



July 2016 News

Water Supply Update Summer 2016

During the summer months we think about water. Lots of water... like, swimming in pools, washing our cars, watering our gardens and running our sprinklers. But, did you ever stop to think that summer is a time when our region's water supply is most strained and resources are limited? This winter, snow packs reached their peak in April but early warm temperatures resulted in early snow melt and warmer than usual temperatures are expected to continue through September. Though it has been a bit cooler and we've had some rain, let's not forget conditions can change. As much as we all love summer, it's important that we use water wisely during these warm, dry months.

Conserving our precious water source, the Clackamas River is a big job, but easily accomplished when we all help. Visit the CRWP website at www.clackamasproviders.org and find helpful outdoor and indoor water saving tips and take advantage of our rebate program and receive up to \$485 in rebates.

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Water Efficient Landscaping

Planning a low water use, low maintenance landscape begins with an analysis of your landscape conditions. This can be done by you or a landscape professional that can provide advice and/or do the entire landscape plan for you. There are also a number of books on how to develop a landscape plan.

Site Analysis. To begin a site analysis start by creating a base map of your property using graph paper to position your house, property lines, walks, patios, trees, fences, etc. Highlight everything that could affect privacy, view, outdoor activities, sun, shade etc. Look at solar patterns, wind patterns, topography and orientation, existing vegetation, soil types, precipitation, water data, landscape purpose, and irrigation needs.

With tracing paper over the base map, take into consideration all the needs you determined earlier (play area, patio) and show positive and negative factors that play a role in the existing landscape. This will help you select and group plants in the right place.

Getting into the Zone. Use of landscape and watering zones are important because different plants have different watering needs and yards have

different micro-climates. Zoning your landscape: low-water use zones: irrigation is only used here when new plants are added so they can get established. Moderate water use zone: plants in this area require a little more water than nature can provide. High water use zones: are where thirsty plants such as turf, vegetable gardens, and annuals are planted.

Evaluate your turf area. How much turf do you want in your yard and what is its function? A) Choose the new turf grass carefully; there are many new water efficient varieties. B) Place the turf areas where they will be the most useful, such as play and picnic areas. C) Avoid planting trees or shrubs inside turf areas. D) Keep the physical layout of the turf in easy to irrigate shapes such as circles or rounded edges. E) Don't put turf areas on steep slopes. F) Consider placing thirsty plants near turf areas where they can get more water. G) Consider alternatives to turf - ground covers and hardscapes.

CRWP is offering Landscape Audits. CRWP is offering free Landscape Audits to help customers find ways to conserve water. During a visit to your home or business, CRWP staff will assess your yard and irrigation system identifying areas where water can be used more efficiently and provide a summary to help get you started. Email Christine at christine@clackamasproviders.org or call **503-723-3511** for more information.

How Water Systems Work

WATER QUALITY TESTING

Clackamas River Water member's drinking water is closely regulated by both the Environmental Protection Agency (EPA) and the Oregon Health Authority (OHA). Water Provider 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.

A few examples of required testing are:

- **Coliform Bacteria (TC)** - A group of bacteria that is an indicator of water contamination and possible presence of parasites and pathogens.
- **Lead and Copper (Pb/Cu)** - lead in drinking water is typically from household plumbing, primarily lead solder that was used to join copper pipes in homes built before 1985. Lead can also be found in brass plumbing fixtures and components.
- **Inorganic Compounds & Radionuclides** - Nitrates, manganese, other simple chemicals and minerals, and radium.
- **Volatile Organic Compounds (VOCs)** - Solvents, cleaners, pesticides, and other man-made contaminants.
- **Disinfection Byproducts. (DBPs)** - Chemicals that form when chlorine is added to drinking water during the treatment process for disinfection. The most common DBPs are; Trihalomethanes (THMs), Haloacetic Acids (HAAs), and Haloacetonitriles (HANs).

You can find a detailed report on what is found in your drinking water by looking at your water providers *Annual Water Quality Report*.

Facts About Lead in Drinking Water

We have all heard the news about the water quality issues in Flint, Michigan concerning lead in their drinking water and now in various schools in our region. Flint's lead issues center around pipes, water treatment, and corrosion, and are very removed from what is happening in our area where elevated levels of lead are seldom detected in drinking water.

Our Drinking water source the Clackamas River has never contained detectable levels of lead. The Clackamas River consistently meets or is better than all federal and state drinking water standards.

The main source of lead in drinking water is typically from household plumbing. This is usually lead solder that was used in homes built or plumbed with copper pipes before 1985, when lead was banned for use in household plumbing construction. Lead can also be found in brass plumbing fixtures and components. The Clackamas River Water Providers do not use lead service lines in their water distribution systems.

Water providers are required to regularly test for lead and manage their systems to reduce lead exposure by managing corrosion in pipes through treatment. In our area, lead-based paint is the most common source of lead exposure.

Here are some things you can do to reduce lead in your drinking water:

- Run your water to flush out lead. If water hasn't been used for several hours, run the water for 30 seconds to 2 minutes or until it becomes cool to the touch or reaches a steady temperature before drinking or cooking with it.
- Use cold, fresh water for cooking and preparing baby formula. Do not use water from the hot tap to cook, drink, or make baby formula. Lead dissolves more easily into hot water.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Consider using a filter. Confirm the filter is approved to reduce lead. Always maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality. Contact NSF International at **(800) NSF-8010** or www.nsf.org for information on performance standards for water filters.

• Test your child for lead. Ask your physician or call the LeadLine at 503-988-4000 to find out how to have your child tested for lead. A blood lead level test is the only way to know if your child is being exposed to lead.

• Consider buying low-lead fixtures. As of January 4, 2014 all pipes, fittings, and fixtures are required to contain less than 0.25% lead. When buying new fixtures, consumers should seek out those with the lowest lead content. Visit www.nsf.org to learn more about lead content in plumbing fixtures.

• Regularly clean your faucet aerator. Particles containing lead from solder or household plumbing can become trapped in your faucet aerator. Regularly cleaning every few months will remove these particles and reduce your exposure to lead.

If you are concerned about lead levels in your drinking water and want more information, contact your water provider and read your water provider's annual water quality report.

News letter article compliments of the Regional Water Providers Consortium <http://www.conserveh2o.org/>



What's New in Water Conservation Rebates?



Clackamas River Water Providers is committed to helping our customers do whatever they can to use their water more efficiently. This year we are offering six water use rebates worth up to \$485 in combined value.

New this year we have added a rebate for up to \$200 for a WaterSense Weather Based Irrigation Controller, we have also made a change to our toilet rebate program. If you replace your old water using toilet to an EPA High Efficiency Toilet, you will receive a rebate of \$85 and an additional \$15 if you have your old toilet recycled.

Along with these changes CRWP is still offering a \$75 rebate for replacing your old residential washer machine with a new Energy Star washer, up to \$60 (or 20 nozzles at \$3 dollars each) if you change your old irrigation spray nozzles to new more water efficient multi-stream rotating nozzles, and up to \$25 each for hose bib timers and/or an irrigation rain switch, These rebates are available on a first-come, first-served basis until the program funds are depleted.

Customers can take advantage of each rebate one time per account per fiscal year. Visit our website at www.clackamasproviders.org for details about each of the rebates, the eligibility requirements, or to download a copy of the rebate brochure and application. For more information please contact Christine at (503) 723-3511.

Summer Quiz:

1. How long do you let your water run to flush out any lead?

- A. .5 minutes
- B. 30 Seconds to 2 minutes
- C. 10 minutes
- D. 30 Seconds to 3 minutes

2. Who regulates drinking water quality testing?

- A. DEQ & FDA
- B. OLCC & DHS
- C. EPA & OHA
- D. OSHA & DMV

3. In your landscape, which plants use the more water?

- A. Turf
- B. Vegetables
- C. Annuals
- D. All of the above

4. What's new in the CRWP rebate program?

- A. Toilet Rebate change and Watersense Weather Based Irrigation Controller
- B. Hose bib timers and Rain Sensor Switch
- C. Water efficient irrigation nozzles & Energy Star washing machines
- D. Faucet aerators and shower heads

Water Smart

Did you know that residential outdoor water use in the United States accounts for more than 9 billion gallons of water each day? Most of that is for landscape irrigation. Experts estimate that as much as 50% of this water is wasted due to over-watering caused by inefficiencies in irrigation methods and systems. Are you wasting water? If you don't know than the answer is probably yes!

If you have an irrigation system consider looking into **WaterSense labeled irrigation controllers**. These irrigation controllers act like a thermostat for your sprinkler system. They are able to tell your sprinkler system when to turn on and off, and they use local weather and landscape conditions to tailor watering schedules to actual conditions at your home. Instead of irrigating using a controller with a clock and a preset schedule, WaterSense labeled controllers allow watering schedules to better match plants' water needs.



By replacing your old standard irrigation clock timer with a WaterSense labeled irrigation controller the average home could save nearly 8,800 gallons of water annually. If every home in the United States with an automatic sprinkler



system installed and properly operated a WaterSense labeled controller, we could save 120 billion gallons of water across the country just by simply not over-watering lawns and landscapes. In our region, that equals to more water in the Clackamas River for fish and other aquatic life.

Let us help you save water and money. New this year the Clackamas River Water Providers are offering a rebate for WaterSense irrigation controllers. You could receive up to \$200 if you replace your older irrigation timer for a new WaterSense Controller. Go here for a list of qualifying WaterSense labeled controllers and visit our website at <http://www.clackamasproviders.org/conservation-rebates/> for more information.

News letter article compliments of Clackamas River Water, Suzanne DeLorenzo blog entry May 1, 2016.

Answers - Can be found on page 5.

Faces of Drinking Water

An Interview with
Dave Stone - City of Estacada

Delivering safe reliable drinking water to our customers is our number one priority. Many different people from many different walks of life work hard every day to ensure the safe delivery of reliable drinking water to our homes, schools and business. Recently we visited with David Stone, the plant superintendent for both the waste & drinking water facilities for the City of Estacada.

How long have you been working in the water division of Estacada Public works? I have worked twice for the City of Estacada, the first time was a stint from 1987 to about 1990 then I came back in '96 after the big flood and I've been here ever since.

What is your background prior to working in drinking water? I was in the 2nd class that went through the Linn Benton Water Environment Technology program. After I completed my first year I started working in waste water at the City of the Dalles, which was in 1974-1976. Later in '76 I moved to Salem to help startup a waste water treatment plant expansion and I was there until 1983. In the summer of 1983 I was asked by a friend to help start a waste water treatment plant in Sitka Alaska, I still remember watching the humpback whales swim in the bay. In 1987 I moved back to Salem, and that fall I was hired by Estacada and by 1990 I was working in both the water and waste water treatment plants. By 1991 I decided I was going to be self-employed but occasionally I would help out in Estacada, by '96 I was back at Estacada full time.

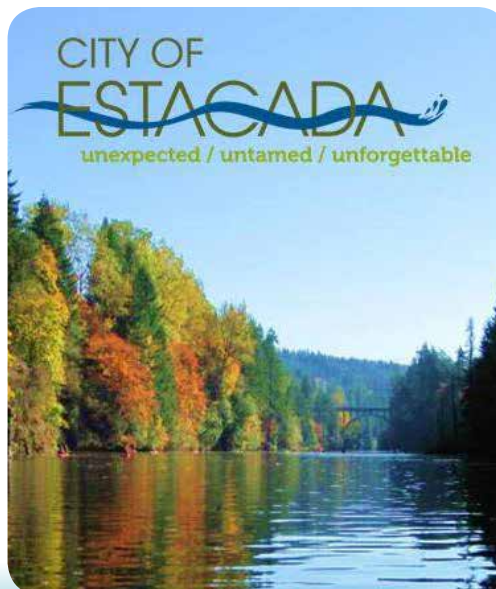
What is your favorite/ least favorite part of your job? I really enjoy the variety that comes with working at both the water and waste treatment plants.

Do you plan on retiring with the City of Estacada Public Works? Yes, I expect I will retire from Estacada but that's still just in the very beginning of the planning stages.



What accomplishments are you most proud of in your career? I've been a part of a lot of startups and expansions during my career. At Salem we added a parallel plant, and a high purity oxygen activated sludge system. When I was in Alaska we started a primary treatment plant with solids handling system and 23 lift stations. I was also a part of Estacada's water and waste water plants expansions.

What advice would you give to someone starting out in this field? You need to expect to move around, that may be moving to another facility or even another state. From my experience that is the only way to ensure that you get higher certifications and eventually higher pay.



How has the industry changed since you started? With the changes in technology, the ability to clean water has really changed over the years. Now days even the water making process itself is cleaner, not just the water.

What would you like the public to know about their drinking water? I don't think most people know anything about it. People take it for granted, tap on, flush and go.

What can the public do to help make your job easier? The city should be putting away more money for the future, we just put in a new treatment facility and they were almost completely unprepared for that. To continue providing people with clean water we have to perform regular upgrades and maintenance. Few customers seem to understand how much of a process providing clean water is.

What do you feel is most important about your job? Protecting public health and safety.

What's the one thing you can't live without at work? Supervisory Control And Data Acquisition (SCADA), we added it in 2000 it archives all of the data you could ever need to live happily ever after. Oh, and a decent city council and city manager.

What do you do for fun when you're not working? I have enough woodworking tools to build pretty much anything, and I have been playing ultimate Frisbee since '78, I don't travel much for it anymore but I still play in the spring and summer leagues in Portland, and I have regular pick-up games on Saturdays and Sundays.

We here at CRWP would like to thank David for taking time out of his busy schedule to let us interview him and for giving us a tour of the drinking water treatment plant.

Thank you, Dave!

CRWP and Source Water Protection



Sustaining a precious resource is one of our top priorities. By preserving the Clackamas River as a high quality drinking water source we can help minimize future drinking water treatment costs, while being good stewards of the river.

In 2010 the CRWP developed a Drinking Water Protection Plan for the Clackamas River to provide its members with a long term source water protection strategy. We have two primary goals for achieving source water protection in the Clackamas watershed. *They are to:*

- 1. Identify, prevent, minimize and mitigate** activities that have known or potentially harmful impacts on drinking water quality so that the Clackamas River can be preserved as a high quality drinking water source to meet the needs of an increasing human population into the future;
- 2. Promote public awareness and stewardship** of healthy watershed ecology in collaboration with other stakeholders.

To achieve these goals the CRWP is an active participant in the watershed and promotes activities that reduce potential contaminants including nutrients, bacteria, pesticides, Volatile Organic Compounds (VOCs), Personal Care Products (PCPs), fine sediments, and other byproducts associated with urban, agricultural, forest, land development, and road uses that could impact the quality of our source water.

To accomplish these goals and objectives the CRWP is:

- **Taking a leadership role** in the protection of the Clackamas River.
- **Promoting** the CRWP's mission of interagency water provider cooperation through implementation of source water protection mitigation strategies and programs.
- **Seeking and developing** partnerships with agencies, landowners, stakeholders, and academia to solicit feedback and identify opportunities to develop long term relationships so that water quality objectives, data and information can be shared.
- **Collaborating** with partners/stakeholders to maximize opportunities to develop and implement long term solutions for the protection of drinking water supplies as well as the enhancement of water quality for fish and wildlife.
- **Conducting additional sub-basin analysis** through studies, GIS analysis, pollution load modeling, and water quality monitoring to help prioritize or reprioritize Best Management Practices and mitigation strategies.
- **Promoting public education, awareness and cooperation** in the watershed that support voluntary watershed protection activities.
- **Providing funding and resources** to implement mitigation strategies and programs recognizing that grants and other outside resources will also be needed.
- **Investigating methods** to meet future water supply needs for people, through moving water around between providers, looking at alternative water sources, or more aggressive water conservation, while maintaining stream flows for fish and wildlife.

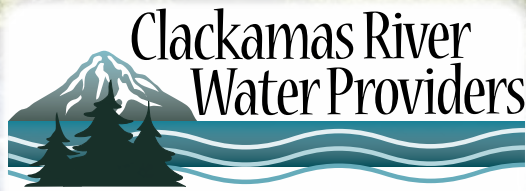
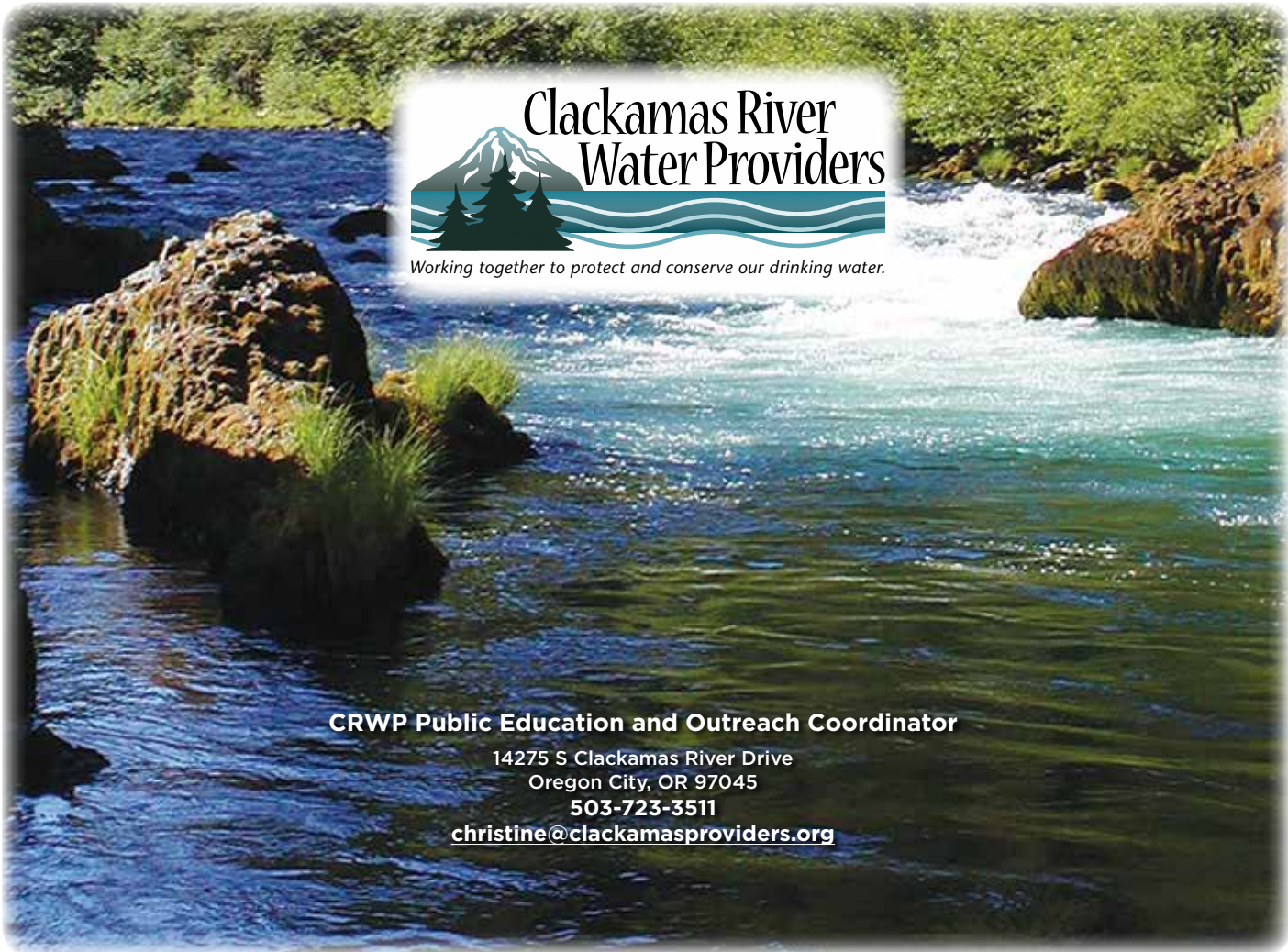
To find out more about what programs and activities we are working on to meet these goals go to www.clackamasproviders.org/watershed-programs/.

Summer Quiz:

Answers

Question 1 - Answer is B
Question 2 - Answer is C

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



Working together to protect and conserve our drinking water.

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www.cwater.com



www.cityofestacada.org



www.ci.gladstone.or.us



www.ci.oswego.or.us



www.oaklodgewater.org



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