

Union Hill Water Association

2020 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 183 million gallons of water in 2020. 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 2020 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 – 9/20 | ND | 1 | 1 | Yes | |
| Asbestos – 4/03 | No asbestos was detected. | | | | |
| Radio Active Compounds- 5/16 | None were detected. | | | | |
| Synthetic Organic Contaminants (SOC’s) – 11/18 | 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) – 11/18 | | | | | |
| Methylene Chloride | 0.97 | 5 | | Yes | All other 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 | Detected 1 – Level 1 Assessment complete | TTT | NA | Yes. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. The Association found coliforms in samples taken 11/09/2020 and 11/16/2020, indicating the need to look for potential problems in the water system. When this occurred, we were required to conduct a Level 1 assessment to identify potential problems and determine (if possible) why total coliform bacteria had been found in our water system. A sample stand was determined to be faulty and was replaced All required coliform samples collected since have been satisfactory. | | |
| Lead and Copper – 8/19 (30 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 | 0.0024 | AL=.015 | 0 | 0 | ND – 0.0051 | Yes |
| Copper | 0.17 | AL=1.3 | 1.3 | 0 | 0.026 – 0.22 | Yes |
| The State Department of Health has changed sampling requirements to 30 samples every 3 years | | | | | | |

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.