



THE CITY of WASHINGTON TERRACE

5249 South 400 East, Washington Terrace, Utah 84405

2019 Consumer Confidence Report June 2019

This report is a snapshot of water quality for 2019. Included in this report are details about where your water comes from, what it contains, what is being done to protect your water sources and how it compares to EPA and State of Utah standards. Weber Basin Water Conservancy District supplies all of the culinary water used by Washington Terrace City through a contract between the City and the District. This is a high quality drinking water that meets or exceeds all state and federal regulations.

Where Does Our Water Come From?

Surface water and groundwater

The Weber Basin Water Conservancy District's drinking water supply comes from the Weber River and from several creeks along the Wasatch Front. Groundwater, primarily from the Delta Aquifer, is used to supplement surface water sources when needed.

How drinking water gets to you

Although a portion of drinking water originates as groundwater and is extracted from deep wells, the majority of our drinking water supply begins as surface water from the headwaters of the Weber River. Water is directed into a canal by a diversion dam. The water flows through this canal and enters two large aqueducts. Several creeks along the Wasatch Front can feed into these aqueducts. The water supplied to Washington Terrace City is subsequently piped to the District's Central Water Treatment Plant. After complete treatment, water is delivered to Washington Terrace City for final distribution to individual users.

Water storage is necessary

Storage reservoirs on the Weber and Ogden river systems play a critical role in ensuring an adequate and constant water supply to all water users throughout the year. Dams have been built to store water during the annual spring runoff of winter snow. Without this storage, those of us living downstream along the rivers and streams would experience extreme high flows during the runoff periods and extreme low flows in the late summer months. There would be much more flooding due to unregulated flows in the river during the spring, and there would be insufficient water to provide for drinking and irrigation needs during the late summer and fall.

The effects of multi-year drought periods have been felt throughout the country during the past decades. Reservoirs also play a vital role in reducing the effects of drought. With the available water storage projects, these effects have been greatly minimized; whereas, without the reservoirs the drought periods could have been devastating.

Storage reservoirs also have other useful functions. They generate hydro-electric power, contribute to the economy through tourism, provide wildlife habitat and recreational activities, and ensure adequate water for agricultural irrigation, industry, commercial uses, and all residential uses.

Water Source Protection

Source Protection Plan

The District has completed a Drinking Water Source Protection Plan for all of its surface public drinking water sources. The Drinking Water Source Protection program includes identification of the area from which the drinking water source receives water, an assessment of the potential contamination threats to the source within this area, and management programs to help control both existing and future potential sources of contamination.

Wellhead Protection Plans

A Wellhead Protection Plan has been written and implemented for all of the District's groundwater sources. These plans define the protection zones for each of the wells, list the potential contamination sources within the zones, and identify what safeguards are in place to protect the aquifer (natural underground water storage formations made of silts, sands, gravels, and cobbles) from the contamination sources. The wellhead protection plans also consist of steps to further monitor the contamination sources and educate those businesses or industries that may become sources.



Copies of these plans may be obtained from the Weber Basin Water Conservancy District office for a nominal fee. The State Division of Drinking Water also has a copy of each protection plan on file.

You can help prevent water pollution

The water you drink comes from reservoirs or is pumped from deep wells. Residents can help prevent water pollution by employing best management practices when storing, using, and discarding fertilizers, pesticides, and other household hazardous wastes. Information on best management practices can be found at <http://www.drinkingwater.utah.gov/source/protection/intro.htm>. This Division of Drinking Water web site also has links to Fact Sheets describing ways to minimize the impact of potential contamination sources on our water resources.

Please don't spoil the water supply for yourself and everyone else! Dispose of paint, used motor oil, and other hazardous chemicals in a proper and safe manner. You can log onto the Washington Terrace City web site at www.washingtonterracecity.com and go to Departments, Public Works, and Waste Disposal to find out about proper waste disposal in the Weber County area.

Preventing Cross Connections

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

Water Conservation

With ever increasing growth and the nature of the regional climate, there is no question that we will encounter future drought years. Future drought cycles will have an even greater effect than previous drought because of the increased demands on water systems. Conservation must become a way of life through each of us incorporating better water use practices and valuing this precious resource more than ever.

Conservation alone will not meet future water needs and the Weber Basin Water Conservancy District will continue to develop water supplies. The City and District will continue to maintain the current infrastructure, but future water projects are costly and limited. Your part in conserving water today will help delay these costly future projects while maintaining your current lifestyle. If we each save a little, we all save a lot!

Value

What will \$2.00 buy? About three-fourths gallon of gas, one deck of playing cards, less than four postage stamps, a 16.9 ounce container of bottled water, or 350 gallons of tap water! Clean, safe, convenient tap water is a great deal that few of us appreciate.

Possible Contaminants in the 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of our drinking water include rivers, streams, reservoirs, 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. Below are some of the contaminants that may be present in the source water.

Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Radioactive contaminants can be naturally-occurring or the result of oil and gas production and mining activities.

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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 (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Special Precautions to Consider

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 (CDC) guidelines on appropriate means to lessen the risk of infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Contact person:

If you have any questions concerning the content of this report please contact Denzil Remington, Washington Terrace City Assistant Public Works Director at 801-393-8681.

Water Web Sites:

www.weberbasin.com; www.drinkingwater.utah.gov; www.epa.gov/safewater; www.slowtheflow.org;
www.conservewater.utah.gov; www.ConservationGardenPark.org

Water Quality Information

The tables on the following pages list all of the regulated and unregulated drinking water contaminants that were detected during this and former sampling years. Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Some of the data, though representative, are more than one year old. Because the concentrations of certain contaminants do not change frequently, the state allows less frequent monitoring. **Note that the presence of contaminants in the water does not necessarily indicate that the water poses a health risk.**

The detected contaminants tables show sampling results for both Weber Basin Water Conservancy District and Washington Terrace City.

Important drinking water definitions:

Detected Contaminant - Any contaminant detected at or above its minimum detection limit (MDL).

Minimum Detection Limit - The lowest level at which a particular contaminant is detected with a specified degree of certainty.

MCL - Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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 an extra margin of safety.

NA - Not applicable - there is no Federal or State MCL and/or MCLG.

ND - Not detected.

NTU - Nephelometric Turbidity Unit – a measure of the cloudiness of the water.

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

ppb - parts per billion, or micrograms per liter (µg/l).

ppt - parts per trillion, or nanograms per liter (ng/l).

pCi/L - picocuries per liter (a measure of radioactivity).

DETECTED REGULATED INORGANIC CONTAMINANTS

Weber Basin Water Conservancy District - Samples Collected from 2017 through 2019 Range

Contaminant (units)	Average	Low	High	MCL	MCLG	Typical Source
Arsenic (ppb)	0.433	ND	1.3	10	NA	Erosion of natural deposits; orchard runoff
Barium (ppm)	0.121	0.091	0.179	2	2	Erosion of natural deposits; drilling wastes
Fluoride (ppm) ³	0.642	0.096	1.5	4	4	Erosion of natural deposits
Nitrate (ppm)	0.552	ND	1.35	10	10	Erosion of natural deposits; fertilizer runoff
Selenium (ppb)	0.433	ND	0.70	50	50	Erosion of natural deposits; mine discharge
Sodium (ppm)	36.3	22.5	47.1	NA ¹	NA	Erosion of natural deposits
Sulfate (ppm)	26.7	7.0	42	1,000 ²	NA	Erosion of natural deposits
Total Dissolved Solids (ppm)	382	352	412	2,000 ²	NA	Erosion of natural deposits

Washington Terrace City - Lead and Copper Samples Collected in 2019⁴

Contaminant (units)	Average/90	Range		MCL	MCLG	Typical Source
	Percentile	Low	High			
Lead (ppb)	3.2	0.8	8.2	15	NA	Corrosion of household plumbing
Copper (ppb)	294	64.4	947	1,300	NA	Corrosion of household plumbing

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. Washington Terrace is responsible for providing high quality drinking 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>.

- 1) The State of Utah requires monitoring for sodium even though no MCL has been established.
- 2) The MCL for sulfate and total dissolved solids is established by the State of Utah.
- 3) This value represents naturally occurring fluoride concentrations.
- 4) Sampled at 20 locations every three years.

DETECTED REGULATED ORGANIC CONTAMINANTS

Weber Basin Water Conservancy District - Samples Collected in 2019

Contaminant (units)	LRAA ¹	Range ²		MCL	MCLG	Typical Source
		Low	High			
Total Trihalomethanes (ppb)	19.4	3.7	63.9	80	NA	By-product of drinking water chlorination
Haloacetic Acids (ppb)	8.85	1.5	19.7	60	NA	By-product of drinking water chlorination

Washington Terrace City - Samples Collected in 2019

Contaminant (units)	LRAA ¹	Range ²		MCL	MCLG	Typical Source
		Low	High			
Total Trihalomethanes (ppb)	26	8.2	66.1	80	NA	By-product of drinking water chlorination
Haloacetic Acids (ppb)	15	ND	32.1	60	NA	By-product of drinking water chlorination

- 1) This value represents the highest running annual average for

year(s).

2) Values in the Range columns are actual concentrations measured in ppb and reflect the range of detected levels.

DETECTED REGULATED RADIOLOGIC CHEMICALS

Weber Basin Water Conservancy District - Samples Collected from 2016 through 2019

Contaminant (units)	Average	Range		MCL	MCLG	Typical Source
		Low	High			
Gross Alpha (pCi/L)	1.08	0.2	2.6	15	0	Erosion of natural deposits
Gross Beta (pCi/L)	2.8	2.0	4.4	50	0	Decay of natural and man-made deposits
Combined Radium (pCi/L)	0.86	0.38	1.7	5	0	Erosion of natural deposits

REGULATED MICROBIOLOGICAL CONTAMINANTS¹

Weber Basin Water Conservancy District - This data comes from continuous monitoring in 2019

Contaminant (units)	Percentage	High	MCL	MCLG	Violations	Typical Source
Turbidity Weber South(NTU)	100	0.04	0.3	NA	No	Soil Runoff
Turbidity Davis North(NTU)	100	0.11	0.3	NA	No	Soil Runoff

1) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Division of Drinking Water regulations require the City to sample 10 different sites in the City each month and test for total coliform and E. coli. If one sample is positive for total coliforms, a violation of the MCL has occurred. No coliforms were detected in any water sampled in Washington Terrace City during 2019.

The Weber Basin Water Conservancy District is required to collect and test 120 samples a month for total coliform and E. coli. If more than 5% of the samples test positive for Total Coliform Bacteria, they are out of compliance. That has never occurred in their system since the rule was established.

DETECTED UNREGULATED ORGANIC CONTAMINANTS

Washington Terrace City - Samples Collected in 2019

Contaminant (units)	Average	Range		MCL	MCLG	Typical Source
		Low	High			
Bromodichloromethane (ppb)	5.2	2.5	9.7	NA	NA	By-product of drinking water chlorination
Bromoform (ppb)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Chloroform (ppb)	16.8	2.6	55.3	NA	NA	By-product of drinking water chlorination
Dibromochloromethane (ppb)	2.0	1.1	3.1	NA	NA	By-product of drinking water chlorination
Dibromoacetic Acid (ppb)	ND	ND	1.0	NA	NA	By-product of drinking water chlorination
Dichloroacetic Acid (ppb)	6.9	ND	12.8	NA	NA	By-product of drinking water chlorination
Monobromoacetic Acid (ppb)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Monochloroacetic Acid (ppb)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Trichloroacetic Acid (ppb)	8.0	ND	19.8	NA	NA	By-product of drinking water chlorination

Results of cryptosporidium monitoring

Cryptosporidium and Giardia are microbial pathogens found in surface water throughout the U.S. Although filtration removes Cryptosporidium and Giardia, the most commonly-used filtration methods cannot guarantee 100 percent removal. Monitoring conducted by the District indicates the presence of Cryptosporidium and Giardia in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Due to these results, the District does use UV light in water treatment which inhibits these organisms from reproducing and causing sickness. Ingestion of Cryptosporidium may cause Cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the

disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Results of radon monitoring

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. At this time, radon monitoring is not required by the EPA; however, the EPA is considering making radon monitoring a requirement. The proposed MCL for radon is 4,000 pCi/L for systems which have a public education program for radon. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).