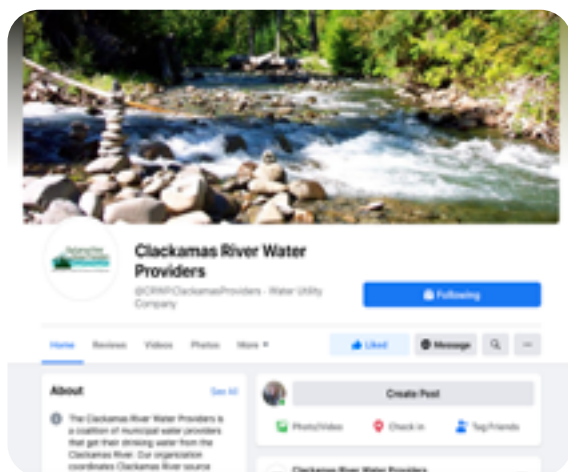




WINTER 2021 News

The CRWP Now on Facebook



The CRWP has joined the social media world by creating a Facebook page.

Visit our new FB page to see what's new with the CRWP. Learn more about the Clackamas River and what we are doing to help protect our drinking water source. Receive seasonal water conservation tips, and information on our rebate programs, teacher resources, and much more.

Like us at [@CRWP.ClackamasProviders](https://www.facebook.com/CRWP.ClackamasProviders) and become a follower and supporter of the Clackamas River Water Providers.

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2021 Water Conservation Calendar

AVAILABLE NOW! Each year the Clackamas River Water Providers invite teachers and their students to participate in our annual water conservation calendar coloring contest.

The theme for the 2021 Calendar is "Healthy River, Happy Fish, Happy People". Because of the COVID-19 pandemic and students being taught from home submitting pictures for the calendar posed some challenges. That being said, we had 19 classes from 10 different schools participate in the contest. Thirteen pictures were chosen and posted on the CRWP website for one week (May 25th - June 1st,) so students, their teachers, families and friends, and the general public could vote for which one of the 13 pictures will be on the cover of the 2021 calendar. Each school that participated in the contest receives a box of calendars (#125) to give away to students and families.

The 2021 Calendars are available to the public 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 support.

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

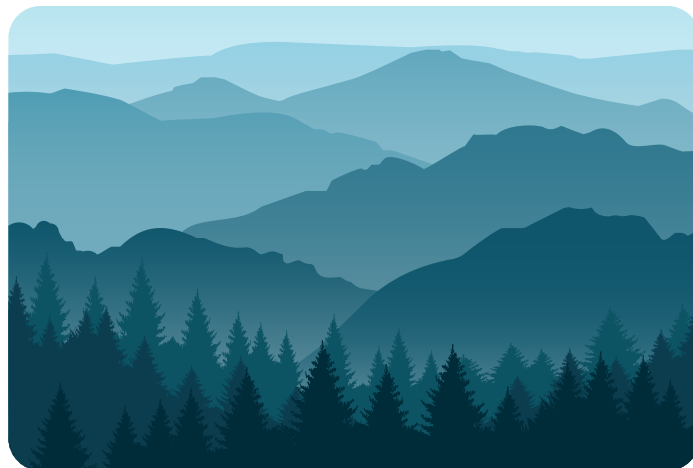
Partner Spotlight: Clackamas Stewardship Partners

The Clackamas Stewardship Partners (CSP) is a group of diverse stakeholders dedicated to restoring ecological function of the Clackamas River Basin while benefiting local economies. Discussions of forming a collaborative group began in the summer of 2004 when members of the Clackamas Ranger District of the Mt. Hood National Forest, the Clackamas River Basin Council, and members of the Clackamas County Economic Development Commission began to explore the possibilities of using the new federal Stewardship Contracting Authority to drive restoration and create jobs in Clackamas County. After several months of independently gathering support from a wide range of stakeholders, Clackamas County arranged a meeting for these stakeholders to come together for a collaborative planning effort.

The stewardship authority was created by Congress to give the U.S. Forest Service and Bureau of Land Management the authority to “perform services to achieve land management goals for the national forests and the public lands that meet local and rural community needs.” Stewardship contracting allows for national forests to achieve ecological restoration goals while also providing economic benefits to local communities by keeping these restoration dollars local.

Stewardship contracts have enabled Clackamas Stewardship Partners (CSP) to identify and recommend funding for restoration and stewardship projects throughout the Clackamas River Basin. The CSP has actively collaborated with the Forest Service in developing Stewardship Contracts as well as providing recommendation on how to use the Retain Receipts funding from these contracts for restoration efforts in the Clackamas Basin. Between 2009 and 2017, CSP recommended Retained Receipts funding for restoration projects in the Basin totaling over \$2,912,700. In 2019, CSP recommended 12 projects for full or partial funding.

The CSP has worked steadily over the years to bring its mission to life on the ground. In addition to working on Stewardship



Contracts, the group has resolved conflicts over forest thinning projects that would have otherwise been litigated by building trust and understanding between the diversity of members at the table. CSP’s strength is in the broad knowledge and experience that its members bring to the collaborative processes.

The CSP continues to work closely with the Mt. Hood National Forest on projects to improve and expand habitat for salmon and other aquatic species of concern, on road repair and decommissioning of unneeded roads, to address and repair sites damaged by inappropriate off-highway vehicle recreation and shooting, enhancement of peregrine falcon nest sites, and thinning projects to increase resistance to insects and wildfire. The CSP is currently working with the forest service to identify ways to help with the Riverside Fire recovery process.

The Clackamas River Water Providers has been part of this group almost since its inception. Participation with the group has helped the CRWP forge relationships with other basin stakeholders and the forest service which allows us to be champions for water quality and efforts that help protect our drinking water supply.



Clackamas Stewardship Partners

Promoting Healthy Forests and Local Communities in the Clackamas River Basin

clackamasstewardshippartners.org

CRWP is Supporting Teachers with Virtual Learning

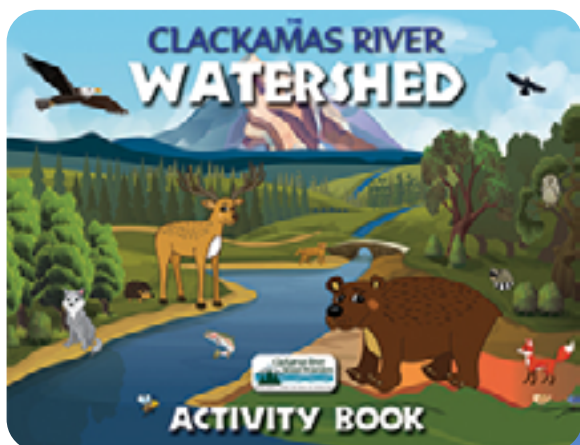
Over the years the Clackamas River Water Providers have supported our teachers with a number of free water and water conservation resources available to schools and teachers within the [CRWP service areas](#). Among other things this includes a full library of water videos and books for all grade levels on everything from the water cycle, properties of water, and how drinking water is made. We also provide a number of class room presentations, and water related assembly programs.

During the time of COVID-19 social-distancing and at home learning the CRWP has created many virtual learning options to continue supporting our teachers in their water and watershed education efforts. Our newly updated [Teacher Resource Page](#) provides access to our Educating from Home resource list, an interactive Clackamas River watershed map, virtual drinking water treatment plant tours, virtual assembly videos with Master Storyteller Will Hornyak, virtual classroom presentations, access to our 'Become a Clackamas River Hero' activity booklet, mini water education grants, and much more.



Storyteller, Will Hornyak, in a classroom presentation

All of these resources and programs are offered at no cost to our schools and teachers, and upon request some of the presentations include curriculum packets and promotional items, such as shower timers, and brochures for students to share with their families. To see the list of schools where these resources are available, [click here](#), or for more information contact our Public Outreach and Education Coordinator at christine@clackamasproviders.org.



Winter Preparation for Outdoor Summer Conservation

Healthy soil is a key tool for managing 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. 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 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.



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. 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 capacity during the summer. For more information on outdoor water conservation, visit our website at www.clackamasproviders.org/outdoor-conservation/.

Winter Quiz:

Answers - Can be found on page 6

1. The CSP (Clackamas Stewardship Partners) are working to:

- A. Improve habitat for salmon/aquatic species
- B. Improve road repair
- C. Enhance Peregrine Falcon nest sites
- D. All of the above

2. CRWP provides access to an 'Educating from Home' resource list.

- A. True
- B. False

3. Managing healthy soil can be accomplished in the winter months by:

- A. Removing dead plants
- B. Turning soil with organic material
- C. Planting cover crops
- D. All of the above

4. Disinfection Byproducts are defined as:

- A. Similar to bleach
- B. Substances formed in a reaction of chlorine with organic matter
- C. Chemicals found in raw river water
- D. None of the above

The “What and Why’s” of Source Water Protection



When the CRWP began our source water protection efforts more than a decade ago there were not many similar types of programs here in Oregon or around the nation. This has changed in the last five years with a number of oil spills, chemical spills (West Virginia 2014), and hazardous algal blooms which have impacted drinking water sources across the USA. This has promoted the need, and the recognition that water providers need to be looking upstream and understand potential drinking water risks.

So, what exactly is Source Water Protection?

Source water protection is the foundation of any drinking water utility and is one of the primary ways to reduce the risk to a source from contamination or decline in production. Source water protection not only helps the utility identify its risk, it is also a necessary part of educating regulatory agencies, permitting authorities, and the community about the impacts their actions can have on drinking water source water quality and quantity.

Source water protection can also:

- Reduce the need for additional treatment to meet water quality standards.
- Help a utility be prepared and reduce the impacts and cost of an emergency when they understand the risk to source quality from contamination or reduce quantity due to climate change.
- Help sustainability when an alternative source of water may not be available or cost prohibitive.

It is also one of the first key steps in a multiple barrier approach to providing clean drinking water which involves several consecutive steps including: high quality source



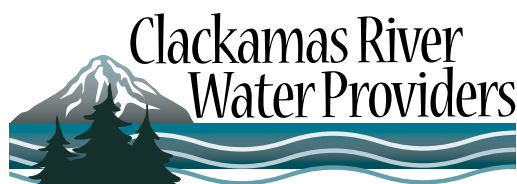
water, source water protection, optimized water treatment, distribution system maintenance and water quality monitoring.

The overall concept of source protection is to have the ability to measure the balance between watershed health and human use over time and implement actions that maintain a healthy balance for production of exceptional water quality. This requires not only being aware of all the different human activities going on, and their risks to drinking water, within the watershed but also understanding the limits of what the river can handle and still maintain a high level of water quality.

In addition, CRWP members recognize the need to better understand climate change and the potential future impacts to water quality and quantity that a changing climate may have on our watershed and water source.

By identifying, preventing, minimizing, and mitigating for activities that have known or potentially harmful impacts on drinking water quality, we are able to preserve the Clackamas River as a high-quality drinking water source, minimizing future drinking water treatment costs, while being good stewards of the river.

To see what strategies and efforts we are implementing to achieve our Source Water Protection goals visit our website at www.clackamasproviders.org or contact Kim Swan at kims@clackamasproviders.org.



Working together to protect and conserve our drinking water.

Water Saving Tips

Visit our [website](#) for more indoor water saving tips.

- **Done with your holiday baking?** Use your leftover food coloring to check your toilet for leaks. [Click here](#) to learn how to check your toilet for leaks.
- **Let your dishwasher do the work.** Energy Star certified dishwashers include several innovations that reduce energy and water consumption. Visit our [website](#) to learn about our \$75 rebate.
- **Thawing food?** Use the microwave, a bowl of water, or place it in the fridge overnight instead of running the tap. You'll save about two gallons of water for each minute the faucet does not run.

- **Freeze the grease** instead of 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.



Water Efficient Plant Guide

Are you spending the winter designing or redesigning for a more water-efficient landscape? Check out our “[Water Efficient Plants for the Willamette Valley](#)” plant guide. During the summer months water usage in our area increases 2 – 3 times from the amount of water we use in the winter. This is primarily due to landscape and landscape watering practices. The need to conserve water, however, does not mean that we have to abandon our beautiful landscapes. The notion that water efficient landscapes have to be barren and dry is changing as people realize that they can have the best of both worlds when it comes to water conservation and landscaping. With proper irrigation design and management, and with proper plant selection and placement, responsible water users can enjoy a full range of landscape styles. A hard



copy of this booklet is also available by mail. Give us a call at 503-723-3511, or email us at christine@clackamasproviders.org.

Winter Quiz:

Answers

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

Question 3 - Answer is D
Question 4 - Answer is B

Faces of Drinking Water

by Christine Hollenbeck

For this 2021 winter edition of our E newsletter, we thought we would formally introduce Katelynn Niece, our tour guide for the South Fork Water Board video tour. South Fork Water Board provides drinking water to, and is jointly owned and governed by the cities of Oregon City and West Linn.

Because of COVID 19 the CRWP is unable to give tours of our member's drinking water treatment plants. In order to provide this educational opportunity to our communities and students we have develop video tours of our treatment plants available on our website under the [Teacher Resource](#) page.

CRWP: How long have you been working for South Fork Water Board?

Katelynn: I have been employed by South Fork for 11 yrs. I started my internship at South Fork through Clackamas Community College in 2009 and then I moved into the summer help position which led to a position within operations.

CRWP: What is your position at SFWB?

Katelynn: Currently I manage the Regulatory Compliance department for the plant.

CRWP: How did you acquire your current position with SFWB?

Katelynn: I started my career with South Fork assisting Maintenance/Operations, my experience over the years has led me to be able to take over the Regulatory Compliance responsibilities.

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

Katelynn: I am a very detail oriented and organized person, what I like most about this position is having sole accountability within my responsibilities and my role within the facility. I also find satisfaction in being able to participate in critical projects involving our facility's future.

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

Katelynn: My greatest accomplishment within my career has been my love and dedication to this field and my dedication to expanding my responsibilities and gain a leadership position in this industry.

CRWP: : What advice would you give to someone starting out in the drinking water industry?

Katelynn: My advice for someone starting out in the field of public drinking water is to explore other positions/departments within your place of employment if it could help you succeed. I have worked within the Maintenance department, Operations, and now Regulatory Compliance and I'm thankful for all the knowledge I've gained because it helps me to have a real understanding of the facility as a whole.

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

Katelynn: The most important part of my job is ensuring our facilities compliance with State and Federal agencies through water quality sampling and data.

CRWP: What would you like the public to know about their drinking water and what your role is in delivering that water?

Katelynn: I would like the public to know first and foremost that the drinking water is safe. I think my role in that is equal to that of the entire team in serving our communities.

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

Katelynn: I would say the combination of projects within my career are

Katelynn Niece
Regulatory Compliance
South Fork Water Board



significant but if I had to choose one it would be taking over the responsibility of Regulatory Compliance for this utility.

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

Katelynn: Coffee.

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

Kate: When I'm not working, I enjoy fishing, especially bass fishing. I'm also really big on family, so when I'm not working, I'm spending time with them.

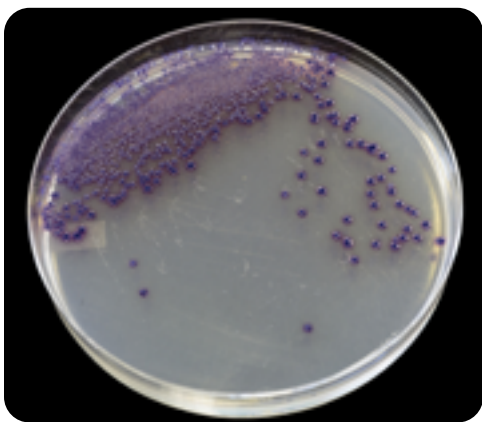
During the filming of our video tour at South Fork Water Board I had the opportunity to get to know Katelynn much better. I truly look forward to working with her in the years to come. Thank you, Katelynn, for all your hard work and dedication helping to ensure that our customers in Oregon City and West Linn are receiving high quality, safe, and clean drinking water every day.

How Our Water Systems Work - Water Quality & Testing

Clackamas River Water Provider 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 water quality testing are:

- **Coliform Bacteria** - Organisms that are present in the environment and in the feces of all warm-blooded animals and humans. Their presence in drinking water indicates that disease-causing organisms (pathogens) could be in the water system.



- **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** - Chemical, organic and inorganic substances that can form during a reaction of a disinfectant (chlorine) with naturally present organic matter in the water.



For more information:

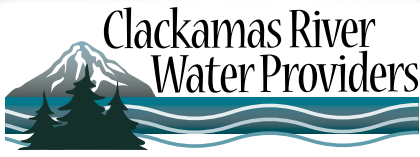
Go to your local water provider's website to view the "Annual Consumer Confidence Report" (Annual Water Quality Report). [Click here](#) to find your CRWP water provider.

Environmental Protection Agency Safe Drinking Water Act:

The EPA sets legal limits on over 90 contaminants in drinking water. The legal limit for a contaminant reflects the level that protects human health and that water systems can achieve using the best available technology. EPA rules also set water-testing schedules and methods that water systems must follow. <https://water.epa.gov/lawsregs/rulesregs/sdwa/index.cfm>

State of Oregon Drinking Water Program: Oregon Drinking Water Services (DWS) administers and enforces drinking water quality standards for public water systems in the state of Oregon. DWS focuses resources in the areas of highest public health benefit and promotes voluntary compliance with state and federal drinking water standards. DWS also emphasizes prevention of contamination through source water protection, provides technical assistance to water systems, and provides water system operator training.

<https://public.health.oregon.gov/HealthyEnvironments/DrinkingWater>



Working together to protect and conserve our drinking water.

14275 S Clackamas River Drive, Oregon City, OR 97045 • www.clackamasproviders.org

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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