

Working together to protect and conserve our drinking water.

Annual Report

For Fiscal Year 2020-21

September 2021

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Background

The Clackamas River Water Providers (CRWP) is a coalition of water providers that get their drinking water from the Clackamas River. The organization is made up of representatives from the City of Estacada, City of Lake Oswego, City of Tigard, Clackamas River Water, the North Clackamas County Water Commission (Oak Lodge Water Services, City of Gladstone), South Fork Water Board (City of Oregon City, City of West Linn), and Sunrise Water Authority (City of Happy Valley, Damascus area). It includes two staff people, a Water Resource Manager and a Public Outreach & Education Coordinator. Combined we serve water to over 300,000 people in Clackamas and Washington Counties.

The CRWP was created by an Intergovernmental Agreement in the Fall of 2007 to coordinate efforts regarding source water protection and public outreach and education around watershed issues, drinking water, and water conservation. Our goal is to preserve the Clackamas River as a high quality drinking water source and minimize future drinking water treatment costs, while being good stewards of the river.

Through these efforts we have been working together for more than ten years to jointly fund projects and studies that would be too expensive to do individually, to foster closer relationships with each other as intra-basin water suppliers, and to speak in one voice when working with other stakeholders in the basin such as PGE. This has allowed us to realize the economies of scale and save money by sharing in the costs of staff people to manage and coordinate programs that benefit all our agencies.

The following is a look at the year in review.

COVID 19

This year COVID 19 continued to impact and change how we do things and how we are interacting with our members, citizens, and watershed partners. We continued to conduct most our work online and expand the programs that we implement into the virtual word. Due to the COVID-19 pandemic social distancing requirements many of the presentations and events that the CRWP typically participates in were canceled or were held virtually.

CRWP Website

This past year the Clackamas River Water Providers website was overhauled to make it easier to navigate and more user friendly. Content on the website is updated on regular basis. The site includes information about CRWP members, our source water protection programs, and public outreach and water conservation programs, and is used as a tool for the Conservation Rebate and Landscape Audit Program. The Resources and Documents page contains CRWP outreach material, plans, and reports that can be downloaded. Go to www.clackamasproviders.org to visit the site.





Source Water Protection Programs

In 2010 the CRWP completed the development of a Drinking Water Protection Plan for the Clackamas River watershed. This Plan acts as a road map of potential strategies and programs to implement over the next decade and beyond to preserve the Clackamas River as a high-quality drinking water source and to minimize future drinking water treatment costs. The CRWP continues to work on implementing elements of the Plan. The descriptions below describe the CRWP efforts for the 2020-21 fiscal year.

Basin Analysis: Studies, GIS, Modeling and Water Quality Monitoring Monitoring Contract with USGS

In August of 2016 the CRWP signed a Joint Funding Agreement with USGS to continue the data-collection program and provide the funding mechanism for the USGS to: (1) operate three continuous water-quality monitors in the Clackamas River (at Oregon City, Estacada, and Carter Bridge), and (2) operate a streamflow gage in the Clackamas River at Oregon City for a five-year period from October 2016 through September 2021.

These stations are strategically placed in the basin to provide a holistic view of water quality as water flows through the watershed. Although each station provides important information on their own, when used in combination the WQ monitors can pinpoint where turbidity sources originate (upper basin, middle basin, lower basin), help pinpoint changes in water quality based on land use in different parts of the basin, and can help identify where to start looking if a spill occurs.

These monitoring stations continuously log pH, specific conductivity, dissolved oxygen, temperature, and turbidity. The Estacada and Oregon City gauges also records chlorophyll and streamflow. New fDom sensors were also purchased and installed for both the Carter Bridge and Estacada gauges. In addition to the monitoring contract, the CRWP paid for replacement probes, solutions and cables, as well as the utility fees for the real time data signals associated with the USGS monitoring sites. The water quality data can be accessed via the web at https://or.water.usgs.gov/clackamas/monitors/

Post Fire WQ Sampling

The September 2020 the Riverside Fire burned around 23% of the Clackamas River watershed. In October the Oregon Health Authority's Drinking Water Services Program provided water system served by surface water with significant burn areas in their watershed *Post Fire Monitoring Guidance*. This included sampling weekly for TOC, iron, manganese and storm sampling for Nitrate and



Nitrite. The CRWP coordinated and funded weekly sampling from November through April of 2021 at both the City of Estacada's and the City of Lake Oswego's water treatment plants. This data was shared with all CRWP member water treatment plants and members. A second round of post fire water quality sampling will take place during the winter of 2021-22.

NRCS NWQI grant

In September of 2020 the CRWP was awarded a \$84,500 National Water Quality Initiative grant from the Natural Resources Conservation Service (NRCS) to develop a Source Water Assessment Plan for a portion of the Clackamas River Watershed where the predominate land use is agriculture. This Source Water Assessment Plan (SWAP) will characterize watershed and source area conditions, identify contaminates and resources of concern, assess BMPs and conservation approaches for protecting source water areas, document implementation goals and objectives, describe effective monitoring approaches, and outline targeted outreach strategies for working with our agricultural landowners to protect water quality. It is anticipated that this project will be completed by the summer of 2022.

GIS Risk Analysis

Between 2012 and 2105 the CRWP completed a series of geographic information system (GIS) analyses to identify how the different land uses in the watershed reflect potential pathways for pollutants to enter into the Clackamas River. The goal of these GIS analyses was to map risk factors known to have a strong negative correlation with drinking water quality in the Clackamas River watershed. These mapped risks identified "hot spots" and provided a spatial context for both the geography and intensity of risk by activity that has been used by the CRWP to help prioritize mitigation efforts. In September of 2020 the CRWP hired a contractor to update this analysis. To see the results go to

https://crwproviders.maps.arcgis.com/apps/MinimalGallery/index.html?appid=31b3fdcfb95345d3868feffed5e220dd

Flow Calculator

The CRWP worked with the consulting firm Geosyntec to develop a web-based tool that automatically calculates and displays water provider withdrawals and river flows. The purpose of this tool was to provide CRWP members with a flexible platform that displays withdrawals with real time river flows, which is adaptable as calculations, and data input changes while reducing user error. During 2020 - 21 the CRWP maintained the webhosting for this online tool.

Education and Research Assistance

Portland State University - Microplastics Pollution Study

During 2020-21 the CRWP provided a Portland State University graduate student a stipend to understand landscape factors that affect microplastics in the Clackamas River and its tributaries, and Johnson Creek. Through a thorough literature review and sample collection in several locations throughout the Clackamas River and Johnson Creek this project will address the following research objectives and questions:

- 1. What is the current abundance of microplastics at the selected sites along the Clackamas River and Johnson Creek in terms of total count per site, and how does flow rate affect these counts?
- 2. How does seasonality affect microplastic distribution and abundance in each river, and are more microplastics observed during wet season samples?
- 3. How do land cover categories and population density influence microplastic distribution in each river?
- 4. What forms of microplastics are most commonly found in these rivers, and what ties to possible sources can be made?

The results of this work are expected to be complete in early 2022.

Point Source Evaluation and Mitigation

Tracking, evaluating, and monitoring point sources (water quality and other permits)

The CRWP continues to review water quality permits that come up for renewal to see if there could be an impact on drinking water quality, and if there is an opportunity to provide public comment on these permits. The CRWP comments generally look at ways to enhance permit requirements and ways to better notify CRWP members of spills, overflows, or contamination events. In addition, this is another tool to help educate and remind permitees that the Clackamas River is an important drinking water source.

Portland General Electric (PGE) Blue Green Algae Team/Mitigation Fund Committee

The CRWP continues to be an active participant in PGE's Blue Green Algae Team which oversees PGE's Blue Green Algae Monitoring Program, and the PGE Mitigation Fund Committee. This year the Blue-Green Algae Team reviewed the 2020 Annual Blue-Green Algae Report, which included results from the yearly monitoring program. Monitoring was conducted from early May through the end of September 2020. Blooms were observed for 12 consecutive weeks at Timothy Lake and toxins were detected twice at levels well below

recreation action levels. No blooms were detected at North Fork Reservoir during the 2020 monitoring season. No suggested changes were made for the 2021 monitoring season. In 2020, PGE's Mitigation Fund Committee received an update on the status of projects funded during the 2019 and 2015 funding cycles.

Nonpoint Source Evaluation and Mitigation Eco Biz Certification Support

The CRWP continues to support the EcoBiz certification program. This certification program recognizes businesses that go beyond compliance with local environmental requirements and implement pollution prevention efforts in their work sites. Businesses are certified through an intensive application and evaluation process http://ecobiz.org/
Part of this support is by providing funding to purchase EcoBiz Chinook Book Ads. This year the group decided to purchase a Mobile online display ad which garnered 171,959 views. *See Appendix A*.

Septic System Workshops

One septic system workshop was conducted in FY 2020-21 for 13 people. This workshop was held virtually via zoom. The CRWP partnered with Clackamas County and the Clackamas Soil and Water Conservation District to host the workshop. The purpose of the workshop is to provide information on how septic systems work, and why they need to be maintained, along with information on the financial assistance the CRWP provides for septic system owners in the Clackamas River watershed. Because this year's workshop was virtual a recording of it can be found at https://www.clackamasproviders.org/septic-system-assistance-program/. See https://www.clackamasproviders.org/septic-system-assistance-program/. See https://www.clackamasproviders.org/septic-system-assistance-program/. See https://www.clackamasproviders.org/septic-system-assistance-program/. See https://www.clackamasproviders.org/septic-system-assistance-program/.

Septic System Financial Assistance Program

The CRWP continued to offer septic system owners that live within the Clackamas River watershed financial assistance for septic system inspections and repairs. To be eligible for the program septic system owners had to live in the watershed upstream from CRWP drinking water intakes and use a DEQ Oregon Septic Smart certified business/contractor. A total of one cost share reimbursements for septic system repairs were processed for a total of over \$100 in financial assistance.

Down the River Clean Up Sponsorship

For the thirteenth year in a row the CRWP has provided funding to We Love Clean Rivers, Inc. to support the Annual Clackamas Down the River Clean Up. Unfortunately, the 2020 event was canceled due to the Riverside Fire and Clackamas County evacuation levels that were in place at the time. Since this event began, we've been able to remove over 44 tons of trash from the Clackamas River with the help of almost 4,700 volunteers. As an event sponsor the CRWP's logo is placed on event marketing and outreach material. *See*

<u>Appendix C</u>.

Hazardous Material Spill Prevention Program

The CRWP contintues to work with the Pollution Prevention Resource Center (PPRC), a nonprofit organization that is one of the Northwest's leading sources of high-quality unbiased pollution prevention information, to implement both our technical and financial assistance for spill prevention efforts to businesses located within the Clackamas Industrial area. Through this program we continued to conduct outreach and provide technical and financial assistance to commercial and industrial businesses in the Clackamas Industrial area. Click on the following link to see which business we worked with this past year https://www.clackamasproviders.org/wp-content/uploads/2021/08/CRWP-PPRC-20_21-Final-Report.pdf

Pesticide Reduction Efforts with the Clackamas Soil & Water Conservation District

This past year we partnered with the Clackamas Soil and Water Conservation District to develop a new video series on Erosion Control Practices for agricultural landowners. The series covers the following best management practices: operational and planning, border and entry, covering, slope management, ditches, piping, and ponds. Erosion control is an important practice in helping to keep soil and pesticides on farms instead of washing off into our tributaries and into the Clackamas River. This is especially important during our rainy season. Click on the following link to watch the videos

https://www.clackamasproviders.org/erosion-and-sediment-control/ or see Appendix D.

Pesticide Reduction Efforts with the Clackamas River Basin Council

For the 14th year in a row the CRWP has worked with Clackamas River Basin Council to support an outreach program for voluntary pesticide reduction, through the implementation of a Pesticide Pledge Program. This program is designed to educate property owners about the wise use of pesticides and to empower them to use pesticides alternatives. Pledge participants then have the opportunity to display a basin-specific yard sign that acts as a reminder of the steps they are taking to promote and enhance watershed health. This year outreach focused primarily on English and Spanish post on social media and an article in the Spring Home and Garden paper *See Appendix E* or visit the



http://www.clackamasproviders.org/pesticide-reduction-efforts/ to download the fact sheets.

CRBC Financial Support

The CRWP continues to provide funding for operational support for the Clackamas River Basin Council. The Clackamas River Basin Council is working to protect and improve water quality, and fish and wildlife habitat in the Clackamas River basin.

Clackamas Partnership

The Clackamas Partnership formally came together in 2015 through an Oregon Watershed Enhancement Board (OWEB) Focus Investment Partnership Capacity and Strategic Planning grant with the goal of increasing the pace, scale, and complexity of restoration project implementation in the Clackamas watershed. In January of 2019 the Partnership was informed that they were awarded a 6-year Implementation Grant totaling \$8,744,080 to support fish habitat restoration in the Clackamas River Basin benefitting Chinook salmon, coho salmon, steelhead, and other native fish species.

The CRWP is recognized as a Supporting Partner who provides technical support, participates in project prioritization and planning through the technical advisory committee (TAC), supports implementation through funding, technical assistance and other means, and participates in the Partnership's governance and decision-making. The CRWP is also part of OWEB's Technical Review Team reviewing all of the individual grant projects for the Clackamas Focused Investment Partnership. In 2020-21 the Technical Review Team met once to review one round of project applications.

<u>Disaster Preparedness and Response</u> The Clackamas Spill Committee

The CRWP convenes an Annual Clackamas Spill Committee meeting with stakeholders (staff from DEQ, Clackamas County, ODOT, as well as local hazmat and first responders) to talk about hazardous material spills and spill response. Due to COVID 19 the

Committee did not convene in 2020-21. The CRWP continues to work however, with spill response partners to find more effective ways of communicating and responding to hazardous material spills and plans. In April of 2021 the CRWP worked with the Clean River Cooperative (CRC) to conduct some training on the Clackamas River which included exercising two of our CRWP geographic response strategies for protecting Clackamas River Water and Lake Oswego/Tigard's intake structures.



Clackamas Basin Communications Workshop 2

In May of 2021 the CRWP held its second Communication Workshop. The purpose of this workshop was to build off of the previous workshop in 2020, and to continue to look at how basin water providers can communication efficiently and effectively with each other during water related events. The focus of this workshop was on communications around cyanotoxin detections.

Public Outreach and Information Sharing

See the Public Outreach & Education Program section for additional information.

Conference Support

This year the CRWP provided both staff and financial support to both the 2021 NW Climate Conference and to the Journey Down the River Conference Series. *See Appendix F*.

Annual Watershed Tour

Due to COVID 19 and the Riverside Fire the fall 2020 annual watershed tour was canceled. This has always been one of the highlights of the fall because it has given us the opportunity to talk to CRWP member elected officials and interested citizen about the amazing watershed their drinking water comes from. In lieu of a tour the CRWP provided interested participants with watershed facts and a link to our Interactive Watershed Map https://www.clackamasproviders.org/interactive-watershed-map https://www.clackamasproviders.org/interactiv



Source Water Protection Presentations

Due to COVID 19 most in person presentation were canceled this year. CRWP staff did record a presentation which was shown at both the Water Environment School in March and at the Water Work School in June on *Where Drinking Water Meets Stormwater*. This presentation looked at how the CRWP has been working with Clackamas Water Environment Services (WES) on stormwater related issues and how these efforts have been beneficial for both parties by working to reduce stormwater pollution for downstream water providers and in return helping WES meet some of their MS4 Permit requirements.

Other Water Resource Activities

Stored Water Agreement with PGE

The CRWP continues to implement the Stored Water Agreement with PGE, providing us

with the ability to call for water to be release from Timothy Lake at certain times of the year for municipal water use.

Water Resource Related Committees

The Water Resource Manager continues to represent the interests of the CRWP on a number of different water resource related committees. These include: the Oregon Water Utilities Council, Clackamas County Local Emergency Planning Committee, the Clackamas Stewardship Partners, the Clackamas Partnership, Clackamas Technical Basin Workgroup, EcoBiz Pollution Prevention Outreach Team, the Drinking Water Source Protection Group, the America Water Resource Association Leadership and Recognition Committee, and the American Water Works Association Source Water Protection Committee.

Public Outreach & Education Program

This program provides public outreach and education, as well as conservation services and programs to CRWP members. Some of the activities described below are not provided for the City of Lake Oswego or the City of Tigard. The primary focus of the program is on education and outreach efforts to the public regarding source water protection and watershed issues, drinking water treatment and distribution, indoor and outdoor water use, and water conservation. This allows us to provide a holistic view of how our water resources are connected and why it is important to protect and conserve the water we get from the Clackamas River. There are a number of individual programs or components that provide awareness, information, motivation and action for our customers. The following is a summary of what the Public Outreach and Education program accomplished this past year.

Youth Education, Presentations, and Assembly Programs

The CRWP youth education program is an integral part of our outreach and education efforts. The goal of this program is to educate students about the Clackamas River watershed, the process of treating and distributing public drinking water, and water conservation issues so they develop an overall awareness and water changing behaviors. The secondary goal is for students to take this information back to their parents. The CRWP programs are offered at no cost to the schools and range from classroom presentations done by staff, assembly programs performed by contractors, as well as education resources for teachers.

Due to COVID 19 we did not go into schools during the 2020-21 school year. The CRWP continued to support water education in the schools by providing our teachers with a "Educating from Home Resource List" which is a list of water, environmental, and science resources for teachers, educators, and parents who were teaching from home. In addition,

we created two videos of our two most popular classroom presentations "Source to the Tap" and "Non-point Source Pollution". These videos are available on our website under the Teacher Resource page. We also worked with storyteller Will Hornyak to develop videos of all his stories which he would normally provide to our schools in person. These videos are also available to teachers on our website under the Teacher Resource Menu https://www.clackamasproviders.org/teacher-resources/. See https://www.clackamasproviders.org/teacher-resources/.

Treatment Plant Tours

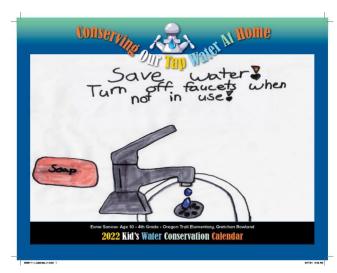
The Public Outreach & Education Program coordinates water treatment plant tours for the general public and CRWP member area schools. Due to COVID 19 we were unable to provide in person treatment plant tours. For this reason, we worked with our members to developed virtual treatment plant tours of our CRWP treatment plants. This included videos for: the City of Estacada, Clackamas River Water, the North Clackamas Water Commission, and South Fork Water Board. The Lake Oswego Tigard Partnership provided their own video. All of these videos are available to teachers on our website on the Treatment Plant Tours page https://www.clackamasproviders.org/treatment-plant-tours/.

Mini Water Education Grants for Teachers

The youth education program offers Mini Water Education Grants to teachers. These grants of up to \$250 are intended to provide supplemental funding for water related projects or field trips to encourage water education in the schools. We processed 3 grants for 3 teachers this past year. *See Appendix H* for more detailed information.

Annual Water Conservation Calendar

The Annual Water Conversation Calendar is a collaborative project with CRWP grade schools where local students participate in a coloring contest with a water education theme. The theme for the 2022 Calendar was "Conserving Our Tap Water at Home". Because of the COVID 19 pandemic and students continuing to be taught from home submitting pictures for the calendar posed some challenges. This year 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 3rd – May 14th,) so students, their teachers, families and friends, and the general public could vote for which one of the 13 pictures would be on

the cover of the 2022 calendar. Each school that had at least one class participate in the contest will receive a box (125) of calendars to give out to family and friends. Additional calendars are available to teachers, families, and the general public upon request. *See Appendix I* for a list of schools and teachers that participated in the project this year.

16th Annual Clackamas County Water Education Team (CCWET) Celebrating Water Festival

Because of the COVID-19 pandemic for the 2nd time in event history the Celebrating Water Festival was canceled in order to ensure the health and safety of all who are involved in organizing and presenting the festival, students, teachers, and chaperones who would have attended the event.

28th Annual Clean Water Festival - Virtual Festival

Staff continues to support the Children's Clean Water Festival by being an active member and current Chair of the organization planning committee. Due to COVID -19 restrictions the in-person 2021 Children's Clean Water Festival was cancelled and was replaced with a virtual festival. This consisted of six water-focused lessons to support 4th grade science standards which could be used in succession or individually and are available on the Children's Clean Water Festival website at www.cleanwaterfestival.org.

Support of Clackamas County Sustainability Outreach to Businesses

The CRWP continues to partner with Clackamas County to support the Sustainability & Solid Waste Business Outreach Team by providing the County with bathroom/kitchen faucet aerators, industrial pre-rinse spray nozzles, and a number of water conservation brochures to help business owners within the CRWP service areas learn how to be more efficient with their water and earn their "Leaders in Sustainability" certification. Over the last three years, the business team has begun working with more restaurants and other food businesses, who are also high-water users.

This year the Sustainability & Solid Waste Business Outreach Team had to modify their service model significantly due to the COVID-19 pandemic and challenges of onsite assistance. However, despite many barriers to in-person assistance the team still provided bi-monthly e-newsletters, and direct waste recycling and waste reduction assistance to over 800 businesses throughout the county and certified 5 businesses as a Leader in Sustainability. There are now 53 businesses certified that represent over 7,100 staff, getting recognized for their efforts in waste and toxics reduction, green purchasing, corporate social responsibility, energy and water conservation. Overall, the County's Sustainability & Solid Waste Business Outreach Team provided businesses in our service areas with 10 - 1.5 GPM kitchen faucet aerators, 2 - 1gpm bathroom faucet aerators, and 5 - pre-rinse kitchen spray nozzles.

Community Events

Because of the COVID-19 pandemic the CRWP did not participate in any public events this year.

Adult Presentations

CRWP staff offer free presentations and interviews to adult audiences. These give staff the opportunity to talk to members of our community as well as peers regarding the Clackamas River Water Providers group and how we operate, where our water comes from, how we treat the river water for public use and why watershed protection and water conservation are so important. The goal of this program is to continue outreach to neighborhood associations, CPO's, local garden groups, or other civic groups interested in learning about our drinking water. See <u>Appendix J</u> for a list of adult presentations given this year.

Newsletters & Websites

CRWP staff continues to provide member Communication staff with articles and information throughout the year for member newsletters, websites, and social media platforms. Topics range from general water conservation, indoor and outdoor conservation information and tips, watershed and water resource issues, emergency preparedness as well as resources that are available through the CRWP such as our rebate and landscape water audit programs. In addition, the CRWP has a quarterly E-newsletter that is distributed to CRWP customers, members and interested parties, as well as being posted on the CRWP website. *See Appendix K* for an example of our quarterly E newsletter.

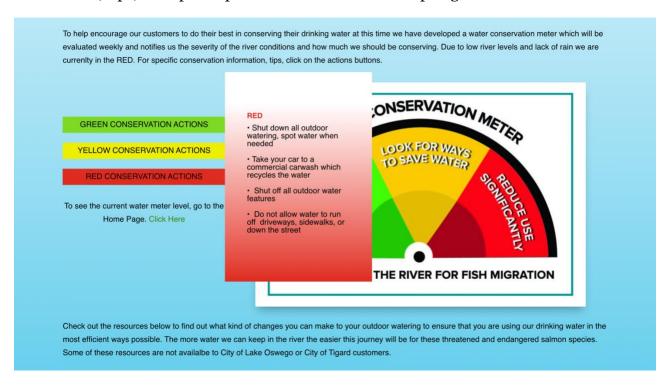
Conservation Outreach Materials & Conservation Tools

The CRWP continues to develop and distribute outreach materials and use a number of promotional items with the CRWP logo and contact information on them such as shower timers, pencils, paper bags, indoor water audit kits and brochures. This year due to COVID 19 all items and materials are available upon request and are posted on the CRWP website where they can be downloaded. https://www.clackamasproviders.org/resources/

Fish on the Run, Irrigation Done. Summer Watering Campaign

This was the third year of implementing the CRWP summer "Fish on the Run. Irrigation Done!" conservation messaging campaign created to encourage CRWP member customers to reduce outdoor water use starting in mid-August and to discontinue outdoor water use by mid-September so that we can leave more water in the river for the fall Chinook and Coho fish migrations. The campaign includes webpages created for the CRWP website specific to this campaign that provide customers with more information, conservation articles, audio PSAs, as well as the ability to take the "Fish on the Run" pledge online.

In an effort to enhance the campaign the CRPW added "Action Tips" to the Water Conservation Meter component. This visual meter shows GREEN, YELLOW, or RED levels and is evaluated weekly throughout the late summer to notifies users of the severity of the river conditions and how much water we should be conserving. The new "Action Tips" give customers actions they can do right now to help keep water in the river. Customers are encouraged to visit our website and the Fish on Run webpage for specific conservation information, tips, or to participate in the Fish on the Run pledge.



In addition to the webpage and outreach materials the CRWP worked with Pamplin Media Group to place a press release, digital ads and print ads in the following CRWP member area newspapers: Clackamas, Estacada, Lake Oswego, Oregon City, Tigard, and West Linn.

The intent is that this campaign will run from August to October each year. <u>See Appendix L</u> for more details.

Technical and Financial Assistance Programs

Water Efficient Landscape Audit Program

The CRWP contracts with a landscape and irrigation professional to perform these landscape audits. The Audits consist of a complete onsite overview of the customer's landscape starting with the location of the customer's meter, checking for leaks, an inspection of the customer's irrigation system, and a full walk through of the customer's yard, garden, and lawn areas.

Customers are invited to use this time with the Auditor to answer any questions and address any landscape and watering concerns they might have. When the onsite audit is complete the customer receives a full written report with water efficient recommendations. The program is marketed through the distribution of a brochure at CRWP member's offices, at summer events, as well as through the CRWP website. Five customers took advantage of the audits this year. *See Appendix M* for more details and a copy of the brochure.

Water Conservation Rebate Program

The CRWP public outreach and education program completed its eleventh year of administering the Water Conservation Rebate Program. This year a total of 315 rebate applications were processed with a total 348 rebates. The Program offers a range of rebates for toilets, clothes washers, smart irrigation controllers, hose bib timers and/or an irrigation rain switch, and irrigation spray nozzles. For a second year, the rebate program also included the \$100 pilot rebate program for a Flume Smart Home Water Monitoring System. The program is marketed through the distribution of brochures at CRWP member's offices, and at local Home Depots and Lowes, and to the public at summer events as well as through the CRWP website. *See Appendix N* for details.

Other Public Education and Outreach Activities

Conservation Related Committees

CRWP staff continues to attend meetings and represent the CRWP interests on a number of different public outreach and conservation related committees. These include the Regional Water Provider's Consortium Conservation and Communicators Network Committees, the Children's Clean Water Festival Planning Committee, Chair of the Clackamas County Water Education Team (CCWET), a member of the Clackamas Sustainability Cooperative, and a member of the PNWS-AWWA Conservation Committee, and Chair of the Northwest Oregon subsection Waterworks School organization committee.

Appendix A - EcoBiz Chinook Book Mobil Ad



Appendix B - Septic System Workshop

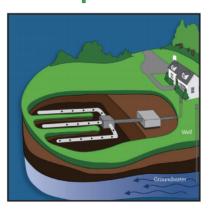
Save the Date!

FREE Virtual Septic System Workshop

Learn how to Check it, Fix it, Maintain it! Wednesday, April 28, 2021 6:00 - 8:00 pm

The workshop will cover:

- how septic systems work
- operation and maintenance
- signs of failure, codes, and permits
- financial and technical assistance



You must register to receive the Zoom meeting information and digital workshop documents.

To register: contact Tami at Clackamas Soil and Water Conservation District (503) 210-6000 or tguttridge@conservationdistrict.org

Sponsored by: Clackamas River Water Providers, Clackamas Soil and Water Conservation District, Clackamas County, and Oregon Department of Environmental Quality

Appendix C - Down the River Clean Up



Down The River Clean-Up is Canceled Due to Clackamas County Wildfires

With heavy hearts we have decided to cancel this year's clean-up. The fires and evacuations in Clackamas County have made it dangerous for volunteers and would impede current emergency services.

We hope that you have not been impacted by the fires, and that if you have you are now evacuated to safety. For more information about Clackamas County's wildfires and evacuation orders, please check here regularly.

Thank you for being excited to clean up the beautiful Clackamas, even during a global pandemic. We look forward to when we can gather again next year to celebrate this river.

Nicole Fredericks

Volunteer Coordinator of the Down The River Clean-Up

Appendix D – Pesticide Reduction Outreach Program with CSWCD Erosion Control Practices Videos



Video Series for Erosion Control Practices

Since the early 2000's we continue to see low levels of pesticides in the Clackamas River from the urban and agricultural areas of our watershed. Pesticides carried by stormwater runoff, wind, and irrigation can contaminate streams and the Clackamas River, threatening aquatic life and our drinking water. There are a number of practices that both residents and agricultural landowner in our watershed can do to reduce the possibility of pesticides reaching the Clackamas River.

The Clackamas River Water Providers partnered with the Clackamas Soil and Water Conservation District to develop a new video series on Erosion Control Practices for agricultural landowners. Erosion control is an important practice in helping keeping soil and pesticides on farms instead of washing off into our tributaries and into the Clackamas River. This is especially important during our rainy season.

Agricultural operations that require growers to work the soil during the rainy season, know that keeping soil in place is a challenge. That challenge often extends to operations that are not just in the winter but are year-round. To bring new ideas for holding your ground, we have created a video that addresses the challenging facets of preventing soil from leaving your operation and ending up in our local streams.

The video includes episodes on best management practices for: operational and planning, border and entry, covering, slope management, and ditches, piping, and ponds. It features local growers, watershed councils, water providers, agency and industry representatives all talking about the importance of soil and erosion prevention.

Watch the Videos Now

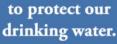
Managing erosion is not a cut-and-dried process. Not every practice works for every situation, but we hope that you will find new ideas that can be applied to your farm. We recommend you view every video, as many practices can work in combination with each other to achieve the best results.

This video series was made possible by support from the Oregon Department of Agriculture, Clackamas River Water Providers, and assistance from the Pudding River Watershed Council staff. The Clackamas Soil and Water Conservation District offers technical assistance and resources to control erosion. Call them 503-210-6000 for more information. By working together, we are working towards conserving and protecting both our land and water resources while helping our communities be better stewards of their natural resources.

Appendix E - Pesticide Reduction Outreach Program with CRBC Article in the Spring Home and Garden Paper

Pamplin Media Group April 2021 SPRING HOME & GARDEN 7

gardeners
are doing their part to
reduce
pesticide use
to protect our





Will you join us?

Show your support for a healthy lawn and a healthy watershed by signing the Pesticide Pledge today: http://clackamasriver.org/pesticide-pledge/





Show your support to be "Pesticide Wise" and follow best practices, like:

- Read pesticide labels to use proper application techniques and amounts
- Apply pesticides only on days without wind and rain to avoid drifting spray
- ◆ Store pesticides securely in their original containers and dispose of them properly

Or, go "Pesticide Free" and use effective alternatives, like:

- → Plant native species that evolved to thrive in local climates and repel local pests
- ◆ Use "Integrated Pest Management" like beneficial insects to remove harmful ones
- Consider barriers, boiling water, and natural scents and pheromones to oust pests

If you live in the Clackamas Watershed, sign the Pesticide Pledge and we'll send you this metal yard sign to decorate your lawn or garden.

Together we can prevent pesticides from entering our streams and protect our drinking water from contamination. May your plants thrive!



Spanish Facebook Posts

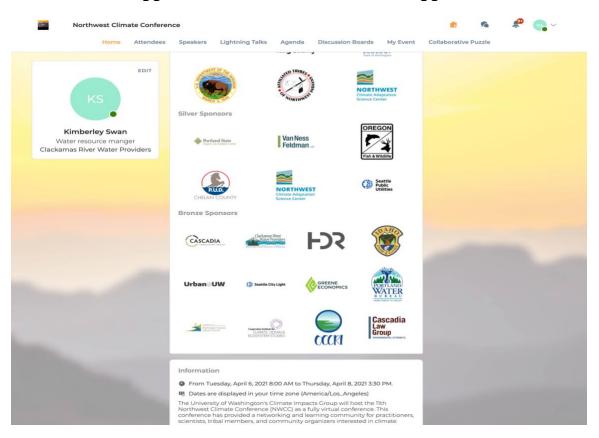






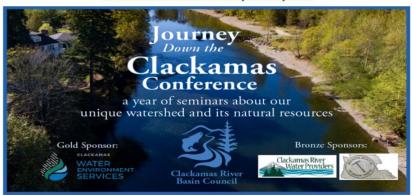


Appendix F - CRWP Conference Support





The Clackamas River Basin Council is pleased to present:



About the Conference:

 $On March 9, the Clackamas \ River Basin \ Council launched a year-long series of free seminars about our unique watershed and its natural resources, from the river's birth in alpine springs to its confluence with the Willamette River.\\$

Appendix G - CRWP Schools

There are 52 schools from 4 different school districts in the Clackamas River Water Providers combined service area that were offered CRWP youth education programs. Below is a list of these schools.

City of Estacada Schools

- Clackamas River Elementary
- River Mill Elementary
- Estacada Jr. High School
- Estacada High School

City of Gladstone Schools

- John Wetten Elementary
- Kraxberger Middle School
- Gladstone High school

Clackamas River Water Schools

- Beaver Creek Elementary
- Bilquist Elementary
- Redland Elementary
- Lot Whitcomb Elementary
- Linwood Elementary
- Sojourner School
- Cascade Heights Public Charter School
- Alder Creek Middle School
- · Ogden Middle School
- La Salle High School
- Sabin Schellenberg Professional Technical Center

Oak Lodge Water Services Schools

- Candy Lane Elementary
- Jennings Lodge Elementary
- Oak Grove Elementary
- Riverside Elementary
- View Acres Elementary
- Rex Putnam High School

South Fork - Oregon City Schools

- Gaffney Lane Elementary
- Holcomb Elementary

- John McLoughlin Elementary
- Gardiner Middle School
- Oregon City High School
- Spring Water Environmental Sciences School
- Alliance Charter Academy

South Fork - West Linn Schools

- Bolton Primary
- Cedaroak Park Primary
- Sunset Primary
- Trillium Creek Primary
- Willamette Primary
- Rosemount Ridge Middle School
- West Linn High School
- 3 River Charter School

Sunrise Water Authority Schools

- Beatrice Morrow Cannady
- Elementary
- Deep Creek Damascus K-8
- Happy Valley Elementary
- Mt. Scott Elementary
- Oregon Trail Elementary
- Spring Mountain Elementary
- Sunnyside Elementary
- Verne Duncan Elementary
- Lewis and Clark Montessori Public Charter School
- Scouters Mountain Middle School
- Rock Creek Middle School
- Happy Valley Middle School
- Damascus Middle School
- Clackamas High School

Appendix H - Mini Water Education Grants

3 grants for 3 teachers were issued to the following schools this past year.

Oak Lodge Water Services

Oak Grove Elementary

- (2) 1st grade Teachers
- (1) 5th grade Teacher

Appendix I -2022 CRWP Children's Calendar

10 schools and 19 classes participated in the 2021 CRWP Children's Calendar coloring contest. More than 200 pictures were submitted. The following is a breakdown of which CRWP members schools participated in the calendar project.

Happy Valley Elementary

Hayley Reinauer Mrs. Anderson Mrs. Mansour

Redland Elementary

Alia Fernandes

Oregon Trail Elementary

Becky Hoddevik-Callahan Gretchen Bowland Susan Ariola

Candy Lane Elementary

Mrs. Hernandez

River Mill Elementary

Mr. Wilensky

John McLoughlin Elementary

Mrs. Branch Mrs. Berry Mrs. Hautin

Clackamas River Elementary

Mrs. Carlson Ms. Hulsey Mrs. Cox

Verne Duncan Elementary

Mrs. Suzie Welch Ms. Colleen Creech

Beavercreek Elementary

Mrs. Blessing

Trillium Creek Primary

Jacquie Bane

Appendix J – Adult Presentations

This year staff gave 3 adult presentations/interviews.

Date	Event	Water Provider
April 20, 2020	Garden Time Interview	Regional Water Providers Consortium
April 27, 2020	KATU Interview AM Northwest	Regional Water Providers Consortium
April 27,2020	KATU Afternoon Live	Regional Water Providers Consortium

Appendix K - Quarterly E Newsletter



Riverside Fire & Your Water Providers

The Fires in Clackamas County and the Riverside Fire in particular have had a heavy impact on our residents and our water provider staff. We appreciate the hard work and dedication it has taken for fire fighters to get these fires under control and to protect life, safety and property. As the fires burned your water providers worked hard to make sure you continued to have high quality drinking water from your tap.

Most of the Riverside Fire is located on the National Forest and as a result the Clackamas River Ranger District has suffered extensive damage to its natural and human resources. In total it burned about 23% of our Clackamas watershed. Now that cooler, wetter weather is here it will slowly wind down the fire season. That being said, even after the fire has a containment line fully around its perimeter, the forest service expects to see hot spots, slow-burning stumps, and smoldering embers that will continue to quietly burn and send out intermittent smoke for months into the winter.

The Forest Service currently has a Burned Area Emergency Response (BAER) team of specialists on the ground out assessing the damage to the watershed, habitat, soils, roads, and identifying stabilization measures that will be implemented to protect post-wildfire threats to human life and safety, property, and critical natural or cultural resources on federal lands.

(Continued on page 2)

What's Inside:

- Fire in the Watershed P1
- Conservation Calendar P2
- Ways to Save Water P3

Partner Spotlight

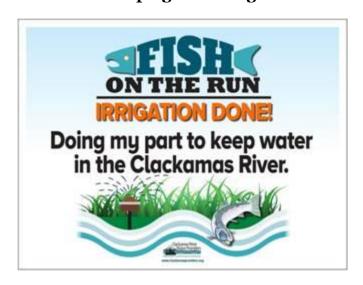
- Fall Quiz P4
- Watershed Tour P5
- Water Treatment P6
- Flume Rebate P6
- 'Faces' Interview P7
- Put Irrigation to Bed P8



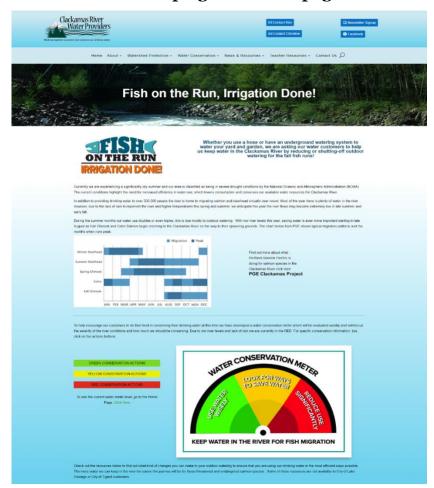
CHRISTINE HOLLENBECK, Public Education and Conservation Program Coordinator, (503) 723-3511 • christine@dackamasproviders.org
KIM SWAN, Water Resource Manager, (503) 723-3510 • kims@clackamasproviders.org

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Appendix L – Fish on the Run, Irrigation Done Campaign Campaign Yard Sign



Campaign Main webpage



Appendix M - Water Efficient Landscape Audit Program

Since July 2020 a total of 4 CRWP member customers participated in the Water Efficient Landscape Audit Program. Below is a breakdown of where the audits were performed.

Oak Lodge Water Services

Number of audits = 2

South Fork Water Board

Oregon City - Number of audits = 1

Sunrise Water Authority

Happy Valley - Number of audits = 1

Audit Brochure



The CRWP is now offering FREE Residential Landscape Water Audits to the following member's service area: City of Estacada, City of Gladstone, Oak Lodge Water Services, and South Fork Water Board (Oregon City and West Linn), and Sunrise Water Authority (Happy Valley and Damascus).



Water use in our communities more than doubles during the summer months due to outdoor watering.

The Clackamas River Water
Providers is a coalition of the
municipal water providers that
get their drinking water from the
Clackamas River who are working
together on water resource issues.
The purpose of the organization is to
fund and coordinate efforts regarding
source water protection and public
outreach and education around
watershed issues, drinking water, and
water conservation. By preserving
the Clackamas River as a high quality
drinking water source we are able
to minimize future drinking water
treatment costs, while being good
stewards of the river.

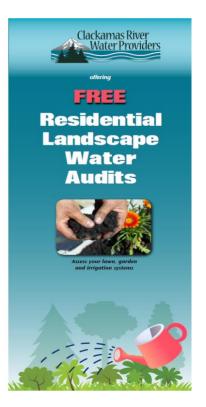


For more information about the CRWP, our watershed, and conservation programs visit our website:

www.clackamasproviders.org

Or contact us at: Clackamas River Water Providers 14275 S Clackamas River Drive Oregon City, Oregon 97045

christine@clackamasproviders.org (503) 723-3511



A Landscape Water Audit...

Is an assessment of your lawn, garden areas, irrigation system and more.

Our landscape auditor will assess your lawn and garden areas, irrigation system and more. Upon completion of the audit you will be provided written recommendations to help you manage your outdoor water use for a more water efficient landscape and irrigation system.

RESIDENTIAL AUDITS

will begin in May and be performed during the spring and summer months only (during the watering season).

The audits will be approximately 1.5 hours long. Please be available to walk through the audit process with the Audit Specialist.

Interested customers can contact the CRWP at **503-723-3511** or email *christine@clackamasproviders.org* to schedule an audit.

Audits are booked on a first come first serve basis. Audits will be performed at each site one time only.



Landscape water audits will include but are not limited to

- A walk through the yard and garden area including all lawn areas
- Making note of 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.
- Making note of existing backflow protection; type, size, make and model number.
- Locating the irrigation system 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, all recommendations will be recorded. This includes irrigation controller schedule adjustments, irrigation head adjustments/replacements, maintenance of existing plant material, and the addition of soil amendments to reduce weeds, promote soil moisture, and reduce the use of fertilizers.



Appendix N - Conservation Rebate Program

A total of 315 rebate applications were processed this year with a total of 348 rebates.

City of Gladstone

Total Rebate Applications = 6 Total Rebates = 7

Irrigation Controllers = 2 Clothes Washer = 4

Toilets = 1

Oak Lodge Water Services

Total Rebate Applications = 34

Total Rebates = 37

Toilets = 18

Clothes Washers = 11

Irrigation Controllers =

6

Hose Timer = 1

Flume = 1

Clackamas River Water

Total Rebate Applications = 65

Total Rebates = 69

Toilets = 26

Clothes Washers = 27

Irrigation Controllers = 13

Spray Nozzles = 1

Hose Timer = 1

Flume = 1

City of Estacada

Total Rebate Applications = 10

Total Rebates = 12

Toilet Rebate = 1

Clothes Washer = 5

Irrigation Controller = 3

Spray Nozzle = 2

Hose Timmer = 1

South Fork Water Board

Total Rebate Applications = 109

Total Rebates = 119

Oregon City = 54

Toilet rebates = 18

Irrigation. Controllers = 11

Spray Nozzles = 1

Hose Timer = 2

Clothes Washer = 17

Flume = 5

West Linn = 65

Toilet Rebates = 21

Clothes Washer = 20

Irrigation Controllers = 19

Spray Nozzles = 1

Hose Timer = 1

Flume = 3

Sunrise Water Authority

Total Rebate Applications = 91

Total Rebates = 104

Damascus = 15

Toilet rebates = 7

Clothes Washer = 3

Irrigation Controllers = 4

Spray Nozzles = 1

Happy Valley = 89

Toilet Rebates = 29

Clothes Washer = 29

Irrigation Controllers = 24

Rain Sensor = 1

Hose Timer = 1

Spray Nozzles = 3

Flume = 2

Rebate Brochure



The Clackamas River
Water Providers
(CRWP) are a coalition
of the municipal water
providers on the
Clackamas River that are
working together on water
resource Issues. The purpose of
the organization is to collectively
fund and coordinate efforts
regarding water resource
planning and management,
water conservation and the
development of the Clackamas
River on a sustainable basis.
For more Information regarding
Individual CRWP members and
their water service areas go to
www.clackamasproviders.org and
at the top of the page click on
"About Us."



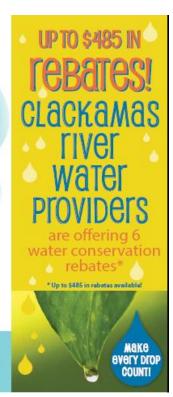
Working Together to Protect and Corserve our Drinking Water

14275 S. Clackamas River Drive Oregon City, OR 97045

For More Information

www.clackamasproviders.org E-mail: Christine@clackamasproviders.org Phone: (503) 723-3511

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TEBATE ELIGIBILITY TEQUITEMENTS

Applicant must meet the following criteria

You must receive water from one of the following water provider members:

City of Estacada City of Gladstone Oak Lodge Water Services South Fork Water Board (Oregon City and West Linn) Sunrise Water Authority (Happy Valley and Damascus) Clackamas River Water

- You must be a single-family residential customer or a small business (50 employees or less) which owns its own site and your account must be active and in good standing.
- The application must be received within 3 months of purchase.
- One rebate each, per account, per fiscal year (July 1-June 30).
- A copy or original of the dated sales receipt (or invoice) that specifies the brand/model must be included with the rebate form. The brand/model purchased must match the Item exactly.
- The high efficiency toilet and weatherbased controller you purchase must be EPA WaterSense* fabled. For a complete list of eligible products, visit: http:// www.epa.gov/watersense/product_ search.html
- For toilet rebates, the toilet brand/ model must match the eligible model list exactly. Tank and bowl numbers cannot be mixed and matched from different models.

- Receive an additional \$15 for recycling your old tollet. Visit our website at http://clackamasproviders. org/water-conservation/ conservation-rebates/tolletrecycling-fac.html for a recycling site near you. A copy of the recycling receipt is required to be eligible.
- For a complete list of eligible washing machines, visit: www. energystar.gov/productfinder/ product/certified-clotheswasher.
- Rebate items must be installed at the property associated with your water account.
- Rebates are available on a first-come, first-served basis. The program will end when funds are depleted. The total rebate per item will not exceed the receipt amount.
- Prior to approval, an on-site Inspection may be required by Clackamas River Water Providers.

Flume Rebate Brochure

Check it out!

mas River Water Providers Is working with FLUME to pilot a \$100 rebate to eligible CRWP customers if they purchase a new FLUME Smart Water Monitor device.

FLUME, a first-of-its-kind, easily installed household device that puts the power of water 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
- · Receive push notifications on suspicious water activities while you're away.

The FLUME Smart Water Monitor tracks your water use 24/7, alerting you to excessive water use and leaks. Take control of your property's water use and protect your home.



coalition of the municipal water providers that get their drinking water from the Clackamas River who are working together on water resource issues. The purpose of the organization is to fund and coordinate efforts regarding source water protection, public outreach and education around watershed issues, drinking water, and water conservation. By preserving the Clackamas River as a high-quality drinking water source we are able to minimize future drinking water treatment costs, while being good stewards of the river.

For more information regarding individual CRWP members and their water service areas go to www.clackamasproviders.org and at the top of the page click on "About Us."



14275 S. Clackamas River Drive Oregon City, OR 97045

For more information: ww.clackamasproviders.org E-mail: christine@clackamasproviders.org Phone: (503) 723-3511







Stop Leaks.
Protect Your Home,
Save Money.
Gain Peace of Mind.

Smart technology sends notifications straight to your phone.





Keep track of everything right from your phone. FLUME provides complete coverage by catching leaks inside of your home as well as in your law or garden. If FLUME senses a leak or unusualluhigh water use, you'll be notified immediately via text, email or push notification anywhere you are.

Control Your Water Use

FLUME gives you real-time access to your water usage. You can determine which activities (or kids!) are using the most water with instant data and take action to avoid excess use.

Manage Your Water Bill

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 me asure your use against like homes in the FLUME Family. Conserve water and

For more information about this device or where to buy one go to Amazon.com or to https://www.flumetech.com/



Robato applicant must most the following requirements:

You must receive water from one of the following Water Provider members:

- City of Estacodo
- City of Gladstone
- Clackamas River Water
- Oak Lodge Water Services
- South Fork Water Board (Oregon City and West Linn) Sunrise Water Authority (Happy Valley and Damascus)
- 1) You must be a single-family residential customer or a small business (50 employees or less) which owns its own site and your account must be active and in
- good standing. 2) The rebate application must be received within 3 months of the product purchase.
- 3) One Flume rebate, per account.
- 4) A copy or original of the dated sales receipt (or Invoice) must be included with the rebate form. The brand/model purchased must match the Item exactly.
- 5) Rebate Item must be installed at the property associated with your water account.
- 6) Rebates are available on a first-come, firstserved basis. The program will end when funds are
- 7) Prior to approval, an on-site inspection may be required by CRWP.
- 8) In accepting this rebate you allow FLUME to share ur water use data with your water provider and the CRWP in part to assist in determining potential water savings of this device.

To apply online go to: www.clackamasproviders.org/conservation-rebates

O REBATE APPLICATION

Name:	 	
Installation Address:		

City/State/Zip:__

Mailing Address (if different): Street

City/State/Zip:____

Email Address:__ Water Account #: ___

Please Circle Your Water Provider:

 City of Estacada П

ı

- City of Gladstone
- Clackamas River Water District ı
 - Oak Lodge Water Services
 - South Fork Water Board (Oregon City and West Linn)
 - Sunrise Water Authority (Happy Valley and Damascus)

☐ is certify the information I have provided is true and correct, and I have purchased the goods for use of the location Indicated. I grant permission to Cockums: River Water Providers, with notification, to enter upon the property to impact the installation of intotile goods to assure program requirements are melt fundamental relations and distributed on a first come first served basis until funds are exhausted.

Signoture
Date