



WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT

2017 Annual Drinking Water Quality Report

Sites: Sand Hollow Wells; Utah System #27073
Hurricane City; Utah System #27007

Source: Ground water

Serves: Sky Ranch and Cliff Dwellers

Executive summary:

The Sand Hollow Wells and Hurricane City water sources met or surpassed all federal and state health and safety requirements, but nitrate and radium 228 were not monitored as required in 2017.

Washington County Water Conservancy District (WCWCD) will continue monitoring the quality, treatment and sustainability of all its water sources to preserve and protect our current and future supply.

About this report:

The Environmental Protection Agency (EPA) requires the monitoring of more than 80 contaminants. The contaminants listed on the following chart were discovered in this water source.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. **All 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 (1.800.426.4791).

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, persons 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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline.

While your drinking water meets EPA's standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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. The WCWCD 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 [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead).

Protecting your water source:

A drinking water source protection plan for the Sand Hollow Wells is available at the WCWCD office. The plan includes information about source protection zones, potential contamination sources and management strategies to protect our drinking water.

One common source of contamination is cross connections – any connection not properly protected by a backflow protection device that allows polluted water or chemicals to enter the water supply system. This can be as simple as a hose-end sprayer used to fertilize or apply pesticides. WCWCD encourages all water users to not make or allow improper connections due to its potential adverse effects on our water supply, the community and its residents.

Additional information:

Customers desiring to know more about their water utility can contact the WCWCD offices at 435.673.3617 or attend one of our regularly scheduled board meetings. Visit www.wcwcd.org/about-us/management/board-of-trustees-meeting-schedule/ for the schedule.

Reporting agency contact:

Ron Thompson
Washington County Water Conservancy District
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St. George, UT 84770
435.673.3617

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
Monitoring Requirements Not Met for Sand Hollow Wells

The Washington County Water Conservancy District (WCWCD) is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

What happened:

WCWCD failed to perform the monitoring requirements for nitrate and radium 228 for a well that supplies water to the Hurricane Valley Water System in 2017.

What is being done:

Upon discovering the error, WCWCD immediately sampled the well for nitrate and radium 228. The result for nitrate was 1.3 parts per million (ppm), which is below the EPA's maximum contaminant level of 10 ppm and is consistent with the nitrate result of 1.7 ppm for the well 2016. The result for radium 228 was 0.45 picocuries per liter (pCi/L), which is below the EPA's maximum contaminant level of 5 pCi/L and is consistent with the 2016 radium 228 result of 0.34 pCi/L for the well.

What should I do:

There is nothing you need to do at this time; however, please share this information with other people who drink this water but may not have received this notice directly.

Contact Information:

For additional information on the monitoring requirements or water quality of the Hurricane Valley Water system, contact Brie Thompson at 435.673.3617.

This notice is being sent to you by:

WCWCD/Hurricane Valley Water System (Utah System #27073)

Date distributed:

June 29, 2018

WATER QUALITY TEST RESULTS								
Contaminant	Unit	Hurricane City Water	Sand Hollow Wells	MCL (EPA Limit)	MCLG (EPA Goal)	Year(s) Sampled	Violation	Possible Sources of Contamination
Alpha Emitters	pCi/L	1 - 14	1	15	0	2016 & 2015	No	Erosion of natural deposits
Arsenic	ppb	RAA = 8 Range = 1-12		RAA = 10	0	2017	No	Erosion of natural deposits
Barium	ppb	19 - 67	80 - 81	2,000	2,000	2017, 2016 & 2015	No	Erosion of natural deposits
Copper	ppb	90% of homes < 92		AL = 1,300	1,300	2017	No	Erosion of natural deposits; corrosion of household plumbing
Fluoride	ppm	ND	0.2	4	4	2016	No	Erosion of natural deposits
Free Chlorine	ppm	Average = 0.7		MRDL = 4	MRDLG = 4	2017	No	Water additive used to control microbes
Haloacetic Acids	ppb	2		60	0	2017	No	By-product of drinking water disinfection
Lead	ppb	90% of homes < 4		AL = 15	0	2017	No	Corrosion of household plumbing
Nitrate (as Nitrogen)	ppm	1 - 3	1 - 2	10	10	2017 & 2016	Yes*	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Radium 226	pCi/L	1	1	5	0	2016	No	Erosion of natural deposits
Radium 228	pCi/L	1	0.4	5	0	2016 & 2015	Yes*	Erosion of natural deposits
Selenium	ppb	2 - 6	5 - 9	50	50	2017, 2016 & 2015	No	Erosion of natural deposits
Sodium	ppm	18 - 84	46 - 96	NE	NE	2017, 2016 & 2015	NA	Erosion of natural deposits
Sulfate	ppm	NA	86 - 198	500**	NE	2016 & 2015	No	Erosion of natural deposits
Total Dissolved Solids	ppm	364 - 656	304 - 690	1,000**	NE	2017, 2016 & 2015	No	Erosion of natural deposits
Turbidity	NTU	0 - 6	0 - 5	TT	NE	2016 & 2015	No	Naturally present in the environment
Trihalomethanes	ppb	10		80	0	2017	No	By-product of drinking water disinfection

**Nitrate and radium 228 were not sampled for a well in 2017 as required. Nitrate concentration for that well was 1.7 ppm in 2016 & 1.3 ppm in 2018. Radium 228 concentration for that well was 0.34 pCi/L in 2016 & 0.45 pCi/L in 2018.

**Although the EPA has not established an MCL for sulfate or total dissolved solids, the Utah Division of Water Quality requires a sulfate concentration of less than 500 ppm and a total dissolved solids concentration less than 1,000 ppm unless a water system has no other water sources available.

Glossary

Action Level (AL) – Concentration of a contaminant which, if exceeded, triggers treatment or other requirements to which a water system must follow.

Maximum Contaminant Level (MCL) – 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.

Maximum Contaminant Level Goal (MCLG) – 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.

Maximum Residual Disinfectant Level (MRDL) – Highest level of a disinfectant allowed in drinking water. There is convincing evidence addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) – Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

None Established (NE) – MCL or MCLG has not been established for particular contaminant.

Non-Detect (ND) – Not detected above reporting limits of laboratory analysis.

Not Applicable (NA) – Violation is not applicable because the EPA has not established an MCL for particular contaminant.

Parts per million (ppm) – One part per million is a unit that represents 1 part contaminant in 1,000,000 parts water. In water applications, one part per million is also equivalent to 1 milligram per liter (mg/L).

Parts per billion (ppb) – One part per billion is a unit that represents 1 part contaminant in 1,000,000,000 parts water. In water applications, one part per billion is also equivalent to 1 microgram per liter (ug/L).

Picocuries per Liter (pCi/L) – Picocuries per liter is a measure of the radioactivity in water.

Range – Range of highest and lowest laboratory results.

Running Annual Average (RAA) – Highest running annual average of four consecutive quarters when sampling occurs quarterly.

Treatment Technique (TT) – EPA requires process intended to reduce the level of a contaminant in drinking water.

Year Sampled – WCWCD is allowed to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some data, though representative, are more than one year old. Systems with more than one source may have multiple dates listed.

Retail Water Line Ownership

A retail water line is a pipe that connects a property to a public retail provider's main water line. The Washington County Water Conservancy District owns the segment of each retail water line that connects the main water line to the water meter. After the meter, the customer owns the retail water line. Any repairs to or replacement of water lines after the water meter are the responsibility of the property owner.