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# Summit Water & Supply Company's 2020 Consumer Confidence Report

**About Summit Water:** We are a member owned, "not-for-profit" corporation, "Group A" water system (State of Washington Department of Health identification #85050V). The services of the corporation are provided to the residence, businesses, public entities and other organizations located in the greater Summit/Waller area of Pierce County. There are approximately 5,225 members. The corporation's articles of incorporation and By-laws along with federal, state and local regulations govern the operation of the company.

The Board of Directors meet twice a month and receives member comments. Summit Water will be glad to provide you additional information about water quality, and you may write, call, e-mail, or drop by at 9701 50th Ave. East, Tacoma, WA. 98446-5444, (253-537-7781), <a href="mailto:service@summitwater.org">service@summitwater.org</a>. For more information about the health effects of the listed contaminants in the material provided in this report, call the Environmental Protection Agency hotline at (800) 426-4791.



## **Important Notice - Cross-Connection Policy**

The Washington State Administrative Codes requires purveyors (Summit Water) to protect the public water system from contamination due to cross-connections. This can be accomplished in part, by the development and implementation of a "Cross-Connection Control Program". A cross-connection is defined as any actual or potential physical connection between a public water system or a consumer's water system and any source of non-potable liquid, solid or gas, which could contaminate the potable water supply. In July of 1994, Summit Water's Board of Directors adopted policy 6.12 "Cross-Connection Control Program", which detailed the Company's plan of implementing a "premise isolation" cross-connection program. Premise isolation is defined as a method of protecting a public water system by installation of approved air gaps or approved backflow prevention assemblies at or near the service connection or alternate location acceptable to the purveyor to isolate the customer's water system from the purveyor's distribution system. Summit Water's current crossconnection policy "6.12(R7) Cross-Connection Control Program Policy and Procedures" requires that a premise isolation backflow assembly (assembly) be installed on all new connections to the water system. Other activities occurring on or to a property served by the Company that require the installation of a backflow assembly are based on, but not limited to; sale of the property (processed with or without escrow), transfer of ownership, addition of accessory dwelling unit (ADU) or other structure, change of use of the property, remodeling or additions to a structure, landscape improvements, irrigation installations, water service reactivation, water line modifications/replacement and/or inspections as may be conducted by qualified Company personnel. Since the installation of these assemblies can create a closed system on the private (home) water system, it is recommended that a water expansion tank be installed to accommodate excess water pressure created by thermal expansion. As of the end of 2020, we have approximately 1,960 active connections (roughly 38% of the system) protected by premise isolation backflow assemblies.

## The Sources of Your Supply

In 2020, system source water was supplied by four (4) wells at three (3) different well sites along with a wholesale connection with Lakewood Water District. The current wholesale contract allows for a transfer of 1.5 million gallons per day (MGD) with a future maximum transfer 0f 3.0 MGD (1,095,000,000 gallons annually) and a pumping capacity of approximately 2,080 gallons per minute. Our storage facilities consist of three (3) standpipe tanks and two (2) ground level tanks with a combined storage capacity of approximately 7.0 million gallons. Potable water and fire flow are supplied through approximately 110 miles of water pipe ranging in size from 2 to 16 inches. The system is operated as a gravity fed system, which means water flows in and out of the standpipe tanks to meet system demand as well as maintaining adequate system pressure. The distribution system is divided into five (5) pressure zones ranging from a hydraulic elevation of 595 to 125 feet. Pressure reducing valves (PRV stations) are located throughout the system where distribution pipes cross pressure zone boundaries. PRV stations are used to step-down the pressure on the distribution system as water flows downhill and gains pressure. Although Summit Water operates and maintains PRV stations on the distribution system, *these stations are meant to protect water main infrastructure, not private plumbing systems (plumbing beyond the water meter)*. The Company recommends that individual PRVs and water expansion tanks be installed on all private plumbing systems, which exceed 80 psi and/or are located in the lower elevation pressure zones.

If you would like to know what pressure zone you are located in or have other questions regarding system operations, please give us a call at (253) 537-7781 or email us at <a href="mailto:service@summitwater.org">service@summitwater.org</a> and we will have the appropriate personnel respond to your request.

#### **Summit Water's System At A Glance** TANK 3 TANK 6B (1.2 MG) TANK 10 (0.66 MG) (a) TANK 4 (a) (0.15 MG) @ LEGEND: ACTIVE SYSTEM COMPONENTS ■ INACTIVE SYSTEM COMPONENTS TANK 6C (4,0 MG) 595' SERVICE ZONE 522' SERVICE ZONE SERVICE INTERTIE FRUITLAND MUTUAL & 205 ZONE INTERTIE TACCMA Φ SERVICE INTERTIE TACOMA 4 SERVICE INTERTIE TACOMA 4 INTERTIF LAKEWOOD WATER DISTRICT

## Water Use Efficiency Program

In September 2014, Summit Water advertised and held a public meeting to establish Water Use Efficiency goals as outlined by the State Health Department. Two of the goals that were set at this meeting were to reduce our Peak Day Demand (PDD) per users by at least 0.25% based on a six-year rolling average and to reduce our distribution system leakage to 10% or less based on a three-year rolling average. Our six-year rolling average goal for 2020 was to have reduced our PDD per users to 536.8 gallons per day (gpd). Our actual PDD per users for 2020 was 516.4 gallons per day, which was 20.4 gallons or roughly 3.8% below our projected goal. Total water produced/purchased for 2020 was 633,398,317 gallons while metered/accounted for water for the same period was 575,300,544. This resulted in a "Distribution System Leakage" (DSL) or unaccounted for water loss of 9.2% (58,097,773 gallons) for 2020 compared to 11.9% (75,965,248 gallons) for 2019. Based on our average distribution leakage for 2018 (8.7%), 2019 (11.9%) and 2020 (9.2%) our three-year rolling distribution system leakage average is 9.9%.

## Water Conservation

With Summer soon approaching, here are some useful websites to help you not only conserve water but save some cash as well.

www.h2ouse.org; www.getwise.org; www.americanwater.com; www.irrigation.org

# **Drinking Water Quality**

This is the 22nd report describing Summit Water & Supply Company's (Summit Water) drinking water sources, quality testing, and programs that protect the quality of the water supply. This publication conforms to a federal regulation requiring water utilities to **provide this information annually.** The last report was provided to the members and customers in June of 2020. Although the report format may look the same as prior reports there is specific information and statements required by statute. This report covers the year 2020. The report's due date for delivery to every consumer of water delivered by the Summit Water system is July 1 of each year.

The United States Environmental Protection Agency (EPA) and the Washington Health Department's Drinking Water Program Division (DOH) are the agencies responsible for establishing drinking water quality standards. To ensure your tap water is safe to drink, EPA and DOH prescribe regulations stating the allowable limit for specific contaminants the water may contain. We make an effort to balance your "right to know" against the sheer volume of information that we can provide. Our website provides a method to get information out in a cost-effective way.

Summit Water goes beyond what is required by these agencies to provide quality water to your home or business, through increased monitoring and placing into practice protection methods that further reduce the risk of contamination.

Water quality monitoring reports are submitted, by Summit and also directly from the testing laboratory, to the DOH who then provides the information to the EPA. The agencies verify our compliance with the many regulatory standards and testing protocols required to assure safe drinking water. For this reporting period in 2020, the water we provided met the established water quality standards.

## Water Quality Monitoring Results

Summit Water collected approximately 200 water samples in 2020 from its sources and throughout the water system. A certified laboratory conducted the analyses on those samples. The results are on file with the Washington Health Department's Drinking Water Program Office and the EPA.

The testing of the sources of supply for the regulated contaminate substances indicated that the **contaminate levels are below** the Maximum Contaminate Levels as established by the EPA.

The items listed below were detected in our water during the 2020 sampling period. All are below the levels allowed by the agencies. Not listed are other potential contaminates that were not detected in any of our tests.

Contaminants	Highest Level Allowed (MCL)	Highest Level Detected	Ideal Goals (MCLG)	Potential Sources of Contaminants
REGULATED AT THE GROU	NDWATER SOURCES			
Nitrate	10ppm	3.23ppm	10ppm	Runoff from fertilizer/Septic and Erosion of natural deposits
REGUALTED AT THE DISTR	RIBUTION SYSTEM			
Total Haloacetic Acids	60ppb	1.37ppb	0	Byproduct of drinking water disinfection
TTHM Potential	80ppb	4.81ppb	0	Byproduct of drinking water disinfection
Chloroform	N/A	1.75ppb	0	Byproduct of drinking water disinfection
Bromodichloro-methane	N/A	1.61ppb	0	Byproduct of drinking water disinfection
Dibromochloro-methane	N/A	1.45ppb	0	Byproduct of drinking water disinfection
Bromoform	N/A	Not Detected	0	Byproduct of drinking water disinfection
Total Coliform Bacteria	<5% of monthly samples	0%	0%	Naturally present in the environment

# **Lakewood Water District (through wholesale intertie)**

The items listed below are the highest levels detected in the Lakewood Water District's water for the monitoring period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2020. Not listed are those volatile organic chemicals, synthetic organic chemicals and herbicides that were not detected.

	<u> 2020</u>	
it of	Measurement	MCLG

	Exceeds	Unit of Measurement	MCLG	MCL	Potential Source of Contaminant
Microbiological Contaminants					
Total Coliform Bacteria	No	70 samples/monthly	0	0	Naturally present in environment
Fecal Coliform and E.coli	No	70 samples/monthly	0	0	Human/animal fecal waste

		Highest Level			
	Exceeds	Detected	MCLG	MCL	Potential Source of Contaminant
Inorganic Contaminants					
Nitrate	No	1.99ppm	10ppm	10ppm	Fertilizer runoff; leaching from septic tanks; erosion of natural deposits
Regulated at Consumer's Tap					
Copper	No	0.364ppm	1.3ppm	1.3ppm	Naturally occurring in rocks and soil
Lead	Yes	0.0425ppm	0	0.015ppm	Naturally occurring in rocks and soil
<b>Volatile Organic Contaminants</b>					
Total Haloacetic Acid	No	Not Detected	60ppb	60ppb	Byproduct of drinking water disinfection
Trihalomethane Potential	No	2.51ppb	80ppb	80ppb	Byproduct of drinking water disinfection
Chloroform	No	0.77ppb	0	N/A	Byproduct of drinking water disinfection
Bromodichloro-methane	No	0.87ppb	0	N/A	Byproduct of drinking water disinfection
Dibromochloro-methane	No	0.87ppb	0	N/A	Byproduct of drinking water disinfection
Bromoform	No	Not Detected	0	N/A	Byproduct of drinking water disinfection
Asbestos (mfl =millions of fibers per liter)	No	<0.116mfl	7mfl	7mfl	Erosion of natural deposits, decay of asbestos cement in water pipes
(min minorio or mocro per meer)					cernent in Mater pipes

For a complete copy of Lakewood Water's CCR, please call the Summit Water office at (253) 537-7781 (or see Lakewood Water's website at http://www.lakewood-water-dist.org).

**Safe Drinking Water Hotline** – 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 Hotline (1-800-426-4791).

## **Immunocompromised Persons**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 and the federal 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 (1-800-426-4791) between the hours of 6a.m. and 2 p.m. Pacific Time.

# **Chlorine Disinfection Byproducts**

Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) are a family of chemicals formed when a disinfectant such as chlorine is added to the water supply. The maximum level permitted for TTHM is 80 parts per billion (ppb) and for HAA5 the maximum level is 60 ppb. Disinfection is an important and necessary step in the supply of tap water, which helps to protect against harmful bacteria and other living organisms that may contaminate the water. Chlorine is the most widely used and approved disinfectant in the United States. Summit Water uses chlorine in a gaseous form for the disinfection of the water supply. There are no contaminates of the water supply coming from the wells. The primary purpose for chlorine addition is for potential contamination of the water distribution system (water mains) up to your meter.

## **Important Definitions**

- Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal (MCLG). The level of a contaminant in drinking water below which there is no known or expected risk to health.
- Treatment Technique. If a contaminant exceeds the maximum contaminant level, EPA may require the water system to use a treatment technique. A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Action Levels. An Action Level is the concentration of a contaminant, which triggers treatment or other requirements, which a water system must follow.
- Part per million; part per billion. One part per million is the
  equivalent of ½ of a dissolved aspirin tablet in a full bathtub of
  water (approximately 50 gallons). One part per billion is
  equivalent to ½ of a dissolved aspirin tablet in 1,000 bathtubs
  of water (approximately 50,000 gallons).

# Other Things to Know

Chlorine residuals are maintained throughout the distribution system, and sampling is performed daily to ensure the water has the recommended residual. Certified personnel monitor the chemical addition to the water at the well sites. They also perform on-site tests and collect samples including, but are not limited to, the following:

Daily	Chlorine residuals, pH, and temperature
Semi-Monthly	Bacteria (total coliform)
Annually	Nitrates
EPA directed	Inorganic, volatile organic contaminants, synthetic
(three-year	organic contaminants, radioactivity, lead, copper
cycle)	and Arsenic

All new construction and repair work performed on the water system infrastructure is treated with chlorine. The water is tested for purity by a state approved laboratory prior to these facilities providing water to you the consumer.

EPA states "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.

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 discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health."

### Measurements

Water is sampled and tested throughout the year. Contaminants are measured in parts per: million (ppm), billion (ppb), trillion (ppt) and even parts per quadrillion (ppq).

## **Additional Water Quality Information**

All samples taken at our source wells and throughout our system tested below the minimum levels acceptable to the EPA and the DOH. Wells are also the source of water for the Lakewood Water District (LWD) system. Water purchased from LWD is supplied to Summit Water at a higher level of chlorine residual than what is normally maintained on our system. The blending of the water supplies from the two water systems results in water characteristics, which are not uniform throughout the Summit Water distribution system. This is most noticeable in the Waller Road area.

## Source Protection

For the past 26 years, Summit Water & Supply has continued its development and implementation of a cross-connection control program. This program meets the state cross-connection control regulations. We continue to work closely with the health department and the property owners in our wellhead areas so that everyone works toward protecting this resource. Prudent chemical application practices and disposal methods will keep your groundwater resource pristine. If you observe evidence of the dumping or abandonment of potential contaminants, you should report it immediately to the Tacoma-Pierce County Health Department.