



Winter 2016 News

A Survey of Drinking Water Customers

We want to hear from you!

The Clackamas River provides drinking water to more than a quarter million residents in Clackamas County. In addition to providing high quality drinking water the Clackamas River watershed is one of the state's most productive agriculture areas, an important recreational destination, and important habitat for some of the region's most iconic fish and wildlife.

The Clackamas River Water Providers are working with Portland State University to better understand the attitudes of Clackamas River drinking water customers and their willingness to support ongoing stewardship of their drinking water watershed.

We want to know your thoughts and opinions about programs that promote watershed protection and conservation while providing the highest quality drinking water. The survey should take about 20 minutes to complete

and your response is entirely confidential. To complete the questionnaire online click on the following link:

<http://tinyurl.com/SurveyClackamas>

The information from this survey will contribute to a growing body of work regarding the role that public utilities and their customers play in strengthening and supporting the environmental and economic benefits of local watersheds.



As a thank you for submitting your completed survey, you will be automatically entered into a drawing to receive a **\$100 gift card**.

Protecting our drinking water starts at the source. For more information contact Christine Hollenbeck at: christine@clackamasproviders.org.

6 Water Saving Tips

- Finished with your Holiday baking? Use leftover food coloring to check for toilet leaks.
- Let your dishwasher do the work. The average dishwasher uses about 10 gallons per load. Many kitchen faucets use the same amount by running for just four minutes.
- Thawing food? Use the microwave, a bowl of water, or place it in fridge overnight instead of running the tap. You'll save 2 gallons of water per minute.
- Freeze the grease instead pouring it down the drain and letting the water run. Keep your kitchen sink draining well by pouring all cooking grease into a can, freezing it, and then tossing the frozen contents into the trash.
- Using one glass all day will mean fewer dishes to do. Especially if everyone joins in!
- Scrape instead of pre-rinsing. Save yourself up to 20 gallons of water by scraping food off your dishes instead of pre-rinsing them.

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Take Back Boxes Ensure Proper Expired Drug Disposal

Why It's Important.

Research shows that currently many unwanted or expired household and prescription medications are improperly disposed of. We now know that flushing drugs down toilets or putting them into the garbage both have damaging effects on our environment and can contaminate our surface and groundwater supplies.

Both drinking water and wastewater treatment plants are not specifically designed to treat for these kinds of chemicals. In addition, unused or expired prescription medications are also a public safety issue, leading to accidental poisoning, overdose, and abuse. Therefore, properly disposing of unwanted pharmaceuticals and drugs will help us keep our rivers and drinking water clean and our communities safe.



Clackamas County has Drug Take Back Boxes located throughout the county! Using these boxes will protect our environment and make room in your cabinets. Please see our website to find the location near you.

www.clackamasproviders.org/drug-take-back-boxes/

What they take:

Acceptable items:

- Prescription medications/samples
- All over-the-counter medications
- Vitamins
- Pet medications
- Medicated ointment tubes
- Liquid meds in leak proof containers

Items not acceptable for deposit:

- Thermometers/Sharps/Syringes
- Bloody or infectious waste
- Hydrogen peroxide
- Aerosol cans
- IV bags
- Inhalers
- EpiPens

What You Can Do.

- Take only the proper amount of medicine needed or prescribed. Excess pharmaceuticals pass through the body and end up in our wastewater where they can be difficult to remove.
- Never flush unused prescription or over the counter medication down the toilet to dispose of them.
- Bring unused or old prescriptions to a Drug Drop Off Box location near you so that the drugs can be properly disposed of in a safe and environmentally friendly manner.

Clackamas County citizens lead the Pacific Northwest in the Drug Enforcement Agency's take back events. With permanent drop boxes, you will not have to wait for special events. Drop off your unwanted, expired drugs on your own schedule.

Winter Quiz:

1. Name one thing you cannot put in a Drug Take Back box.

- A. Pet medications
- B. Medicated ointment tubes
- C. Inhalers
- D. Vitamins

2. Which of the following is an effective way to prevent soil erosion in the garden?

- A. Remove all dead plant debris
- B. Turning and working the soil in the early winter
- C. Having your soil tested
- D. Plant cover crops

Answers - Can be found on page 4.

3. The Clackamas River flows approximately how many miles from the beginning to the end?

- A. 110
- B. 83
- C. 205
- D. 95

4. Which one of the following is a member of the Clackamas River Water Providers?

- A. The City of Portland
- B. The City of Wilsonville
- C. The City of Gladstone
- D. The City of Sandy

It's a Fact!

In the US we consume more prescription drugs than any other country in the world, with almost 65% of our population taking prescription medication.

Faces of Drinking Water

An Interview with
Dan Fraijo

Many different people from many different walks of life work hard every day to bring safe, reliable drinking water to our homes, schools and business.

Recently we sat down with Dan Fraijo, Operations Superintendent at Sunrise Water Authority to talk to him about what working in the water industry means to him.

How long have you been working for Sunrise Water Authority?

Dan: This past July 2015 marked my 5th year at Sunrise.

What is your back ground prior to working in drinking water?

Dan: I began working in the timber industry out of high school, as a timber cutter. Soon I got a job working for DM Excavating Company in Happy Valley who do work for public water systems installing and repairing water distribution infrastructure. I worked for DM for over 12 years.

I wanted to change career paths, and found an opening with the City of Canby-Streets Department, and kept my own excavation business. I worked for Canby 4 years.

I missed working in excavation, mainly because I really enjoyed building and repairing the water infrastructure for public municipalities. I had a passion for drinking water and I wanted to get back into that industry. I attained a position with West Linn Water Department and worked there for 3 years gaining my Water Operator 1 and 2 certifications.

In 2010, I applied for this position here at Sunrise Water Authority. My strong work ethic, years of construction experience, willingness to work hard, and make good decisions gave me the confidence to apply. After two interviews with Sunrise, they offered me the position!! I trained for six months with the prior Operations Supervisor, and when he retired I took over.



What is your favorite/ least favorite part of your job?

Dan: One of the things I enjoy most about my job is providing a service to thousands of people who are mostly unaware of how important it is. We provide a service that none of us can live without, and we do it in a way that makes providing safe clean drinking water seem so simple.

Something I find difficult about my job, is there isn't anything tangible about it. There is no absolute final product. It is ongoing, unlike construction where you create something out of nothing with a final product.

Another difficult thing about my position is holding people accountable and imposing disciplinary actions for poor performance. It doesn't happen very often but that is a part of my job I don't enjoy.

Do you plan on retiring with SWA?

Dan: I'm happy here. I'm doing what I love and what I have always had a passion for. I would love to retire here!

What accomplishments are you most proud of in your career?

Dan: I have developed good relationships with my peers. I like having people with whom I can share ideas and glean information. I am always mindful of the fact we are working for our rate payers. Being efficient in the overall operations of the agency to keep the cost of water affordable..

What advice would you give to someone starting out in the field?

Dan: Work hard, be reliable and honest.

Remember to be open-minded so you can learn from others. Always!

How has the industry changed since you started?

Dan: There are always new tools to help make our jobs easier, more efficient and make better decisions. I've recently learned about a pipe assessment tool that I think would be very useful in helping us to prioritize future upgrade projects.

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

Dan: Be observant of their water systems. Pay attention to the little things like small leaks in and outside of the house. I would also like to see our customers value the safe clean drinking water they are so fortunate to have.

What do you feel is most important about your job?

Dan: Providing clean, safe drinking water to our customers.

What's the one thing you can't live without at work?

Dan: Water!!!!

Is there anything you would like to see change?

Dan: I would like to change the public's perception that people in Public Works don't work.

What do you do for fun when you're not working?

Dan: I enjoy spending time with my family. I have twin sons. One is off to college studying renewable energy and the other is working for Molalla River School District as a custodian. I also have a daughter who is in the 7th grade. We like to hunt, go razor clam digging and crabbing. I enjoy watching them grow into good people.

I have some property in the county and I enjoy maintaining the land and caring for our animals. I really like the beach and if life goes well, I would like to retire there some day.

Is there anything else you'd like to share?

Dan: I feel very lucky to have fallen into my passion. Not everyone gets to do what they love.

Winter Preparation for Summer Ready Soil

Healthy soil is a key tool for managing our outdoor water use during the summer months. Soil is more than just dirt: It contains the nutrients plants need, and its structure allows for better water holding compactly throughout the dry summer months. However, few gardeners are lucky enough to have healthy soil without some sort of gardener intervention, so adding soil amendments to improve nutrition, pH and structure is an expected garden chore, and one that's easily carried out during the winter months.

Cleaning

Begin preparing the soil for winter by removing all dead plant material from this past season's garden. Dead roots, stems and foliage can harbor insects and diseases that emerge in the spring to infect next year's garden.

Soil

Unless soil erosion poses a problem, winter is the best time to turn the garden. While you're working the soil, incorporate organic material, such as well-rotted manure or finished compost.

The start of winter is also a good time to have your soil tested, giving you the opportunity to incorporate any amendments needed to correct nutritional or pH problems before spring.

Compost

Make compost right in the garden, where it's on hand for incorporation into the soil. Spread layers of soil and partially finished compost with grass clippings and other compost-able materials right on top of the soil. The materials will break down over the winter, providing nutrition for your spring garden, as well as reducing winter soil erosion.

Erosion

Winter rain can create erosion of bare soil which can run off into the street, down into the storm drain and directly to our rivers and streams. To prevent erosion, cover the soil and garden areas with a thick layer of leaves. The leaves will form a mat that can be pulled up in the spring when you're ready to plant. For vegetable gardens plant cover crops to reduce erosion while restoring soil fertility, plant legumes and grasses that cover bare garden soil for the winter and in the spring, till under the cover crops to enhance the nutrients and organic matter in your soil.



Though spring and summer seem a long way off they are just around the corner. Following these easy tips will help your garden soils be healthier and have better water holding compactly which will help you save water all summer long.

For more information on outdoor water conservation, go to www.clackamasproviders.org/ and visit our Water Conservation page.



Winter Quiz:

Answers

Question 1 - Answer is C
Question 2 - Answer is D

Question 3 - Answer is B
Question 4 - Answer is C

From the Forest to the Tap

Because water flows instantly from our faucets we never think of how the water gets from the forest to the tap.

We are very lucky that the Clackamas River provides us with a high quality water source. However unlike the City of Portland's Bull Run Watershed, which is protected, the Clackamas is considered a multi-use watershed with various users and ownership throughout the watershed.

In addition to supplying high-quality drinking water to almost 300,000 people in Clackamas County, the Clackamas River watershed also:

- Drains more than 940 sq miles, made up of 16 subwatersheds
- Flows 82.7 miles from its headwaters on the slopes of Olallie Butte to its confluence with the Willamette River near Gladstone and Oregon City
- Crosses two counties and includes federal, state, and private land
- Is 72% publicly owned, 25% privately owned, and 3% tribally owned
- Is home to Steelhead, Chinook, Coho Salmon, as well as Lamprey Eel, and Sea-run Cutthroat Trout
- Generates hydroelectric power
- Hosts many productive farms and nurseries
- Offers a wealth of recreational activities such as fishing, hiking, camping, white water rafting, kayaking, and hunting
- Provides important habitat for many plant, wildlife, and aquatic species wild and Scenic Waterways
- Sections of the River are also designated as Federal and State wild and Scenic Waterways



The Cost to Bring Water to Your Tap

Everyone pays a water bill, either directly, or it is figured into rental cost. Most people have no idea for what they are actually paying.

Intake structures- There are five intake structures on the Clackamas River where water is taken out of the river and treated for human consumption.

- **Treatment process-**

Several different processes are used to treat the river water - conventional treatment, direct filtration, slow sand, and membrane filtration.

- **Testing-** State and Federal drinking water regulations require water providers to meet over 100 different water quality standards.

- **Moving Water-** Electricity is used to power pumps which move water from the river through treatment and distribution systems.

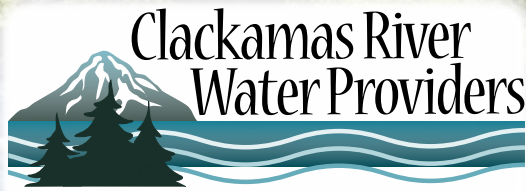
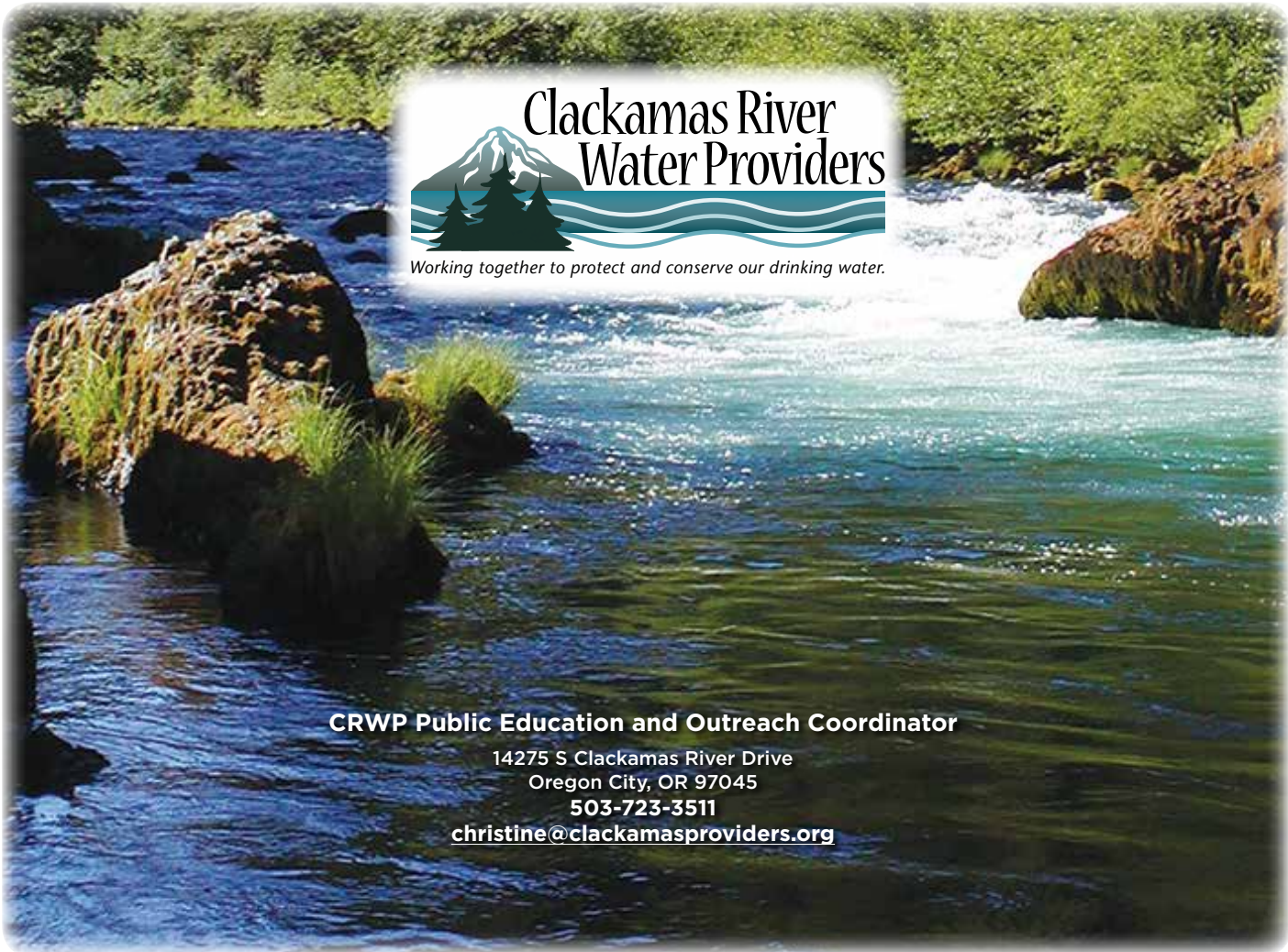
- **Distribution Systems-** This is the unseen network of pipes, valves, reservoirs, and pumping stations that move water to your taps throughout our communities.

- **Water Management-** Water providers implement and manage a number of regulatory programs. Two of these are water conservation and source water protection. Both aim to ensure we have plenty of high quality water for years to come.

We provide water at a cost of less than a penny per gallon. When you compare that to the price of bottled water, you will see what an amazing service our public water systems provide. So next time you take a drink of water, remember what it takes to get that water to your faucet.

For more information about our watershed and conservation programs please visit our website: www.clackamasproviders.org, or contact us at (503) 723-3511.





Working together to protect and conserve our drinking water.

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