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CRWP YouTube Channel



WINTER 2024 News

2024 Water Calendars are Now Available!



Each year the Clackamas River Water Providers invite teachers and their students to participate in our annual *Kids Water Calendar* coloring contest.

The theme for the 2024 Calendar is "Saving Water is Easy!". Students from 32 classes and 15 different schools throughout our CRWP member service areas submitted pictures depicting what saving water looks like to them. Of the roughly 900 pictures submitted, thirteen pictures were chosen to be in the calendar and displayed on the CRWP website

for two weeks so family, friends, and our community members could vote for which one of the 13 pictures would be on the cover.

During the month of October each school that participated in the contest received a box of calendars to give away to students and families. In addition, the 2024 calendars are available to the public at your water providers front offices, local libraries, and upon request by contacting our office at 503-723-3511 or by emailing christine@clackamasproviders.org.

The CRWP annual calendar contest continues to be one of our most successful projects because of the enthusiastic participation of our teachers, students, and community members. Thank you to everyone for your participation and support.

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New! Hose End Water Meter - \$25 Rebate



The CRWP provides our member customers with tools and devices to help you better conserve and efficiently use your drinking water. Our Rebate Program is one of those tools offering many different rebates to fit the many different needs of our communities.

New to our [rebate program](#) is a \$25 **Hose End Water Meter** rebate. These Hose End Water Meters are easy to install, battery operated, and will let you know exactly how much water you are using. It fits 3/4-inch standard outdoor hoses and faucets, calculates both single-use and total water consumption, and can be calibrated allowing users to make adjustments to fine tune measurements reporting data in Gallons, Liters, Pints and Quarts. There are many different types and style of Hose End Water Meters ranging from \$20-\$50.

For more information and to apply online visit the [Conservation Rebate](#) page on our website. Have questions? Email christine@clackamasproviders.org.

CHRISTINE HOLLENBECK, Public Education and Conservation Program Coordinator, (503) 723-3511 • christine@clackamasproviders.org
KIM SWAN, Water Resource Manager, (503) 723-3510 • kims@clackamasproviders.org

Conservation Tools

Winter is the perfect time to look at your indoor water use and see if there are things you can do to make your water use more efficient. The Clackamas River Water Providers have a number of FREE conservation tools and devices to help you save water at home. To request any of the devices listed below, please email christine@clackamasproviders.org or call 503-723-3511.



Water Audit Kits

Performing an audit on your water use will help you understand where you can save the most water. This process is simple and may take an hour to complete. It will help you locate leaks, prioritize fixing them, and help you start saving money and water.

Leak Detection Tablets

Leak detection tablets are small tabs that you drop in the tank of the toilet to test your toilet for leaks. Learn more about fixing [faucet](#) or [toilet](#) leaks.

Toilet Fill Cycle Diverter

When a toilet is flushed, both the tank and the bowl need to be refilled. On many toilet designs, the bowl will fill sooner than the tank. In this case, the water will continue to run into the bowl until the tank water level is high enough to shut off the fill valve. Water that enters the bowl after it is full simply overflows down the drain and is wasted. The fill cycle diverter directs more water to the tank and less to the bowl during refill. The goal is to have both the tank and the bowl finish filling at the same time, or as close to the same time as possible. Estimated savings are ½ gallon per flush (gpf).

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Source to Tap – Protecting Water Quality

A safe, reliable water supply is critical to the success of any community. It creates jobs, attracts industry and investment, and provides for the health and welfare of citizens in ways ranging from disease prevention to fire suppression.

As our populations continue to grow, so does the demand for high quality water. Conserving and protecting the Clackamas River and investing in our water infrastructure will play a key role in making the best use of this precious resource we share. Safe drinking water is our top priority and we are here to monitor and protect it from its source to your tap.

SOURCE: Our drinking water source comes from the Clackamas River. This river supplies high-quality drinking water to over 300,000 people in Clackamas and Washington Counties. The Clackamas River Water Providers are working hard to identify, prevent, minimize, and mitigate activities that have known or potentially harmful impacts on drinking water quality. This enables us to preserve the Clackamas River as a high-quality drinking water source, and to meet the needs of an increasing human population into the future.

FILTRATION & TREATMENT: We have five water treatment plants on the Clackamas River where water is taken out of the



river and treated before it is used as drinking water. Water treatment is the process of removing undesirable chemicals, biological contaminants, suspended solids and

gases from the raw water. The result is water fit for human consumption, or drinking water.

STORAGE & WATER LINES: Our water systems have hundreds of miles of transmission, distribution and service lines, hundreds of valves and fire hydrants, reservoirs and pumping stations which move water from our treatment plants to home, offices and industries in our service areas. These systems allow us to provide an uninterrupted supply of pressurized safe drinking water to our consumers.

TAP WATER: Clackamas River Water Providers member's drinking water is closely regulated by both the Environmental Protection Agency (EPA) and the Oregon Health Authority (OHA). Our staff and testing experts conduct more than a thousand tests every month in our source water, drinking water treatment plants, and in our distribution systems. This continuous monitoring of quality and safety, ensures that our drinking water more than meets strict federal and state drinking water standards.

Conservation Tools continued

1.0 gpm Bathroom Faucet Aerator

An aerator reduces the amount of water that comes from the tap without impacting water pressure. It uses only 1.0 gallon per minute (gpm).

Kitchen Faucet Aerator

This aerator is for your kitchen or utility sink, and flows at 1.5 gallons per minute (gpm).

1.0 gpm Bathroom Shower Head

This shower Head reduces the amount of water that comes from the tap without impacting water pressure and uses only 1.0 gallons of water per minute (gpm).

5-minute Shower Timer

Taking a shorter shower, in combination with using a low-flow showerhead, can result in significant savings. This timer suction onto your shower wall, and when all the sand has run through, time's up! (Note: This device does not "shut off" the water after 5 minutes, although many parents of teenagers have asked for this feature!)



For more information about the water conservation tools and devices the CRWP provides visit our website [here](#).

Emergency Preparedness

It is the start of a new year and the perfect time to make sure your emergency preparedness supplies are up to date and ready for any winter storms or other emergencies that might result in power outages. Water is a critical component of these supplies so make sure you have one gallon of water per person, per day for two weeks (14 gallons) and don't forget to have water for your pets.

Need to know more about what should be in your emergency preparedness kit? There is a lot of good information out there on how to make sure you are prepared.

The links below provide resources and information on how to prepare as well as local contact information regarding emergencies.

- [Regional Water Providers Consortium](#) – This website has information on how to store emergency water, emergency water sources, and how to treat emergency water.
- [Ready.gov](#) – This website offers excellent advice for utilizing water supplies in your home from your water pipes, water heater and other sources and how to safely treat water.

- [Red Cross](#) – Good information on how to prepare for an emergency and what you should have on hand.
- [Clackamas County Public Alerts](#) – Opt-in to receive critical emergency messaging via email, phone call and text during times of disaster.
- [Preparedness 101: Zombie Pandemic](#) – The CDC has a fun new way of teaching the importance of emergency preparedness.
- [Clackamas County Disaster Management](#) – A 20-page booklet about ALL aspects of preparedness including sections for specific disasters.
- [Oregon Office of Emergency Management](#) – A detailed list of Hazards and Preparedness, Emergency Management Resources, and much more.
- [FEMA Guide on Food and Water in an Emergency](#) – If an earthquake, hurricane, winter storm, or other disaster strikes your community, you might not have access to food, water, and electricity for days or even weeks. By taking some time now to store emergency food and water supplies, you can provide for your entire family.

Winter Quiz:

1. We monitor and protect your water from source to tap. This includes :

- A. Filtration
- B. Storage/Distribution
- C. Treatment
- D. All of the Above

2. Which item is new to our Rebate Program:

- A. Toilet Rebate
- B. Hose End Water Meter
- C. Hose Bib Timer
- D. There is nothing new

3. Before winter's freezing temperatures, it's best to:

- A. Detach hoses from all outside faucets
- B. Turn off and drain automatic sprinkler systems
- C. Insulate your faucets with foam caps
- D. All of the Above

4. A water pressure zone is a geographic section of a water distribution network that is determined by the elevation of the area served.

- A. True
- B. False

Answers - Can be found on page 7

Winterization

Make sure your home and family are prepared for the cold winter months.

Teach everyone in your household where your [emergency water shut-off valve](#) is and how to use it. In residential homes, most shut-off valves are in the crawl space, basement, garage, or outside near the foundation. If a pipe bursts inside your home, this valve will turn the water off.

Before Winter's Freezing Temperatures

Outside your home

- Detach hoses from all outside faucets (spigots). Insulate your faucet with a foam cap or another insulating material. Foam caps are available at most hardware or home improvement stores for about \$5.
- If your outdoor faucet has its own shut-off valve (usually located in the basement or crawl space), turn it to the right to shut it off. Then turn on each outdoor spigot to drain the water from the pipes.
- Turn off and drain automatic sprinkler systems and backflow assembly devices. Wrap backflow devices with insulating material. Learn more ways prepare your irrigation system for winter with [these maintenance tips](#).

Inside your home

Insulate hot and cold pipes that are in unheated areas in your such as the garage, crawl space, or attic. Cover foundation vents with foam blocks, thickly folded newspaper, or cardboard.



During Winter's Freezing Temperatures

If you haven't already, make sure you complete the "Before Winter" steps above. Water pipes are more likely to break when we have freezing weather. You can keep the water in your pipes from freezing with these tips:

Turn on the faucet farthest from your water meter so that it has a slow and steady drip. Not sure where your water meter is located? Turn on a faucet that is farthest from the street, like in the back of your home or upstairs. This will keep water moving and make it less likely to freeze in your pipes.

You can also open kitchen and bathroom cabinet doors to let the warmer air from the rest of your home into that space. This will help keep the pipes in your home's walls from freezing.

This article provided by the Reginal Water Providers Consortium

Winter Conservation Tips

- Wash your car at a commercial car wash that recycles its water.
- Thaw frozen food in your refrigerator, not in the sink with running water.
- Run the dishwasher only when it is full.
- If you leave home for several days, put your furnace on a low setting (50 degrees). This may not prevent freezing pipes but it can help.

Faces of Drinking Water

To kick-off a new year we would like to introduce Jason Hoyer, the new Water Conservation Specialist for the City of Lake Oswego. Jason began his new position with the City of Lake Oswego late last summer and we are very excited to have him aboard and look forward to working with him to help support the City's conservation program.

CRWP: How long have you been working for the City of Lake Oswego?

JASON: Five years ago, I started in the wastewater collections department, then moved into water treatment 2 years ago.

CRWP: How did you acquire your position with the City of Lake Oswego?

JASON: I was an operator at the treatment plant when the conservation specialist position opened-up. I have pursued outreach and educational messaging for previous projects, and thought that it would be a rewarding career to move into conservation.

CRWP: What was your background prior to working in drinking water?

JASON: I was a telecommunications auditor and travelled the country on annual contracts. During a visit to the Portland Metropolitan area, I went mountain biking near the Bull Run Watershed and was curious to learn more about the system. I enrolled in the Water & Environmental Technology program at Clackamas Community College and landed my first job in the industry.

CRWP: What is your favorite/ least favorite part of your position?

JASON: My favorite part has been learning about the conservation efforts and backgrounds of the different stakeholders in the local industry. Becoming aware of how many hard-working folks are collaborating to protect our water sources has been inspiring as I carry out our program at Lake Oswego.

CRWP: Do you plan on retiring from the City of Lake Oswego?

JASON: I see no reason why I wouldn't, but there are (hopefully) a few years remaining in my career.

CRWP: What accomplishments are you most proud of in your career?

JASON: I am most proud of the relationships I have formed with other staff and community members.

CRWP: What advice would you give to someone starting out in the field (What do you wish you knew your first week working in drinking water)?

JASON: The water industry offers many opportunities. Keep an open mind, but be honest about your goals and interests to find a

by Christine Hollenbeck

Jason Hoyer
Water Conservation Specialist
City of Lake Oswego



path that suits you. Show up to work on time, ask lots of questions, and leave your phone in your pocket.

CRWP: What do you think is most important about your position?

JASON: The most important part of my position is collaborating with the stakeholders, such as the Clackamas River Water Providers, to ensure we have adequate water for customer needs and environmental protections.

CRWP: What would you like the public to know about their drinking water?

JASON: I would like the public to know that water conservation takes effort from all of us. On a city level we are employing programs to monitor and use our water wisely, and there are many people involved in making these programs successful.

CRWP: What can the public do to help make your job easier?

JASON: We offer [many resources](#) for the public to learn about water conservation. Please explore these and contact me at jhoyer@ci.oswego.or.us with any questions or suggestions – I'm happy to hear from our residents.

CRWP: What is the one thing you can't live without at work?

JASON: KMHD – *Jazz Without Boundaries* playing at my standing desk.

CRWP: What would you say water is to you?

JASON: Water is a finite resource that takes careful work to deliver safely.

CRWP: What do you do for fun outside of work?

JASON: When I'm not chasing my 1-year-old around the house, I like to cook, appreciate music, and (patiently) watch a Blazers game.

Thank you, Jason for giving us a chance to introduce you to our CRWP members and customers. We welcome you to our member family and look forward working with you and sharing the responsibility of educating our customers about the Clackamas River and the importance of conserving it as a drinking water source and natural habitat.

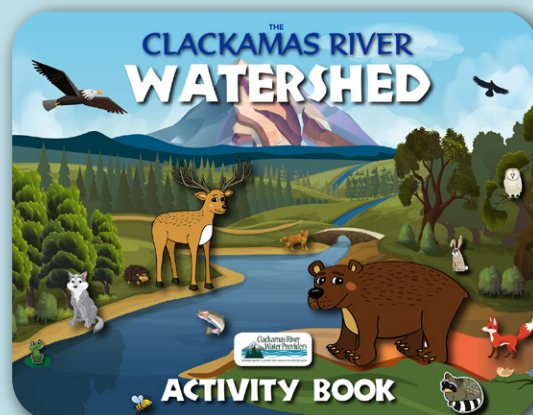
Stormwater Pollution:

The CRWP offers an [Activity Book](#) that teachers can use to help inform students about the importance and value of clean water, and how to protect this precious resource. It includes many cool games, puzzles, and activities to become more familiar with the Clackamas River Watershed where we get our high quality drinking water.

Unscramble the words to complete the tips on how you can prevent stormwater pollution and protect our watershed.

1. **EPWSE** the driveway instead of hosing it off to keep debris out of the storm drain. _____
2. Never **PUDM** motor oil, antifreeze, pesticides, or any toxic materials down storm drains or onto the ground. _____
3. Ask your parents to **EYECRCL** used motor oil. _____
4. Water the lawn for **TROSRHE** periods to prevent runoff. _____
5. Pick up **ETP TAWES** and put it in the garbage. _____
6. **SWHA** the car on the lawn or at the car wash, so dirt, oil and soap don't end up in the storm drain. _____
7. Make sure your car is not leaking **LIO** or **DIFSUL**. _____
8. **NLATP** trees along streams to keep the **AKBSN** from eroding. _____

1. SWEEP
2. DUMP
3. RECYCLE
4. SHORTER
5. PET WASTE
6. WASH
7. OIL, FLUIDS
8. PLANTS, BANKS



DID YOU KNOW?

All storm drains lead directly to a local river, creek, or stream.

How Water Systems Work

Pressure Zones

Because most of our water service areas are not flat most water systems have multiple water pressure zones. A water pressure zone is a geographic section of a water distribution network that is determined by the elevation of the area served.

The pressure in the water system, known as hydraulic pressure, is created by gravity pulling a column of water downwards. At an average height of about 120 feet, water towers properly pressurize the water distribution pipes within a pressure zone.

Within a pressure zone, a minimum pressure is established by pumping stations or reservoirs. Water does not flow between pressure zones unless it flows from a higher-pressure zone to a lower-pressure zone, through a pressure reducing valve. Water pressure in a pressure zone typically ranges from 40 to 130 psi (pounds per square inch) but may be higher.

PUMPING STATIONS

Most water systems are designed to utilize gravity to efficiently move water throughout the distribution system. When the use of gravity cannot be utilized, pumps take over to move the water.

The energy required to pump water is an extremely demanding component of water distribution system. Since electrical power for pumping is a major expense, the goal is to develop a system which minimizes pumping.

Pump stations fall into two different categories. The first type lifts water from lower elevations to fill water reservoirs located at various high points. From there gravity takes over to supply customers at the lower elevations.

For other areas where customers cannot be served by gravity, another option exists, the booster pump. These stations pump water to customers and help ensure adequate pressures are maintained at all times.



CRWP members have numerous pumps and pump stations in various locations throughout their service areas. Distribution system operators don't use all of the pumps in the system at the same time; rather they cycle them on and off based on the demand.

Some pump stations will always have pumps running, i.e., booster pumps, while others may only be needed in the height of the summer water-use season. Many of our systems have pumps that automatically increase and decrease pumping capacity with shifts in water demand helping us save money on electrical costs.

Winter Quiz:

Answers

Question 1 - Answer is D
Question 2 - Answer is B

Question 3 - Answer is D
Question 4 - Answer is A

Clackamas Watershed Technical Data

Many stakeholders in the Clackamas River watershed monitor water quality to meet regulatory requirements and to better understand the health of the watershed. The CRWP maintains a webpage with links to reports, studies, and technical data for the basin. So if you are looking for data or interested in seeing what kind of work is happening in the basin, check out our webpage at <https://www.clackamasproviders.org/technical-data>.



Water Job Highlight - Civil Engineer



Do you know someone that is interested in a career in Water? The CRWP plans to start highlighting some of the jobs that are currently available within its member agencies. In this newsletter we are focusing on Oak Lodge Water Services who currently has a position open for a Civil Engineer.

Most Water Civil Engineering jobs require a bachelor's degree in Civil Engineering from an accredited program and knowledge of modern civil and environmental engineering principles and practices, with special reference to water delivery, wastewater collections, wastewater treatment and watershed infrastructure.

Oak Lodge Water Services (OLWS) provides drinking water, wastewater services and watershed protection to almost 30,000 citizens of the Oak Grove and Jennings Lodge areas through 9,100 customer connections and 200 miles of water and wastewater pipes. To see more details about this position, go to <https://www.governmentjobs.com/careers/olwsd>.

Civil Engineers are important positions for water providers. They prepare designs and specifications for water storage and distribution, wastewater collections and treatment, surface water quality, and stormwater infrastructure. Assist in development of long-term planning for capital projects and act as project managers to ensure budget and administrative procedure compliance, and timely completion. They assist in the review of building permit applications and reviews assigned street and utility construction plans for compliance and provide information to managers, Board of Directors, contractors, engineers, developers and general public regarding utilities, services and projects.

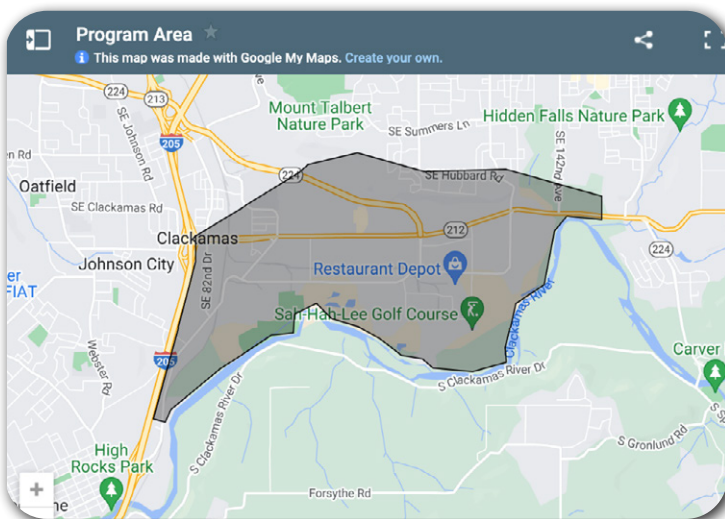


CRWP Partner Article

Pollution Prevention Resource Center (PPRC)

Free Technical Assistance & Equipment Available for Businesses to Protect the Clackamas River

Many businesses in the Clackamas River Water Providers (CRWP) jurisdiction are upstream from four drinking water intakes which provide safe drinking water to over 300,000 residents. Business operations can have substantial impacts on the health of our community and the water we drink. Businesses located in the Clackamas Industrial Area and upstream from the CRWP's drinking water intakes are eligible for free tools and technical assistance.



The CRWP is partnering with Pollution Prevention Resource Center (PPRC), a nonprofit organization that is one of the Northwest's leading sources of high quality, unbiased pollution prevention information, to help implement both technical and financial assistance for spill prevention efforts to businesses located within the Clackamas Industrial area. PPRC will also help distribute spill prevention tools such as spill pallets, spill kits, double-walled tanks, berms, containment trays and even repairs to floor drains.

Interested in learning more? Contact Ara Vickers at avickers@pprc.org or at 206-352-2050, ext.109.

PPRC also implements the EcoBiz program. See our [website](#) for more information.



Sign-up for Public Alerts

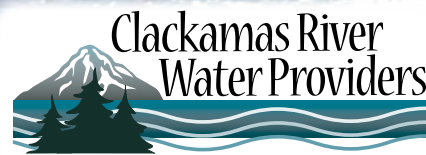
By signing up you can receive emergency notifications for your home or other address (such as business). You will only be contacted when the associated address is affected by an emergency.

If the call is picked up by an answering machine, it will leave a message and not call back. If the number is busy or there is no answer, the system will try contacting your other contact methods. Once you have acknowledged receipt of a message on one device, the system will stop trying to contact your other devices.

#ClackCo^{Wi} PublicAlerts

By providing your contact information as a county resident you can opt-in to receive critical emergency messaging via email, phone call and text during times of disaster. Important messages that could be relayed include notices to evacuate, shelter-in-place, shelter locations and other extremely important information. To learn more and sign-up click [here](#).





Working together to protect and conserve our drinking water.

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Our Members:



www.cwater.com



www.cityofestacada.org



www.ci.gladstone.or.us



www.ci.oswego.or.us



www.oaklodgewaterservices.org



www.sfwb.org



www.sunrisewater.com



www.tigard-or.gov

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