

# KEEP IT PURE™ From your Mountains to your Tap

## Salt Lake City Department of Public Utilities Water Quality Report 2017

¡Atención! El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

**OUR PRIMARY GOAL** at Salt Lake City Public Utilities is to always deliver the best drinking water possible. This means water that meets and exceeds all state and federal regulations. Federal law requires regular updates of these rules, and Salt Lake City Public Utilities will continue to support and contribute to ongoing research efforts with the Environmental Protection Agency, state and local agencies, and universities. Our community's health and safety is our top priority. If you have any questions or concerns about your drinking water, please feel free to contact our office.

### Community Participation

We encourage your participation in decisions that affect our community's drinking water. The Public Utilities Advisory Committee meets the fourth Thursday of each month at 7:30 a.m. in our office, 1530 South West Temple. We welcome you to these open meetings. Find updates and more information at [www.slcgov.com/puac](http://www.slcgov.com/puac).

### Water Assist Program

Are you struggling to pay your utilities bill? SLC Public Utilities Water Assist Program helps many low-income customers pay their utilities bill. To learn more about applying for assistance, please visit [www.slcgov.com/utilities](http://www.slcgov.com/utilities) or [www.saltlakecity.salvationarmy.org](http://www.saltlakecity.salvationarmy.org). If you would like to donate to Project Water Assist, you can do so by checking the box on your utility bill.

This Consumer Confidence Report (CCR) is a snapshot of last year's (2017) water quality data. The report includes details about where your water comes from, what it contains and how it compares to United States Environmental Protection Agency (EPA) and State of Utah Division of Drinking Water (Utah DDW) standards. Salt Lake City Public Utilities (SLC Public Utilities) is committed to accuracy and transparency in providing this information.



## Conservation, Weather, and the Future of Water Supply in Utah

We are rigorous about protecting our source waters as the first stage of treatment. Clean water at the start means higher quality water from your tap. We regularly monitor our source waters and prepare source protection plans. For several years, our "Keep It Pure" campaign has helped to educate the community on the value of protecting our watershed and water resources. Please help us maintain good water quality by protecting your culinary drinking water watershed. For more information, visit [www.keepitpure.com](http://www.keepitpure.com).

**The winter of 2017/2018** produced lower-than-average snow accumulation and stream flows. We are engaged with many stakeholders to understand and prepare for potential climate change scenarios. Regardless of snow totals, spring runoff, or supply levels, please remember:

***Conservation is always the best practice.***



**Keep It Pure™**  
Mountains to your Tap



## Where does our water come from? How is it treated?

Multiple source waters feed our system. We have also built redundancy into our system to avoid disruption in service. Our source waters include mountain streams, surface water reservoirs, and a network of groundwater wells and springs. SLC Public Utilities owns and operates three surface water treatment plants and purchases water from other water districts and conservancies. We typically use our network of wells in the summer months to meet high demand. Because of our multiple sources and treatment facilities, water in our distribution system is blended from these sources. Also, the sources may vary throughout the year depending on supply and demand.

**SURFACE WATER.** Our primary source waters are from mountain streams (i.e., City Creek, Parley's Creek, Big Cottonwood Creek, and Little Cottonwood Creek), which are in the protected watersheds located north and east of Salt Lake City in the Wasatch Mountains. Salt Lake City Ordinances 17.04 and 17.08 were adopted to protect these mountain streams from pollution. In addition, we have invested in and receive treated water from the Provo River watershed. Like many public water systems around the country, the surface water treatment for SLC Public Utilities uses a multi-step treatment process, including coagulation, flocculation, sedimentation, filtration, and disinfection. The primary disinfectant used is chlorine. After the water leaves the treatment plants, SLC Public Utilities routinely collects samples throughout the distribution system to monitor the quality of water as it travels through more than 1,300 miles of pipe to your tap.

**GROUNDWATER.** SLC Public Utilities' wells and springs are spread across the valley from Cottonwood Heights to the mouth of City Creek Canyon. The quality of our groundwater is impacted by what happens on the ground above. Salt Lake City zoning ordinance 21A.34.060 was adopted to help protect our groundwater resources. Never dispose of chemicals or hazardous materials on the ground. These materials can migrate through the soils and impact groundwater. Because of SLC Public Utilities' excellent groundwater resources, groundwater does not require special treatment. Similar to the filtration process of surface water, groundwater is continually filtered through a natural process as it passes through the subsurface geology. SLC Public Utilities routinely monitors the quality of the groundwater and remains a concerned and active stakeholder for sites where groundwater contamination has been identified. As such, we work with the Utah Department of Environmental Quality, the EPA, and other stakeholders to protect our citizens and their interests.

## Cross Connection

Through our cross-connection control program we provide oversight and monitor connections to our system to prevent water back-flowing from residential, commercial, or industrial consumers into our distribution system. A cross-connection is any actual or potential connection between the water

you want to drink with other sources of water that may be contaminated. You can do your part by monitoring your own water use and connections within your home or business. For more information regarding cross-connection, please visit [www.deq.utah.gov](http://www.deq.utah.gov).

### TYPICAL RESIDENTIAL CROSS CONNECTIONS:



Hose Bibs



Toilet Ball-Cocks



Lawn Irrigation



Swimming Pools



Hot Tubs

## Drinking Water Contaminants

Drinking water sources include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and can pick up contamination from animal or human activity. Contaminants include microbial contaminants (viruses and bacteria), inorganic contaminants (salts and metals), pesticides and herbicides, organic chemicals (synthetic and volatile organic chemicals) and radioactive contaminants. The EPA prescribes regulations limiting the amount of certain contaminants in public water systems. We support these regulations and work daily to provide you with the best possible drinking water.

Your drinking water is treated and tested for more than 170 individual contaminants to ensure it meets all state and federal standards. Last year we conducted more than 19,000 tests; all met EPA and Utah DDW standards. The state allows us to monitor for some contaminants less than annually because their concentrations do not change frequently. Some of our data, though representative, is more than one year old. The table provides a listing of some compounds we analyze. Potential contaminants not detected are not listed.

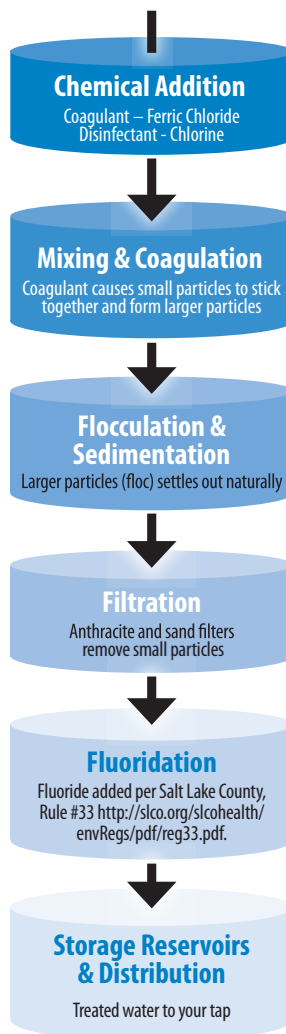
We also take part in federal programs aimed to assist with development and refinement of regulatory levels for possible contaminants. In 2013-2014 we participated in the EPA's Unregulated Contaminants Monitoring Rule. The results from that program are available at [www.slco.gov/DrinkingWater](http://www.slco.gov/DrinkingWater). In addition, we completed a two-year sampling program in 2016 under the EPA's Long-Term 2 Enhanced Surface Water Treatment Rule (LT2). This allows us to monitor for cryptosporidium and other disease-causing microorganisms in our source waters. Results from this program have been as expected and have not raised concerns. Starting this year through 2019 we will be participating in EPA's 4th Unregulated Contaminants Monitoring Rule program.

## Health Alert

Drinking water, including bottled water, may reasonably be expected to contain trace amounts of some contaminants. The presence of contaminants in drinking water does not necessarily indicate a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk for infections. If you fall within any of these categories, please seek advice about drinking water from your health care providers.

### Source Water Mountain Streams & Reservoirs



# 2017 Water Quality Report\*

TREATED SURFACE WATER SOURCES									
	MCL or TT Standards <sup>a</sup>	Parleys Water Treatment Plant	Big Cottonwood Water Treatment Plant	City Creek Water Treatment Plant	Metro Little Cottonwood Water Treatment Plant	Metro Point of the Mountain Water Treatment Plant	Jordan Valley Water Conservancy District	Range on Salt Lake City Wells	Source of Contaminant
<b>NATIONAL PRIMARY DRINKING WATER STANDARDS<sup>a</sup></b>									
Arsenic	10 ppb	ND	ND	ND	ND	ND	1.3	ND	Erosion of natural deposits
Barium	2000 ppb	101	37.9	25.5	63.8	63.3	63	16.4 - 114	Erosion of natural deposits
Chromium	100 ppb	ND	ND	ND	1.21	ND	0.10	ND	Discharge from steel and pulp mills
Cyanide	200 ppb	ND	ND	ND	ND	ND	ND	ND - 11.9	Discharge from steel/metal factories
Fluoride <sup>b</sup>	4000 ppb	698	720	706	490	632	420	125 - 613	Erosion of natural deposits
Nickel	100 ppb	ND	ND	ND	1.92	1.82	0.34	ND - 11.3	Erosion of natural deposits
Nitrate	10 ppm	0.10	0.34	0.19	0.3	0.3	1.3	0.21 - 4.63	Fertilizer runoff, septic tanks
Nitrite	1 ppm	ND	ND	ND	ND	ND	ND	ND - 0.1	Fertilizer runoff, septic tanks
Selenium	50 ppb	ND	0.6	0.8	ND	ND	0.6	ND	Mine discharge
<b>TURBIDITY**</b>									
Finished Water Annual Average	NTU	0.04	0.02	0.01	0.02	0.03	0.04	0.1- 2.37	Soil runoff
<b>RADIONUCLIDES (pCi/L)</b>									
Gross Alpha	15 pCi/L	ND	ND	ND	ND	0.6	2.7	1.6 - 3.3	Erosion of natural deposits
Radium 228	5 pCi/L	ND	ND	ND	ND	ND	0.6	ND - 0.78	Erosion of natural deposits
<b>DISTRIBUTION SYSTEM COMPLIANCE</b>									
Microbials	Presence/Absence	# Samples	% positive	Highest Monthly %					
E.coli	0%	2,580	0%	0%					Feces of humans and animals
Total Coliform	<5%	2,580	0.35%	1.62%					Naturally occurring and feces of humans and animals
<b>DISTRIBUTION SYSTEM DISINFECTION BY PRODUCTS</b>									
		SLC Avg <sup>b</sup>	SLC Max	SLC Min	Metro LCW Avg	Metro POMW Avg	JVWCD Avg		
Total Trihalomethanes	80 ppb	41	65	9	16	46	28	--	By-product of chlorination
Total Haloacetic Acids	60 ppb	39	70	12	16	51	23	--	By-product of chlorination
<b>DISTRIBUTION SYSTEM LEAD/COPPER<sup>c</sup></b>									
LEAD/COPPER	Action Level <sup>d</sup>	# Samples Before Flushing		90th Percentile Before Line Flushing <sup>e</sup>		90th Percentile After Line Flushing <sup>e</sup>			
Lead	15 ppb	57		6.8		1.26			Corrosion of household plumbing
Copper	1300 ppb	57		243.4		59.24			Corrosion of household plumbing
<b>NATIONAL SECONDARY DRINKING WATER STANDARDS<sup>a</sup></b>									
	Secondary MCL								
Aluminum	200 ppb	ND	ND	ND	ND	4.87	2.43	ND	Treatment chemicals
Chloride	250 ppm	235	40.9	9.35	37.1	36.5	38	17.8 - 208	Erosion of natural deposits
Iron	300 ppb	ND	ND	ND	133	133	24	ND	Erosion of natural deposits
Manganese	50 ppb	ND	ND	3.08	--	--	1	ND	Erosion of natural deposits
pH (in Units)	6.5-8.5	7.79	7.44	7.91	7.68	7.85	7.8	7.0 - 8.1	Erosion of natural deposits
Sulfate	250 ppm	44	38.5	11.9	31.8	34	38	33.6 - 292	Erosion of natural deposits
Total Dissolved Solids (TDS)	500 ppm	568	224	192	208	224	238	210 - 782	Erosion of natural deposits
Zinc	500 ppb	ND	ND	ND	--	--	0.001	ND - 17.3	Erosion of natural deposits
<b>ADDITIONAL DATA</b>									
Alkalinity as CaCO3	ur-ppm	189	110	191	94	108	119	119 - 268	Erosion of natural deposits
Bromide	ur-ppm	ND	ND	ND	ND	ND	ND	ND	Erosion of natural deposits
Calcium	ur-ppm	93.9	40.4	58.9	--	--	46.0	36.8 - 134	Erosion of natural deposits
Hardness as CaCO3	ur-ppm	312	158	218	133	150.3	163	149 - 509	Erosion of natural deposits
grains/gallon	calculated	18.2	9.2	12.7	7.8	8.8	9.5	8.7 - 29.8	Erosion of natural deposits
Non-Carbonate	calculated	123	48	27	39	42.1	44	30 - 241	Erosion of natural deposits
Magnesium	ur-ppm	18.9	13.8	17.2	--	--	20	13.1 - 42.2	Erosion of natural deposits
Molybdenum	ur-ppb	ND	2.85	ND	1.29	1.32	--	ND - 2.9	Erosion of natural deposits
Phosphate	ur-ppb	ND	ND	ND	ND	ND	2	ND - 50.3	Erosion of natural deposits
Potassium	ur-ppm	1.7	1.1	ND	--	--	5	ND - 3.8	Erosion of natural deposits
Sodium	ur-ppm	104	22.4	6.05	21.9	11.9	26.2	11.2 - 73	Erosion of natural deposits
Specific Conductance	µS/cm	1118	433	538	355	393	443	370 - 1252	Erosion of natural deposits
Total Organic Carbon (TOC)	ur-ppm	1.76	ND	ND	1.72	2.14	1.5	ND - 1.95	Decomposition of organic material
UV-254	ur-1/cm	ND	0.011	ND	0.022	0.02	0.02	ND - 0.013	Decomposition of organic material

\*\* SLC Public Utilities sets a goal of 0.1 NTU turbidity. All SLC Water Treatment Plants received the Partnership for Safe Water 15-Year Director's Award for superior water quality.

\* For full list visit our website [www.slcgov.com/utilities](http://www.slcgov.com/utilities)

## HOW TO READ THE CHART

Our water is routinely tested. The chart lists the most recent test results for the facilities listed and indicates the most likely source of the contaminant. The well data is a range of lowest and highest levels for wells.

<b>MCL</b>	Federal Maximum Contaminant Level: highest level of a contaminant that is allowed in drinking water	<b>ppm</b>	Parts per million (mg/L, 1 penny in \$10,000)
<b>ND</b>	Non detected: less than the analytical method can see	<b>ppb</b>	Parts per billion (ug/L, 1 penny in \$10 million)
<b>NTU</b>	Nephelometric Turbidity Units (turbidity is cloudiness)	<b>TT</b>	Treatment Technique
<b>pCi/L</b>	Picocuries per Liter (radioactivity unit)	<b>ur</b>	Unregulated with no EPA standard set
		<b>µS/cm</b>	Micro Siemens/centimeter
		-	Not Analyzed

<sup>a</sup> The US-EPA sets regulatory limits for the amounts of certain contaminants in water provided by public water systems. For more information visit [www.epa.gov/dwstandardsregulations](http://www.epa.gov/dwstandardsregulations).

<sup>b</sup> Highest monthly average or annual average.

<sup>c</sup> Most recent results for lead and copper are from 2015; additional sampling will be performed in 2018.

<sup>d</sup> Exceedence of the 90th Percentile Action Level for Lead and Copper would require additional actions to be taken.

<sup>e</sup> 90% of the results are less than equal to this concentration.

## Affiliations

SLC Public Utilities is a member of the American Water Works Association (AWWA), the American Water Works Research Foundation, Association of Metropolitan Water Agencies, American Water Resources Association, Partnership for Safe Water, Utah Water Quality Alliance, and the Salt Lake County Stormwater Coalition.

## Resources

Information about contaminants and potential health effects, testing methods, and steps you can take to minimize exposure, can be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791, or at

[www.epa.gov/ground-water-and-drinking-water](http://www.epa.gov/ground-water-and-drinking-water).

The Utah DDW and the EPA have excellent websites regarding lead in drinking water at [www.deq.utah.gov/Pollutants/L/lead/LeadinWater.htm](http://www.deq.utah.gov/Pollutants/L/lead/LeadinWater.htm) and [www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water](http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water).

For more information on fluoride in drinking water, please visit: [www.slco.org/uploadedFiles/depot/fHealth/regs/fluoridation.pdf](http://www.slco.org/uploadedFiles/depot/fHealth/regs/fluoridation.pdf).

## Salt Lake City Public Utilities Contact Information

**SLC Public Utilities Customer Service:**  
801-483-6900

**SLC Public Utilities 24-hour Emergency:**  
801-483-6700

**Water Quality Division**  
801-483-6832 or 801-483-6765

**Webpage**  
[www.slco.gov/utilities](http://www.slco.gov/utilities)

## Additional Contacts

**Utah Division of Drinking Water:**  
801-536-4200; [www.deq.utah.gov/Divisions/ddw](http://www.deq.utah.gov/Divisions/ddw)

**Salt Lake County Health Department:**  
385-468-3860; [www.slco.org/health](http://www.slco.org/health)

**EPA Safe Drinking Water Hotline:**  
800-426-4791

**For questions on this report:**

**Marian L. Rice**

Water Quality & Treatment Administrator  
Salt Lake City Department of Public Utilities  
801-483-6700 (24-hour customer service number)



## Frequently Asked Questions

### Is lead a concern in Salt Lake City's Water?

Lead in drinking water is a topic of important national discussion. Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily caused by leaching from plumbing materials and components associated with service lines and home plumbing. SLC Public Utilities removed lead pipes from the drinking water distribution system many years ago, but we do not control the materials used in household plumbing components. If your water has been sitting in your in-home plumbing lines 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 can have your water tested. Please contact our SLC Public Utilities Water Quality Division for assistance.

Under the EPA Lead and Copper Rule ([www.epa.gov/dwreginfo/lead-and-copper-rule](http://www.epa.gov/dwreginfo/lead-and-copper-rule)), public water systems such as SLC Public Utilities take part in annual to triennial lead and copper sampling and analysis from consumers' homes. SLC Public Utilities is on the three-year schedule. Our 2015 results for lead and copper were very similar to our historical levels and in line with those across the state. Results indicated that concentrations of lead and copper were below the EPA action levels (refer to the accompanying table). If you are interested in taking part in the next round of lead and copper sampling, to be completed this year, summer of 2018, please visit [www.slco.gov/DrinkingWater](http://www.slco.gov/DrinkingWater) for more information.

Homes will be selected based on the age and type of plumbing materials present as well as a distribution of locations spread throughout our water system.

### Is Fluoride added to SLC Public Utilities water supply?

In 2003, voters in Salt Lake County passed Rule #33 mandating Regulated Public Water Suppliers to fluoridate the water supplied to their customers, and the Salt Lake County Health Department is responsible for implementation of this rule. Fluoride is added to our water supply with a finished water goal of 0.7 milligrams per liter (mg/L). Please check with your health care provider for specifics on fluoride intake for you, your infant, and your family. For more information please visit [www.slco.org/uploadedFiles/depot/fHealth/regs/fluoridation.pdf](http://www.slco.org/uploadedFiles/depot/fHealth/regs/fluoridation.pdf).

### 800 South - 500 East artesian well and Liberty Park artesian drinking fountain.

Although not part of the SLC Public Utilities system, the 800 South 500 East artesian well and the Liberty Park artesian drinking fountain (located in the southeast corner of the park) are routinely monitored by our staff. These natural water sources meet federal and state requirements for drinking water. However, low levels of perchlorate, a compound that may be naturally occurring or related to explosives manufacturing, have been detected in the 800 South 500 East artesian well. The levels detected are below what the EPA considers a concern and this compound is not currently regulated in Utah. For more information, please visit [www.slco.gov/artesianwells](http://www.slco.gov/artesianwells).

## Stormwater

We monitor the quality of our stormwater discharges to ensure that stormwater is clean as possible before discharging to our creeks and rivers. Please help us in this effort by keeping plastic bottles, leaves, grass and other pollutants out of storm drains. If you observe a clogged storm drain or illegal discharge, please report the incident to 801-483-6700 (SLC Public Utilities 24-hour dispatch) or 801-580-6681 (Salt Lake County Health Department 24-hour hot line).

