

Summer Water Outlook for 2020

May and June were cooler and wetter than expected and flows in the Clackamas are still above normal for this time of year, but things can change quickly. As water managers we look to tools that help us understand what the rest of our summer may look like and what this will mean for water demands, as well as what kind of management decision we may need to make. There are two tools that we use to help inform these decisions.

The first is the Oregon Water Resource Department bi-weekly Water Condition Reports. These reports look at snowpack in addition to current statewide water year precipitation, temperatures, and streamflow conditions. The most recent three-month outlook from the NOAA Climate Prediction Center, indicates an increased probability of above-normal temperatures along with below-normal precipitation across the Pacific Northwest. To see these reports go to https://apps.wrd.state.or.us/apps/wr/wr_drought/current_updates.aspx.

The second are the bimonthly Drought & Climate Outlook webinars for the Pacific Northwest that are put on by the National Integrated Drought Information System. The Pacific Northwest Drought Early Warning System (PNW DEWS) Drought & Climate Outlook Webinar is part of a series of regular drought and climate outlook webinars designed to provide stakeholders and other interested parties in the region with timely information on current drought status and impacts, as well as a preview of current and developing climatic events (i.e. El Niño and La Niña). For more information go here www.drought.gov/drought.

SUMMER 2020 News

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We encourage our customer to use water wisely every day all year round, but if this summer ends up being hotter and longer than anticipated we will encourage our customers to take advantage or our <u>conservation resources and tools</u> to find more ways to save and conserve water. This will be especially important in September, if we don't get Fall rain to ensure there is enough water in the river for the fall fish migration.



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Annual Water Conservation Calendar



Each year the Clackamas River Water Providers invite teachers and their students to participate in our annual water conservation calendar coloring contest. Students demonstrate their knowledge of water by creating pictures that reflect the calendar theme.

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, 19 classes from 10 different schools participated in the contest with approximately 200 entries. Thirteen pictures were chosen from all the entries submitted and were 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.

The winner of this year's contest will be revealed in October of 2020. The CRWP will work to make sure each school that participated in the contest receives a box of 125 calendars to give away to students and families. The 2021 calendars will also be available 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.

Flume Smart Home Water Monitor

The Clackamas River Water Providers is working with **FLUME to pilot a \$100 rebate** for eligible CRWP customers if they purchase a new Flume Smart Water Monitor device.

Flume, is a first-of-its-kind, easily installed household device that puts the power of water use monitoring into the hands of homeowners.

- Detect small leaks before they cost money and cause damage
- Gain real-time information on your household water consumption
- Set water usage goals and budgets for your household
- Smart technology sends notifications straight to your phone
- Receive push notifications on suspicious water activities while you're away





Conservation Rebates are back!

Click here for more information.

The Flume Smart Water Monitor provides complete coverage by catching leaks inside of your home as well as in your lawn or garden. If Flume senses a leak or unusually high-water use, you'll be notified immediately via text, email or push notification anywhere you are tracking your water use 24/7, alerting you to excessive water use and leaks.

Never be surprised by a high-water bill again. Flume lets you set daily, weekly or monthly budgets and notifies you as you approach your limit. You can also measure your use against like homes in the Flume Family.

For more information about the Flume Smart Water Monitor and how to apply for our CRWP pilot rebate, visit our <u>website</u> under rebates.

Conserve water and save money.

Partner Spotlight: The Clackamas Partnership

The Clackamas Partnership is more than fifteen regional organizations committed to working collaboratively to improve watershed health. For more than ten years, the Partnership's watershed councils, local, state, and federal agencies, tribes, and other Partner organizations have shared resources and collaboratively engaged in restoration projects, funding efforts, monitoring, and community outreach activities.

In 2018 the Partnership developed a Strategic Restoration Action Plan (Strategic Plan) to guide restoration actions designed to improve river and stream habitat and the environment that sustains native fish populations. The Strategic Plan's large geographic area (Plan Area) encompasses the Clackamas River and all tributaries from its headwaters to the confluence with the Willamette River; a portion of the Willamette River and its floodplain; and watersheds flowing into the east side of the Willamette River, including Abernethy, Kellogg, and Johnson Creeks.

The Strategic Plan describes the Clackamas Partnership's commitment to, and outlines the roadmap for, increasing the pace and scale of restoration through collaboration, focused investment, outreach, and sharing information and resources. To support the collaborative strategic planning effort and on-going restoration actions, the Partnership organizations (Partners) share staff resources, data, and information on the factors degrading watershed health and fish populations. Through coordination between the Partners, the Partnership has identified priority restoration areas and actions. The Strategic Plan describes restoration actions that address the limiting factors identified in state and federal recovery plans, outlines performance goals and objectives, and demonstrates the Partnership's capacity for phased restoration project implementation for recovery of native fish populations.



Pacific Lamprey oregonzoo.org



All of the Partners bring substantial staff capacity, expertise, and resources to the Clackamas Partnership's activities. The Partnership has two categories of partner organizations based on responsibilities. Core Partners lead restoration and conservation project implementation and reporting, participate in project prioritization and planning through the Technical Advisory Committee (TAC), and participate in the Partnership's governance and decision-making. Supporting Partners provide technical support, participate in project prioritization and planning through the TAC, support implementation through funding, technical support and other means, and participate in the Partnership's governance and decision-making.

The CRWP is a supporting partner. Our role includes planning support, landowner outreach, promoting water quality BMPs, participating in Partnership governance and decision-making monitoring and reporting. In addition, funding support provided by the CRWP for Clackamas River Basin Council activities, as well as for CRWP monitoring and studies in the Clackamas River Basin is used as OWEB grant funding match.

In 2019 The Clackamas Partnership was awarded a grant through the Oregon Watershed Enhancement Board's (OWEB) Focused Investment Partnership (FIP) program. The \$8,744,080 grant will support implementation of fish habitat restoration, outreach, monitoring, and other activities over a 6-year investment period, 2019 - 2025. The Partnership estimates leveraging an equal amount of additional funding from Partnership organizations and other sources to support the restoration program.

For more information about the Clackamas Partnership or to download a copy of the Strategic Plan go to www.clackamaspartnership.org.

Summer Quiz:

1. May and June were hotter and dryer than expected.

A. True B. False 2. The OWEB Grant (awarded to Clackamas Partnership) will support which activities?

- A. Fish Habitat
- **B.** Restoration **C.** Monitoring
- **D.** All of the above

Answers - Can be found on page 9

3. Some weeds thrive during reduced water situations because of large tap roots that can hold water.

A. True B. False 4. How many Drinking Water Treatment Plants take their water from the Clackamas River?

Faces of Drinking Water

For this Summer 2020 issue of our E newsletter we interviewed Wade Hathhorn Manager of Sunrise Water Authority and the North Clackamas County Water Commission.

CRWP: What is your back ground?

Wade: I have had three different careers. I began my professional life as a university professor, first at the University of Illinois at Chicago and later at Washington State University. I left academia in 1997 to enter private consulting as an engineer. During that time, I became President of a consulting firm called Economic & Engineering Consulting (EES). In fact, one of my first consulting jobs involved the merger of the former Mt. Scott and Damascus Water Districts to form the Sunrise Water Authority. I later served as a senior executive at several major consulting firms including HDR and MWH. In 2010, I was recruited for the General Manager's position at Sunrise by the then outgoing manager who was retiring.

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

Wade: The favorite part of my job is helping people and the organization improve. I use a lot of my former business experience to set goals and targets for the organization and then create actionable steps to achieve measurable outcomes. It can be extremely rewarding. The least favorite part of my job is dealing with bad behavior by an employee. Disciplining people is not fun. It's stressful and unpleasant.

CRWP: Do you plan to retire from Sunrise Water Authority?

Wade: Yes. I plan to retire at Sunrise.

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

Wade: Transforming Sunrise into a sustainable organization. I came to Sunrise during the housing market crash in 2010.

by Christine Hollenbeck

The organization had been depleted of cash and was reeling from downsizing to remain solvent. Since then, with an understanding and supportive Board of Commissioners, we have been able to rebuild the organization and put it on a path toward a resilient and successful future.

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

Wade: Don't be afraid to make mistakes and be humble in your success. Find a purpose beyond yourself. Seek to improve and make a difference. It can be very rewarding.

CRWP: How has the industry changed since you started?

Wade: Technology is advancing how we do business and how we interact with our customers. Access to data and information is rapidly expanding. Keeping pace with those changes is challenging.

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

Wade: Being fair to staff and customers. In that fairness there is understanding, respect and gratitude.

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

Wade: I'd like the public to better understand the value of drinking water, the quality of the product, and the service we provide at a reasonable cost. My job is to ensure we accomplish this every day. We are a public service provider and an integral part of public health. We take that responsibility very seriously and are proud of our efforts in meeting the challenges and requirements that come with this line of work.

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

Wade: Understand that we actually care

Wade Hathorn, General Manager Sunrise Water Authority and N. Clackamas Co. Water Commission



about them and our role as their water service provider. Recognize that we make mistakes from time to time but that our interests are centered on providing them the best service possible.

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

Wade: This is an interesting question. Professionally I have managed the construction of some sizable infrastructure projects including 6 miles of 72-inch water transmission pipeline that went along the highway between Hillsboro and Cornelius and underneath several major waterways. It was quite the endeavor. Privately, I have been part of several efforts to raise money to fight cancer and homelessness. I find both rewarding.

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

Wade: Besides M&Ms or Doritos, it has to be making a difference in the lives of our staff and customers. I find basic accomplishment of goals and targets fun. It is so rewarding to work as a team on a common purpose and succeed.

CRWP: What would you say H2O is to you?

Wade: Frankly, it has been one of my passions. It's allowed me to have a great life. I began my career as a *(Continued on page 5)*

Faces - continued

college undergraduate working at Sierra Pacific Power in Reno, Nevada as a summer intern in their Water Division. I was part of the plant operation staff. I can remember my excitement to be involved in something that mattered to the community. I was hooked. It's interesting to note that later I always wanted to be an attorney, practicing environmental law, and the next thing I knew I had a PhD in Engineering. I have a master's degree in water treatment and a PhD in advanced fluid mechanics.

I rarely use the title Dr. Hathhorn but I do carry the credential. At one end of my career, I once served as an expert panelist to the US EPA in the environmental clean-up of the Hanford nuclear facility. Today, I am the General Manager of a public water utility. Between the many lives I've enjoyed, I have a few stories to tell.

CRWP: What are the top priorities for your agency over the next few years? Next decade?

Wade: Always at the top is to care for our customers. That aside, Sunrise is growing to meeting the expanding demands of the city of Happy Valley. We face some real challenges as the city grows into the former rural areas of the county. Lots of big infrastructure is needed and with that comes the demand for money. I am working with our Board to create a unique "pay as you go" financing program that will allow us to potentially avoid any long-term debt over the next 20 years. We are also growing as an agency and making plans to move from our present location to a new facility.

CRWP: What is the biggest challenge facing your organization in the next couple of years? What are the opportunities?

Wade: Although I mentioned the growth of Happy Valley, technology may be as great a challenge in the future. Customers are growing accustomed to access via phone apps and other informational platforms that we as an industry are not prepared to provide. You can now control your home heating or AC from anywhere in the world. Cars are about to drive by themselves. The water industry is simply not prepared to provide that kind of service. It requires a different kind of service team and resources. Technology evolves every three to four years while the water industry continues to make 20-year plans. This will create several challenges.

CRWP: What do you see as your agency's greatest accomplishments in the time you've been there?

Wade: Rebuilding a broken utility. Literally broke when I took over. Today, we talk about strategy and financing objectives. Short and long-terms goals. We look for measured outcomes and performance to guide change. I am proud to have brought that kind of discipline to Sunrise. I think it has made a big difference. More recently, we proved to be an industry leader in preparation for the COVID-19 disaster. We had been working to improve emergency response capabilities for several years, relying largely on web-based services and tools. When the crisis hit, we were ready to disperse staff and keep the agency operating with little disruption.

CRWP: Many utilities are struggling with the need to increase rates for their services. How are you approaching this? What are the keys to your success?

Wade: Rates themselves are not the issue. Unfortunately, decisions are. For years, public water providers took pride in not raising rates. While the cost of labor and materials rose, the financial capacity of these agencies fell. What could have been 2-4% annual increases in rates turned into 15-30% increases or more, while still remaining short of what's actually needed to fund future needs.

Today, some of those same bad decision persists and public agencies are bad at cooperation. They fend for themselves under a veil of self-protectionism only to miss the important opportunity to share the cost across larger, collective populations, so called economies of scale. The private sector well-understands this principle and drives down costs through consolidation and more efficient operations. The alternative is to limit public sector labor and use contracted resources where advantageous, while looking to partner with those agencies who desire to share in similar productive outcomes.

In the end, rates are the true cost of service and will set themselves based on market value, but this requires strategic management decisions and some luck. Long-term debt is also destructive, yet it remains pervasive among agencies looking to repair the past, literally. Debt appears the only option to make cash available, but often limits future options under crippling bond payments and associated rate increases. Avoidance of debt, however, requires steady persistence and some luck but it offers the opportunity to guide an independent future. This is also a place where the federal government can play a particularly important role through infrastructure financing at the state and local level.

CRWP: If you could change one thing about state or federal regulatory programs, what would it be?

Wade: Limit rules that reach beyond their intended purpose. For instance, the hundreds of tests and protections on the water we serve are actually good. It protects the customer even if it's expensive. By contrast, when those same regulations extend into the yard of homeowners, like the requirement on annual backflow testing of a residential sprinkler system, then I have concern. This is a good example of a rule that is very costly and does little to actually protect the public water system.

(Continued on page 8)

Let Your Turfgrass (Lawn) Go Dormant

Many of today's regionally adapted turfgrasses (lawns) can handle a period of drought or heat. Choosing not to water your lawn during the summer and allowing it to go dormant is a great way to ensure there is enough water in the Clackamas River for fish. In our area lawns have the ability to go dormant during adverse conditions.

Dormancy Is:

Summer dormancy is simply a state of reduced water usage where the turfgrass plant focuses resources on the roots and is a normal response to the stress of heat and drought. Most turfgrass plants can stay in a dormant state for at least 4 weeks without the grass dying. In the Willamette valley the most common turfgrass used is a perennial ryegrass which is a cool-season grass, meaning it peaks in growth during cool seasons, from fall through spring, and naturally goes dormant during the summer months. Dormant turfgrass will turn brown, but it will recover when conditions improve.

If you choose to let your turfgrass go dormant this year, follow these simple tips to help it recover starting in mid-August when the nights begin to get longer and cooler.

Watering:

If drought goes beyond 4 weeks, apply enough water to re-hydrate the grass slightly and wet the soil down to a 5-inch (12.5 cm) depth. In most cases this will not green up the turfgrass, but will keep the plant alive.

Mowing:

Maintain the turfgrass at a slightly higher height of cut before and during a drought. This helps to keep the soil cool and retain soil moisture. To minimize stress, mow only as needed, early in the morning or late in the evening. Use a sharp blade and remove no more than one-third of the turfgrass leaf blade.

Fertilizing:

During dormancy avoid excessive fertilization. The dormant turfgrass is not actively bringing in large quantities of nutrients. Excessive nitrogen applications before or during a drought can promote top growth at the expense of rooting activity and cause injury to the turfgrass plant.

Weed Control:

Some weeds thrive during reduced water situations because of large tap roots that can hold water. A broadcast application of herbicide can further stress the dormant turfgrass. Instead, spot treat these weeds with an herbicide or remove the weeds by hand.

Use:

Because the turfgrass is dormant it is not able to readily repair itself so reduce traffic on the lawn as much



as possible. Avoid any activity on the turfgrass during the heat of day. Foot traffic and even lawn mowers can injure the turfgrass plants and cause almost immediate dehydration. If you have children or pets and would like to have an area of green lawn, only water that area rather than the whole lawn. Visit our website and sign up for the Weekly Watering number to ensure you are not over watering. When cooler, wetter weather returns, it will restore soil moisture, wash dust off the lawn, rehydrate the dormant crowns and buds, and initiate root growth.

Over the years we have spoken with many CRWP customers who have chosen to let their lawns go dormant during the summer and they are all amazed at how quickly their lawns bounce back and begin to green up in mid-August when the nights are longer and cooler. This year we encourage you to give lawn dormancy a try and see how resilient your lawn can be.

Information in this article provided by The Lawn Institute. **www.TheLawnInstitute.org**.

Watershed Protection

SOURCE TO TAP, your water is protected, filtered and monitored.

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 Clackamas and Washington Counties continues 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 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.

What's Your Weekly Watering Number?

Everyone wants a beautiful Lawn and Garden – however, we also need to think about conserving water. The good news is that landscapes can be maintained with far less water than you think. Want to know exactly how much you should be watering each week? By using the weekly watering number, you can do just that.

The **Regional Water Providers Consortium** have contracted with a weather forecasting service to provide Portland Area Water Providers with a free weather forecast and zip code specific *Weekly Watering Number* each Thursday (April - September). This number is based on historical data (evapotranspiration, rain fall, and other data points) from the previous week, but it is used to determine how much to water lawns and gardens during the current week. As the weather changes throughout the watering season so does the Weekly Watering Number, this allows you to give your lawn and other plants exactly what they need and not waste water.



Visit our **website** for more information and to sign-up for the *Weekly Watering Number* to start watering smart today!

Faces - continued

Public health is about risk management and using limited resources to achieve the most useful outcomes. There are times when these regulations simply ignore this principle and require unnecessary waste of time and money.

CRWP: What's something people might be surprised to know about Sunrise Water Authority?

Wade: We're only 25 people and we serve just under 50,000 customers through about 16,500 connections. Our staff works hard and they make it happen every day. We maintain about 230 miles of pipe, 16 pump stations and 19 reservoirs. We generally have very few interruptions to service, 24 hours a day, 365 days a year.

CRWP: What's on your to-do list?

Wade: Lots of infrastructure planning, design and financing. We are also challenged to improve our administrative and emergency response functions. There are many challenges to creating and maintaining a successful utility. The common threads shared widely in the

drinking water industry include infrastructure maintenance and replacement, emergency preparedness, staffing and employee management, and a continued focus to deliver the best service to our customers.

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

Wade: I love to fly fish. Catch and release only. I also have a pilot's license and it's been way too long since I last piloted a plane. More recently, my wife and I set out to run half-marathons on every continent in the world. I've been to all seven including Antarctica. It was crazy good.

The CRWP would like to thank Wade for taking time out of his busy schedule for this interview. His passion for the drinking water industry is evident in his active participation as the past Chair of the CRWP, and in the management of the Sunrise Water Authority and the North Clackamas County Water Commission.

Fish on the Run, Irrigation Done

In August the CRWP begins our annual "Fish on the Run, Irrigation Done" campaign. The purpose of this annual campaign is to encourage our member customers to greatly reduce or stop all outdoor water use by September 1st in order to leave water in the Clackamas

River for the fall fish migration. Visit our website in mid-August for more information on what you can do to help.



KEEP WATER IN THE RIVER FOR FISH.

5 Easy Summer Conservation Tips

Properly managing your outdoor water use during the summer months isn't only important to do because it can help you manage your water bill, it is also the right thing to do.

1) Chose plants adapted to the Willamette Valley

Visit our **website** to view the Water Efficient Plants for the Willamette Valley plant guide. Chose plants that are adapted to your specific soil, water, and light conditions.



2) Water plants in the morning or evening Watering plants in the morning or evening (while it's cool), allows the water to absorb into the soil to reach the roots without losing too much water to evaporation.

3) Wash your dog on the lawn

Bathe your dog outside during the summer and water the lawn at the same time.

4) Hand-water your plants

Instead of using the irrigation system or a sprinkler, water your plants by hand allowing you to water only the plants that need it.

5) Go to a car wash

Choose a car wash that uses low-flow washing systems and recycles the water which is better for the environment.





Summer Quiz:

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

Question 3 - Answer is A Question 4 - Answer is C

Managing Your Outdoor Irrigation System

Summer's rising temperatures often coincide with rising outdoor water use, primarily due to an increase in lawn and landscape watering. While using water efficiently is important throughout the year, sometimes the timing of water use can make a big difference for our Clackamas River water supply and your water bill.

In our area the amount of water homeowners use to keep their lawns green and gardens lush spikes in the summer—two to three times as much water is used than the rest of the year! And those with timed outdoor watering systems often forget to monitor the weather or set their irrigation controllers back in the late summer and fall, leading to overwatering during the cooler months.

If your home is one of the more than 13.5 million with an inground irrigation system, and you do not let your lawn go dormant during the summer try these simple strategies to reduce your water use, protect the environment. Having a beautiful landscape doesn't have to mean using a lot of water.

 Adjust your irrigation system often. Irrigation controllers should be updated based on seasonal changes. An Environmental Protection Agency (EPA) WaterSense labeled Smart Controller uses weather data to determine when and how much to water. Visit the CRWP <u>website</u> for a \$100 Smart Controller Rebate, and for more tips on adjusting your irrigation controller schedule, read the <u>EPA's Irrigation Controller</u> Brochure.

• Set sprinklers to keep the water on the landscape and off the pavement. Lots of water is wasted by poorly designed and neglected sprinkler systems that spray sidewalks, driveways, and the street. Save water by adjusting sprinkler heads directing them toward the landscape.





• Inspect your irrigation system monthly. Check for leaks, broken or clogged heads, and other problems. Clean microirrigation filters as needed and correct obstructions in sprinkler heads that prevent them from distributing water evenly. The EPA has a checklist Find It, Flag It, Fix It: A Checklist For Your Landscape which provides tips on how to identify irrigation and landscape issues and when you might want to call an irrigation professional for assistance.

The CRWP has contracted with a landscape professional to offer FREE landscape water audits. For more information and to schedule your FREE landscape water audit visit our <u>website</u>.

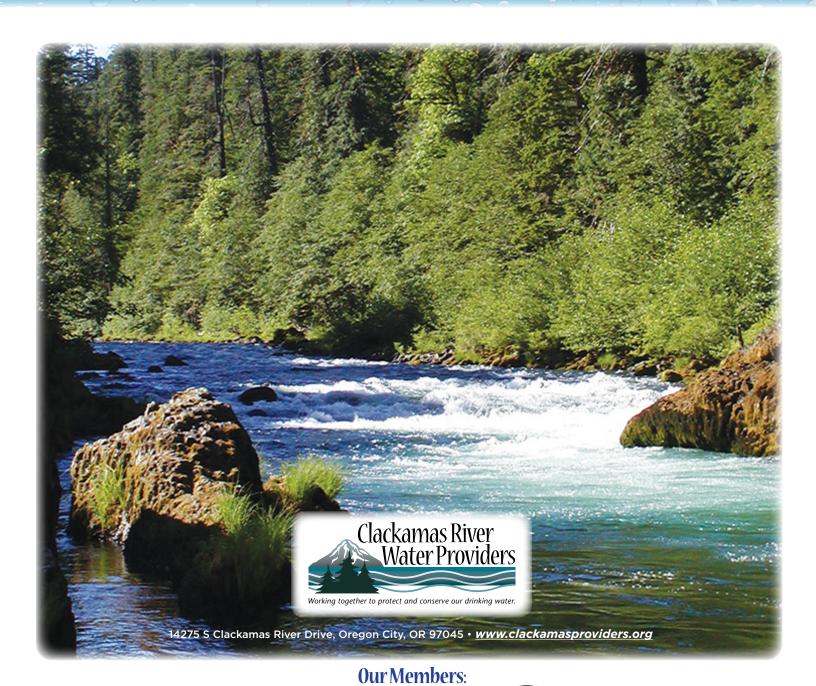
• **Play "zone" defense.** Plants with similar needs should be planted together in an irrigation zone or "hydrozone". Each hydrozone should account for the type of sprinkler, sun or shade exposure, and type of plants. You can save even more water outdoors by incorporating water-smart landscaping principles into your landscape design. Go here to view the <u>Water Efficient</u> <u>Plants for the Willamette Valley</u> and for more information on which plants should be grouped together.

Even if your home doesn't have an in-ground timed sprinkler system, there are a number of simple steps you can take to promote a healthier lawn and garden with less water this summer:

• **Step on it**: Grass doesn't always need water just because it's hot out. Step on the lawn, and if the grass springs back, it doesn't need water. An inexpensive soil moisture sensor can also show the amount of moisture at the plant's roots and discourage over-watering.

• Leave it long: Raise your lawn mower blade. Longer grass promotes deeper root growth, resulting in a more drought-resistant lawn, reduced evaporation, and fewer weeds.

Visit our website for more outdoor water conservation tips and information on our rebate program which has 4 outdoor rebates to help you manage all of your summer water use.









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













www.tigard-or.gov

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