

Union Hill Water Association

2023 Annual Water Quality Report

Water Quality

Union Hill Water Association is proud of the fine drinking water it provides. This water quality report shows the source of our water, lists the results of our tests, and contains important information about water and health. Union Hill Water Association will notify you immediately if there is a reason for concern about our water. This report is provided annually in conformance with a federal regulation requiring water utilities to provide this information. The report is technical in nature; we have attempted to present the information in an understandable format.

Water Sources

The Association produced over 202 million gallons of water in 2023. The water supply is obtained from two wells. There are no chemicals added to the Association's water supply for disinfection or other purposes.

The Association adopted a wellhead protection plan in 2013. The plan defines wellhead protection areas (WHPA) for the well field. Contaminant inventory and risk assessments were also conducted 2013. The Washington Department of Health has assessed a low contaminant susceptibility rating to the well field. The Association continues to monitor for new risks that may arise.

Storage

The Association has three existing storage sites. The first site consists of two steel tanks with a total capacity of 1.32 million gallons. The second site has a concrete tank with a capacity of 2.8 million gallons. The third site has a 2.5-million-gallon concrete tank.

Health Information

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration prescribes regulations that establish limits for contaminants in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or by going to www.epa.gov.

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 can dissolve naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in the source water include:

- Microbial contaminants (coliforms), 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 runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics which are byproducts of industrial processes and petroleum production, and 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.

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. Union Hill Water Association is responsible for providing high quality water but cannot control the variety of materials used in plumbing components. When your water has been sitting for

several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

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. EPA/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 (800-426-4791).

Water Quality Tables

The following tables present the results of our 2023 water quality monitoring. Where tests are required less than annually, the most recent results for the monitoring period are presented. The state requires us to monitor for certain contaminants less than once per year because the concentrations are not expected to vary significantly from year to year.

The first table shows results of testing of the well field. The second table shows distribution system testing. In addition to the items included in the following tables, the Association's water has high levels of manganese. Manganese is a chemical that has a "secondary" maximum contaminant level (MCL). Secondary MCLs are based on aesthetic and cosmetic effects, not health effects. High levels of manganese can stain clothes and fixtures. For more information about this report, contact the Association's General Manager, Teresa Fowlkes at 425-497-1812.

<i>Detected Regulated Substance</i>	<i>Detection (mg/l)</i>	<i>MCL</i>	<i>MCLG</i>	<i>In Compliance?</i>	<i>Major Sources in Drinking Water/Comments</i>
Inorganic and Physical:					
• Complete Inorganic and Physical Tests –7/18					
Arsenic	.0035	.010	0	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Nitrates	ND	10	10	Yes	Runoff from fertilizer use. Leaking from septic tanks, sewage; erosion of natural deposits
Nitrites – 7/23	ND	1	1	Yes	
Asbestos – 4/03	No asbestos was detected.				
Radio Active Compounds- 6/22	None were detected.				
Synthetic Organic Contaminants (SOC's) – 9/19	None were detected. No SOC's have ever been detected in the Association water supply. The State Department of Health reduced SOC sampling requirements to one test per nine-year period.				
SOC – Herbicides 08/19	None were detected.				
Volatile Organic Contaminants (VOC's) – 2/23					
All Analytes ND					

Other Water Testing Results

Coliforms – tested monthly throughout the distribution system

<i>Regulated Substance</i>	<i>Absent/ Detected</i>	<i>MCL/TTT</i>	<i>MCLG</i>	<i>In Compliance?</i>
Total Coliform Bacteria	0	1	NA	Yes – Monthly samples are collected from representative points throughout the distribution system. The number of required samples is based on population. The Association is required to collect 10 samples per month.

Lead and Copper – 8/22 (20 samples taken)

<i>Regulated Substances</i>	<i>90th Percentile</i>	<i>MCL mg/l</i>	<i>MCLG mg/l</i>	<i># of Homes Exceeding Action Level</i>	<i>Range of Results mg/l</i>	<i>In Compliance?</i>
Lead	0.0029	AL=.015	0	0	ND – 0.0046	Yes
Copper	0.29	AL=1.3	1.3	0	0.013 – 0.34	Yes

Testing for PFAS in Drinking Water

Per-and-Polyfluoroalkyl Substances (PFAS) have been in the news lately and of concern to health officials and communities. PFAS are widely used as coatings in common consumer products such as food packaging, outdoor clothing, carpets, leather goods, ski and snowboard waxes and firefighting foam. PFAS chemicals are very persistent in the environment. They do not break down or go away easily.

PFAS are not regulated under the Safe Drinking Water Act at this time. The Environmental Protection Agency is in the process of developing enforceable standards. The Washington State Board of Health has developed State action Levels (SAL) for 5 PFAS. Testing for all community water systems will be happening over the next 3 years. Union Hill Water Association participated in a program the Department of Health offered for PFAS testing. Results show that Union Hill Water Association's water is non-detect (ND) for all five of the PFAS that the State has SAL's for.

Footnotes to Tables:

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

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

ND – None detected

N/A – Not applicable

ppb – parts per billion or micrograms per liter

ppm - parts per million, or milligrams per liter (mg/l)

90th Percentile – Out of every 10 homes sampled, 9 were at or below this level.

2023 Water Use Efficiency Report

In 2003, the Washington State Legislature passed the Municipal Water Supply Efficiency Requirements Act. The Water Use Efficiency Rule requires all water suppliers under the Water Use Efficiency Rule to enhance the efficient use of water by the system and/or its consumers.

Requirements of the Water Use Efficiency Rule

The Water Use Efficiency Rule applies to all municipal water suppliers and requires suppliers to:

- Develop water use efficiency goals through a public process and report annually on their performance.
- Maintain distribution system leakage at or below 10 percent of production.
- Meter all existing and new service connections.
- Collect production and consumption data, calculate distribution system leakage and forecast demands.
- Evaluate water use efficiency measures.

Efficiency Goals

The Association adopted the following water use efficiency goals in April of 2008 and revised them in 2014 and then again in July 2020.

- Achieve a water use reduction of .5 percent per year per ERU through 2021, with 2006 as the base year.
- Reduce distribution system leakage to 10% by 2025.

The average water use from 2007 – 2021 was 24% lower than in 2006.

Distribution system leakage decreased from a 19% average from 2005- 2007 to 7.12% in 2022.

To achieve water use reduction the Association has, and continues to, contribute to conservation education in schools, print conservation tips in our newsletter, have a conservation rate structure, meter sources and customer services and provide rebates for water efficient clothes washers,