CONSUMER CONFIDENCE REPORT

Established 1922
MEDFORD WATER
100 Years
Water for the Next Century.

the water WE DRINK

// ISSUED JUNE 2022
// BASED ON 2021 WATER QUALITY DATA

Este informe contiene información importante sobre su agua.
Para una copia de este informe en español, por favor visite
www.medfordwater.org/InformeDeConfianzaDelConsumidor.pdf
o llame al 541-774-2430.

ANNUAL WATER QUALITY REPORT FOR
Medford Water, Charlotte Ann Water District,
Elk City Water District, and Partner Cities:
Central Point · Eagle Point · Jacksonville · Phoenix

To Our VALUED CUSTOMERS,

We are pleased to share our 2021 annual Consumer Confidence Report, which includes facts about where your water comes from, water quality testing results for the year 2021, and information explaining what the results mean. It is provided by Medford Water, along with Charlotte Ann and Elk City Water Districts, and our Partner Cities of Central Point, Eagle Point, Jacksonville, and Phoenix.

You will learn how we protect, monitor, and treat the water that flows from our watersheds to your home, school, or workplace.

As we roll forward in 2022, we are celebrating our 100-year anniversary of providing water to our customers. We are proud of this legacy, and look for forward to providing Water for the Next Century. This means that throughout the changes and challenges to come, we will continue to provide high-quality drinking water that meets or surpasses all applicable federal and state drinking water standards, and to value and respect our responsibility to provide a critical, life-sustaining product.

If you have any questions or comments about this material, please contact us at 541-774-2728 or water@medfordwater.org. Contact information for the Water Districts and our Partner Cities is provided inside. Read on to learn more about the water we drink and how you can join us in protecting and conserving this valuable resource.

Brad Taylor
General Manager
Medford Water

WHERE DOES YOUR WATER COME FROM?

BIG BUTTE SPRINGS has been our primary water source since 1927. Considered a groundwater supply, the springs flow from the lower slopes of Mt. McLoughlin near Butte Falls. Consistently cold and clear, the springs discharge water of exceptional quality that requires no filtration or treatment other than disinfection, which is accomplished with on-site chlorination at a state-of-the-art treatment facility. Spring flows are collected underground and never see the light of day until emerging from customers' taps.

THE ROGUE RIVER is a surface water supply that supplements the year-round springs supply during warmer summer months, when water use more than triples. While also high in quality, the river water requires additional treatment to meet drinking water standards. Treatment of this surface water takes place at the Robert A. Duff Water Treatment Plant, and includes ozonation, coagulation, settling and filtration, along with chlorination. The addition of ozone in 2002 provided a dramatic reduction in occasional musty tastes and odors that can occur in the river water.

To stay on trend with changing population projections and to increase the resiliency and efficiency of our system, we are also expanding the capacity of our treatment plant from 45 million gallons per day (MGD) to 65 MGD. This work includes filters, ozone, pumping, and storage projects. These improvements will help us serve our customers for decades to come.

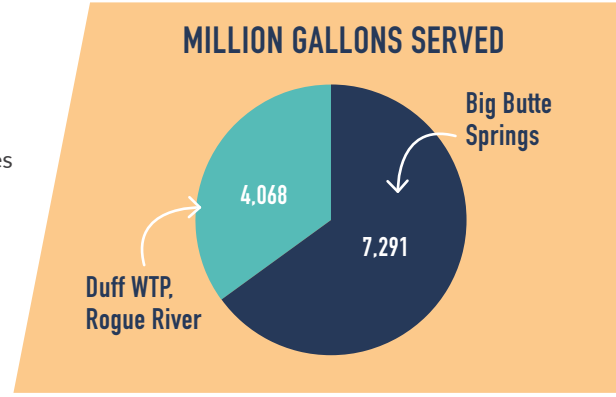
PROTECTING OUR WATERSHED

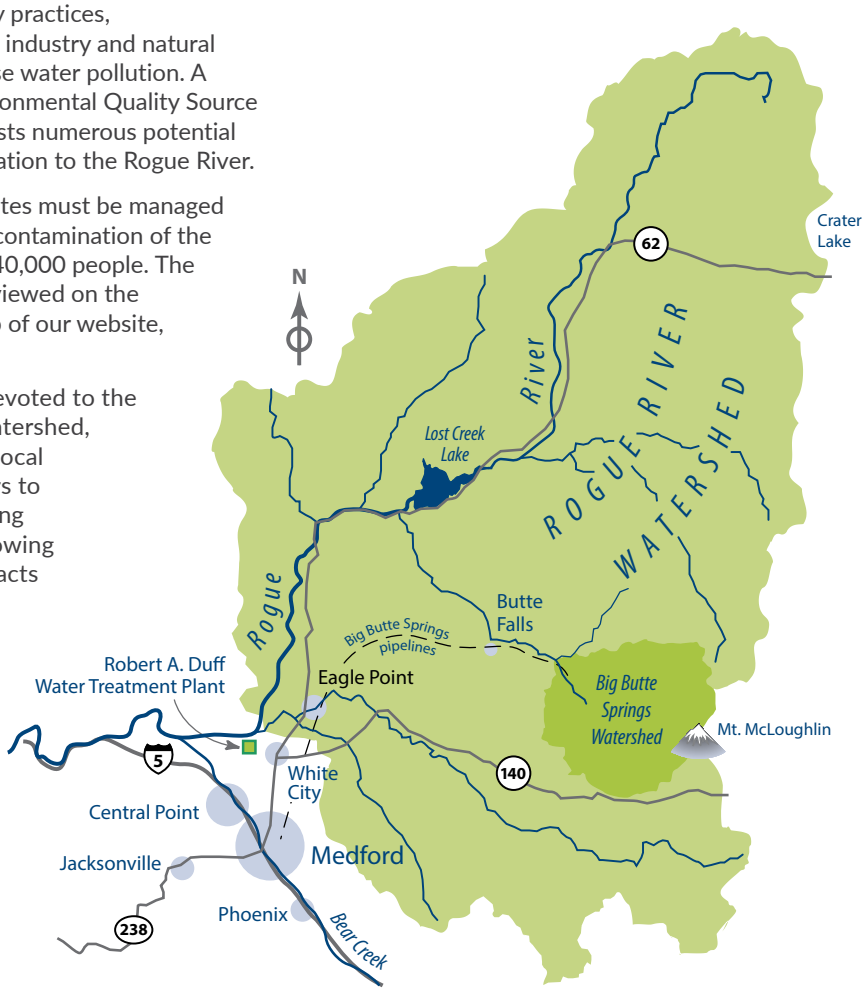
The Big Butte Springs watershed drains about 88 square miles of largely undeveloped forestlands, and most of the watershed is protected as part of the Rogue River National Forest. Medford Water owns nearly 3,700 acres around Big Butte Springs, affording additional protection to this pristine source.

The portion of the Rogue River watershed upstream of the treatment plant is lightly developed, but includes some land uses that can lead to degraded water quality. Small communities and rural residences, farms and ranches, forestry practices, transportation, small industry and natural disasters can all cause water pollution. A Department of Environmental Quality Source Water Assessment lists numerous potential sources of contamination to the Rogue River.

These sources and sites must be managed properly to prevent contamination of the drinking water for 140,000 people. The Assessment can be viewed on the Water Resources tab of our website, medfordwater.org.

Medford Water is devoted to the protection of our watershed, working with many local and regional partners to safeguard our drinking water supplies. Following the devastating impacts of the Almeda and South Obenchain Fires in September 2020, we have accelerated fire risk reduction work, contributing to a favorable reduction in fire risk to our watershed ahead of the upcoming fire season.





2021 WATER QUALITY TEST RESULTS FOR TREATED WATER

REGULATED CONTAMINANTS ANALYSES

Substance	MCL (Maximum Allowed)	MCLG (Ideal Goal)	Source	Average Amount Detected	Range	Complies?	Typical Source
Barium (ppm) (last sampled 2020)	2	2	Big Butte Springs	0.003	0.003	YES	Erosion of Natural Deposits
			Rogue River	0.005	0.005		
Cadmium (ppb) (last sampled 2020)	5	5	Rogue River	0.2	0.2	YES	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints

MICROBIOLOGICAL CONTAMINANTS

Location	Substance	MCL (Maximum Allowed)	MCLG (Ideal Goal)	Detected Level	Complies?	Typical Source
Medford Water, Charlotte Ann Water District, and Partner Cities	Coliform bacteria	N/A	0% Presence	0	YES	Naturally present in the environment
Elk City Water District	Coliform bacteria	N/A	0% Presence	2 Detections*	YES	Naturally present in the environment
Medford Water, Charlotte Ann Water District, Elk City Water District, and Partner Cities	E. coli	0	0	0	YES	Human and animal fecal waste

*Elk City Water District was required to conduct a Level 1 coliform investigation after having a sample location test positive for coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Elk City found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, they are required to conduct an investigation to identify problems and to correct any problems that were found during this investigation. It was determined that a sample location had stagnant water not representative of the water served to the community; that sample station has since been replaced and coliforms have not been detected since.

OTHER ANALYSES – ROGUE RIVER

Substance	TT	Maximum Amount Detected	Minimum Amount Detected	AVG	Complies?	Typical Source
Turbidity	95% < 0.3 NTU	0.45	0.04	0.06	YES	Soil erosion and stream sediments
Total Organic Carbon	N/A	1.0	0.6	0.81	YES	Soil erosion and stream sediments

UNREGULATED CONTAMINANTS ANALYSES

Substance	Water Source	Maximum Amount Detected	Minimum Amount Detected	Average Amount Detected	Last Samples	Typical Source
HAA6 (ppb)*	Distribution	1.4	ND	0.5	2018	Byproduct of Disinfection
HAA9 (ppb)*	Distribution	17	ND	6.0	2018	Byproduct of Disinfection
Manganese (ppb)*	Rogue River	3.0	0.9	2.2	2018	Erosion of Natural Deposits
Bromide (ppb)*	Big Butte Springs	5.3	ND	5.2	2018	Erosion of Natural Deposits
Nickel (ppb)*	Rogue River	2	2	2	2020	Erosion of Natural Deposits
Sodium (ppm)*	Big Butte Springs	7.1	7.1	7.1	2020	Erosion of Natural Deposits
	Rogue River	4.7	4.7	4.7	2020	Erosion of Natural Deposits

* Unregulated contaminants are monitored for the EPA to assess the prevalence and detection levels of substances being considered for future regulation.

UNDERSTANDING THE RESULTS: Medford Water and each of the Partner Cities participating in this report run water quality tests according to specific schedules. Thousands of tests are run each year to ensure that no substances are present at harmful levels. Although continuously improving testing techniques allow contaminants to be detected at truly miniscule levels, most of the contaminants we test for have never been found in our water. Those that we do detect are found at levels well below health standards, as shown in the adjacent tables. Medford Water received a violation for late reporting of groundwater rule information during December; there are no expected health effects due to this violation. Elk City received a violation for failing to report coliform samples from June; the samples were collected as required but were reported incorrectly. There are no expected health effects due to this violation.

TESTING FOR MICROBES: Unlike most contaminants, microscopic organisms can appear suddenly and cause immediate illness. Testing for bacteria is therefore done on a frequent basis by Medford Water Commission and the Partner Cities participating in this report. This includes looking for coliform bacteria as well as confirming that adequate chlorine is present in the water to provide ongoing disinfection. While most coliforms do not pose a health threat, they are a good indicator of whether other bacteria might be present. If found, further testing is conducted for harmful forms of bacteria.

CHLORINE RESIDUAL: Sodium hypochlorite is used as a disinfectant and provides continuous protection to customers' taps. Sampling throughout the distribution system confirms that the amount of chlorine present is neither too low nor too high. Our water is effectively disinfected with much less chlorine than the allowable limit.

RADON TESTING: The most common source of this colorless, odorless gas is from the soil, but a small amount of exposure can come from tap water. We conduct testing, but radon is not currently regulated. Radon is considered to be a cause of cancer.

SPECIAL NOTICE FOR IMMUNO-COMPROMISED PERSONS: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can particularly be at risk from infections. These people should seek advice about drinking water from their health care providers. Guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the U.S. Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline (1-800-426-4791).

WHAT THE EPA SAYS ABOUT DRINKING WATER CONTAMINANTS: Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

CONTAMINANTS IN DRINKING WATER SOURCES MAY INCLUDE:

Microbial contaminants, such as viruses and bacteria, which may come from wildlife or septic systems.

Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, farming and leaching from plumbing materials.

Pesticides and herbicides, which may come from a variety of sources such as farming, urban stormwater runoff and home or business use.

Organic chemical contaminants, which are byproducts of industrial processes, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, which can occur naturally.In order to ensure that tap water is safe to drink, the EPA has regulations that limit the amount of certain contaminants in water provided by public water systems and require monitoring for these contaminants. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

MEDFORD WATER, WATER DISTRICTS, AND PARTNER CITIES' DISINFECTION AND DISINFECTION BY-PRODUCT ANALYSES

Substance	Entity	Average for Highest Location	Range	MCL (maximum allowed)	MCLG (ideal goal)	Complies?	Typical Source
Total Trihalomethanes (ppb)	Medford Water	13.1	ND - 23.8	80	0	YES	By-products of chlorination used in the water treatment process
	Charlotte Ann Water District	1.4	ND - 2.4				
	Central Point	21.3	1.1 - 37.8				
	Eagle Point	14	ND - 14.0				
	Elk City Water District	22.9	14.8 - 30.9				
	Jacksonville	15.1	15.1				
	Phoenix	5.7	ND - 5.7				
Haloacetic Acids (ppb)	Medford Water	9.4	ND - 24.4	60	0	YES	By-products of chlorination used in the water treatment process
	Charlotte Ann Water District	ND	ND				
	Central Point	13.7	ND - 33.5				
	Eagle Point	12.0	11.9 - 12.0				
	Elk City Water District	17.0	11.1 - 22.9				
	Jacksonville	6.7	6.7				
	Phoenix	ND	ND				
Chlorine Residual (ppm)	Medford Water	0.7	0.2 - 0.9	4.0 (MRDL)	4.0 (MRDLG)	YES	Treatment additive for disinfection
	Charlotte Ann Water District	0.5	0.4 - 0.6				
	Central Point	0.5	0.1 - 0.9				
	Eagle Point	0.5	0.1 - 0.9				
	Elk City Water District	0.5	0.3 - 0.8				
	Jacksonville	0.4	0.2 - 0.5				
	Phoenix	0.6	0.3 - 0.8				

RADIOACTIVE CONTAMINANTS

Substance	MCL	MCLG	Amount Detected	Typical Source
Radon-222 (pCi/L) (last sampled 2018)	N/A	N/A	Big Butte Springs - 88 pCi/L	Erosion of Natural Deposits

LEAD AND COPPER SAMPLING FROM RESIDENTIAL WATER TAPS

Substance	Entity	Amount Detected (90th percentile value)	Date of most recent test	Action Level	MCLG (ideal goal)	Complies?	Typical Source
Lead (ppb)	Medford Water	0.9	2019	90% of homes tested must have lead levels less than 15 ppb	0	YES (No sample exceeded the action level)	Corrosion of household plumbing
	Charlotte Ann Water District	2.0	2021				
	Central Point	1.2	2020				
	Eagle Point	2.6	2019				
	Elk City Water District	7.4	2021				
	Jacksonville	3.5	2019				
	Phoenix	0.1	2021				
Copper (ppm)	Medford Water	0.8	2019	90% of homes tested must have copper levels less than 1.3 ppm	1.3	YES (No sample exceeded the action level)	Corrosion of household plumbing
	Charlotte Ann Water District	0.4	2021				
	Central Point	0.2	2020				
	Eagle Point	0.1	2019				
	Elk City Water District	0.1	2021				
	Jacksonville	0.4	2019				
	Phoenix	0.4	2021				

TERMS AND ABBREVIATIONS

Terms used in the table are explained below.

Contaminant: A potentially harmful physical, biological, chemical or radiological substance.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ND (Non-detect): Not detected at an established minimum reporting level.

pCi/L (Picocuries per Liter): A measurement of radioactivity equivalent to a trillion times smaller than one curie.

ppm (Parts Per Million): One part per million means that one part of a particular substance is present for every million parts of water. This is the equivalent of one penny in $10,000 or approximately one minute in two years.

ppb (Parts Per Billion): One part per billion corresponds to one penny in $10,000,000 or approximately one minute in 2,000 years.

TT (Treatment Technique): A required treatment process intended to reduce the level of a contaminant in drinking water.

Turbidity: A measure of how clear water is, expressed in Nephelometric Turbidity Units (NTU). Turbidity does not necessarily indicate that water is unhealthy, but it can interfere with disinfection and can be an indicator of microorganisms.

REDUCING EXPOSURE TO LEAD AND COPPER:

Our water sources, Big Butte Springs and the Rogue River, contain virtually no lead or copper. However, because these metals can leach into drinking water through contact with household plumbing or distribution system pipes, additional testing is conducted at residences considered to be at greatest risk. Within the homes we've sampled, lead and copper have not been detected at levels that exceed EPA rules for safe drinking water.

Customers should be aware that lead and/or copper levels can increase when water stands in contact with lead or copper pipes, lead-based solder and brass faucets containing lead. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Medford Water and each of our Partner Cities are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by running the cold water tap for 30 seconds to 2 minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead.

WATER LINES: Utility vs. Customer Responsibility

When it comes to the pipes, valves, and other appurtenances that bring high-quality water all the way to your tap, do you know where Medford Water responsibility ends and yours begins?

In addition to the two underground pipelines that bring water approximately 30.5 miles from our primary water source, Big Butte Springs, we operate 12 pump stations, 16 water reservoirs, more than 476 miles of water mains throughout our distribution system, as well as tens of thousands of valves, fire hydrants, and meters.

Medford Water is responsible for the construction and maintenance of all of these facilities in a vast underground grid of water mains and service connections, ending at the water meter that serves your residence or business. Meters are located in concrete boxes and usually found at the property line either in front of or behind the residence.

Customer responsibility begins at the customer-side of the meter, and includes the pipes, valves, and facilities leading from the meter and into the premises served.

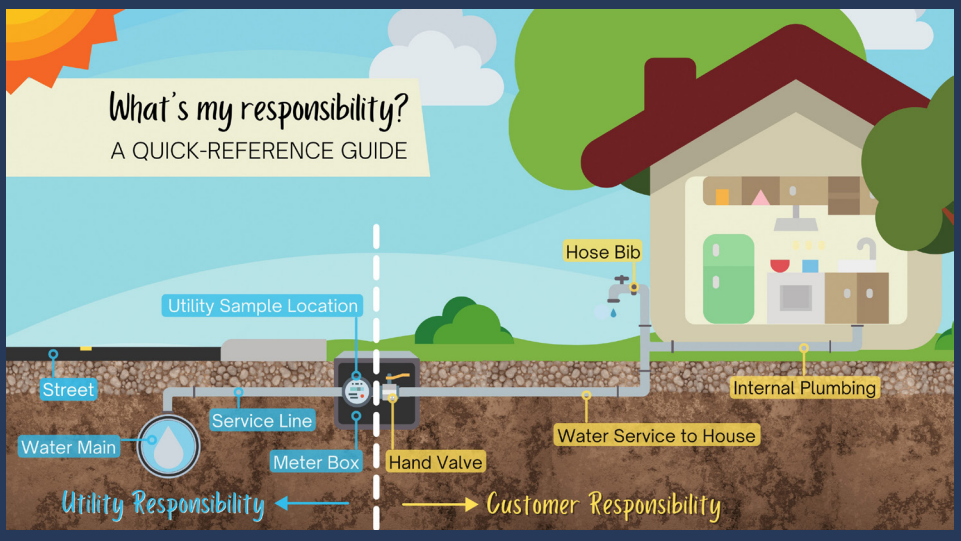
If you are concerned about the pipes in your home or business, such as possible contamination from your pipe materials or damage from fire, you may consider having your water tested by a state-certified laboratory. Neilson Research Corporation is the only certified independent water testing laboratory in our area; their phone number is (541) 770-5678.

Medford Water regularly monitors the quality of the water supply both at the treatment plant and in the distribution system. Sampling ensures that the distributed water meets the criteria established by the Environmental Protection Agency, which sets strict standards for drinking water quality and requires monitoring for more than 100 potential contaminants. Our water has always exceeded all standards.

Periods of long stagnation, such as a home being vacant for several days, can greatly impact your water quality. One simple way to combat this is by flushing the stagnant water out of your lines; find out how in the Frequently Asked Questions About Water Quality section on this page.

For a quick-reference guide to utility and customer responsibility with regards to testing and water piping components, see the graphic below. For help, contact our Customer Service Department at (541) 774-2430.

PRO TIP: It is a good idea to locate your meter box and acquaint yourself with turning your water supply off and on before a broken pipe or other water emergency occurs at your home. This may require using a tool to turn the valve.



Frequently Asked Questions About WATER QUALITY

DOES OUR WATER CONTAIN PFAS?

Fortunately, both of our water sources are at low risk for per- and polyfluoroalkyl substances (PFAS), and PFAS have not been detected in either the Big Butte Springs or the Rogue River sources. We will continue to monitor these drinking water sources for contaminants such as PFAS and maintain our robust source water protection programs to continue to bring you a reliable, high-quality water supply at the best value.

DOES MEDFORD WATER ADD FLUORIDE TO THE DRINKING WATER?

No, we don't add fluoride to the water. The U.S. Public Health Service considers the naturally-occurring fluoride levels in our water sources to be lower than optimal for the prevention of tooth decay. You may want to consult with your dentist about fluoride treatment, especially for young children.

IS MEDFORD'S WATER SOFT OR HARD?

Our water is considered soft.

HAVE ALGAL TOXINS BEEN DETECTED IN OUR DRINKING WATER?

No, algal toxins have never been detected at our intake or in our finished drinking water since the statewide testing program began in 2018.

WHAT CAN I DO TO IMPROVE MY WATER QUALITY?

- Always use the cold water tap for drinking or cooking, since hot water is more likely to release metals from pipe materials.
- During periods of long stagnation, water can pick up off-tastes from sitting in the plumbing inside of your house, especially in older plumbing systems. To help combat this, you can run your water for 30 seconds to 2 minutes (until you feel the temperature drop) before drinking or cooking, to flush water that has been sitting in pipes without use, such as: in the morning, after returning from work or school, and especially after a vacation. (Conservation tip: When flushing water from pipes, you can reduce the length of time needed to run the tap if you run your sprinklers, wash a load of laundry, or shower first. Consider catching flushed tap water for plants or other household use, such as cleaning.)
- Periodically remove and clean out the aerators in your faucet.

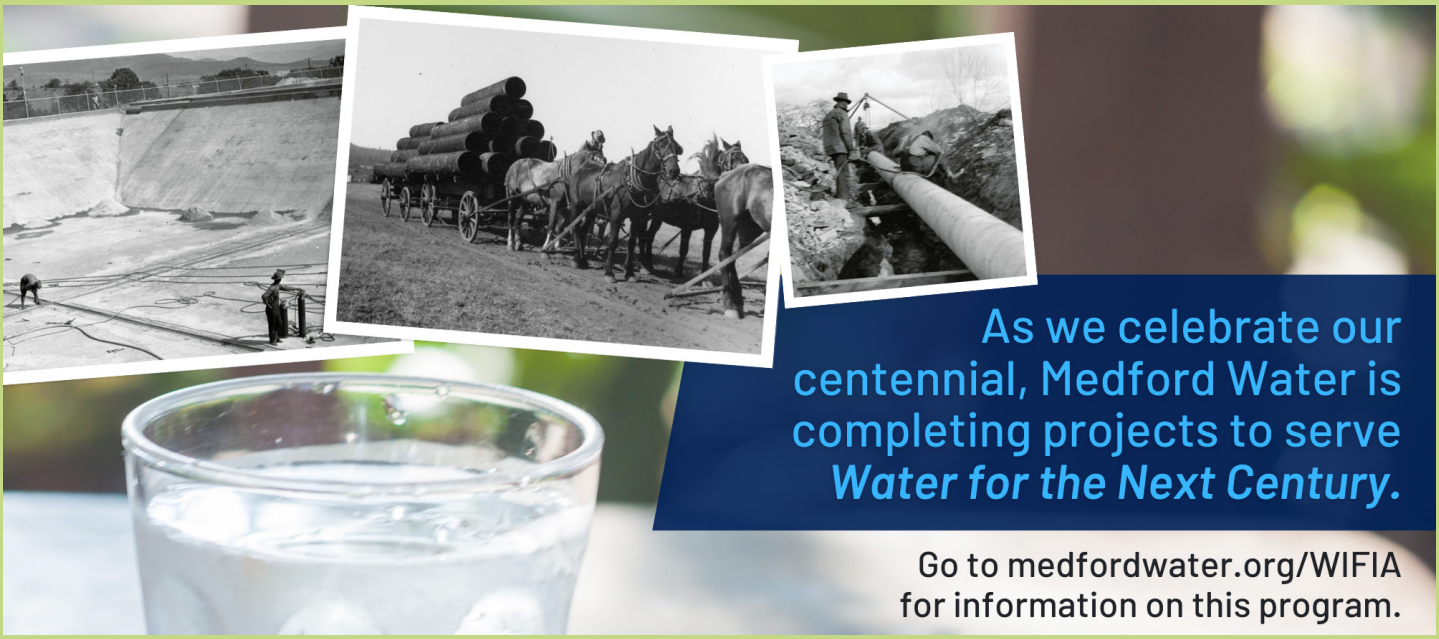
LOVE YOUR WATER, USE IT WISELY

Promoting the Efficient and Sustainable Use of Water

Medford Water is fortunate to have access to reliable, high-quality drinking water to serve our communities. With just the turn of the tap, we have fresh mountain spring water in our homes and businesses. While having water readily available at the tap may make it seem like there is an abundance of water, local weather trends are causing water supplies to become more stressed each year. As drought occurs more frequently in Southern Oregon, it is essential for our communities to work together to find ways to use the water we have as efficiently as possible.

Over the past few years, weather conditions have created challenges for water suppliers throughout the region, especially for the irrigation districts that serve water to local farms and orchards. Limited water supplies and drought have brought up concerns about water availability in Jackson County, prompting many people to think about where their water comes from, how it's managed, and what can be done to reduce and preserve one of our most precious resources.

Medford Water prioritizes the responsible use of water and promotes water efficiency practices throughout our community. Making water efficiency a part of our daily life can help preserve this essential resource. We offer several programs, rebates, tips, and giveaways to help our community use water efficiently and conserve during times of limited supply as well as throughout the rest of the year. For more information, please visit our website at medfordwater.org.



Medford Water
(PWSID: 41-00513)
Ben Klayman, PhD, PE,
Water Quality & Treatment Manager:
541-774-2728

Board Meetings: 1st and 3rd Wed. at 12:15 p.m.

Location varies; see agenda for details.

Email: ben.klayman@medfordwater.org

www.medfordwater.org

City of Central Point
(PWSID: 41-00178)
Micheal McClenathan, Water Division Supervisor: 541-664-3321 (ext. 272)

Council Meetings: 2nd and 4th Thurs. at 7 p.m.

City Hall, 140 S. 3rd Street

Email: mike.mcclenathan@centralpointoregon.gov

www.centralpointoregon.gov

Charlotte Ann Water District
(PWSID: 41-01547)
Robert Stone, CAWD Attorney:

541-734-4093

Board Meetings: 2nd Thurs. at 6 p.m.

Community Bldg. at San George Estates, 10 E. South Stage Road

Email: rob@robstonelaw.com

City of Eagle Point
(PWSID: 41-00267)
Aaron Prunty, City Administrator:

541-826-4212

Council Meetings: 2nd and 4th Tues. at 6 p.m.

City Hall, 17 Buchanan Avenue South

Email: aaron@cityofeaglepoint.org

www.cityofeaglepoint.org

City of Jacksonville
(PWSID: 41-00405)
Jeffrey Alvis, City Administrator:
541-899-1231

Council Meetings: 1st and 3rd Tues. at 6 p.m.

New City Hall Assembly Rm., 206 N. Fifth Street

Email: administrator@jacksonvilleor.us

www.jacksonvilleor.us

Jackson County Health Department
Environmental Public Health: 541-774-8206

Elk City Water District
(PWSID: 41-01549)
John Blackhurst, ECWD Attorney:

541-779-8900

Board Meetings: 1st Mon. at 6 p.m.

Greenbriar Terrace Rec. Rm., 301 Freeman Road

Email: jwb@roguelaw.com

City of Phoenix
(PWSID: 41-00625)

Matias Mendez, Public Works Superintendent:
541-535-2226

Council Meetings: 1st and 3rd Mon. at 6:30 p.m.

Phoenix Plaza Civic Ctr., 220 N. Main Street

Email: matias.mendez@phoenixoregon.gov

www.phoenixoregon.gov

Oregon Health Authority
Drinking Water Program: 971-673-0405

www.oregon.gov/oha/ph/healthyenvironments/drinkingwater

EPA Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/safewater