In 2001, Running Springs Water District completed a source water assessment to determine the contamination vulnerabilities of Running Springs Water District's water resources. Our sources are considered vulnerable to contamination from historic dumps/landfills, sewer collection systems, high density housing, storm drain discharges, utility maintenance areas and illegal and/or unauthorized dumping. You may request a copy of the assessment by contacting the California State Water Resources Control Board, Division of Drinking Water at (909) 383-4320 or the Running Springs Water District at (909) 867-2766.

Source No.	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected
8	Horizontal Well 041I	Historic waste dumps/landfills	None
9	Horizontal Well 041J	Historic waste dumps/landfills	None
11	Luring Canyon Vertical Well	Housing-high density	Arsenic
		Sewer Collection System	None
16	Sidewinder Canyon Vertical 05	Wells-Water Supply	None
17	Sidewinder Vertical Well 01A	Wells-Water Supply	None
18	Sidewinder Vertical Well 03	Wells-Water Supply	None
	Weiss Canyon Vertical	Sewer Collections Systems	None
22	Rimwood Vertical Well #2 Well	Wells-Water Supply	None
28	Horizontal Well 86-7-13H	Sewer Collections Systems	None
29	Horizontal Well 04D	Sewer Collections Systems	None
31	Owl Rock Vertical Well	Illegal activities/unauthorized dumping	None
33	Horizontal Well 96-6-16H	Sewer Collections Systems	None
		Historic waste dumps/landfills	None
34	Luring Pines Well	Housing-high density	Nitrate
		Sewer Collections Systems	Nitrate
		Storm Drain Discharge Points	None
50	Ayers Well 2	Sewer Collections System	None
101	District Complex Vertical Well	Sewer Collections Systems	None
		Utility stations-maintenance areas	None
103	Horizontal Well 98-9-17H	Wells-Water Supply	None
104	Horizontal Well 98-9-18H	Historic waste dumps/landfills	None
105	Harris Vertical Well	Sewer Collections Systems	None

- ppm - Parts per million
- ppb - Parts per billion
- mg/L- Milligrams per liter = ppm
- ug/L- Microgram per liter = ppb
- pCi/l - picoCuries per liter is a measure of the radioactivity in water.
- 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. Turbidity is a measure of the cloudiness of water. We monitor turbidity because it is a good indicator of water quality. High Turbidity can hinder the effectiveness of disinfectants.
- TDS - Total Dissolved Solids
- MCL- Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as economically and technologically feasible. Secondary taste and appearance of drinking water.
- MCLG- Maximum Contaminant Level Goal is the 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.
- PDWS- Primary Drinking Water Standard: MCL's for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- PHG- Public Health Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- Range- Lowest to Highest
- N/S- No Standard
- ND- Non-Detect
- Micromos- One Millionth of OHM.

RUNNING SPRINGS WATER DISTRICT
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RUNNING SPRINGS WATER DISTRICT
2019 Annual Water Quality Report

Running Springs Water District 2019 Annual Drinking Water Consumer Confidence Report (CCR)

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien

Board of Directors – Mark Acciani, Bill Conrad, Anthony Grabow, Errol Mackzum, Michael Terry

Public Water System ID#: 3610062

The District Customers are encouraged to continue to voluntarily limit outdoor irrigation of ornamental landscapes or turf with potable water to two or three days per week. Please visit the Running Springs Water District website at: http://www.runningspringswaterdistrict.com/ for additional water conservation information.

We are pleased to present the District's Annual Water Quality Consumer Confidence Report (CCR) for calendar year 2019. This Report is designed to provide information regarding the quality of water we deliver to you every day. Our goal is, and always has been, to provide a safe and dependable supply of drinking water.

Your water primarily comes from groundwater wells located throughout the Running Springs Water District. Other sources include imported State Water Project water purchased from the Crestline-Lake Arrowhead Water Agency (CLAWA) and groundwater purchased from Arrowbear Park County Water District (ABPCWD).

Running Springs Water District, CLAWA and ABPCWD routinely monitor for contaminants in your drinking water according to Federal and State laws. The State allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The tables in this report illustrate the results of our monitoring from January 1 to December 31, 2019. We are presenting the water quality report data and tables from our purchased water suppliers, CLAWA and ABPCWD, in essentially the same format that they were provided to us.

If you have any questions about this report, please contact the District, Safety Compliance Operator at (909) 867-2766. We want our valued customers to be informed about their water utility. If you would like to learn more, please attend any of our regularly scheduled Board Meetings which are held on the 3rd Wednesday of each month at 9:00am in the District's Board room located at 31242 Hilltop Blvd., Running Springs, CA 92382.

The District's Board of Directors and Staff strive to meet your service needs. We are always interested in your comments and suggestions and ask that all our customers help us protect our water resources. If you have suggestions to help us improve our service or would like more information, please contact us at (909) 867-2766 or visit our website at www.runningspringswd.com.

Running Springs Water District / 2019 Water Quality Report

TEST RESULTS

Contaminants	MCL	PHG (MCLG)	Average Level	Range of Detection	Sample Dates	Violation Yes/No	Typical Source of Contamination
PRIMARY STANDARDS* **							
Microbiological							
Turbidity *(NTU)	5	NS	.23	ND-1.10	2017-2019	No	Soil Runoff
Disinfection Byproducts**							
Total Trihalomethanes (TTHM) (ppb)	80	NS	6.28	3.1-8.1	2019	No	Byproduct of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	60	NS	0.26	ND-1.1	2019	No	Byproduct of drinking water disinfection.
Inorganics							
Fluoride (ppm)***	2	1	0.02	ND-.12	2017-2019	No	Erosion of natural deposits, water additive to promote strong teeth.
Nitrate (as NO3) (ppm) Monitored yearly	45	45	0.57	ND-1.4	2019	No	Runoff/leaching from fertilizer use. Leaching from septic tanks, sewage and erosion of natural deposits.
Arsenic (ppm)	10	4	1.07	ND-9.6	2017-2019	No	Erosion of natural deposits, runoff from orchards, glass, and electronics production waste.
RADIOLOGICAL CONTAMINANTS**							
Gross Alpha Activity (pCi/L)	15	N/S	3.62	ND-13.25	2017-2019	No	Erosion of natural deposits.
Uranium (pCi/L)	20	N/S	3.94	ND-12.55	2017-2019	No	Erosion of natural deposits.
SECONDARY STANDARDS***							
Chloride (ppm)	500	N/S	18.48	6.71-41.0	2017-2019	No	Runoff/leaching from natural deposits, sea water influence.
Corrosivity	Non-Corrosive	N/S	11.29	10.25-12.17	2017-2019	No	Natural/industrial-influenced balance of hydrogen, carbon, and oxygen in water affected by temperature and other factors.
Sulfate (ppm)	500	N/S	3.71	ND-8.90	2017-2019	No	Runoff/leaching from natural deposits, industrial waste.
Total Dissolved Solids (TDS)	1000	N/S	164.11	97-270	2017-2019	No	Runoff/leaching from natural deposits.
Specific Conductance (micromhos)	1600	N/S	280	180-430	2017-2019	No	Substances that form ions when in water, sea water influence.
Odor (Threshold)	3	N/S	1	1	2017-2019	No	Naturally occurring organic chemicals.
OTHER CONTAMINANTS***							
Sodium (ppm)	N/S	N/S	13.68	8.5-26	2017-2019	No	Erosion of natural deposits.
Potassium (ppm)	N/S	N/S	2.78	1-3.8	2017-2019	No	Erosion of natural deposits.
Magnesium (ppm)	N/S	N/S	9.68	3.9-17	2017-2019	No	Erosion of natural deposits.
Calcium (ppm)	N/S	N/S	30.44	17-44	2017-2019	No	Erosion of natural deposits.
Total Hardness (ppm)	N/S	N/S	115.78	59-170	2017-2019	No	Erosion of natural deposits.

LEAD AND COPPER – Lead and Copper are required as a Treatment Technique under the Lead and Copper Rule which requires systems to take water samples at the consumer's tap every three years. Results are from 2019. Schools were tested in 2019.

	90th Percentile Result	Unit Measurement	MCL	PHG	
Lead	7.1	ppb	15	2	Internal corrosion of household plumbing systems, discharge from industrial manufacturing, erosion of natural deposits.
Copper	420	ppb	1300	300	Internal corrosion of household plumbing systems, erosion of natural deposits.

* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can inhibit the effectiveness of disinfectants.
** Radiological Contaminants – Four (4) quarterly samples are required ever four (4) years.
*** Monitored every 3 years
**** Results are calculated on a locational running annual average.

As the tables show, we did not exceed the maximum contaminant level for any of the contaminants tested. Our drinking water exceeds Federal and State Standards. There may be terms and abbreviations you may not be familiar with, so we are providing these definitions on the following page to help you better understand them. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The Presences of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at (800) 426-4791.

Crestline-Lake Arrowhead Water Agency / 2019 Water Quality Report

Test Results

Contaminant	Avg. Level Detected	Range of Levels Detected	Units	MCL	PHG	Major Sources in Drinking Water
Primary Standards						
Total Trihalomethanes*	46.9*	24.6-68.6	uG/l	80	N/A	Byproduct of drinking water disinfection
Haloacetic Acids*	4.6*	0-9.0	uG/l	60	N/A	Byproduct of drinking water disinfection
Inorganic Chemicals						
Fluoride (naturally occurring)	0	0-0	mg/l	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as N)	.03	0-.40	mg/l	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Secondary Standards						
Chloride	71.00	36-110	mg/l	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate	39.25	31-48	mg/l	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	251.88	170-330	mg/l	1000	N/A	Erosion of natural deposits
Other Constituents						
Sodium	61.38	40-87	mg/l	N/A	N/A	"Sodium" refers to the salt present in the water and is generally naturally occurring
Total Hardness	83.88	59-110	mg/l	N/A	N/A	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring
Odor-Threshold	1	1-1	TON	3	N/A	Naturally occurring organic materials
Unregulated Contaminants						
Boron	90	0-160	uG/l	1000	N/A	Erosion of natural deposits
Vanadium	0	0-0	uG/l	50	N/A	Erosion of natural deposits
pH	8.14	7.7-8.4	Unit	6.5-8.5	N/A	

*Total Trihalomethanes and Haloacetic Acids are reported as the Highest Locational Running Annual Average.

Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique (a) (Type of approved filtration technology used)	Conventional Treatment with multimedia pressure filters
Turbidity Performance Standards (b) (that must be met through the water treatment process	Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	100%
Highest single turbidity measurement during the year	0.2 NTU
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.
(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

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. USEPA/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 Safe Drinking Water Hotline (800) 426-4791.

The sources of drinking water (both tap water and bottled) 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 presented in source water include:

- Micro contaminants, such as viruses, and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas productions, mining, or farming.
- Pesticides and herbicides, that 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 that are byproducts of industrial processes and petroleum production, and can also come for gas stations, urban storm water runoff, agricultural application and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

Arrowbear Park County Water District / 2019 Water Quality Report

Test Results

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	PHG (MCLG)	Typical Source of Bacteria
No Microbiological contaminants (Total Coliform Bacteria or Fecal Coliform or *E. Coli*) were detected during weekly routine sampling.			1 positive monthly sample.	0	Coliforms- Naturally present in the environment, *E. coli*- Human and animal fecal waste.

Lead and Copper	Sample Date	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	PHG (MCLG)	Typical Source of Contaminant
Lead (ppb)	8/15/17	11	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	8/15/17	11	.15	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Contaminant/ Constituent	Violation Y/N	Avg. Level Detected	Range of Detections	Unit of Measurment	MCL	PHG MCLG	Typical Source of Contaminant
Radioactive Contaminants							
Alpha Activity, Gross	N	0.21	ND-3.5	pCi/l	15	NONE	Erosion of Natural Deposits.
Uranium	N	.02	ND-1.0	pCi/l	20	NONE	Erosion of Natural Deposits.
Inorganic Chemical Contaminants							
Nitrate as N (NO3-N)	N	.114	ND - 0.57	mg/l	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Fluoride*	N	0.08	ND – 0.15	mg/l	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Disinfection Byproducts (Trihalomethanes/Haloacetic Acids							
Total Trihalomethanes	N	ND	None	ug/l	80	80	Byproduct of drinking water disinfection.
Total Haloacetic Acids	N	ND	None	ug/l	60	60	Byproduct of drinking water disinfection.
Secondary Standards							
Chloride*	N	3.32	1.5 - 3.9	mg/l	500	NONE	Runoff/leaching from natural deposits; seawater influence.
Sulfate*	N	2.08	1.6 – 2.4	mg/l	500	NONE	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance*	N	258	240 – 280	uS/cm	1600	NONE	Substances that form ions when in water, seawater influence.
Odor Threshold	N	1.0	1.0 – 1.0	TON	3	NONE	Naturally-occurring organic materials.
Total Dissolved Solids*	N	160	150-190	mg/l	1000	NONE	Runoff/leaching from natural deposits.
Turbidity*	N	0.1	ND-0.2	NTU	5	NONE	Soil runoff.
Other Constituents							
Calcium*	N	37.8	33-42	mg/l	NONE	NONE	Erosion of natural deposits.
Magnesium*	N	2.3	2.0-2.5	mg/l	NONE	NONE	Erosion of natural deposits.
Sodium*	N	15.8	14-17	mg/l	NONE	NONE	Naturally occurring salts.
Bicarbonate (HCO3)	N	160	140-180	mg/l	NONE	NONE	Erosion of natural deposits.
Total Hardness*	N	102.2	91-110	mg/l	NONE	NONE	Sum of polyvalent cations present.

*Testing/sampling required once every three years. Data present in the table is from testing/sampling done in 2017 in accordance with the regulations. Next testing/sampling for these constituents is due in 2020.

**Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can also hinder the effectiveness of disinfectants.

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT

Violation	Explanation	Duration	Actions taken to Correct the Violation	Health Effects Language
No violations occurred in 2019				

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW) limit the amount of certain contaminants in water provided by public water systems. SWRCB-DDW regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

In order to ensure that tap water is safe to drink, USEPA and the SWRCB-DDW prescribe regulations that limit the number of certain contaminants in water provided by public water systems. SWRCB-DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead: 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. Running Springs Water District 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/lead.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.