

The Clackamas River

The Clackamas River provides drinking water to over 300,000 people in Clackamas and Washington Counties supplying water to the Cities of Estacada, Gladstone, Lake Oswego, Oregon City, Tigard, and West Linn, as well as to Clackamas River Water and Oak Lodge Water Services which provide water service to unincorporated areas of Clackamas County, and Sunrise Water Authority which serves the Happy Valley-Damascus area.

Our communities use a lot of water during the summer months, this is due mostly to outdoor water use. Summer is also the time of year when the Clackamas River is flowing at its lowest levels and we get the least amount of rainfall.

In addition to providing drinking water the Clackamas is also home to endangered and threatened fish species, provides important habitat for many wildlife species, both game and non game, and offers a wealth of recreational activities such as fishing, hiking, camping, white water rafting, kayaking, and hunting. PGE operates three hydroelectric dams on the Clackamas River mainstem: Faraday (just east of Estacada), River Mill (west of Estacada) and North Fork (upstream from Faraday) providing renewable energy to more than 78,000 homes in the Portland metro area. *(Continued on page 2)*

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2019 Excellence in Communication Award Winner!



The CRWP has received an award from the Pacific Northwest Section of the American Water Works Association (PNWS AWWA) for our youth activity book "The Clackamas River Watershed". The award is for "Excellence in Communication for a Large Water System".

It is a real honor for those of us at the CRWP to receive this award and to be recognized for our efforts in furthering the education of our young community members about the Clackamas River Watershed, watershed health, and water conservation. Contact <u>Christine</u> for copies of the book.

Category: Print Communication – Large Utility Utility: Clackamas River Water Providers Entry: The Clackamas River Watershed Activity Book

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Clackamas River continued

Clackamas River Water Providers have been working hard to identify, prevent, and minimize activities that have known or have potentially harmful impacts on drinking water quality, while encouraging our customers to conserve water so that we can be good stewards of the river.

As our communities continue to grow, so does the demand for high quality drinking water. Conserving and protecting the Clackamas River plays a key role in making the best use of this precious resource we share, and help minimize future drinking water treatment costs.

Learn more about our source water protection and water conservation efforts by visiting our website at **www.clackamasproviders.org**

Give Your Irrigation System a Spring Check-Up

Before the summer watering season starts, go through this preseason check list to ensure your irrigation system is ready for peak summer performance. It's one of the most important things you can do to ensure your system is

operating efficiently.

Spring Checklist:

1. Close all manual drains. The sprinkler system was probably drained last fall, so make sure that none of the manual drain valves have been left open.

2. Slowly open the main valve and allow the mainline piping from the main valve to the backflow preventer to fill with water.

3. Have the backflow prevention assembly tested by a state certified tester – many local water providers can supply a list of local testers.

4. Pressurize the mainline from the backflow prevention assembly to the control valves. Have one of the control valves open while you do this so that air trapped in the piping can escape through the sprinkler heads as the pipes fill with water.



5. Most important! Run the entire sprinkler system, one zone at a time. As you do this, check the following:

• Signs of leakage, caused by damage spray heads or piping during the winter months. Repair as needed. • Spray pattern of the sprinklers can be inefficient. Sometimes nozzles get clogged and need to be cleaned. Also, nozzles and sprinklers may need adjustments to reduce overspray onto walks, driveways, etc.

• Interference of the spray pattern can occur if plants have been moved, play equipment has been installed, or if plants have just grown too tall. Adjusting the sprinklers to accommodate the changing landscape will eliminate dry spots and puddling caused by blocked spray.

• **Overgrown grass** can impede spray heads – make sure to trim the grass away from the sprinkler heads.



By following this simple check list before the summer watering season starts, and making periodic checks throughout the watering season, you can be sure your lawn and garden are being watered properly all summer long without wasting water!

How Water Systems Work Emergency Preparedness

We don't just plan for the "Big One", we plan for "Every

One." - Out of sight out of mind, service on demand, and it's as easy as turning on your tap. As water providers we not only ensure that you have water 24/7, 365-days per year, but we also plan for emergencies which can come in all shapes and sizes.

Be it a quake, an eruption, a drought, ice storm, power outage, or a major line break, people still need water. The Clackamas River Water Providers are working together, and with other providers in the region, to plan for events that could impact your water supply, because our job is to make sure water is there for you when you need it – even in an emergency.

Planning Ahead – To avoid emergencies before they happen Clackamas River Water Provider members are replacing old water lines, seismically upgrading facilities, planning for future or alternative water supplies, monitoring watersheds, and ensuring regulatory compliance.

Being Prepared – Practice makes perfect. We conduct yearly emergency exercises to test our capabilities and constantly look for ways to improve our coordination and communication during an emergency

What You Can Do – As prepared as we are, some emergencies are potentially bigger than us – especially natural disasters. That's why everyone needs to help. If an earthquake, winter storm, or other disaster strikes our community, you may not have access to food and water for days or even weeks. Take time now to prepare for you and your family. The most important thing you can do to prepare for an emergency is to plan ahead and have essential emergency supplies on hand. Here's what you can do to plan for the "Big One" yourself – and help us, help you.

Having an ample supply of WATER is a top priority in an emergency. You can live for weeks without food, but without water, you can die in as little as 3 days. Help your water provider, emergency responders and other relief organizations help you by having an adequate emergency supply of water, food and other essentials.

You will need to store at least one gallon per person per day. According to the Red Cross and FEMA, you should store at least a two-week supply of water (or 14 gallons) for each member of your family. Don't forget to store additional supplies for your pets.

In an emergency, drink at least 2 quarts of water a day, 3 to 4 quarts a day if you are in a hot climate, pregnant, sick, or a child. If supplies run low, don't ration water: Drink the amount you need today and look for more tomorrow.



2013/14 seismic upgrade to the Oak Lodge Water Services' View Acres water reservoirs



Pouring concrete in the support foundation at the View Acres water reservoirs seismic upgrade.

Spring Quiz:

1. When testing, you should run your entire sprinkler system one zone at a time.

A. True B. False

2. The Clackamas Soil and Water Conservation District focuses on:

A. Conservation

- **B.** Septic Systems
- C. Pesticides
- D. All of the above

3. The TOP priority in Emergency Preparedness is:

A. To have a nice garden

- **B.** Have an ample supply of water- one gallon per person per day.
- C. Boxes of Granola Bars
- D. Blankets and Tents

Answers - Can be found on page 6

4. What is the greatest waste of water?

- A. In the shower
- B. Washing dishes
- C. Outdoor wateringtoo much, too often
- **D.** Brushing teeth

The 7 Basic Steps For Outdoor Water Savings

By following these 7 Basic Steps you can achieve color and texture while reducing maintenance and water use. The bonus is that you'll have more time to enjoy your landscape creation.

1. Start with a Plan. The planning and design of your landscape is one of the most important steps. Whether you are starting from scratch or changing your existing landscape, begin by creating a master plan. Your plan can range from a drawn sketch to a professional survey, but should include all existing structures, trees, shrubs, and streets, as well ass sun orientation and the direction of the wind. In this planning stage, you will decided on use zones and watering zones, and select the appropriate plants for each location. (Use zones include public area, private areas, and service areas. Watering zones are broken into high, moderate, and low watering zones). Public areas are highly visible areas such as the entry to your home. This area receives the most care and often uses the most water. Private areas are where most outdoor activities take



place, probably your backyard. This area should be functional as well as attractive and durable. It could be designed to use less water than your public area. Service areas are the working or utility areas of the landscape usually screened from view – garbage can, dog house, or air conditioning unit. This area should be designed to use even less water. High watering zones are small, visible, highly maintained areas, home entrances and grassy areas. In the moderate zones in addition to natural rainfall, occasional watering may be needed to maintain healthy plant material. The low watering zone requires only natural rainfall. If you need help with your landscape layout, consult with a landscape professional.



2. Compost and Cultivate. As a typical to the Northwest is rain, is clay in our soil. Because our soils are predominately clay, with some sandy soils, so improvements to the soil are also very important to water-wise landscaping. Clay soils absorb water so slowly that if water is applied to quickly it runs off the surface before it can infiltrate the soil. Sandy soils have such large air spaces that they dry quickly and do not hold water or nutrients well. By adding organic soil amendments such as compost or peat moss it improves absorption, water holding capabilities, and may provide nutrients for plants. Work generous amounts of soil amendments into the soil as deep as possible before planting. Your plants will love it!

3. Grass and Ground Cover. Turf requires more water and maintenance than other plants. So it is important to evaluate your lawn to see where grass is practical and functional. New grass varieties have deeper roots and may require less upkeep and watering than standard varieties. Where foot traffic is infrequent or undesirable, or on steep slopes and sharp angles, consider ground covers, low-water-use plants or mulches. Hardscaping your landscape with rock, wood and concrete patios and walkways can enhance your yard.

4. The Right Plant in the Right Place. Your yard probably has areas where it gets more sun or shade than other areas, by planting like plants together you can optimize similar watering needs. Some plants don't need as much water or are adapted to our local soil and rainfall.

(Continued on page 5)

The 7 Basic Steps continued

5. Water Wisely. The greatest waste of water is too much, too often. Generally turf areas need more water than other plant material, so irrigate turf areas separately from plant areas. Often water is applied faster than it can be absorbed, most of the water runs off and never reaches. the plant's roots, so water evenly. The amount that you water should be based on soil conditions and plant needs. Watering thoroughly, but infrequently, will produce a deep rooted lawn that is more water-efficient and drought tolerant. Generally, established lawns only need 1 inch per week. It is also important to adjust your watering schedule to compensate for changing weather conditions. Take advantage of rains or cooler weather! Use drip irrigation or soaker hoses for gardens and shrubs. These systems apply water directly to the plant roots, reducing waste from evaporation or runoff. Don't waste watering your sidewalk or driveway, they won't grow no matter how much water you give them.

6. The Use of Mulches. Organic mulches included aged manure, compost, and bark chips, or wood chips. Organic mulches increase the soils ability to store water by covering and cooling the soil thereby minimizing evaporation. Mulches also reduce erosion and help with weed control. Inorganic mulches such ass rocks and gravel will actually re-radiate the sun's heat and can increase the amount of water that surrounding plants will need.

7. Keep Up the Maintenance. Check your irrigation system periodically for leaks and broken sprinkler heads. Reprogram your system regularly to adjust for changing weather conditions. Thatch and aerate your lawns annually to ensure that the roots are receiving the right amount of water. Routine maintenance such as pruning, pest control, and fertilization will keep your plants healthy and your landscape at its peak.

OTHER OUTDOOR WATER SAVING TIPS:

- Clean sidewalks/driveways with a broom instead of a hose.
- Use a bucket and sponge to wash your car.
- Cover pools and spas to stop evaporation.
- Put shut-off nozzles on all of your hoses.

Free Landscape Water Audits

The Clackamas River Water Providers are offering free landscape water audits to the following member's service areas; Clackamas River Water, City of Estacada, City of Gladstone, Oak Lodge Water Services, South Fork Water Board (Oregon City and West Linn), and Sunrise Water Authority (City of Happy Valley and Damascus).

Water use in our communities more than doubles during the summer months due to outdoor watering. Higher than normal outdoor water use is often the sign of inefficient use of water in our yards or an irrigation system that needs repair and scheduling adjustments. A landscape water audit is a way to get your irrigation system and landscape on track and running right.

Saving water and having a water efficient landscape is what a landscape water audit is all about. Our landscape auditor will assess your lawn and garden areas, irrigation system and more. Residential landscape water audits often include but are not limited to:

- A walk through your yard and gardens including all lawn area.
- Making note of existing soil types, plant material, naturally available water, and sun exposure.
- Locating the water meter, noting any existing leaks from the meter throughout the irrigation system.
- Locating the irrigation controller, making note of the make/ model as well as the current schedule, each zone will be ran

separately, recording gallons per minute used for each zone.

When the audit is complete you will receive a detailed report with recommendations such as controller schedule adjustments for better water efficiency, irrigation head adjustments/



replacements if necessary, maintenance of existing plant material for more efficient watering (i.e....pruning up), soil amendments to reduce weeds and promote soil moisture, and reduce use of fertilizers giving you the tools you need to better manage your outdoor water use.

These free landscape water audits are available during the spring and summer months only. The audits are available on a first come first serve basis and audits are approximately 1.5 hours. Please be available to do the walk through with the auditor. Audits will continue through the summer season or until program funds are depleted.

To schedule your free landscape water audit contact Christine at christine@clackamasproviders.org or call 503-723-3511. For more information about our free landscape water audits, conserving water during the summer months, and other Clackamas River Water Provider programs visit our website.

Faces of Drinking Water

The **Clackamas River Water Providers** members are a coalition of many different cities and public water providers who depend on the Clackamas River as their water source. The ability to treat, store, and deliver safe clean drinking water to their customers takes many different professionals with a variety of background and skills.

Most recently we visited with Brian Monnin the Water Quality Coordinator for the City of Oregon City-Public Works to learn a little bit more about him and his career in public drinking water.

CRWP: How long have you worked for the City of Oregon City?

Brian: It will be 2 years this April.

CRWP: How did you acquire your position?

Brian: I came to the City of Oregon City from the City of Hillsboro water department to fill the position of the Environmental Services Technician. In my first year as an Environmental Services Technician I became a certified Backflow Assembly Tester, Cross Connection Specialist and got my Water Operators Certification I. I also got to know the City of Oregon City and learned all I could about the stormwater National Pollutant Discharge Elimination System (NPDES) MS4 permit and the Total Maximum Daily Load (TMDL) Implementation Plan. My timing was good because the long time Water Quality Coordinator was planning to retire and I was eventually able to land in that position.

CRWP: What is you background prior to working in Water?

Brian: I have a Bachelors Degree in Environmental Science from Portland State and have a background working with fish from an internship with the City of Portland Bureau of Environmental Services and after college with the Oregon Department of Fish and Wildlife. I also worked seasonally for the Department of Environmental Quality for a couple of summers doing coastal, and lake/reservoir assessments for the state of Oregon and doing stream surveys and habitat assessments in the Coast range.

by Christine Hollenbeck

CRWP: What are your favorite/ least favorite parts of your job?

Brian: My favorite – I always jump at the chance to get back out in the field. I always used to say that sideways rain in 30 degree weather was better than being stuck at the desk. What really has me excited right now is submersing myself in the world of stormwater. I've spent much of my career in watersheds and doing drinking water sampling/monitoring so to be involved and learning so much in this incredibly important field is exciting and rewarding.

Least favorite – Probably has to do with the Cross Connection program. There is a great deal of single person education that needs to be done to have a successful program, and sometimes that leads to many phone calls and letters to make sure our customers are complying with the program and protecting our distribution system.

CRWP: Do you plan on retiring with the City of Oregon City

Brian: What I love about working in Oregon City as a Water Quality Coordinator is the possibilities are endless. We are making some big changes to the all of our current programs and we have our eyes set on starting some new programs that will really make a difference for water quality here in Oregon City, both drinking water and stormwater. It could take some time to get everything rolled out, so yeah, it's possible I could retire here.

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

Brian: I'm proud of what I work for every day,

An Interview with Brian Monnin, City of Oregon City



water. I'm proud of my role in Oregon City. My career has allowed me a great deal of knowledge to pass along to my kids and help them become stewards of the environment and clean water. Not many 4 year olds can identify stormwater facilities.

CRWP: What advice would you give to someone starting out in this field?

Brian: You never know where you are going to end up. This isn't exactly where I thought I would end up, but here I am and I like it. Keep an open mind about the jobs you apply for and apply for what you think is interesting and important to you. Don't be afraid to ask questions, there are some people in the field who know a great deal of information that you can't learn in a book.

CRWP: How has the industry changed since you started working in water?

Brian: I haven't been in the industry incredibly long, but I like seeing the younger people coming in with fresh ideas and different ways of thinking about things. This is also an unfortunate part of the changing of the guards, the people retiring have a wealth of knowledge, and it's not always what the "as-built" maps say (if there are any "as-builts").

(Continued on page 8)

Partner Spotlight Clackamas Soil and Water Conservation District

The Clackamas Soil and Water Conservation District (SWCD) is a Special Service District

headquartered in Oregon City, Oregon, and is governed by a board of publicly elected directors. We employ professional staff to assist citizens throughout Clackamas County, Oregon.

We see the District as a place where our communities, environments, and economies all thrive. Our mission is to help create that future. We provide technical service and support designed to help people use natural resources sustainably today and for future generations.

We assist Individuals, Neighborhoods and

Watersheds. Traditionally, we work one-on-one with individuals who are concerned with their land and related resources. However, natural resource issues like soil erosion and water quality are rarely limited to a single land parcel. Instead, these issues often involve neighbors, communities, and sometimes entire watersheds. Therefore, we provide a wide variety of services, which include:

- Providing conservation technical and planning assistance to land owners and managers
- Helping protect streams and rivers through education, outreach, and on-the-ground projects
- Helping land owners control wind and water-based soil erosion and protect water quality
- Planting trees, shrubs, and grasses to hold soil in place and provide wildlife food and cover
- Facilitating urban neighborhood programs to enhance the quality of watersheds and beautify local communities
- Teaching young people about natural resources and why they must be protected

(The powers and authorities of Oregon SWCD's are defined in ORS 568.210 through 568.933.)

Our Services Are Based on Voluntary Cooperation, Not Regulation. We do not issue tickets or turn people in. We often serve as an interface

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between a landowner and a regulatory agency. Our services and resources are available to people who collaborate with us to find solutions. While we do share the same geographic service area as county agencies at Clackamas County (www. clackamas.us), the Clackamas Soil and Water Conservation District is a separate and unique organization (www. conservationdistrict.org) focused on providing conservation information and advice to land owners.

We Believe In Working Together. We work hard to develop and nurture key partnerships to achieve our shared conservation missions. Watershed work rarely occurs by itself — usually, it requires working with multiple partners to coordinate actions that make sense over the long term such as partnerships with the Clackamas River Water Providers (CRWP).



There is a Long History. The CRWP and Clackamas SWCD have been working together for a number of years on pesticide reduction efforts and on septic system technical and financial assistance. The Windsock Program and the Pesticide Sprayer Efficiency Cost Share Program are two examples of pesticide reduction efforts. In addition to these programs, the CRWP and Clackamas SWCD are currently working with a large group of partners to develop erosion control recommendations using cover crops and other ground cover strategies. *(Continued on page 8)*

Answers Question 1 - Answer is A Question 2 - Answer is D

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

Partner Program Highlights:

Learn more about the Programs that the CRWP and The Clackamas Soil and Water Conservation District are working on together.

Windsock Program - The purpose of this program is to reduce contamination of surface water from pesticide drift due to the wind. Agricultural producers can get a free calibrated windsock through the Clackamas Soil and Water Conservation District. These windsocks are attached directly to the tractor for real time information to help make quick, accurate decisions on spraying practices to reduce pesticide drift.

Sprayer Efficiency Cost-Share Program - This program provides cost-share on the replacement of a limited number of parts for commercial pesticide spray equipment used by agricultural producers in the Clackamas River watershed. The purpose is to improve sprayer efficiency which in turn reduces the amount of pesticide needed. Reducing pesticides reduces the risk of polluting nearby waters that are used by humans, fish, and wildlife.

Septic System Partnership - Working

together, the CRWP and Clackamas SWCD offers workshops and creates new (or modifies existing) outreach materials specifically for Clackamas County septic system owners. The most exciting part of the Septic System Partnership is the development of financial assistance programs for septic system owners. These programs are currently available only to septic system owners in the Clackamas River watershed.

The Clackamas River Water Providers offer two financial assistance programs, a Rebate for Septic System Inspections and a Cost Share program for septic system repairs. For more information about these programs go to <u>http://</u> <u>www.clackamasproviders.org/septic-systemassistance-program/</u>

The Clackamas SWCD offers Residential Septic System loans to homeowners in the Clackamas River watershed for the repair or replacement of failed and failing septic systems. For more information regarding this loan program go to <u>https://conservationdistrict.org/programs/</u> <u>septic-system-repair-loans</u>

Faces continued

CRWP: What do you feel is most important about your job?

Brian: There are many important aspects of my job, but supplying the public with safe drinking water is the most important.

CRWP: What is the most significant project you've been involved in during your career?

Brian: Watershed monitoring when I worked for the City of Hillsboro, working in the watershed and being in nature.

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

Brian: South Fork Water Board makes high quality water that is delivered to customers in Oregon City and we do everything we can do to keep the drinking water of high quality. The City's employees work for the citizens of Oregon City, so don't hesitate to call if you are concerned about water quality.

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

Brian: The toughest part of my job is communicating the importance of having and testing backflow assemblies. If everyone got their backflow assemblies tested, I would have more time to start new water quality programs.

CRWP: What would you say water is to you?

Brian: Life, enjoyment, recreation, delicious.

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

Brian: I like to spend time outdoors with my family having fun and enjoying music. We also like to research what amazing things are created from water, like beer.

The staff here at the Clackamas River Water Providers would like to thank you, Brian, for the time you took away from your busy job for this interview. We at the CRWP look forward to working with you in the future.



2019 Calendar

2020 Conservation Calendar

It's almost time to vote for which art will be on the cover!

Each year the Clackamas River Water Providers holds a coloring contest with local elementary schools in our service area to create our annual Conservation Calendar. We receive roughly 600 pictures from our grade schools students and from those we chose 13 of them for the calendar. Each year we ask students, their families, and the community to help us decide which of the 13 pictures will be on the cover by voting on their favorite picture. The picture with the most votes will be on the cover of our 2020 calendar.

Watch our website in mid-May so you can cast your vote!





Our Members:





www.ci.gladstone.or.us www.ci.oswego.or.us



www.cityofestacada.org

CITY OF







TIGARD

www.tigard-or.gov



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