Rate discounts available for senior, disabled, and low income persons. Call us to learn more.

2024

Consumer Confidence Report on Water Quality

Photo by Gayle Fischer

Our mission is to provide high quality water and excellent customer service while effectively managing District infrastructure for a reliable water system today, and for future generations.

This report contains important information about your drinking water. If you need assistance understanding this information, please have someone translate this information for you or speak with someone who understands it.

Этот отчет содержит важную информацию о вашей питьевой воде. Если вам нужна помощь в понимании этой информации, попросите кого-нибудь перевести эту информацию для вас или поговорить с кем-то, кто ее понимает.

Este informe contiene información importante sobre su agua potable. Si necesita ayuda para comprender esta información, pídale a alguien que la traduzca o hable con alguien que la comprenda.

该报告包含有关您的饮用水的重要信息。如果您需要帮助来理解此信息，请让人为您翻译此信息或与理解此信息的人交谈。

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Nếu bạn cần trợ giúp để hiểu thông tin này, vui lòng nhờ ai đó dịch thông tin này cho bạn hoặc nói chuyện với người hiểu thông tin đó.

This Consumer Confidence Report on Water Quality is brought to you by Highline Water District

Visit us:

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2025 Board of Commissioners:

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Contact us:

Monday through Friday
7:00 am – 4:00 pm

(206) 824-0375
customerservice@highlinewater.org

Annual Water Quality Report for 2024

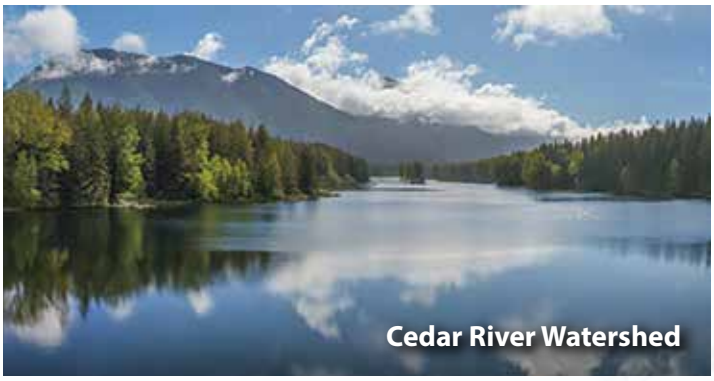
Please share this information with all the other people who may drink water provided by Highline, especially those who may not have received a notification about this report directly from the District (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand or mail.

Where Was Your Water Sourced?

In 2024, approximately 76% of Highline Water District's water was purchased from Seattle Public Utilities (SPU), sourced from the Cedar River Watershed. The remaining 24% was produced from the following groundwater wells owned and operated by the District:

- Des Moines Well; Des Moines, WA
- Angle Lake Well; SeaTac, WA
- McMicken Well; SeaTac, WA

Water from these wells is directed to one of two treatment plants where it is filtered, treated, and tested before being blended with water from SPU.



Cedar River Watershed

How Are These Sources Protected?

According to the Washington State Department of Health (DOH), all surface water is rated as highly susceptible to contamination. To mitigate susceptibility, SPU owns or manages 129 square miles of the Cedar River Watershed land that are closed to unsupervised public access. SPU ensures these areas are free of agricultural, industrial, and recreational activities, and no one can live in the city-owned watershed.

Highline Water District's groundwater sources are protected by naturally occurring "confining layers" of impervious soil above the aquifer. This minimizes the potential for surface or man-made contamination from entering the aquifer. The District's Wellhead Protection Program establishes a protection area that monitors the types of businesses and activities that surround our wells.

To protect these hidden resources, the District notifies property owners and regulatory agencies of these water source locations to help prevent potentially harmful contaminants from polluting our water.

Washington's Source Water Assessment Program is conducted by the state Department of Health (DOH) Office of Drinking Water. Information on the source water assessments is available from the DOH website at https://fortress.wa.gov/doh/swap/

Lab equipment and reagents commonly used to test water

How Was Your Water Tested?

Your drinking water is tested frequently both by Highline Water District and SPU to ensure that high quality water is delivered to your home. Last year your drinking water was tested for nearly 200 compounds and contaminants. Tests are done before and after treatment and while your water is in the distribution system.

Who Sets the Water Testing Standards?

Your drinking water is regulated by the United States Environmental Protection Agency (EPA). In order to ensure that tap water is safe to drink, EPA prescribes regulations which set drinking water quality standards to limit the amount of certain contaminants in the water provided by public water systems. These regulations are administered by the Washington State Department of Health (DOH), which adopts the EPA's requirements.

Who Sets the Water Testing Standards, continued

DOH may also implement additional or more stringent standards. Regulations include established testing methods and monitoring requirements for water utilities, maximum levels for water contaminants, and require utilities to give public notice whenever a violation occurs. The Food and Drug Administration (FDA) establishes limits for contaminants in bottled water to provide similar protection for human health.

Pump Station 8: these pumps move SPU-supplied water into Highline's distribution system.

How Was Your Water Treated?

In addition to the careful protections afforded to SPU's Cedar River source, the water undergoes the following six-step treatment process before reaching Highline Water District, to ensure that it is safe to drink:

- The water is screened to remove debris.
- Fluoride is added for dental health.
- Lime is added to adjust pH and control corrosion of plumbing materials.
- Ozone is added to disinfect the water.
- Water passes through ultraviolet light to destroy harmful organisms.
- Chlorine is added as a residual disinfectant.

Des Moines Treatment Plant: these pipes carry well water to and from the filtration system, where iron and manganese are removed.

Water from Highline's wells is treated as follows:

- Water passes through greensand filters to remove low levels of iron and manganese.
- Chlorine is added to provide a residual disinfection
- Fluoride is added for dental health.
- Sodium Hydroxide is added for pH adjustment to reduce corrosion in plumbing materials.

Why is Your Water Tested?

Nationally, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, wells, reservoirs and springs. As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals. These by-products of industrial processes and petroleum production can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

We test your water to ensure it's safe to drink. For more information, call the EPA's Safe Drinking Water Helpline at 1-(800) 426-4791.

Table 1: Water Quality Testing Results for 2024

Abbreviations are explained in the yellow "Table Definitions" chart at the bottom of this page.

		EPA Allowed Limits		Source Water Levels			
Detected Compounds	**Unit**	**MCLG**	**MCL**	**Avg.**	**Range**	**Typical Source of Compound**	**Comply?**
RAW WATER FROM CEDAR RIVER WATERSHED (MEASURED BEFORE TREATMENT)							
Total Organic Carbon	ppm	NA	TT	0.73	0.50 to 1.23	Naturally present in the environment	Yes
FINISHED WATER FROM CEDAR RIVER WATERSHED (MEASURED AFTER TREATMENT)							
Turbidity	NTU	NA	TT	0.41	0.16 to 2.1	Soil runoff	Yes
Arsenic	ppb	0	10	0.4	0.3 to 0.6	Erosion of natural deposits	Yes
Barium	ppb	2000	2000	1.3	1.2 to 1.5	Erosion of natural deposits	Yes
Bromate [1]	ppb	0	10	1.3	ND to 14	Byproduct of drinking water disinfection	Yes
Fluoride	ppm	4	4	0.65	0.10 to 0.70	Water additive to promote strong teeth	Yes
FINISHED WATER MEASURED IN HIGHLINE WATER DISTRICT'S DISTRIBUTION SYSTEM							
Trihalomethanes, Total	ppb	NA	80	25	12.0 to 41.5	Byproduct of drinking water disinfection	Yes
Haloacetic Acids (5)	ppb	NA	60	21	12.4 to 30.3	Byproduct of drinking water disinfection	Yes
Chlorine	ppm	MRDLG=4	MRDL=4	1.0	0.24 to 1.48	Water additive used to control microbes	Yes
DCPA	ppb	NA	NA	0.83	0.83	Runoff from herbicide used on turf, gardens, and agricultural crops	Yes
Fluoride	ppm	4	4	0.70	0.50 to 0.89	Water additive to promote strong teeth	Yes
RAW WATER FROM HIGHLINE WATER DISTRICT'S MCMICKEN WELLS							
Arsenic	ppb	0	10	2.15	1.4 to 2.9	Erosion of natural deposits; runoff from orchards, glass and electronics production waste	Yes

This table shows all of the drinking water contaminants detected during the calendar year of this report, unless otherwise noted. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or DOH allows monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Upon request, Highline Water District can also provide a list of the compounds that were tested but not detected.

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 for 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 operations 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.

Table 2: Lead and Copper Testing Results in 2022

Lead and Copper sampling is required every three years. The next test will occur in 2025.

Tested Compounds	Unit	MCLG	90th Percentile Action Level	90th Percentile	# of Homes Over Action Level	In Compliance	Typical Source of Compound
Lead	ppb	0	15	5.6	0 of 30	Yes	Corrosion of household plumbing
Copper	ppm	1.3	1.3	.325	0 of 30	Yes	Corrosion of household plumbing

Table Definitions

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

DCPA - Dimethyl Tetrachloroterephthalate: a pre-emergent herbicide.

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 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 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.

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 River Watershed supply in 2022 is 5 NTU.

NA: Not applicable.

ND: Not detected.

ppm: 1 part per million = 1 mg/L = 1 milligram per liter.

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter.

1 ppm: = 1000 ppb.

How to Test Your Water Service Line for Lead

You have a lead pipe if....

Scratch Test: Scraped area is shiny and silver.

Magnet Test: Magnet does not stick to pipe.

Tapping Test: Tapping a coin on the pipe makes a dull noise.

You have a galvanized pipe if....

Scratch Test: Scraped area remains dull grey.

Magnet Test: Magnet sticks to pipe.

Tapping Test: Tapping a coin on the pipe makes a metallic ringing noise.

You have a copper pipe if....

Scratch Test: Scraped area is copper in color, like a penny.

Magnet Test: Magnet does not stick to pipe.

Tapping Test: Tapping a coin on the pipe makes a metallic ringing noise.

Lead and Copper Monitoring Results

Your water meets state and federal requirements for lead, but if present at elevated levels, lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily sourced from materials and components associated with service lines and in-home plumbing. The District is responsible for providing high-quality drinking water but cannot control the variety of materials used in home plumbing systems. Homes built before 1986 (federal ban) and 1957 (when King County no longer approved lead service lines) are more likely to have lead-based plumbing components. To reduce lead contamination from plumbing components, the District adjusts the water pH to reduce the potential of lead corrosion.

When your water has been sitting for several hours, you can further minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about the potential presence of lead in your tap water, you may consider having your water tested.

The District completed a comprehensive service line inventory in 2024 and is pleased to report that there are no lead service lines in the Distribution System. To access the lead service line inventory or to get more information about identifying lead service lines, you can visit our website at: https://lead-service-line-inventory-highlinewater.hub.arcgis.com/

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Helpline at 1-(800) 426-4791 or at: www.epa.gov/safewater/lead

You can also find information on lead on our website: www.highlinewater.org

People With Special Concerns

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

Immuno-compromised individuals such as people with cancer undergoing chemotherapy, people with organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water.

EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Helpline at 1-(800) 426-4791. You are also welcome to contact Highline Water District at (206) 824-0375.

Conserving Water Together... at Every Step

The first step in water conservation is efficiency.

During 2024, Highline Water District produced or purchased approximately 2.4 billion gallons of water for our customers. Of this total, approximately 4.7% was classified as non-revenue water (water lost prior to reaching customers. This is well below DOH's goal of maintaining water loss at less than 10%.

Highline's ongoing efforts to identify and address primary areas of water loss include:

- Meter fire hydrant use
- Perform leak detection
- Monitor for unauthorized connections
- Replace aging infrastructure
- Test water meters

The next step in water conservation is teamwork.

The Saving Water Partnership (SWP)—made up of Highline Water District and 18 water utility partners— has set a ten-year conservation goal: keep the total average annual retail water use of SWP members under 110 Million Gallons per Day (mgd) through 2028, despite forecasted population growth, by reducing per capita water use. For 2024, the SWP met the goal, using 94.5 mgd.

The final step in water conservation involves you.

Here are actions we can all take to use water wisely:

- Fix leaks or report leaks to your property manager right away. Fixing leaks prevents water waste and saves money.
- Upgrade older water-using appliances in your home to newer, more efficient models. Visit savingwater.org to learn more about rebates to replace old toilets.
- Choose plants for your yard or garden that are suited to the Pacific Northwest climate and need less water.
- Build better soil with compost and mulch. Healthy soil absorbs water easily, drains well, and retains moisture. You know it's time to invest in soil health when your higher-water use plants (like lawns or annuals) need more than an inch of water per week, including rain, in the summer.

Visit savingwater.org for tips, tools, and rebates to help you preserve our region's water for future generations. When we work together to use water wisely, it adds up to make a big difference.

Conservation Benefits Salmon

We share our water with the entire ecosystem. The mountain reservoirs that supply our tap water also provide water to rivers that are home to salmon, trout, and many other species. Conserving water in the summer and fall helps adult salmon who are returning to rivers to spawn when stream flows are naturally low.

More About Water Quality

We at Highline Water District encourage public participation in the decisions that affect our drinking water. If you would like to learn more about your water, contact Jon Seibel, our Operations Supervisor at (206) 592-8946, or reach out to any of the organizations listed below.

You are also welcome join our Board of Commissioners meetings. These are typically held the first and third Wednesday and fourth Tuesday of each month.

Seattle Public Utilities
206.684.3000 • https://www.seattle.gov/utilities/your-services/water/water-quality

U.S. Environmental Protection Agency (EPA) and the Safe Drinking Water Hotline
800.426.4791 • www.epa.gov/safewater

Washington State Department of Health (DOH):
800.521.0323 • https://doh.wa.gov/you-and-your-family/healthy-home/drinking-water

New Hypochlorite Generation System at DMTP

New Telemetry System at PS6

Interior of 2.5 MG Reservoir during rehabilitation

Improvements to Your Infrastructure in 2024

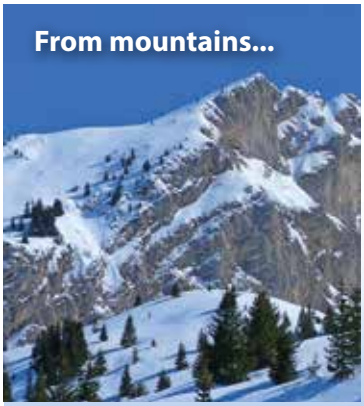
In 2024, Highline Water District made several site improvements to improve reliability, safety, and efficiency. A new hypochlorite generation system was installed at the Des Moines Treatment Plant (DMTP), replacing an aging unit. The previous Des Moines unit was relocated to the McMicken Treatment Plant, replacing a unit that had reached the end of its useful life. This upgrade helps guarantee continued disinfection at both facilities.

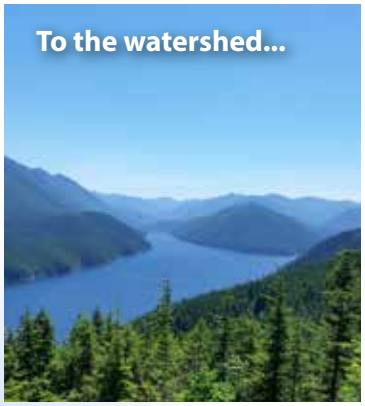
At Pump Station No. 2, design and procurement began for a new generator to replace an undersized unit nearing the end of its service life. The upgraded generator will provide backup power to the Des Moines Well, treatment plant, and pump station. Construction is anticipated in 2026.

The District also began rehabilitation of the 2.5-million-gallon reservoir at the Mansion Hill Site. Originally built in 1959, the tank is undergoing interior and exterior recoating, with safety upgrades including a new stair system and rooftop guardrail.

Finally, the District replaced the telemetry system at Pump Station 6 with new components and cellular communication, improving alarm response, reliability, and operational control.

All projects are funded through existing rates and capital reserves.





Fun Facts About Water

75% of the earth's surface is covered with water, but 97% of it is salt water that we cannot drink, and 2% is frozen in glaciers at the North and South Poles. Water is a precious resource: less than 1% of the earth's water is available for health, agriculture, industry, transportation, and all other uses.

Despite our rainy reputation, Seattle's average annual rainfall is 39 inches, compared to Miami (62 inches), Houston (55 inches), Atlanta (47 inches), and New York (45 inches).

Toilets are the largest user of indoor water. Toilets made before 1980 use 7 gallons of water per flush, compared to today's high-efficiency toilets that only use 1.6 gallons per flush. Replacing your old toilet is the easiest way to save on your water bill.

Do You Have One of These at Your Home or Business?

If you have any of the following connected to your water plumbing:

- ❑ Fire Sprinkler system
- ❑ Lawn irrigation system
- ❑ Swimming pool
- ❑ Hot tub / jacuzzi tub
- ❑ Decorative fountain
- ❑ On-site well
- ❑ Water makeup lines (that supply a boiler or hydronic heating)

OR if you are a business of (most) any kind, OR if you raise farm animals, Washington State law may require that you have a "Backflow Prevention Assembly."

The purpose of this device is to provide "cross connection control"—preventing contaminated water from flowing back into your drinking water—a serious health hazard.

Even the best Backflow Prevention Assembly can fail due to freezing, debris, improper installation, and unapproved plumbing connections. For this reason, the state's Department of Health requires these devices to be tested annually by a certified backflow assembly tester, with a copy of the test record sent to Highline Water District.

Helpful Reminders from Highline

Through Highline Water District's Cross Connection Control Program, we maintain a database of Backflow Prevention Assemblies installed throughout our District, which enables us to monitor their testing, and send customers an annual reminder notice when testing is due.

A list of qualified testers can be found in our website's "Customers" section.

Preventing Backflow at Home

Additional ways to maintain water safety at home include:

- Do not submerge a connected garden hose into a swimming pool, sink, or bucket containing water or other liquid.
- Do not use hose-end applicators to apply garden chemicals or insecticides to your yard.

If you have any questions about backflow or any other water quality issue, contact our Water Quality Supervisor at (206) 592-8946.

Reduced Pressure Backflow Assembly (RPBA) at Highline Headquarters


Backflow Assembly Being Tested