Consumer Confidence Report on Water Quality

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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Kent, Washington 98032

www.highlinewater.org

2024 Board of Commissioners:
Kathleen Quong-Vermeire (President)
Vince Koester (Secretary)
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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 2023

Highline Water District's water meets all state and federal guidelines for regulated contaminants and exceeds the EPA's required safety levels.

Where Was Your Water Sourced?

In 2023, approximately 75% of Highline Water District's water was purchased from Seattle Public Utilities (SPU), sourced from the Cedar River Watershed. The remaining 25% 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.

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 the 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/

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 over 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 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 DOH, which adopts the EPA's requirements. 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.

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 Ultra Violet Light to destroy harmful organisms.
- Chlorine is added as a residual disinfectant.

Water Treatment continued >


McMicken Treatment Plant

Water Treatment, continued

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 Hotline at 1-(800) 426-4791.

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.

In response to the EPA's revised lead and copper rule, the District is compiling a comprehensive material inventory of customer-owned and District-owned water service lines. The District will post the results of the inventory on our website by October 16, 2024. Customers with lead service lines, unknown service line material, or galvanized service lines requiring replacement will be notified by a letter within thirty (30) days of posting the inventory.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 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 Hotline at 1-(800) 426-4791. You are also welcome to contact Highline Water District at (206) 824-0375.

Table 1: Water Quality Testing Results for 2023

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	0.76	0.42 to 1.12	Naturally present in the environment	Yes
FINISHED WATER FROM CEDAR RIVER WATERSHED (MEASURED AFTER TREATMENT)							
Turbidity	NTU	NA	TT	0.38	0.19 to 3.5	Soil runoff	Yes
Arsenic	ppb	0	10	0.43	0.34 to 0.6	Erosion of natural deposits	Yes
Barium	ppb	2000	2000	1.5	1.3 to 1.7	Erosion of natural deposits	Yes
Bromate [1]	ppb	0	10	0.7	ND to 11	Byproduct of drinking water disinfection	Yes
Fluoride	ppm	4	4	0.7	0.5 to 0.8	Water additive to promote strong teeth	Yes
Nitrate	ppm	10	10	0.1	1 sample	Erosion of natural deposits	Yes
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
Coliform, Total [2]	%	0	5%	ND	ND	Naturally present in the environment	Yes
LEVELS IN HIGHLINE WATER DISTRICT'S DISTRIBUTION SYSTEM AFTER TREATMENT							
Nitrate	ppm	10	10	< 0.2	2 samples	Erosion of natural deposits	Yes
Fluoride	ppm	4	4	0.70	0.50 to 0.89	Water additive to promote strong teeth	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. [1]In October 2023, a bromate sample was not analyzed for the Tolt supply, and therefore SPU cannot be sure of the quality of your drinking water during that time. However, based on historical data and results since October 2023, Tolt bromate levels are generally non-detect. HWD does not typically receive water from the Tolt supply. [2]Two positive samples of Coliform were detected in 2023; resampling determined ND (not detected).

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	< 0.002	0 of 30	Yes	Corrosion of household plumbing
Copper	ppm	1.3	1.3	< 0.04	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.

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.

PFAS and Your Water

PFAS (per- and polyfluoroalkyl substances) are a large family of chemicals that have been in use since the 1950s to make a wide variety of stain-resistant, water-resistant, and non-stick consumer products. In Washington State, PFAS have been used in certain types of firefighting foams utilized by the U.S. military, local fire departments, and airports.

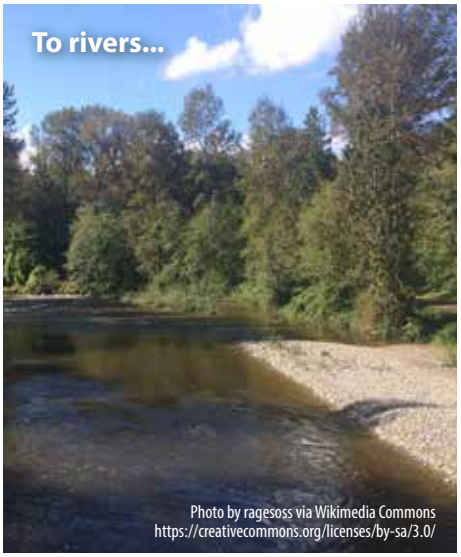
PFAS are a public health concern: they do not break down in the environment, can travel long distances in groundwater, and accumulate in animals and humans over time. Some people who drink water with excess levels of PFAS over many years may experience cholesterol, immune, liver or reproductive issues. Children exposed prenatally may have lower birth weights and increased risk of abnormal development.

Highline began testing for PFAS in 2022 and found one of its well sources, the Tyee Well, with the presence of one form of PFAS, Perfluorononanoic Acid (PFNA), in a concentration that exceeded the State Action Level (SAL). Upon confirmation, Tyee was removed from service. 2023 samples confirmed that no other Highline wells contained PFAS. Learn more about PFAS and how we are addressing it on our website at www.highlinewater.org

EPA's Revised Total Coliform Rule

In compliance with the EPA's Revised Total Coliform Rule, Highline Water District conducted over 980 water quality tests in 2023. Two samples tested positive for coliform bacteria. Immediate follow-up testing was performed, and all repeat samples were negative for both coliform and E. coli. This demonstrates the effectiveness of our water quality monitoring and rapid response protocols, ensuring the continued safety of your drinking water. For more information about the Total Coliform Rule, visit the EPA's website:

www.epa.gov/dwreginfo/revised-total-coliform-rule-and-total-coliform-rule



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More About Water Quality

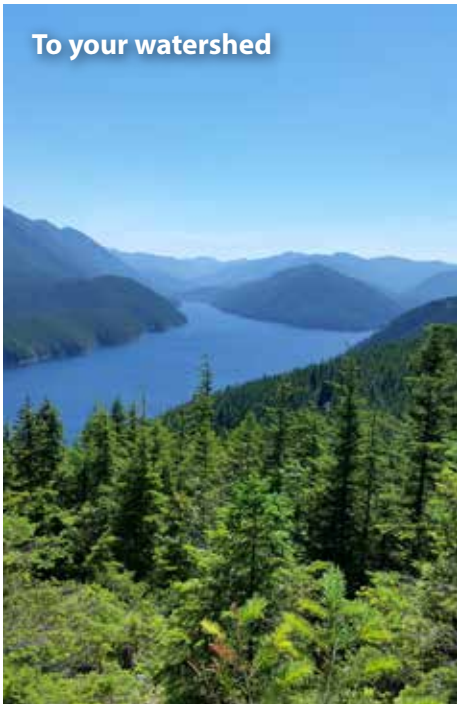
We at Highline Water District encourage public participation in the decisions that affect our drinking water. If you would like to learn more about your water, contact Jon Seibel, our Operations Supervisor at (206) 592-8946, or reach out to any of the organizations listed below.

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 • www.seattle.gov/util/MyServices/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 • www.doh.wa.gov/ehp/dw/



Conserving Water Together... at Every Step

The first step in water conservation is efficiency.

During 2023, Highline Water District produced or purchased approximately 2.4 billion gallons of water for our customers. Approximately 4.2% is considered non-revenue water (water loss)—well below DOH's goal of less than 10% water loss. 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.

In 2019, the Saving Water Partnership (SWP), a group of regional water purveyors including Highline, set a ten-year conservation goal to reduce the total average annual retail water use to less than 110 Million Gallons per Day (MGD), despite forecasted population growth. The SWP met this goal in 2023.

The final step in water conservation involves you.

The average person uses an estimated 80-100 gallons of water every day. The largest use of household water is flushing the toilet, followed by showers and baths. How can you reduce that?

- Installing water-saving shower heads is one of the easiest steps, and can reduce water use between 10-15% depending on household use.
- Swapping out your old toilet for a newer water-sense toilet can go a long way towards saving water, and there are currently toilet rebates available on the Saving Water Partnership website: www.savingwater.org/rebates

Rebates are also available for some irrigation system upgrades and for sprinkler timer replacements.

Combined, these efforts can reduce your in-home water use by as much as 35%.

Highline would appreciate any reports of leaking water or unauthorized water use from fire hydrants.

Want more water saving ideas? Visit our website at www.highlinewater.org, and/or contact the Garden Hotline at (206) 633-0224 or help@gardenhotline.org for water-saving gardening advice. Businesses are encouraged to visit the following website: www.savingwater.org/businesses/

Why Conserve Water?

Simply put, using less water saves you money. But water conservation also helps protect native salmon populations by ensuring sufficient quantity and quality of water in the streams that support them, as well as all the other species that live in and around our lakes, rivers and streams. Water conservation also helps ensure a reliable future water supply, despite regional growth and climate uncertainty.

Water Outlook for 2024

As of spring 2024, the supply outlook for the Seattle Regional Water System is good. SPU reservoirs are above average for this time of year, though the mountain snow pack was at 71% of normal last winter. SPU began storing extra water earlier in the year in anticipation of summer demand.

SPU uses a number of tools and operational strategies to manage this supply. Snow pack, rainfall and other water resource factors are monitored daily. Operational changes adjust how water is captured and released, as well as how it is moved through the water supply system, in order to balance water supply, flood management, hydro power, and fish habitat.

5 Ways to Help Protect Salmon

1. Wash your car at a car wash facility (where used water is routed to treatment facilities).
2. Avoid installing hard pavement; use permeable or porous pavement.
3. Avoid chemical weedkillers to protect groundwater and backyard wildlife habitat.
4. Safely dispose of batteries, motor oil, and other hazardous wastes.
5. Plant a rain garden to filter stormwater runoff.

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


Lawn Irrigation


Hot Tub


Fire Sprinkler System


Decorative Fountain

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.

However 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.

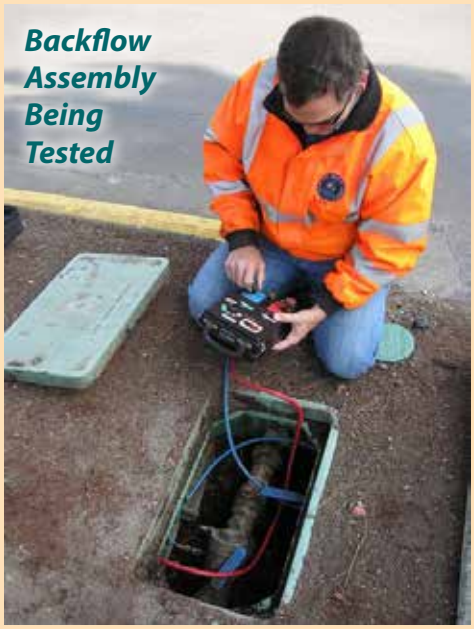
Preventing Backflow at Home

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.


Double Check Valve Assembly
located at our McMicken Treatment Plant


Backflow Assembly Being Tested