THE CITY of
WASHINGTON TERRACE
5249 South 400 East, Washington Terrace, Utah 84405

2017 Consumer Confidence Report
April 2018

This report is a snapshot of water quality for 2017. 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 decade. 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.

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 pervious 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 two-thirds gallon of gas, one deck of playing cards, four postage stamps, a 16.9 ounce container of bottled water, or 390 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 Steve Harris, Washington Terrace City Public Works Director at 801-395-8289.

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 2011 through 2017

		Range				
Contaminant (units)	**Average**	**Low**	**High**	**MCL**	**MCLG**	**Typical Source**
Antimony (ppt)	ND	ND	ND	6,000	6,000	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppt)	600	ND	1,200	10,000	NA	Erosion of natural deposits; orchard runoff
Barium (ppb)	150	80	260	2,000	2,000	Erosion of natural deposits; drilling wastes
Fluoride (ppb)	640	80	1,400	4,000	4,000	Erosion of natural deposits
Nitrate (ppb)	700	100	1,600	10,000	10,000	Erosion of natural deposits; fertilizer runoff
Selenium (ppt)	1,100	600	2,100	50,000	50,000	Erosion of natural deposits; mine discharge
Sodium (ppm)	29.1	19.6	38.6	NA[1]	NA	Erosion of natural deposits
Sulfate (ppm)	38.6	25	48	1,000[2]	NA	Erosion of natural deposits
Thallium (ppt)	300	ND	1,000	2,000	500	Leaching from ore-processing; discharges from electronics, glass, and drug factories
Total Dissolved Solids (ppm)	372	315	416	2,000[2]	NA	Erosion of natural deposits

Washington Terrace City - Lead and Copper Samples Collected in 2016[3]

	Average/90	Range				
Contaminant (units)	**Percentile**	**Low**	**High**	**MCL**	**MCLG**	**Typical Source**
Lead (ppb)	3.2	0.6	7.0	15	NA	Corrosion of household plumbing
Copper (ppb)	363	58.8	587	1,300	NA	Corrosion of household plumbing

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) Sampled at 20 locations every three years.

DETECTED REGULATED ORGANIC CONTAMINANTS

Weber Basin Water Conservancy District - Samples Collected in 2016-2017

		Range[2]				
Contaminant (units)	**LRAA[1]**	**Low**	**High**	**MCL**	**MCLG**	**Typical Source**
Total Trihalomethanes (ppb)	19.3	8.5	36.5	80	NA	By-product of drinking water chlorination
Haloacetic Acids (ppb)	9.4	2.9	19.9	60	NA	By-product of drinking water chlorination

Washington Terrace City - Samples Collected in 2017

		Range[2]				
Contaminant (units)	**LRAA[1]**	**Low**	**High**	**MCL**	**MCLG**	**Typical Source**
Total Trihalomethanes (ppb)	32.9	0.8	47.6	80	NA	By-product of drinking water chlorination
Haloacetic Acids (ppb)	20.9	1.6	19.4	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 2013 through 2017

		Range				
Contaminant (units)	**Average**	**Low**	**High**	**MCL**	**MCLG**	**Typical Source**
Gross Alpha (pCi/L)	0.1	0	0.2	15	0	Erosion of natural deposits
Combined Radium (pCi/L)	0.5	0.4	0.5	5	0	Erosion of natural deposits

REGULATED MICROBIOLOGICAL CONTAMINANTS[1]

Weber Basin Water Conservancy District - Samples Collected in 2016-2017

Contaminant (units)	**Percentage**	**Avg.**	**High[3]**	**MCL**	**MCLG**	**Typical Source**
Turbidity (NTU)	100[2]	0.02	0.07	0.3	NA	Sediment in source water
Total Coliform Bacteria[1]		0.0	0.0	5%	NA	Naturally found in environment

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 2017.

The Weber Basin Water Conservancy District is required to collect and test 40 samples per week 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.

2) This value represents the lowest monthly percentage of combined filter readings meeting less than 0.3 NTU in at least 95% of the measurements taken each month during 2016.

3) This value represents the highest single measurement of combined filter readings taken every four hours during 2016.

DETECTED UNREGULATED ORGANIC CONTAMINANTS

Washington Terrace City - Samples Collected in 2016

Contaminant (units)	Average	Range Low	Range High	MCL	MCLG	Typical Source
Bromodichloromethane (ppb)	6.3	4.0	9.8	NA	NA	By-product of drinking water chlorination
Bromoform (ppb)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Chloroform (ppb)	22.5	3.7	47.6	NA	NA	By-product of drinking water chlorination
Dibromochloromethane (ppb)	1.9	0.8	3.2	NA	NA	By-product of drinking water chlorination
Dibromoacetic Acid (ppb)	0.4	ND	1.7	NA	NA	By-product of drinking water chlorination
Dichloroacetic Acid (ppb)	8.3	4.3	15.5	NA	NA	By-product of drinking water chlorination
Monobromoacetic Acid (ppb)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Monochloroacetic Acid (pp)	ND	ND	ND	NA	NA	By-product of drinking water chlorination
Trichloroacetic Acid (ppb)	10.0	2.4	19.4	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).