or public health, and one person with expertise in employee safety. The Continuing Education Committee is a six-member body appointed by the Director and comprised of three individuals from the well construction industry; one person from the Department; one person having expertise in ground water quality or public health; and one person having expertise in employee safety.

The duties of the Well Constructors Continuing Education Committee are to review and approve coursework submitted by sponsors, and to determine the category and number of continuing education credits (CECs) to assign. The committee meets approximately 4-5 times a year; the committee does not typically meet during the summer months due to the timing of the well constructor licensing cycle, which ends June 30th.

The two open positions on the committee will have appointments beginning July 1, 2025, or when appointed, through June 30, 2028. For those who wish to serve on the committee, please submit a letter of interest to:

Ivan Gall, Director  
Oregon Water Resources Department  
725 Summer St NE, Suite A  
Salem OR 97301-1266

For additional information, please contact Buffy Madrigal-Adams at (971) 287-8305 or [Buffy.M.Madrigal-Adams@water.oregon.gov](mailto:Buffy.M.Madrigal-Adams@water.oregon.gov).

## WELDED STEEL CAPS

During routine well inspections, well inspectors have found that welded steel caps on wells are **not** meeting the minimum requirements required by Oregon Administrative Rule (OAR) 690-220-0005. Temporary steel caps may be welded to the well casing with a minimum of four separate welds, each at least **3/16 of an inch long** and evenly spaced around the casing. The cap itself must be at least 3/16 of an inch thick and made of **steel** or **cast iron**. The welded cap is also required to have an **access port** that is a **minimum diameter of 1/2-inch** for the purpose of determining the water level in the well at any time. The access port is required to be installed by the well constructor **before** removing the drilling machine from the site.

Welded caps that do not meet the requirements listed above are a well construction deficiency. Well inspectors who find welded caps that do not meet the minimum requirements will be contacting the well constructor and sending repair letters to bring the well caps into compliance.

For more information on well caps, 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).

# MULTIPLE START CARDS ON ONE TAX LOT

When a well constructor is in a situation where they need to file an additional Start Card for the same tax lot, they can avoid waiting 72-hours to begin work by selecting “second/additional well” from the drop-down menu in the Start Card application. For example, if the first hole is dry and another attempt is made to find water, a well constructor can begin work on the second well immediately after filing an additional Start Card and fee by indicating that the well is on the same tax lot as a previously submitted Start Card.

As a reminder, every Start Card requires a Commence Work Notification to be submitted, including Start Cards submitted for the same tax lot. Oregon Revised Statute (ORS) 537.762, requires that on the day that work on the well commences, the licensed or permitted person shall, *before* beginning well construction, notify the Department that the work is about to begin. The Seal Placement Notification is only required if the well constructor is placing the seal on a day that is different than the proposed date on the Start Card. If the seal will not be placed on the proposed date, the well constructor must notify the Department of the change at least four hours before placing the seal using “Manage Pending Start Cards” within the Start Card e-file application.

For more information regarding multiple Start Cards on the same property, 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).

## TIMELY CUSTOMER SERVICE



At Oregon Water Resources Department, we understand that clear and timely communication is essential to serving the public and supporting well constructors in the office or on the job site. Whether well constructors are reaching out with a question about water right permits, well construction standards, inspections, or reporting requirements, we want everyone to know we are here to help, and we are committed to doing so promptly. In instances where Department staff are out of the office and unable to respond, they will provide an alternate contact person in case immediate assistance is required.

To ensure consistent service, Department staff aim to return all phone calls and emails as soon as possible, and no later than one business day. This timeframe allows us to provide thoughtful, accurate responses while balancing the volume of inquiries we receive across the state. We recognize that delays can impact project timelines and cause unnecessary frustration. If your request is time-sensitive, please indicate that in your voicemail or subject line, and we will do our best to prioritize accordingly.

### Help Us Help You!

Here are a few tips to help us respond efficiently:

- Include your name, license number, and contact number
- Include any Start Cards, well reports, or water right permits associated with the question.
- Be as specific as possible about your question or concern.

We appreciate your patience and partnership. Thank you for helping us maintain high standards of communication and customer service!

# THANK YOU!

## CASING HEIGHT REQUIREMENTS AND FLOOD ZONE CONSIDERATIONS

Oregon Administrative Rule (OAR) 690-210-0250 outlines top terminal height requirements for well casings to help prevent surface water from entering and compromising wells. These standards apply to all water supply wells constructed in the state and are intended to **reduce the risk of contamination** due to surface water runoff or site-specific environmental conditions.

The rules state that the casing head or pitless unit must extend at least **12 inches above** both the finished ground surface (or pumphouse floor) *and* the highest point of local surface runoff. This dual requirement ensures that wellheads are protected from water inundating or pooling around the site, which can introduce surface contaminants. **Proper grading around the wellhead is also essential** to direct pooling water away from the casing and prevent infiltration.

It is especially important to consider casing height in flood-prone areas where wells are at a greater risk of submersion during high water events. For wells located within the designated FEMA 100-year floodplain, the casing must extend at least **one foot above the Base Flood Elevation (BFE)**, the elevation corresponding to a flood that has a 1% chance of occurring in any given year. This elevation is also used to represent the highest point of local surface runoff. Meeting this requirement helps protect the wellhead from floodwater intrusion and reduces the potential for contamination. If you are unsure whether a well is in a FEMA flood zone, or have questions about meeting casing height requirements, contact your regional well inspector for guidance.

**Exceptions to this standard are rare and must be approved by the department.** Requests must clearly describe the site's physical limitations and proposed alternative protective measures. Approval is only granted when those measures, combined with the site conditions, provide equal or better protection than the standard height requirement.

Maintaining proper casing height not only helps protect public health and the environment, but it also ensures compliance and long-term usability of the well.

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

## MAINTENANCE OF EXISTING WELL AFTER CONSTRUCTION OF REPLACEMENT

When constructing a new water supply well to replace an existing one, it's important to ensure that the old well does not pose a risk to the resource or public health. Oregon Administrative Rule (OAR) 690-215-0010, states that if an existing well is a source of contamination or is wasting groundwater by allowing the loss of artesian pressure or the commingling of aquifers, **it must be either properly repaired or permanently abandoned.**

Contaminated wells create a conduit for pollutants to migrate into clean aquifers, while improperly sealed wells can allow water from different aquifers to mix, reducing water quality and pressure. Additionally, wells leaking artesian pressure waste the groundwater resource. If the existing well on the property is found to be a source of contamination, waste of the groundwater resource, or is commingling aquifers, then it must be brought into compliance by either repairing the well to minimum construction standards, or it must be permanently abandoned. Properly repairing or abandoning wells that pose a health or resource risk is essential in **protecting water quantity and quality**, while also meeting Oregon Well Construction statutes and rules.

If you have questions regarding maintenance of an existing well, please contact Tommy Laird, Well Construction Program Coordinator, at [Tommy.K.Laird@water.oregon.gov](mailto:Tommy.K.Laird@water.oregon.gov) or (503) 302-8618.

## ABANDONMENT OF EXISTING WELL FOLLOWING REPLACEMENT

When a well constructor drills a new well for a landowner with an existing well, it is important to be aware that the existing well must be abandoned if it is located within a setback as defined in Oregon Administrative Rule (OAR) 690-210-0030. Proper, permanent abandonment of wells within setbacks helps to protect the groundwater resource and public health.

Well constructors should work with landowners to determine if the existing well is located within setbacks. If it does not meet setback requirements, the landowner is required to abandon the well within one year of the function of the well being replaced or one year after the water right (if applicable) is transferred to the new well, whichever is later. Landowners who fail to comply are subject to formal action, including the assessment of civil penalties.

For more information 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).

## DRILLING NEAR AIRPORTS: FAA REGULATIONS YOU NEED TO KNOW



When planning a drilling project near an airport, it is critical to understand and comply with Federal Aviation Administration (FAA) regulations. Whether it is constructing a water well, geothermal system, or monitoring well, proximity to an airport can trigger additional requirements designed to protect air traffic and navigational safety. Under Title 14 of the Code of Federal Regulations (CFR) Part 77, any construction or drilling activity within certain distances of an airport must be reviewed by the FAA. The well constructor is required to file a Notice of Proposed Construction or Alteration (Form 7460-1) if the project involves:

- Any structure over 200 feet tall above ground level.
- Any construction within 20,000 feet (approximately 3.8 miles) of a public-use airport if the structure exceeds specific height thresholds.
- Drilling activity near runways, approach zones, or navigational paths.

Tall drill rigs, cranes, and associated equipment can pose risks to aircraft, especially during takeoff and landing. Additionally, well construction often includes reflective surfaces, lights, or emissions (dust, steam, etc.) that could interfere with visual or electronic navigational aids.

### Well Constructor Responsibilities:

- File form 7460-1 at least 45 days prior to construction.
- Coordinate with the airport authority and local planning officials.
- Adhere to FAA determinations, which may include marking, lighting, or adjusting the height or timing of your operation.

Failing to notify the FAA or noncompliance with Part 77 can result in enforcement actions, project delays, or safety hazards. If unsure whether the project is impacted, it's better to check early and ensure all aviation safety protocols are followed.

For more information visit: <https://oeaaa.faa.gov/oeaaa/oe3a/main/#/home>





# HISTORY OF THE BAD ELF OLYMPICS



As part of our modernization efforts, the Oregon Water Resources Department (OWRD) established minimum standards for well inspector GPS data, focusing on accuracy and how it is calculated. To meet these requirements, the department adopted GPS units manufactured by Bad Elf, which provides the precision needed for our inspections. Over time, the well inspectors became known as "Bad Elves," a nickname that started as an inside joke but quickly became a badge of honor. This tradition eventually led to the creation of the Bad Elf Olympics, an annual event celebrating the inspectors' hard work, dedication, and achievements in the field.

Using Survey123, inspectors visit and document well sites, and the inspector with the most total sites visited earns the prestigious gold medal and the title of "Bad Elf." This event is the culmination of our modernization efforts, celebrating our success in meeting quotas—inspecting at least 30% of all new well Start Cards—and showcasing the impact of our fully digital inspection process. By streamlining data collection, accessibility, and accuracy, OWRD has transformed the way inspections are conducted, improving efficiency across the board.

These achievements are not the result of individual efforts alone, but a testament to the collective experience, innovation, and dedication of our entire team. Together, we have built a smarter, more efficient inspection process, setting new standards for excellence. Join us as we celebrate our shared success and honor the top inspectors who lead the way!

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

## NEW STAFF

### CARLEY MAYES, NEW CENTRAL REGION WELL INSPECTOR

Please join the Oregon Water Resources Dept (OWRD) in welcoming Carley Mayes as the new Central Region Well Inspector out of the Bend regional office. Carley's first official day with the Department was June 13, 2025. Expect to see her around your drill sites as she participates in training with OWRD staff. Stay tuned for the October 2025 issue of the Well Said for Carley Mayes' biography.

Carley Mayes, Central Region Well Inspector, may be contacted at (971) 493-9414 or [Carley.N.Mayes@water.oregon.gov](mailto:Carley.N.Mayes@water.oregon.gov).

# MEET KATIE RATCLIFFE



Katie Ratcliffe joined the Oregon Water Resources Department (OWRD) in November 2021 as a Protest Program Specialist. In April 2022, she became the Water Rights Section Manager, and in February 2025, began her current role as the Water Right Services Division Administrator. The division relies on the expertise of OWRD's Well Construction Program to determine if wells subject to water right transactions meet well construction standards.

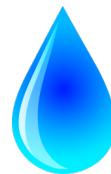
While now fully immersed in the water resources realm, water has been an undercurrent throughout Katie's career. She began her career as a natural resource economist assessing the economic value of tribal water right claims. At a consulting firm, she established a permitting practice and oversaw large technical teams evaluating water-intensive energy and mining projects. When public service called, she joined the Oregon Department of Energy, where she evaluated applications for large energy facilities against local and state requirements, including Oregon water law.

Katie earned her Bachelor of Arts degree in Environmental Studies, with a minor in Economics, and maintains her Project Management Professional (PMP) certification. In her free time, she enjoys managing a small acreage property in farm and forest country with her husband and teenage sons, supporting the Harborton Frog Shuttle, and scuba diving.

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# STAY HYDRATED, STAY SAFE

As temperatures rise, so do risks associated with heat-related illnesses on the job. Whether someone is drilling wells, inspecting sites, or working construction, staying hydrated is one of the simplest and most effective ways to protect your health and safety. The Occupational Safety and Health Administration (OSHA) emphasizes the importance of proper hydration as a critical part of its Heat Illness Prevention Campaign.



According to OSHA guidelines:

- Workers should **drink water every 15 to 20 minutes**, even if they are not thirsty.
- Each worker should consume about **one quart of water per hour** during moderate to high heat conditions.
- **Cool, clean drinking water** must be readily accessible to all employees at the worksite.

Dehydration can impair judgment, reduce physical strength, and increase the risk of heat exhaustion or heat stroke, a potentially fatal condition. Early symptoms include dizziness, fatigue, muscle cramps, and nausea. Left untreated, heat illness can quickly escalate into an emergency.

Water, rest, and shade are your best defenses.

Hydration isn't just a personal responsibility, it is a **shared safety standard**. Make it part of the **daily routine** to keep everyone on the team healthy and productive throughout the hot season.

**Stay cool. Stay safe. Stay hydrated.**

For more information regarding hydration, please visit the OSHA website:

<https://www.osha.gov/heat-exposure/water-rest-shade>



## BEWARE OF HAZARDS

Oregon drillers have recently reported encountering rattlesnakes and mountain lions on drill sites, so the Department wanted to take this opportunity to remind those working in the field to be cautious of those hazards, as well as the following:



Aggressive rattlesnake recently encountered on drill site

- Poison Oak
- Ticks
- Hornets, Wasps, Bees and Fire Ants
- Fire danger
- Aggressive pets
- Scorpions and Poisonous Spiders
- Bears, Cougars

For more information about worksite safety, please visit the OSHA website at: <https://www.osha.gov/complianceassistance/quickstarts/construction>



# PHOTOS FROM THE FIELD



Dug well with debris in SW Oregon.



Inspecting a well in SW Oregon.



Goats helping with well inspection in Eastern Oregon.



New well in NW Oregon.



**WELL CONSTRUCTION SECTION**  
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## WELL SAID NEWSLETTER - Oregon Water Resources Dept

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### Well Construction Section Staff Directory

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