Seattle Public Utilities

Your 2024 Drinking Water Quality Report

Your Wonderful Water

SEATTLE WATER
Pure from the start.

This report is about Seattle's water—where it's from, what's in it, how it gets to your tap, and the people who keep it safe and tasting great.

2024 marked the 50th anniversary of the **Safe Drinking Water Act (SDWA)**—landmark legislation that helps ensure the quality of drinking water across the United States. The SDWA was enacted due to growing concerns about contamination and pollution of rivers, lakes, and other public drinking water sources.

Reflecting on this important milestone, I am reminded of how fortunate we are to have one of the most pristine and protected water sources in the country. The city's drinking water flows from protected watersheds, high in the mountains and free from the impacts of agriculture or industry. Seattle has some of the best water in the country and will continue to for decades to come.

But the quality of our water isn't only due to our mountain-sourced supply. It's also the result of the skilled and dedicated Seattle Public Utilities (SPU) employees who show up every day to ensure the water that flows out of your tap is clean, safe, and reliable.

It's also because of **you**. Thank you for your partnership as we work together to protect and conserve this precious resource for many generations.

I hope you enjoy reading this report and learn something new about Seattle Water, **pure from the start**.

Sincerely,

Andrew Lee
General Manager/CEO
Seattle Public Utilities

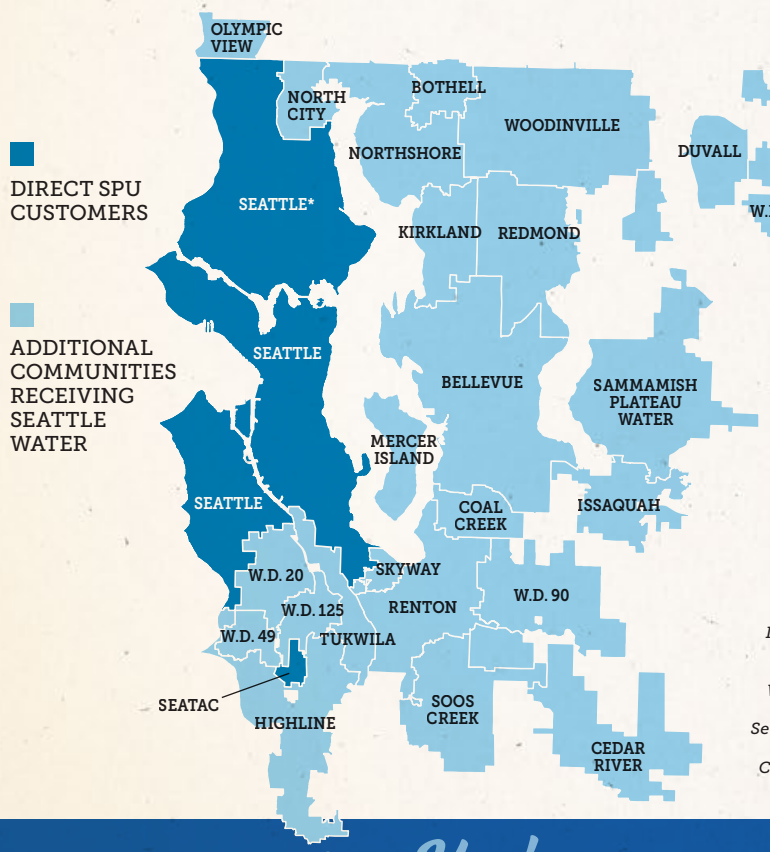
Why we send this report

The Environmental Protection Agency (EPA) requires all public water providers to publish an annual water quality report. They want the public to be informed about the quality of their drinking water, and so do we! We send you this report so you can feel confident that the water you drink every day is safe, clean, and reliable.

Who should read it

The information in this report is relevant to anyone who uses Seattle Water. Our drinking water system serves more than 1.6 million people in the greater Seattle area, including those who get water from neighboring utilities throughout the region*.

Please share this report with others who use Seattle Water, especially those who may not have received it directly, such as residents of apartments, nursing homes, schools, and businesses. You can post it publicly, hand out copies, or mail them.



** SPU provides drinking water to the cities of Bothell, Duvall, Mercer Island, and Renton; Cascade Water Alliance (cities of Bellevue, Kirkland, Redmond, Tukwila, and Issaquah); Skyway Water and Sewer District; Sammamish Plateau Water; Cedar River Water and Sewer District; Coal Creek Utility District; Highline Water District; North City Water District; Northshore Utility District; Olympic View Water and Sewer District; Soos Creek Water and Sewer District; Woodinville Water District; and King County Water Districts 20, 49, 90, 119, and 125.*

We want to hear from You!

What do you think of SPU's Drinking Water Quality Report? Which parts do you find most useful? Would you prefer to read it online or do you enjoy receiving it in the mail? Let us know in this quick survey by scanning the QR code or going to ***seattle.gov/utilities/waterqualityreport***.

You can also provide feedback on the water quality report by leaving a voicemail at (206) 615-0827 or sending an email to ***drinkingwater.quality@seattle.gov***.

Celebrating 50 Years of the Safe Drinking Water Act

The 1970s wasn't just bell bottoms and disco (though they definitely had their moment!). It was also a time of reckoning with the environmental consequences of decades of rapid industrial growth. The '70s saw the rise of the modern environmental movement, the first Earth Day in 1970, and the establishment of the Environmental Protection Agency (EPA). In response to growing public pressure, the federal government began to take a more active role in protecting natural resources and public health. One significant milestone in this shift was the passage of the Safe Drinking Water Act in 1974.

The Safe Drinking Water Act is key legislation that helps ensure everyone has access to safe, reliable drinking water. It authorizes the EPA to establish national standards for drinking water and make sure states follow them. It also helps improve water infrastructure by requiring investments in systems that ensure clean and safe water reaches communities.

Updates to the law, especially in 1986 and 1996, made it stronger by requiring more testing, addressing new threats to water, and requiring water suppliers to give the public additional water quality information.

Where Your Water Comes From

Seattle's water comes from two large, protected watersheds in the Cascade Mountains: 65 percent from the Cedar River Watershed and 35 percent from the South Fork Tolt River Watershed.

The system also has access to wells in Burien that can be used to meet peak summer demand. These wells have not been used since 2015.

Protected Watersheds

The City of Seattle owns or controls more than 100,000 acres of watershed that are closed to public access. No one is allowed to live in these watersheds, and SPU makes sure they are free of agricultural, industrial, and recreational activities.

Watershed Resilience

Threats related to climate change, such as reduced snowpack, drought, extreme rain, and wildfires, have the potential to impact watershed ecosystems, water supply, and drinking water quality. SPU is working to increase resilience to these impacts through efforts like watershed protection, wildfire risk management, conservation, and forest ecosystem management.

Collaborating with Tribes

Indigenous Tribes are the original caretakers of this land. They have lived and traveled in the Cascade Mountains, in the Salish Sea, and across the Pacific Northwest since time immemorial. Their knowledge, stewardship practices, and reciprocal relationship with the environment provide valuable insights for resource use and conservation. SPU staff seek to collaborate with Tribes to protect and steward the watersheds.

See the Source

Experience the wonder and beauty of the Cedar River Watershed! Visit in person to check out the Cedar River Watershed Education Center or hike nearby Rattlesnake Ledge for a breathtaking view of the watershed. Find us online to explore our extensive learning resources, including informative videos and engaging at-home activities.

Center hours, program offerings, watershed tour information, and online learning resources are available at ***seattle.gov/utilities/crwec*** or by calling (206) 733-9421.

What's a Watershed?

CASCADE MOUNTAINS

RAIN

SNOWMELT

Rain and snowmelt travel downhill into streams and rivers known as tributaries.

TRIBUTARIES

OLD GROWTH FOREST

Tributaries flow into a bigger body of water, like a lake.

Fallen conifers like pine and cedar trees make great fish habitat.

RIPARIAN FOREST

MEADOW

Meadows are home to amphibians like frogs and newts. Elk and deer come to the meadows to forage for food.

CEDAR RIVER

TRIBUTARY

The Cedar River Watershed is a diverse ecosystem with old growth and riparian forests, meadows, wetlands, and other important habitats for fish and wildlife.

SPU protects and stewards two forested mountain watersheds that provide drinking water to 1.6 million people. But what exactly is a watershed?

A watershed is an area of land where all water flows down into a common body of water like a stream, river, lake, or ocean.

Let's look at the Cedar River Watershed to learn more!

Deciduous trees—trees that lose their leaves in the fall—provide important bird habitat.

CHESTER MORSE LAKE

RIPARIAN FOREST

A riparian forest is a woodland near a body of water.

Make Your Own Watershed

Find out how watersheds work in real life! Make a paper model of a watershed and see how water flows over the land. You'll discover that whatever goes on the land, goes in the water, too. Follow this QR code:

Watersheds

Our water starts as rainfall and snowmelt, high up in the Cascade Mountains. It flows downhill, collects in mountain reservoirs, and is eventually released to begin its journey to your faucet.

Treatment

Treatment comes next. Before water is safe to drink, it must be treated to get rid of microorganisms that can make us sick. Because Seattle's source water is protected, we don't have to do as much treatment to meet the same water quality regulations as other cities.

Water Quality Lab

Water samples are brought to our water quality lab for testing. We test samples between 10 and 100 times per day, 365 days a year.

Service Lines and Meters

Water travels from the water main to your home via your water service line. Your water meter sits on your service line and tracks your home's water usage.

Forest to Faucet

How our drinking water gets to your tap

Reservoirs

After treatment, drinking water is stored in covered reservoirs throughout the city. (The tops of these reservoirs provide acres of open space for recreation!)

Pipes

Water travels through 1,900 miles of pipes to get from the mountains to your faucet. We regularly maintain this network of pipes to prevent leaks and breaks.

Sampling Stations

More than 90 water sampling stations are located throughout the city. We take samples every day of the year to ensure the safety and quality of Seattle Water.

Your Tap

Safe, clean Seattle Water finishes its journey from forested mountain watersheds to a faucet near you. *Enjoy!*

We partner with federal and state regulators to ensure your water is safe to drink. Here's what our partners want you to know:

Sources of Water

Nationally, 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.

Potential Contaminants

To ensure that tap water is safe to drink, the Environmental Protection Agency and/or the Washington State Board of Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and/or the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants.

Because Seattle's watersheds are protected, there is little opportunity for contaminants to enter the water. Even so, there is always potential for natural sources of contamination. In Seattle's surface water supplies, the potential sources of contamination include:

- microbial contaminants, such as viruses, bacteria, and protozoa from wildlife;
- inorganic contaminants, such as salts and metals, which are naturally occurring; and organic contaminants, which result from chlorine combining with the naturally occurring organic matter; and
- radioactive contaminants, which can be naturally occurring.

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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessments

Protecting the sources of our drinking water from contamination or decline in production is critical to safeguarding public health. In 1996, Safe Drinking Water Act Amendments required all states to implement a Source Water Assessment Program (SWAP) that includes a determination of each source water area's susceptibility to contamination.

Washington's SWAP, conducted by the Washington State Department of Health Office of Drinking Water, gives all surface waters in Washington a susceptibility rating of "high," regardless of whether contaminants have been detected or whether there are any sources of contaminants in the watershed. More information is available on the SWAP mapping tool at ***fortress.wa.gov/doh/swap***.

People Who May Be at Higher Risk

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 be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Notice of Minor Monitoring Violation

The Washington State Department of Health requires utilities to notify customers in the event of a minor monitoring violation. It was determined that Seattle Public Utilities experienced a minor monitoring violation at the Cedar Treatment Facility on June 21, 2024, when one part of the monitoring equipment failed to record a portion of data for one of the seven operating ultraviolet (UV) treatment units. Other data was available for that UV unit showing that UV treatment was still occurring, so there were no public health implications. Repairs were made, system programing improved, and operators were provided with additional training to help prevent this from happening in the future. If you have any questions about this event, please call Seattle Public Utilities at (206) 615-0827.

Conserving as a Community

SPU is committed to using water efficiently to meet current and future water demand. This includes saving water long before it reaches your tap. SPU produced 45.3 billion gallons of treated drinking water in 2024. Of that, 2.55 billion gallons were lost to leakage. While that may sound like a lot, it's only 5.6% of the total and is considered relatively low.

SPU has a long history of focusing on conservation. In the 1980s, we convened local water utilities committed to working together to help customers conserve water. The group—now called the Saving Water Partnership and made up of SPU and 18 other utilities—is still going strong today.

To encourage efficient water use, the Saving Water Partnership set a 10-year (2019-2028) conservation goal to keep the total average annual retail water use of its members below 110 million gallons per day (mgd) through 2028, despite forecasted population growth, by reducing per capita water use. In 2024, our customers met this goal, using 94.5 mgd.

Save Water, Help Salmon

The foundation for a healthy salmon run is a healthy habitat, including adequate water flow and good water quality. Your actions to conserve water, particularly in the summer and early fall when stream flows are naturally low, help provide the habitat necessary for a healthy salmon population.

Use Water *Wisely*

Get trusted information on how to use water wisely, including tips, tools, and rebates from SPU and the Saving Water Partnership, at ***savingwater.org***.

Meet the People

Who Care for Your Water

Wildland Fire Protection

More than a dozen SPU staff are part of SPU's Wildland Fire Crew. They are trained in firefighting to help protect the Tolt and Cedar River Watersheds from wildfires, which could pose a threat to water quality and the region's water supply. *L to R: Wildland Fire Crew Zoe, Mark, and Kenny.*

Water Resources Planning & Engineering

This team oversees the operation, maintenance, and engineering of our mountain reservoirs and manages the region's water supply to ensure we have enough water for people and fish. *Water Resource Supervisors Elizabeth (left) and Ulysses.*

Water Treatment

SPU's In-town Water Treatment crew keeps treatment levels in compliance with state and federal regulations. They help ensure that the water leaving our in-city reservoirs is safe and clean and tastes great. *In-town Water Treatment Crew Chief Devron.*

SEATTLE WATER
Pure from the start.

Water Testing & Analysis

Employees in SPU's Water Quality Lab test and analyze more than 30,000 water samples each year. The lab has teams that specialize in microbiology, limnology, chemistry, engineering, inspections, sample collection, and water treatment. *L to R: Microbiologists Mesekir, Taryn, and Bao-Tran.*

Water Transmission & Distribution

This team maintains and repairs more than 1,900 miles of drinking water pipe. *L to R: Vanessa, Kirsten, Gloria, Nicole, Gisela, and Adalinda.*

Water System Operations

At SPU's Operations Control Center, Water System Operators work around the clock to remotely move millions of gallons of Seattle Water every day throughout the region. *Water System Operators Peter (left) and Kaleb.*

"*I'm Proud* of Seattle Public Utilities employees for their dedication and around-the-clock commitment to providing clean, safe, and reliable Seattle Water. It's pure from the start and among the best tap water in the U.S. You can be sure that the SPU team will continue putting residents at the center of their work and ensuring Seattle has the best drinking water now and for future generations."

– Seattle Mayor Bruce Harrell

2024 Water Quality Monitoring Data

Good news! SPU's water quality results are all **better** than the recommended federal levels designed to protect public health.

Monitoring results for contaminants regulated by federal and state agencies in 2024 are shown below. For other water quality information, go to ***seattle.gov/utilities/waterquality*** or call (206) 615-0827.

We can also send you a list of the more than 200 compounds, including unregulated contaminants, that we tested for but did not find in our surface water supplies.

How to read this table

We know—it's a lot of information! To present all the information in one table, we used many abbreviations and defined them below.

In Seattle, if you live south of Green Lake, your water probably comes from the Cedar River Watershed. Areas north of Green Lake usually receive water from the South Fork Tolt River Watershed. Each source can provide water to other areas in Seattle if needed.

		EPA's Allowable Limits		Levels in Cedar Water		Levels in Tolt Water			Passed!
Detected Compounds	Units	MCLG	MCL	Average	Range	Average	Range	Typical Sources	
Raw Water				**Raw Water**		**Raw Water**			
Total Organic Carbon	ppm	NA	TT	0.73	0.5 to 1.23	1.24	1.12 to 1.39	Naturally present in the environment	✓
Finished Water				**Finished Water**		**Finished Water**			
Turbidity	NTU	NA	TT	0.41	0.16 to 2.1	0.04	0.02 to 0.29	Soil runoff	✓
Arsenic	ppb	0	10	0.4	0.3 to 0.6	0.23	0.2 to 0.3	Erosion of natural deposits	✓
Barium	ppb	2000	2000	1.3	1.2 to 1.5	1.2	1.1 to 1.4	Erosion of natural deposits	✓
Bromate	ppb	0	10	1.3	ND to 14	0.3	ND to 3.8	By-product of drinking water disinfection	✓
Fluoride	ppm	4	4	0.65	0.6 to 0.7	0.7	0.6 to 0.8	Water additive	✓
Nitrate	ppm	10	10	ND	1 Sample	0.08	1 Sample	Erosion of natural deposits	✓
Coliform, Total	%	0	5%	Highest Month=0.6% Annual Average=0.13%		Highest Month=0.6% Annual Average=0.13%		Naturally present in the environment	✓
Total Trihalomethanes	ppb	NA	80	41	21 to 49	43	25 to 63	By-products of drinking water chlorination	✓
Haloacetic Acids(5)	ppb	NA	60	30	11 to 38	33	21 to 46	By-products of drinking water chlorination	✓
Chlorine	ppm	MRDLG = 4	MRDL = 4	Average = 1.0	Range = 0 to 2.2	Average =1.0	Range = 0 to 2.2	Water additive used to control microbes	✓

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.

MCL: *Maximum Contaminant Level,* The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: *Maximum Residual Disinfectant Level,* The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the 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.

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

NTU: Nephelometric Turbidity Unit, Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2024 was 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 100% of Tolt samples for 2024 were below 0.3 NTU.

ppm: 1 part per million = 1 mg/L = 1 milligram per liter
(That's equivalent to less than a gallon in an Olympic-sized swimming pool)

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter
(That's equivalent to half a teaspoon in an Olympic-sized swimming pool)

1 ppm = 1000 ppb ***NA:*** Not Applicable ***ND:*** Not Detected

Lead Safety

There is no detectable lead in Seattle's source water.

Still, it's important to know that if present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Here's what you need to know about lead and drinking water:

It's (usually) the pipes

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Where you live, when your plumbing was installed, and what type of plumbing you have all play a part in determining your potential exposure level.

While there are no known lead service lines in Seattle's water distribution system, there are a small number of homes and buildings that may have lead connections. In addition, individual homes and businesses may have other plumbing components that could corrode and introduce contaminants into the water. SPU is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. We treat the water to minimize the chances that lead will enter the water through corrosion, and results show that we have been very successful at this.

You can flush your tap

The risk of lead contamination in water increases when water sits in pipes for longer than six hours. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

Testing is available

Seattle's source water does not contain lead. However, 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 or at ***epa.gov/safewater/lead***. Customers enrolled in the City of Seattle Utility Discount Program can access free testing by calling SPU's Water Quality Lab at (206) 615-0827.

Water is just one contributor to lead exposure

Finally, remember that drinking water is only a minor contributor to overall exposure to lead. Other contributors include paint, soil, and food.

Lead and copper monitoring results

Parameter and Units	MCLG	Action Level+	2022 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	2.8	0 of 50	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.12	0 of 50	

** 90th percentile: i.e., 90% of the samples were less than the values shown.*

+ The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

What you need to know about PFAS

PFAS (per- and polyfluoroalkyl substances) are a category of manufactured chemicals used in everyday products like waterproof jackets, food packaging, and nonstick pans, since the 1940s. Because PFAS don't break down in the environment, they are sometimes called "forever chemicals." Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals.

To protect human health, SPU monitors your drinking water to detect PFAS. Our testing results have shown no detections of PFAS in recently established state and federal regulations for PFAS compounds. Those results and additional information about our PFAS testing can be found on our website: ***seattle.gov/utilities/PFAS***.

We're Here to Help You!

Have a question about your drinking water (or garbage, or sewer, or drainage) services? We're here for you!

How Can I...

Get help with SPU services or my SPU bill	**Customer Service: (206) 684-3000** **Monday-Friday 7:30 am–7:00 pm** ***myutilities.seattle.gov***
Learn more about Seattle's drinking water quality	***seattle.gov/utilities/waterquality***
Ask questions about Seattle's drinking water quality	**Drinking Water Information Line: (206) 615-0827**
Ask general drinking water quality questions	**Environmental Protection Agency's Safe Drinking Water Hotline: (800) 426-4791**
Learn more about drinking water systems in my home	**Washington State Department of Health:** ***doh.wa.gov/you-and-your-family/healthy-home/drinking-water***
Explore water-saving tips, programs, and rebates	***savingwater.org***
Learn more about free toilets for income-qualified customers	***seattle.gov/utilities/freetoilets*** **Minor Home Repair:** ***mhr@soundgenerations.org***
Learn how to find and fix leaks	***savingwater.org/indoors/fixing-leaks***
Sign up for emergency alerts	***alert.seattle.gov***
Report urgent concerns, such as water outages, discolored water, or hydrant leaks	**SPU's 24-hour Operations Response Center: (206) 386-1800**

Keeping Essential Services Affordable

Every day, SPU delivers essential, life-sustaining water and waste services while protecting public health and our environment to ensure healthy, thriving communities.

SPU customers should have access to these essential services regardless of their financial situation. We work hard to invest ratepayer dollars wisely, keep rates low, and make our services accessible and affordable. For those who need help paying their utility bill, assistance is available. We offer:

Flexible Payment Plans: Pay what you can now and the rest over time. We'll work with you to set up a plan that makes sense for your budget. Available to all customers.

Utility Discount Program: 50%-60% off utility bills for income-eligible customers.

Emergency Assistance Program: Income-eligible residential customers can get help paying their utility bill immediately.

Learn more at *seattle.gov/utilitybillhelp* or call (206) 684-3000.

Celebrate Water Year-Round!

Fix a Leak Week: Takes place in March and is an annual reminder for people to check household plumbing fixtures and irrigation systems for water leaks. Learn more at ***epa.gov/watersense/fix-leak-week***.

World Water Day: An annual United Nations observance day on March 22 to highlight the importance of fresh water. Learn more at ***un.org/en/observances/water-day***.

Water Week: Held in March by the Water Environment Federation for water professionals to advance key water policy priorities. Learn more at ***wef.org/waterweek***.

Drinking Water Week: Celebrated the first full week in May and sponsored by the American Water Works Association, Drinking Water Week recognizes the vital role water plays in our daily lives. Learn more at ***awwa.org/drinking-water-week***.

Imagine a Day Without Water: A National Day of Action (in October), sponsored by the US Water Alliance, that brings together diverse participants to highlight how water is essential, invaluable, and in need of continuous investment. Learn more at ***uswateralliance.org***.

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통역 서비스를 원하시면 (206) 684-3000번으로 전화해 주십시오

Para sa serbisyo ng tagapagpaliwanag, tumawag sa (206) 684-3000.

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