

YOUR WATER

2022 DRINKING WATER QUALITY & CONSUMER CONFIDENCE REPORT



Eugene Water & Electric Board



Clear Lake, source of the McKenzie River, and Eugene's water supply, sits tucked away in Oregon's Willamette National Forest.

Clean water starts at the source

As an EWEB customer, you receive some of the highest quality drinking water in the world. Your water comes from the pristine McKenzie River, which emerges from Clear Lake, high in the Cascade Mountains. Clear Lake is a spring-fed lake, the water bubbling to the surface through acres of natural volcanic “filters,” before flowing 85 miles down the McKenzie River to the Hayden Bridge Water Filtration Plant in Springfield, where the Eugene Water & Electric Board draws water from the river.

EWEB has completed a [Source Water Assessment](#) to identify potential contaminants of concern for our drinking water. Although the McKenzie River has faced some major challenges over the last few years, overall water quality remains excellent. EWEB works with residents throughout the watershed to minimize contaminants from pesticides and urban runoff, and coordinates with multiple emergency responders to prepare for potential hazardous material spills. With climate change bringing warmer and drier weather, our watershed will endure greater threats in the forms of droughts, wildfires, and harmful algal blooms.

For more information about EWEB's source water monitoring and protection program visit www.eweb.org/sourcewaterprotection.

For contacts and more information, see page 9.

Para obtener contactos y más información, consulte la página 9.



Your tap water costs less than a penny a gallon.

But what does that penny cover? Here's a hint, it's more than just water.



Source Water Protection Programs



3-Step Treatment Process



800 Miles of Pipes



28 Pump Stations



22 Storage Tanks



85,000 Samples Each Year

Your water bill supports clean, safe and reliable drinking water from source to tap.

This report is a summary of the quality of water we provided to our customers in 2022. We are happy to report that your water meets and exceeds all state and federal drinking water health standards and that EWEB has once again been listed as an “Outstanding Performer” by the Oregon Health Authority (OHA).

Cross Connection & Backflow

Cross connection control and backflow prevention are vital parts of keeping drinking water safe throughout EWEB's water distribution system and within your home or business.

What are cross connections?

A cross connection is a permanent or temporary connection between drinking water and anything which can pollute or contaminate the water supply. For example, without backflow protection, attaching a fertilizer sprayer to a garden hose or even placing your hose in a soap bucket for car washing can create a cross connection and possible health hazard.

What is backflow?

Backflow is the undesirable reversal of flow of unsafe water or other substances through a cross connection. This reversal of flow or "backflow" can allow contaminated water to flow backward into your home and our drinking water piping.

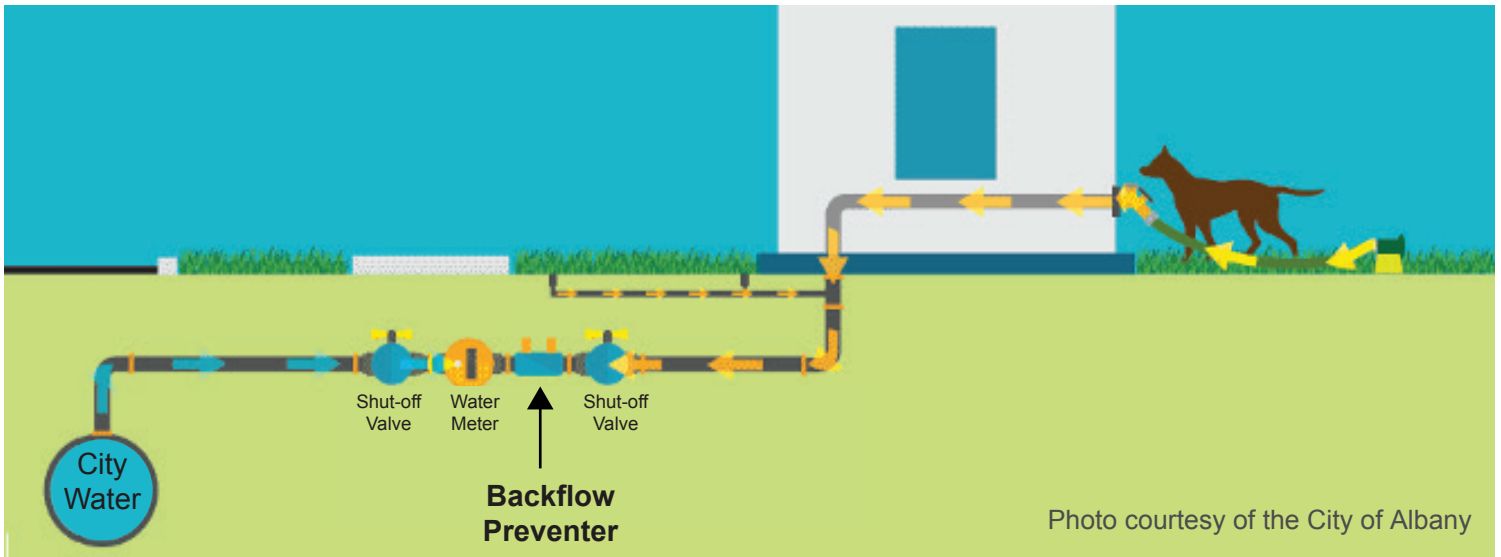
What can cause backflow?

Backflow can be caused when an unforeseen change in water pressure allows the water to flow backwards within the water supply piping system. A drop in pressure can be caused by a variety of things, including a water main break or the need to fight a fire.

How do you prevent the backflow of contaminants?

The Oregon Plumbing Specialty Code (OPSC) and Oregon Administrative Rules (OAR) require backflow prevention when drinking water comes into contact with any unsafe water or other substance.

Backflow prevention assemblies must be installed and tested annually by an Oregon Health Authority-certified backflow tester. EWEB staff inspect all new, replaced, and removed assemblies.



Who is required to have a backflow prevention device?

Common residential water uses that could require backflow prevention include irrigation systems, pools, hot tubs, water features (fountains, ponds, etc.), hydronic and geothermal heating systems, wells, and water softeners. This list is not all inclusive. If you are unsure if your property needs a device, or unsure if you currently have one installed, please contact an EWEB Cross Connection Specialist at 541-685-7352.

Who can test backflow prevention devices?

Backflow assemblies must be tested at the time of installation, annually after installation, after repairs, and after relocating. Testing in Oregon must be done by Oregon Health Authority-certified backflow testers. You can find a list of authorized testers at www.yourwater.oregon.gov/backflow.php

2022 Regulated Contaminant Results

Your water met or exceeded all state and federal drinking water health standards

This report provides a snapshot of last year's water quality. EWEB is proud to say that we have never violated a maximum contaminant level or any other water quality standard established by the EPA. For information on EWEB's drinking water monitoring program go to www.eweb.org/water-quality, call 541-685-7861, or email water.quality@eweb.org.

The following regulated contaminants were detected in the water. To view a comprehensive list of all the contaminants that EWEB tested for in 2022, visit www.eweb.org/Documents/water-quality/testing-summary%202022.pdf.

Test	MCL	MCLG	Detection Range	Probable Source	In Compliance?
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Inorganics

Barium (ppm)	2	2	ND - 0.002	Erosion of natural deposits	Yes
Nitrate (ppm)	10	10	ND - 0.10	Fertilizer runoff; septic tank leaching; erosion of natural deposits	Yes

Disinfection Byproducts

Total Trihalomethanes (ppb)	80	NA	8.5 - 17.0 Highest LRAA: 14.6	Byproduct of drinking water disinfection	Yes
Haloacetic Acids (ppb)	60	NA	ND - 8.9 Highest LRAA: 7.0	Byproduct of drinking water disinfection	Yes
Chlorine (ppm)	4	4	0.15 - 0.84	Added to control microbes	Yes
Total Organic Carbon (ppm)	TT	NA	ND - 0.81	Naturally present in the environment	Yes

Microbiological

Turbidity (NTU)	TT<0.3 95% of the time	NA	Highest result: 0.050	Soil runoff	Yes
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Per- and Polyfluoroalkyl Substances (PFAS)

On March 14, 2023, the EPA announced the proposed National Primary Drinking Water Regulation (NPDWR) for six PFAS contaminants. PFAS, also known as per- and polyfluoroalkyl Substances, are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s. PFAS have characteristics that make them useful in a variety of products, including nonstick cookware, waterproof clothing, stain-resistant carpets and fabrics and firefighting foam. PFAS tend to break down extremely slowly in the environment and can build up in people, animals and the environment over time.

We want to assure our customers that the drinking water delivered to your homes and businesses meets the proposed regulation. We have been monitoring for PFAS since 2013 and our results show that PFAS are not detected in our drinking water.

Notes on EWEB detected contaminants

The following provides additional information about the contaminants that were detected:

<p>Chlorine EWEB adds chlorine to our water during the disinfection process to protect against microorganisms such as Giardia and E. coli.</p>	<p>Copper Copper is found in natural deposits and is also widely used in household plumbing materials.</p>	<p>Turbidity Turbidity is a measure of the cloudiness of water. It can interfere with disinfection. EWEB's filtration process effectively removes turbidity.</p>
<p>Barium This naturally-occurring substance, found in the mineral composition of our watershed, was detected at extremely low levels — well below regulatory standards.</p>	<p>Disinfection Byproducts (DBPs) Disinfectants are an essential element in drinking water treatment because of the barrier they provide against waterborne disease-causing microorganisms. DBPs form when disinfectants used to treat drinking water react with naturally-occurring materials in the water (e.g., decomposing plant and other organic material).</p>	<p>Nitrate Nitrate is an essential component of living things and occurs naturally in surface and groundwater at concentrations up to 1-2 mg/L. At these naturally-occurring levels, nitrate is not harmful to health.</p>
<p>Total Organic Carbon A measure of naturally-occurring organic materials in water.</p>		

Definitions and abbreviations

90th Percentile Value

This means that 90 percent of the samples collected were equal to or below the value reported.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment.

Highest Locational Running Annual Average (LRAA)

The highest calculated average of multiple results at a single location in a 12-month period.

Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)

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.

NA

Non-Applicable

ND

Contaminant not detectable using current monitoring equipment and methods.

Nephelometric Turbidity Units (NTU)

A measure of water clarity.

ppb

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

ppm

Parts Per Million
One part per million corresponds to one penny in \$10,000 or approximately one minute in two years.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Copper and lead sampling results

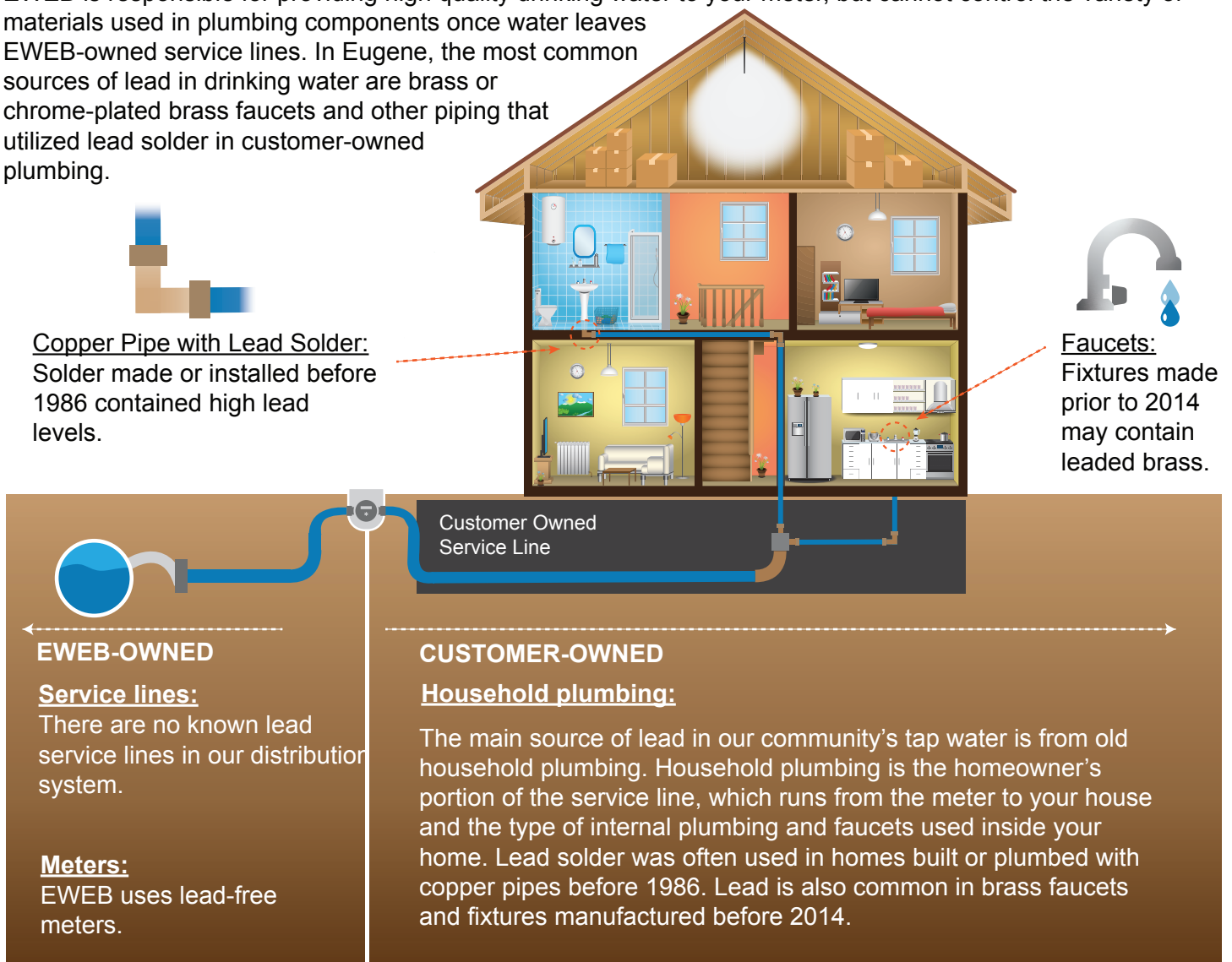
The State requires EWEB to collect samples from 50 high-risk residential water taps once every three years. The following table represents our most recent testing results from 2021. See **page 4** for explanation of acronyms.

Contaminant	Action Level	MCLG	90th Percentile Result	Samples Exceeding Action Level	Source of Contaminant
Copper (ppm)	1.3	1.3	0.065	0	Corrosion of household plumbing systems
Lead (ppb)	15	0	2.8	0	

How lead could get into your household drinking water

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.

EWEB is responsible for providing high quality drinking water to your meter, but cannot control the variety of materials used in plumbing components once water leaves EWEB-owned service lines. In Eugene, the most common sources of lead in drinking water are brass or chrome-plated brass faucets and other piping that utilized lead solder in customer-owned plumbing.



How we reduce the risk of lead in our drinking water system

For decades, we have tested our source water for lead. This testing shows that there is no lead in the water that enters the distribution piping. We also adjust the pH of the water to reduce corrosion in our pipe systems and to help prevent lead from leaching out of old household plumbing fixtures. EWEB is considered optimized by the Oregon Health Authority in our corrosion prevention and is in compliance with all lead regulations.

How you can reduce your lead exposure

Boiling water will not reduce or remove lead from water. Here are a few tips to reduce or eliminate exposure to lead in tap water:



Flush your pipes.

Before drinking or cooking, let your water run until it becomes as cold as possible and reaches a steady temperature. If the water has undergone recent use, such as showering or running the dishwasher, this could take as little as 30 seconds. If the water has been sitting for six hours or more it could take several minutes.

Use only cold water to drink, cook and make baby formula.

Hot water makes it easier for lead to leach from your pipes into the drinking water.

Clean your aerator every few months.

Your faucet aerator can trap particles that contain lead.

Consider buying low-lead fixtures.

As of January 4, 2014, all pipes, fittings and fixtures must contain less than 0.25 percent lead. Learn how to identify lead-free products, at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100LVYK.txt>

Consider using a water filter.

Contact National Sanitation Foundation International at 1-800-673-8010, or visit www.nsf.org for information about certified water filters. Follow all filter maintenance instructions to keep your water safe.

Concerned about lead in your drinking water?

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 www.epa.gov/safewater/lead.

Visit www.eweb.org/water-quality/lead to learn how you can have your tap water tested for lead.

You can also learn more by visiting the websites for [Oregon Health Authority](#), [Environmental Protection Agency](#), or [Centers for Disease Control](#).

[Let's Get the Lead Out](#) - watch this video from the [American Water Works Association](#) to learn more about where lead comes from.

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 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 at 1-800-426-4791 or visiting:

www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-information.

The sources of drinking water (both tap 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.

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

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 storm water runoff, industrial or domestic wastewater discharges and farming.

Pesticides and herbicides

which may come from a variety of sources such as farming and forestry activities, urban storm water runoff, and home or business landscaping activities.

Organic chemical contaminants

including synthetic and volatile organic chemicals, which are byproducts of industrial processes. These substances also can come from gas stations, urban storm water runoff and septic systems.

Radioactive contaminants

can occur naturally or may result from oil and gas production and mining activities.

Special health considerations

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



Boil-water advisories

A “boil-water advisory” is a precautionary notice issued by a public drinking water system or by health authorities to consumers when a community’s drinking water is or could be contaminated by disease-causing organisms. It is a preventive measure that is intended to protect the health of water consumers when there is an actual or significant possibility that contamination may be present within the drinking water system.

In 2022, EWEB issued two boil-water advisories due to loss of water pressure in the distribution pipes. The loss of water pressure can result in the backflow or infiltration of unclean water into EWEB’s water pipes, posing a potential risk to the health of our customers.

Date	Location	Customers Affected
7/4/2022	Dahlia Lane	4
12/6/2022	Lower Dillard 800 Pressure Zone	179

In each case, the system was repaired and water pressure restored within a few hours. EWEB then collected water samples to test for the presence of bacteria. Results from these tests were available after 18 hours, and in all cases EWEB was able to notify the affected customers that the water was safe for consumption. The health of the community is our top priority and EWEB will continue to follow best management practices to reduce the risk of contamination entering the water system.

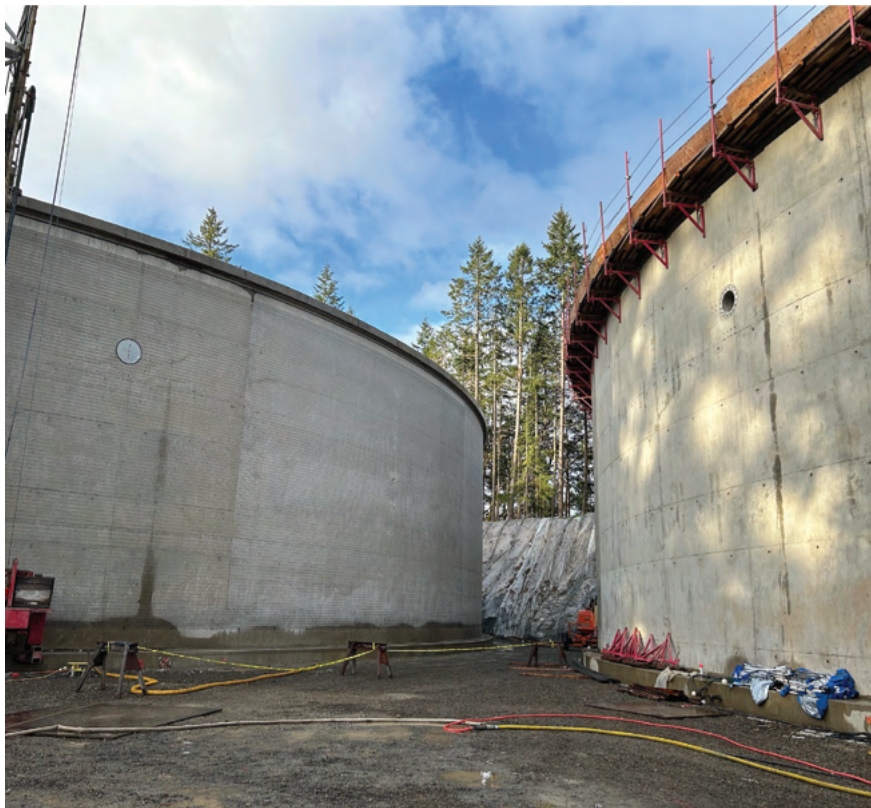


EWEB will leave a door hanger advising customers to boil their water as a precaution against any possible contamination as required by the Oregon Health Authority.



Once EWEB determines that there are no issues with the water, EWEB will leave a door hanger communicating water is safe to use and consume.

Water Storage Improvements



Access to clean water is vital to our community. In an emergency, such as a Cascadia Subduction Zone earthquake, our community will depend on the water stored in concrete reservoirs for drinking and fire suppression.

EWEB's three base level water storage tanks—those that serve all of Eugene—have reached the end of their useful lives. They do not meet modern seismic standards and would not survive an earthquake. To supplement existing storage, two new earthquake-proof tanks are under construction near E. 40th and Patterson St. When that project is completed later this year, EWEB will move on to replacing the 80-year old College Hill Reservoir with new seismically resilient storage.

Learn more at <https://www.eweb.org/WaterReliability>



Eugene Water & Electric Board
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In a water emergency, please call 541-685-7595.

For water quality questions or to request a printed copy of this document, please call 541-685-7861 or email water.quality@eweb.org.

For general EWEB questions, please call 541-685-7000 or email eweb.answers@eweb.org.

EWEB's elected Board of Commissioners holds public meetings the first Tuesday of every month. Learn more at www.eweb.org/board.

Para una copia de este informe en español, contáctenos en eweb.answers@eweb.org o 541-685-7000.

