

medford water

WATER EFFICIENCY REPORT 2022



MEDFORD WATER



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Medford Water operates and maintains the water system that delivers high-quality drinking water to around 140,000 Rogue Valley residents. The utility is an autonomous agency of the City of Medford, Oregon, established through a change in the city charter on Nov. 7, 1922, and is governed by the Board of Water Commissioners. The Board appoints the General Manager, who is authorized to direct the operations of the utility.

Medford Water directly serves customers in the City of Medford and the unincorporated community of White City. The cities of Ashland, Central Point, Eagle Point, Jacksonville, Phoenix and Talent are served on a wholesale basis. Additionally, two domestic water districts purchase water from the utility. All water services are metered.

Total water production averages approximately 17 million gallons per day (MGD) during the winter and 46 MGD during the summer months, with occasional summer peak days of around 62 MGD. Big Butte Springs is our primary water source, with the Rogue River used as a supplement during the summer months.

We are a utility member of the American Water Works Association (AWWA), an international, nonprofit scientific and educational society dedicated to the improvement of drinking water quality and supply. With more than 50,000 members, it is the largest organization of water professionals in the world. The AWWA supports Water For People, a nonprofit, international development organization whose mission is to help the most impoverished people worldwide improve their quality of life by supporting sustainable drinking water, sanitation and hygiene projects.

meet the water efficiency team



JULIE SMITHERMAN **CUSTOMER SERVICE AND WATER EFFICIENCY MANAGER**

I began my career in the drinking water industry right here in the rogue valley in 2009. During the past 14 years I have been actively involved locally and regionally in the field of water resources and water efficiency. I'm committed to helping our customers find simple and innovative ways to use water efficiently in and around their homes and businesses. I look forward to continuing to work with our community to preserve and protect our valuable water resources.

CODY SCOGGINS **WATER EFFICIENCY COORDINATOR**

I began my career 5 years ago as a Water Treatment Operator and have since moved into my current role. Since starting my career, I have obtained my Master's Degree in Natural Resource Management and also have been involved with community outreach and education. I'm part of a committed team who thrives on being good stewards of our water and are reliable resources for those who look to be good stewards themselves.

AARON ADACHI **WATER EFFICIENCY TECHNICIAN**

I began my career in water efficiency in 2022. My background is in Business Management and Project Management. I received my Master's Degree in Business Administration and have spent the earlier part of my career in the software/technology industry. I chose to come to Medford Water for the opportunity to implement lasting change in the surrounding community with the skills that I learned from the private sector.

Water Management and Conservation Plan

June 2017



ch2m



water management and conservation plan (wmcp)

DESCRIPTION

Medford Water uses water from two major sources: Big Butte Springs and the Rogue River. The Robert A. Duff Water Treatment Plant currently operates intermittently during the months where water demands are higher. In general, this document serves as the principal guide for all the initiatives undertaken by the Water Efficiency Department of Medford Water. It outlines the parameters that we need to follow in order to be good stewards of our water source.

WATER DEMAND PROJECTIONS

Medford Water measures the demand for water in a number of different ways. This is a crucial part of the WMCP. Our team monitors the current levels of water on an ongoing basis and constantly compare that to the consumption or usage and formulate projections that will give us the best overall view of our water.

CURTAILMENT PLAN

Curtailment planning is the development of proactive measures to reduce water demand if the water supply is reduced temporarily. Supply shortages could result from a number of situations. The WMCP highlights the action steps that need to be taken when the water supply levels trigger this plan. The objective of this plan is to provide guidance, while allowing flexibility to respond according to specific circumstances.

CONSERVATION PROGRAM BENCHMARKS

The benchmarks for the Water Efficiency Department details the activities that will be implemented during the duration of the WMCP. The Water Efficiency Program in its entirety is focused on providing customers with ample support in multiple forms. The plan outlines specific goals and objectives for water management and conservation, such as reducing wastewater or increasing water efficiency. As we will outline in this report, we have outdoor programs, indoor programs, public outreach initiatives, and partnerships that all exists to bring a solution or a resource to our customers.

Finally, the plan includes provisions for evaluating its success and making revisions as needed to ensure that it remains effective in achieving those goals. The end result of the WMCP is to ensure sustainable usage of water resources, protection and conservation of water for future generations.

outdoor programs

SPRINKLER SURVEYS

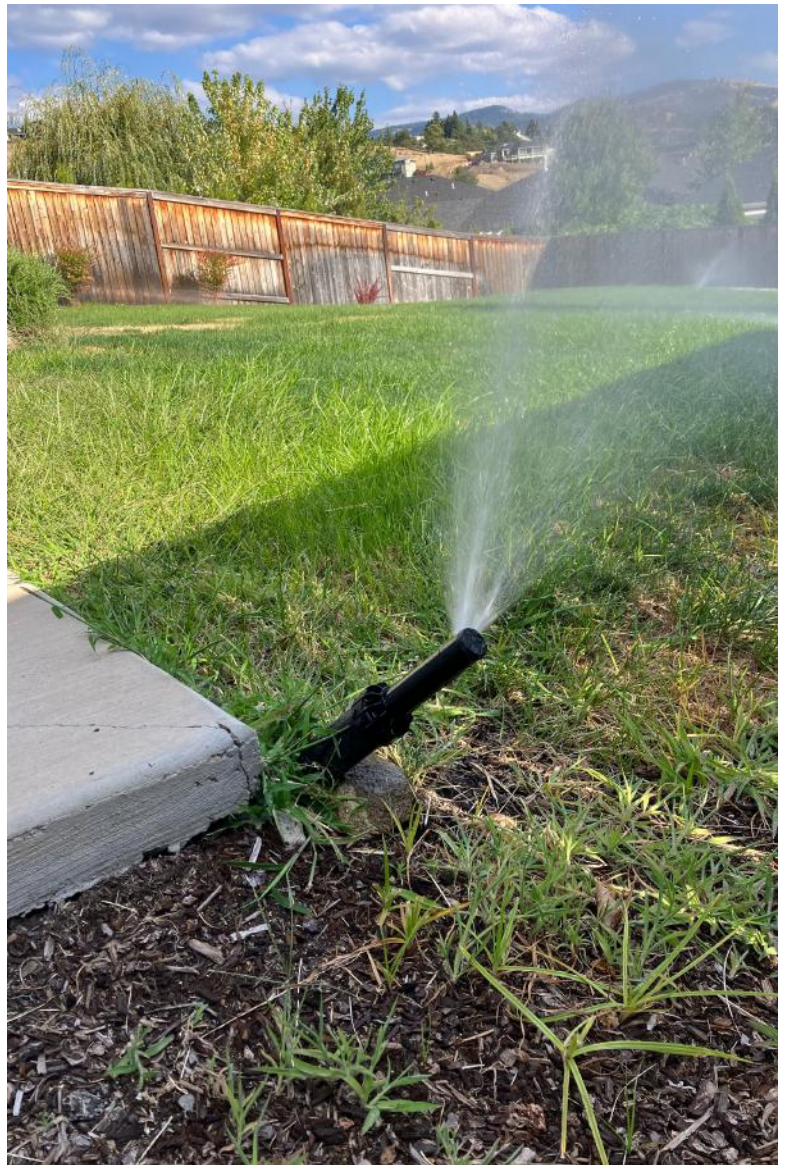
The program is a free service that we provide to all Medford customers in hopes to establish the most water efficient sprinkler systems possible. We manually run each zone to identify any inefficiencies that may be present in the system. In the process of finding ways to make sprinkler systems more efficient, we have often found major leaks that contribute to wasted water and higher water bills.

- This year we were able to help 163 Medford customers with this program.
- To date, we have provided this service to a little over 1,000 Medford customers. Estimated water savings of about 2.4 million gallons.

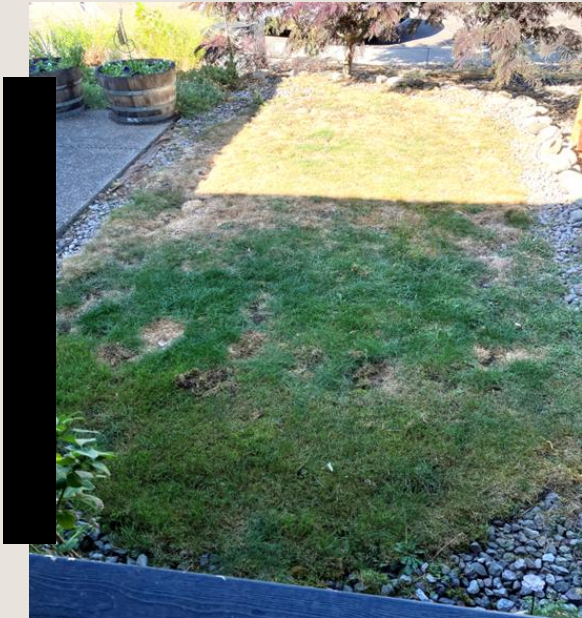
SMART CONTROLLER REBATE PROGRAM

Coupled with the sprinkler survey program is our SMART controller rebate program. This program promotes the use of Water Sense approved sprinkler system controllers. The greatest benefit to these controllers is the ability to utilize real-time local weather data to help your watering schedules. Using weather data will reduce over-watering and ensuring that your landscape is getting the appropriate amount of water. Another great benefit is having your sprinkler controller at your fingertips. All SMART controllers can be accessed from your phone, and it gives you the comfort to control your landscape from anywhere you have internet.

- This year we replaced 30 controllers with SMART controllers for an estimated 450,000 gallons of water saved.



lawn replacement program



BRAND NEW PROGRAM!

In 2022 we launched a Lawn Replacement Pilot Program. The goal of this program is to remove unwanted or non-functional turf and replace it with drought-tolerant alternatives to reduce water usage during peak water demand times. Turf grass uses the most water outdoors and, in many cases, it provides little to no benefit. This program seeks to eliminate these areas and save water. Applicants were required to show a 10% reduction in water related to the conversion from turf to other alternatives.

- We are currently working with 5 customers.

LOOKS GREAT AND SAVES WATER!

Although turf grass does have a prominent place in our community, there are areas where it may not make sense to have it. With this program we hope to eliminate as much unwanted or non-functional turf as possible to maximize the water savings in our community while keeping the look and feel that we all know and love. Alternative landscapes are great landscapes that provide the same function and beauty as turf. This is one of our first applicants that converted a small patch of turf in their front lawn to a beautiful river landscape with river rock and shrubs. The old irrigation system consisted of pop-up sprayers around the perimeter of the lawn and has been converted to a more efficient drip irrigation system. The best part about this project was that we were able to help them financially.





HIGH USAGE ACCOUNTS

We work to track down high water use accounts. The primary goal is awareness during these interactions. Most times, the customer is not aware that there is a leak. We want the customer to be aware of the high-water usage so they can be aware there is a leak. Most of these calls lead to a leak investigation which our staff can help to support.



LEAK INVESTIGATION

During a leak investigation we physically walk the property to see if there are any obvious signs of the leak, we check the meter to verify that the leak indicator is moving, then we provide the customer with the resources to fix the leak.

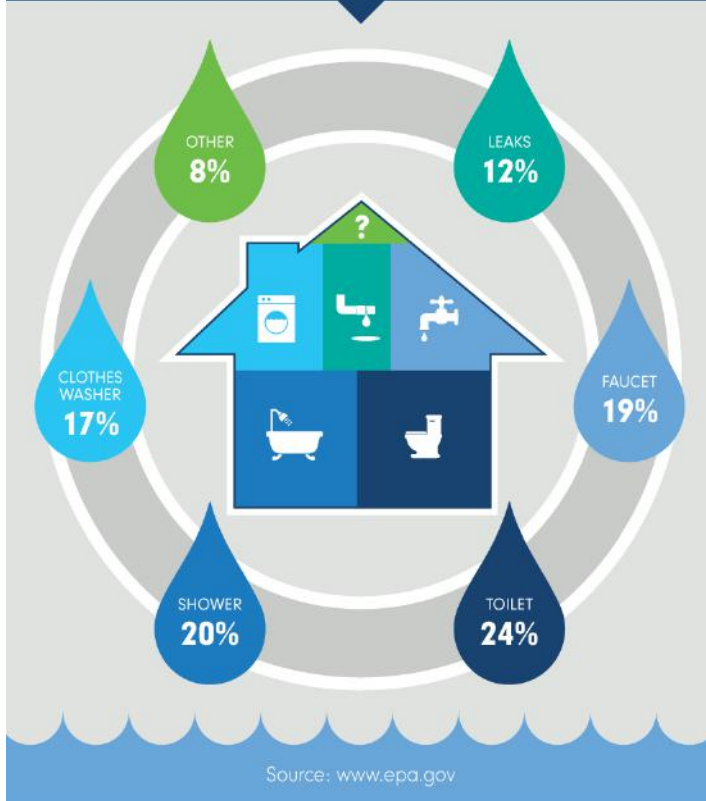
In 2022, we saved an estimated 10,000,000 gallons of water through our leak investigation efforts. By equipping the customer with the resources that they need to find and fix leaks, the long-term impact will be a better maintained water system.

In addition to our efforts, we partner with St. Vincent de Paul and The Salvation Army to provide financial assistance to customers that are on the shut-off list and/or have a leak that they cannot afford to fix on their own. Through this partnership we were able to help numerous customers reduce water leaks that resulted in lower monthly water bills.

- Last year, we were able to help 123 customers find or fix a leak on their property.

Household Water Use

Here's how the average household uses water:



HOUSEHOLD WATER USE

Do you know how much water you are using inside your home? Do you know what uses the most water inside the home on average? If you guessed the toilet, you are correct! Toilets account for approximately 24% of all indoor water usage. Showers account for 20% with Faucets and Clothes Washer coming in at a close third. Our water footprint will leave an impact on the generations to come. It is the amount of water consumed by human activity, not only from the tap, but the also the water we use to produce food, energy, clothes and other items.

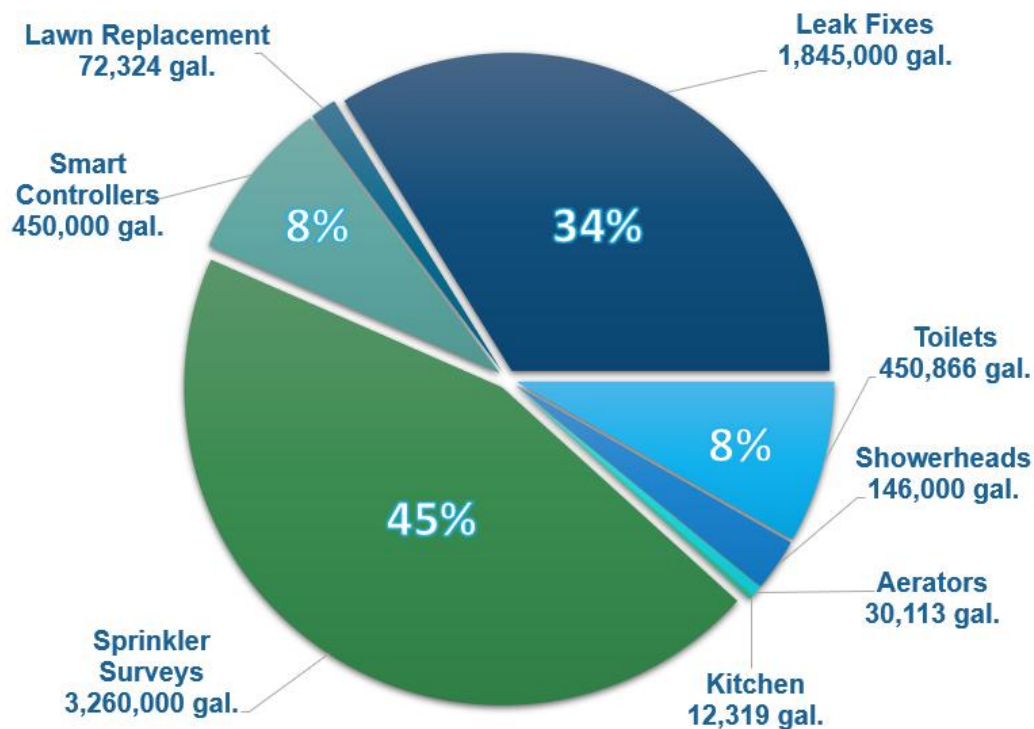
TOILET REBATE PROGRAM

To qualify for the rebate, replace your existing toilet, 1.6 gallons per flush or greater with a higher efficiency toilet that uses 1.28 gallons per flush. Once your old toilet is replaced, recycle the old toilet and Medford Water will issue your rebate. It's that simple.

- Since the beginning of this program, we have recycled over 2,600 toilets in Medford.
- In 2022, we replaced 71 toilets for an estimated water savings of 450,000 gallons. We continue to receive rebate requests throughout the year, so the program is always available.



summary of 2022 water savings



To summarize our water savings, we gear all of our programs around the customer. Our goal is to efficiently reduce the amount of water being used to an efficient amount that will provide long term benefits for our watershed as a whole.

Our outdoor programs account for 54% of our total water savings in 2022. These 3 programs go hand-in-hand in the effort to reduce water usage outside of the home.

Our indoor evaluation program is geared to reduce water use inside of the home through the use of water efficient technology. Toilets are more efficient now than ever before. Flushing at 1.28 gallons per flush drastically reduces the amount of water wasted by simply flushing the toilet. In addition, low flow fixtures such as 1.5 gallon per minute (gpm) showerheads, kitchen aerators, and 1.0 gpm bathroom aerators allow customers to reduce water wasted by normal everyday tasks.

Our High-Use and Leak Investigation Program accounts for the remaining 34% of water savings. Leak investigations require minimal resources and results in maximum water savings. Customers are immediately impacted once the leak has been identified and fixed. Through the process, we educate the customer on simple leak detecting methods that will help them identify leaks in the future. Leak investigations produced an estimated savings of 1,845,000 gallons each year.

Total savings for 2022 equate to approximately 6,000,000 gallons of water through our combined outdoor and indoor program efforts.

CAREER DEVELOPMENT

CAREERS IN GEARS

Careers in Gears is an annual event that connects job seekers with potential employers. It is also a place where high school students can learn about different types of jobs that are available to them from the service world.

SOU CAREER FAIR

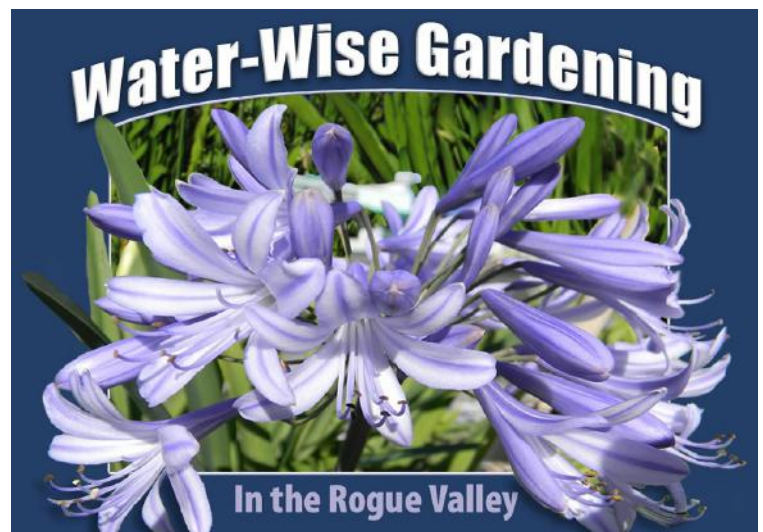
We partner with Southern Oregon University to host a booth at their annual Career Fair. The goal is to introduce college students to the water industry and present them with an opportunity to be a part of our internship program. The internship program is geared to expose interns to all aspects of the water industry from the watershed to water quality, infrastructure, and conservation, this program has made a meaningful impact.

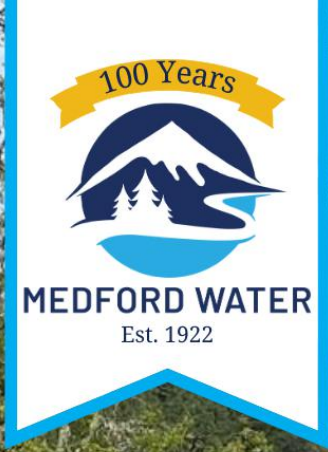
SALMON FESTIVAL

We were excited to be able to participate in the 2022 Salmon Festival held in Ashland, OR. This amazing event brings together prominent environmental partners and educators for a fun-filled day of entertainment and learning. Our watershed is our most precious resource and having the ability to collaborate and celebrate it was an opportunity like no other! Local experts were on hand with outdoor activities for all ages including interactive exhibits, kids' activities, live animals, salmon education, Native American demonstrations, spin-casting and storytelling. Join us next year to learn all about our wildlife habitat and how we can all become better stewards of our watershed.

OTHER OUTREACH EVENTS

- Garden Club Presentation
- Water Solutions Summit
- Ashland Climate Collaborative
- Jefferson Center
- Medford Rotary
- Careers in Gears
- United Way
- SOCAN
- SOLA Meetings
- Newsletter, Newspaper, Social Media, Radio
- Watering Recommendations
- Water-Wise Gardening Website





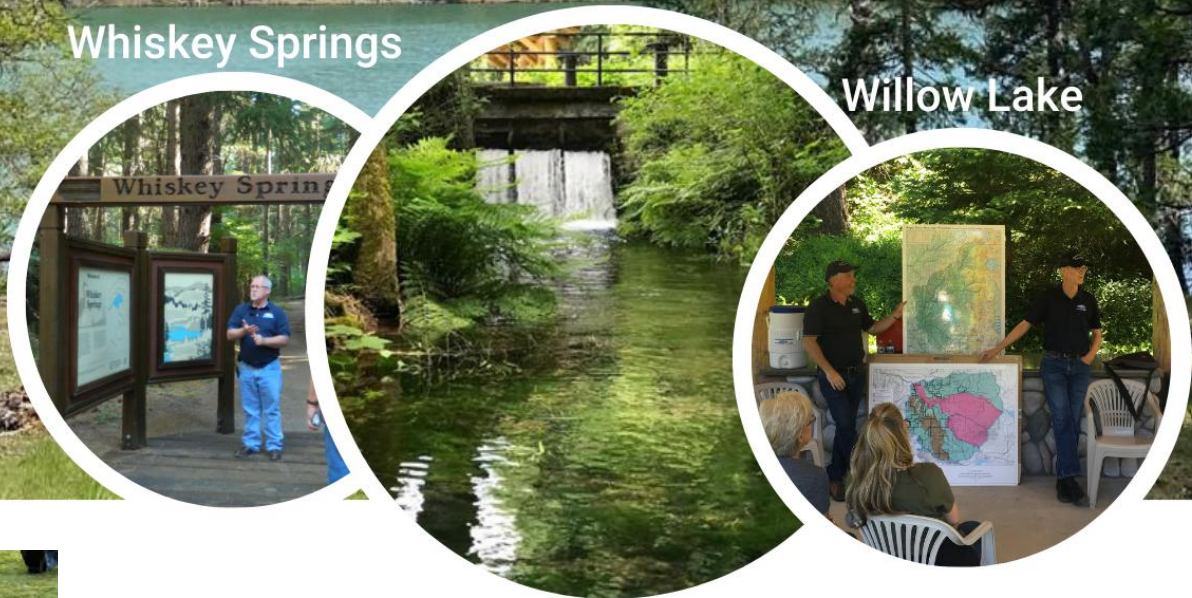
Water Sources Tour

September 2022

Big Butte Springs

Whiskey Springs

Willow Lake



WATER SOURCES TOUR

Up to year 1889 no organized water system existed in Medford and all water for domestic uses was obtained from open wells and pumps sunk only deep enough to secure surface water.

The first organized water system was installed in Medford in the year 1889. It received its supply from Bear Creek by means of an open ditch about three miles long which delivered water to a well in the city.

The old water ditch was abandoned in 1902 and a pumping plant established on the west bank of Bear Creek near the present sub-station of the California Oregon Power Company.

Because of the rapid growth of the city at this time, this source of supply soon proved entirely inadequate and repeated tests showed the water to be unsuitable for domestic use and a menace to health. Immediate steps were taken to secure a more reliable source of supply for the city water.

A gravity water system was sought as the most desirable if a dependable quality of water could be obtained within reach of the city finances.

On July 1, 1927, the pipeline was completed and the water from Big Butte Springs flowed from every faucet.

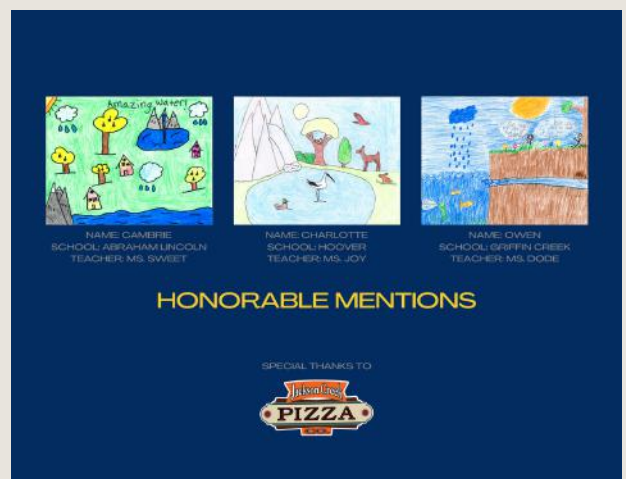


medford school district

1st annual calendar contest

This year, Medford Water sponsored a calendar contest for the students in the Medford School District and White City, to pique an interest in water conservation in the everyday lives of students in grade school. Starting with the 4th grade students, we prompted students to think about what water means to them and why it is important to conserve, and to create an illustration based on this idea. The top 12 submissions were selected to be published in a 2023 calendar. We coupled the contest with a presentation that we used to bring an even deeper understanding into water conservation, discussing where the water from the tap comes from, how it is treated, and various ways that water is used in everyday life. All the students that participated drew amazing works of art, and it was a challenge for the Medford Water team to decide on the winners for the 2023 calendar.

The top 3 submissions for the first annual Medford Water Calendar Contest also received some great prizes: first place winner received a pizza party for their class sponsored by Jackson Creek Pizza, as well as an electric scooter! The second-place winner received a drone, and the third-place winner received a mini fridge all sponsored by Medford Water. Prizes were awarded in December 2022, and the calendars will be presented to the winners and the participating classes in the middle of January. This has been an inspiring event and we look forward to continuing this contest in the years to come.



calendar contest winners



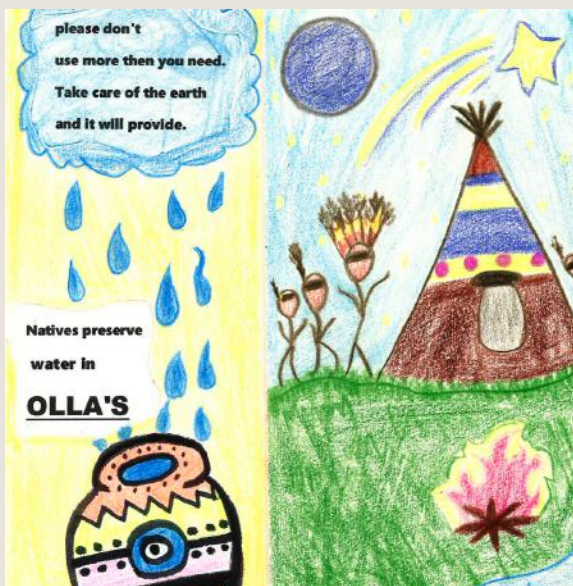
BE YOU

Be You was submitted from Griffin Creek Elementary School. Receiving the first-place prize in our first annual Calendar Contest, Be You answered the questions "What does water conservation mean to me? And why is it important to conserve water?" Be You exemplifies water conservation in today's day and age. The idea that we all need to think about water conservation and how it effects your life personally is something that we should all be thinking about.



CHAMELEON

Chameleon was submitted from Griffin Creek Elementary School. Chameleon is a creative piece of artwork that displays the earth in the shape of a chameleon. Relating to the theme of conserving water, this is a reminder that we cannot change our surroundings, but we can adapt and be what the world needs us to be today. Conserving water is a practice that needs to change over time. We don't know what the future has in store for us, and we cannot do anything about the past that is behind us, all we can do is adapt to the world today and do what we can.



SACRED WATER

Sacred Water was submitted from Jefferson Elementary School. Celebrating their heritage, Sacred Water reminds us that water conservation is not a new way of thinking. Native Americans practiced preservation and sharing our natural resources from long ago. Traditions passed down through the generations and is still a practice today. Thank you for reminding us that by doing our part and taking care of the earth, it will provide for us.

regional partnerships



Medford Water prioritizes the responsible use of our water resources and promotes water efficiency practices throughout the Rogue Valley. Making water efficiency a part of our everyday lives and implementing measures to conserve water helps to preserve this essential resource for years to come. Medford Water recognizes the value in working collaboratively with our partner agencies to find innovative solutions to address the water challenges in our region.

City of Ashland

In our efforts to expand water efficiency programs and resources to partner communities, Medford Water began providing the City of Ashland with water conservation and efficiency services in the spring of 2021. Through an intergovernmental agreement between Medford Water and the City of Ashland, Medford Water staff facilitates the Ashland program. We provide onsite indoor and outdoor water use evaluations, guide the rebate programs, promote appliance and fixture upgrades, giveaway free showerheads, aerators and soil moisture meters, write newsletter articles, and provide education to the public through community events and presentations.

City of Medford

Staff assists the City of Medford Planning Department with reviewing landscape and irrigation plans for new development and provides recommendations to refining the code to incorporate best practices for creating water efficient landscapes. We also collaborate with the planning department on developing Firewise landscaping recommendations and have participated on the City's Climate Adaptation and Resiliency Committee providing feedback and suggestions on the efficiency measures that could be adopted to help ensure our community will continue to have reliable and sustainable water resources into the future.

Southern Oregon Subsection of the American Water Works Association (SOSS - AWWA)

Medford Water participates and serves on the board of the Southern Oregon Subsection of the American Water Works Association. Through our role, we connect and work with several water utilities throughout Southern Oregon to promote the value of water to our communities, we provide classes that help local operators get continuing education credits toward their operator's licenses and participate in career fairs to engage and introduce the water industry to the younger generation.



SOLA

Southern Oregon Landscape Association

SOUTHERN OREGON LANDSCAPE ASSOCIATION

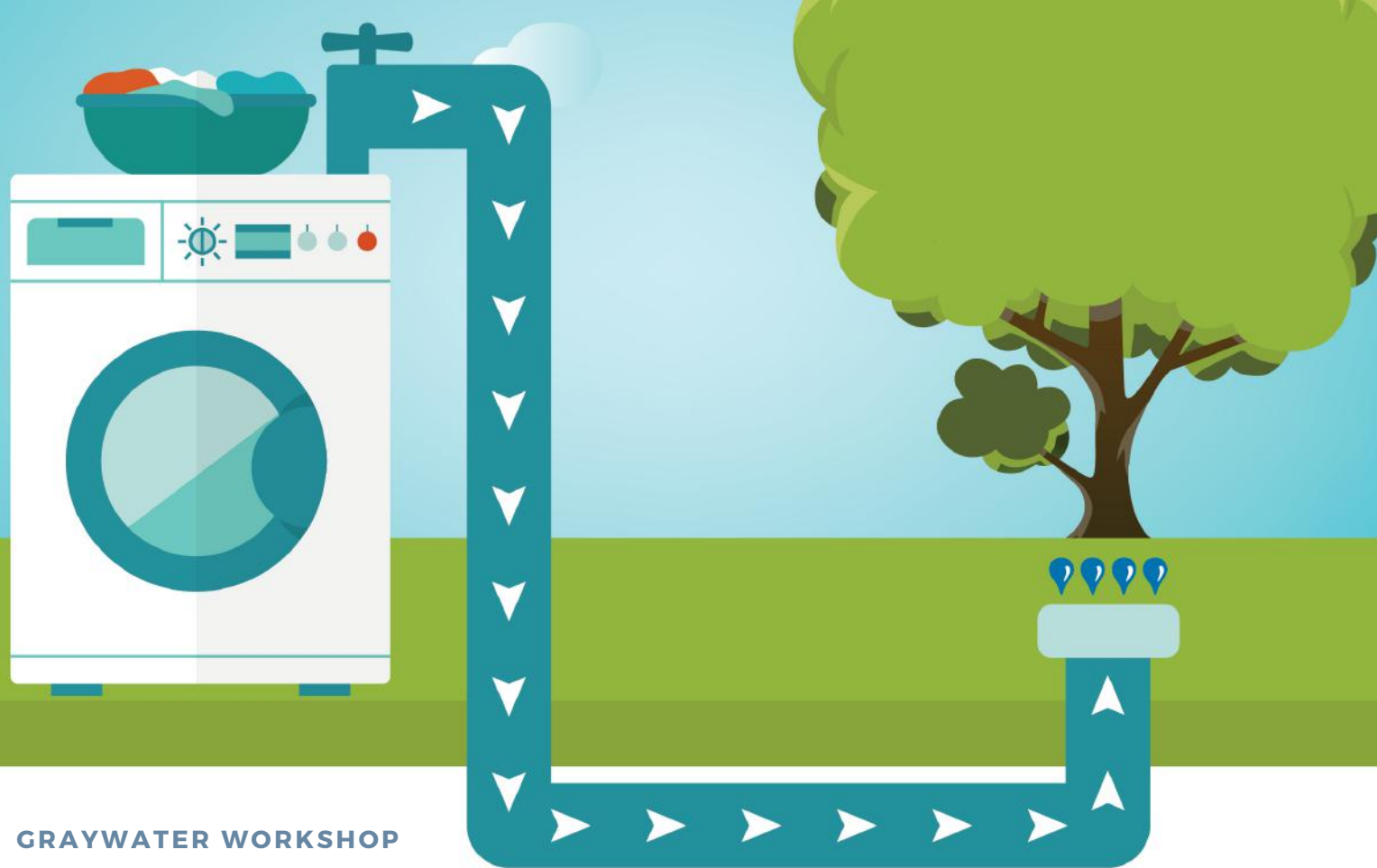
Landscapes can provide many important benefits and are an essential part of the look and feel of our homes, businesses and community. Professionals that specialize in irrigation and landscaping help us manage these landscapes and keep them looking beautiful, healthy and maintained.

The Southern Oregon Landscape Association (SOLA) is a nonprofit organization and was originally founded in the late 1980's as a venue for members of the professional landscape community to join together in the interest of public service and the promotion of professional landscaping. Our goals include, increasing public awareness of the value of professional landscaping and horticultural services, providing our members the opportunity to expand their knowledge and earn continuing education hours (CEH's) toward their license, and to educate members and the public on new and improved irrigation technologies and best practices for creating thriving water efficient landscapes.

SOLA has participated in many community improvement projects over the years and continues to look for ways to serve our community. Some of the projects included the design, landscape, and irrigation system for the original Children's Advocacy Center and the Bear Creek Park Demonstration Garden in Medford, Dogs for Better Lives, in Central Point and most recently Blue Heron Park Pollinator Garden in Phoenix.

As drought becomes more frequent in our region, SOLA recognizes the responsibility to be strong advocates for the responsible and efficient use of our water resources. We continue to build relationships within the local landscape and irrigation industry and strive to work together to promote the value of professional landscaping and the importance of water efficiency in our communities.

Please visit our website at www.sola-oregon.com or give us a call at 541-774-2436 for more information.



GRAYWATER WORKSHOP

On October 22nd the City of Ashland in partner with Medford Water, held a graywater workshop from 9:30 a.m. to 12:30 p.m. for all who were interested. Each attendee was provided with a Graywater Guide book written by our esteemed instructor Laura Allen with Graywater Action.

Attendees of the workshop learned about the basics of graywater, including what fixtures you can collect graywater from, how that water can be used, and the types of systems you could install. We also learned to do site assessments to determine which type of graywater system would be the best for varying locations as well as general costs and pros and cons of each type of system.

We discussed Laundry to Landscape Graywater Systems, and reviewed the parts needed to design one. Each participant had an opportunity to practice putting the parts together in the classroom. We spent a good amount of time learning to estimate graywater flows, estimating plant water requirements and how best to design the system based on these characteristics.

We also discussed and reviewed branched drain and pumped systems, which uses graywater from multiple fixtures such as showers, bathroom faucets and washing machines to water the landscape. We went over proper sizing and positioning of pipes transporting graywater to the landscape as well as the type and size of diverter valves. We identified sites that would be appropriate for such a system and sites that would work better with a simple laundry to landscape system instead.

If you would like more information on graywater systems please visit the City of Ashland's website at www.ashland.or.us/graywater or you can call 541-774-2436.

2023 and beyond

WHAT ARE WE LOOKING FORWARD TO...



OUTDOOR PROGRAMS

- Rogue Valley Association of Realtors Partnership
- SOLA - Utilizing this partnership to develop the Sprinkler Survey Program

INDOOR PROGRAMS

- Working with Plumbers in Southern Oregon to build mutually beneficial relationships
- Indoor evaluations

COMMERCIAL PROGRAMS

- Develop outdoor and indoor water evaluations

PUBLIC OUTREACH

- Increased engagement with schools
- Reusable Medford Water Bags
- Continue BBS and Duff Tours
- Annual Water Efficiency Report
- Regional Partnerships

CUSTOMER SERVICE

- WaterSmart Customer Portal
- AMI Capabilities



*"We will conserve only that which we love,
we will love only what we understand,
and we will understand only what we are taught."*



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FIND OUT MORE ABOUT WATER EFFICIENCY AND
STAY CONNECTED WITH MEDFORD WATER

WWW.MEDFORDWATER.ORG

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