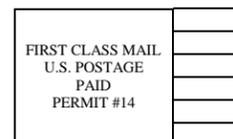


- ppm – Parts per million
- ppb – Parts per billion
- mg/L – Milligrams per liter=ppm
- ug/L – microgram per liter =ppb
- pCi/l – picoCuries per liter is a measure of the radioactivity in water.
- NTU – Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is 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 is 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
- Micromhos – One millionth of OHM.

Source No.	Source ID	Most Vulnerable Activities (PCA)	Chemical detected
8	Horizontal Well 04I	Historic waste dumps/landfills	None
9	Horizontal Well 04J	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
19	Weiss Canyon Vertical	Sewer collection systems	None
22	Rimwood Vertical #2 Well	Wells-Water Supply	None
28	Horizontal Well 86-7-13H	Sewer collection systems	None
29	Horizontal Well 04D	Sewer collection systems	None
31	Owl Rock Vertical Well	Illegal activities/unauthorized dumping	None
33	Horizontal Well 96-6-16H	Sewer collection systems	None
		Historic waste dumps/landfills	None
34	Luring Pines Well	Housing-high density	Nitrate
		Sewer collection systems	Nitrate
		Storm Drain Discharge Points	None
101	District Complex Vertical Well	Sewer collection 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 collection systems	None

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 dump/landfills, sewer collection system, high density housing, storm drain discharge, utility maintenance areas, and illegal unauthorized dumping. You may request a copy of the assessment by contacting the California Department of Public Health Sanitary Engineer at (909) 383-5289 or the Running Springs Water District at (909) 867-2766.

RUNNING SPRINGS WATER DISTRICT  
Post Office Box 2206  
Running Springs, CA 92382-2206



## RUNNING SPRINGS WATER DISTRICT 2013 Annual Water Quality Report



JUNE 2014

REPORT

# Running Springs Water District 2013 Water Quality Report

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

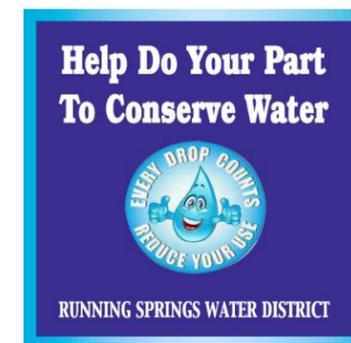
BOARD OF DIRECTORS – KEN AYERS, ED BRITTAIN, PAMELLA BENNETT, MICHAEL TERRY, HENRY HEREDIA

The Running Springs Water District provides our customers with water produced from District wells, purchased water from Arrowbear Park County Water District (well water), and Crestline Lake Arrowhead Water Agency (treated surface water). All water distributed to our customers depends upon rain/snow fall. For the past two years in Running Springs we have received below average precipitation. On January 17, 2014, Governor Brown issued a drought state of emergency declaration in response to record low water levels in California's rivers and reservoirs as well as an abnormally low snowpack. The Governor's proclamation called upon all Californians to reduce their water usage by 20 percent.

Water awareness is an important part of water conservation and the following will help our community reduce water consumption and at the same time lower the water bill. Here are some useful tips to help with conservation of our valuable water resources:

- Verify that your home is leak free. Read your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there is a leak.
- Repair dripping faucets. A faucet dripping at a rate of one drop per second will waste 2,700 gallons per year. This water travels to the sewer treatment plant adding cost not only to your water bill, but also the sewer treatment cost.
- Fix leaking toilets. To check for a toilet leak, place a few drops of food coloring in the tank and wait. If it seeps into the bowl without flushing, there is a leak.
- Operate automatic dishwashers and clothes washers only when they are fully loaded.
- Insulate your water pipes. You will get hot water faster and avoid wasting water while it heats up. This will also reduce the energy required to heat the wasted water.
- Do not hose down your driveway or sidewalk. Use a broom to clean these areas.
- Do not leave sprinklers or hoses unattended. A garden hose can pour out 600 gallons or more in only a few hours.
- Report all significant water losses (broken pipes, errant sprinklers, etc.) to the property owner, or if no one is home, to the District office.
- Report any water flowing down the street, coming up through the street or pooling where you think it shouldn't. Any one of these observations could indicate a water main or service line leak. A service person will be dispatched to investigate and determine if action is needed. This is often how water leaks are discovered and the District appreciates your concern and help.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save up to 750 gallons per month.
- Before winter, drain sprinkler systems and turn the water supply off to the sprinklers.
- If the home will be vacant for extended periods, be sure to turn the water off at the home owner shut-off valve and drain the lines in the home. This will help prevent costly leaks and water damage to unoccupied homes.
- Reduce outdoor irrigation and restrict watering to between the hours of 6pm and 8am.
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information on ways to conserve water.

Try to do one thing each day that will result in saving water and remind your friends and neighbors to do the same. Don't worry if the savings are minimal. Every drop counts and we can all make a difference.



**Running Springs Water District - 2013 Water Quality Report**

TEST RESULTS						
Contaminants	MC (MCLG)	PHG (MCLG)	Average Level	Range of Detection	Sample Dates	Violation Yes/No

PRIMARY STANDARDS						
Turbidity* (NTU)	5	NS	0.06	ND-0.4	11/06/13	No

RADIOLOGICAL CONTAMINANTS**						
Fluoride (ppm)	2	1	0.08	ND-0.19	06/12/13	No
Nitrate as Nitrogen (ppm)	10	10	0.48	ND-1.4	08/10/11	No
Nitrate (asNO3)	45	45	2.56	ND-6.3	01/19/13	No

SECONDARY STANDARDS						
Chloride (ppm)	500	N/S	18.45	11-38	06/12/13	No
Corrosivity	Non Corrosive	N/S	11.48	10.44-12.22	01/12/13	No
Zinc (ppb)	5000	N/S	13.75	ND-110	06/12/13	No
Sulfate (ppm)	500	N/S	4.3	ND-10.0	06/12/13	No
Total Dissolved Solids (TDS)	1000	N/S	167.75	92-230	06/12/13	No
Specific Conductance (Microhmhos)	1600	N/S	301.25	180-440	06/12/13	No
Odor (Threshold)	3	N/S	1	1	01/12/11	No

OTHER CONTAMINANTS						
Sodium (ppm)	N/S	N/S	13.48	7.8-21	01/12/11	No
Potassium (ppm)	N/S	N/S	2.41	ND-4.4	06/12/13	No
Magnesium (ppm)	N/S	N/S	9.75	3.4-17	06/12/11	No
Calcium (ppm)	N/S	N/S	30.5	15.44	01/12/11	No
Hardness (ppm)	N/S	N/S	112.87	48-170	06/12/13	No

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 2013						
Contaminant	90th Percentile Result	Unit Measurement	MCL	PHG	Likely Source of Contaminant	
Lead	5.6	ppb	15	2	Internal corrosion of household plumbing systems, discharge from industrial manufacturing, erosion of natural deposits	
Copper	280	ppb	1300	300	Internal corrosion of household plumbing systems, erosion of natural deposits	

UNREGULATED CONTAMINANTS						
Iron	17.5	ug/L	0-280	300	N/A	Leaching from natural deposits; industrial wastes
Lead	.61	ug/L	0-9.7	15	2	Internal corrosion of household water systems; discharges from industrial manufacturers; erosions of natural deposits
Odor-Threshold	1	TON	1-1	3	N/A	Naturally-occurring organic materials
Boron	150.63	ug/L	110-220	1000	N/A	Erosion of natural deposits
Vanadium	1.35	ug/L	0-6.3	50	N/A	Erosion of natural deposits
pH	8	Unit	7.8-8.2	6.5-8.5	N/A	

PRIMARY STANDARDS						
Turbidity	0.1	N	<0.1-0.1	NTU	5	NS
Radioactive Contaminants						
Alpha Activity, Gross	0.0	N	0.0-0.0	pCi/l	15	(N/A) Erosion of natural deposits.
Uranium	0.0	N	0.0-0.0	pCi/l	20	(N/A) Erosion of natural deposits.
Inorganic Chemical Contaminants*						
Nitrate (as NO3)	ND	N	None	ug/l	45	Runoff from fertilizer use.
Iron	ND	N	None	ug/l	300	NS
Fluoride	.124	N	0.0- .19	mg/l	2	1
Chloride	3.72	N	1.9-6.0	mg/l	500	NS
Sulfate	2.16	N	1.7- 2.6	mg/l	500	NS
Specific Conductance	248	N	230-270	uS	1600	NS
Natural occurring or leachates.	1	Units	3			
Total Dissolved Solids (TDS)	150	N	140-160	mg/l	1000	NS
Other Constituents*	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Calcium	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Magnesium	2.34	N	1.9-2.6	mg/l	NS	Erosion of natural deposits.
Sodium	15	N	13-19	mg/l	NS	Erosion of natural deposits.
Potassium	ND	N	None	mg/l	NS	Erosion of natural deposits.
Total Hardness	98.8	N	91-120	mg/l	NS	Erosion of natural deposits.

TEST RESULTS						
Contaminant	Column	Violation Y/N	Avg. Level Detected	Range	Unit (MCLG)	Likely Source of Contamination
Turbidity**	0.1	N	<0.1-0.1	NTU	5	Soil runoff.
Microbiological Contaminants						
Major Sources in Drinking Water						
Average Level Detected	Range of Levels Detected	Units	MCL	PHG		

TEST RESULTS						
Turbidity	.04	N/A	0- 2	TT	5	Soil runoff.
Total Trihalomethanes	21	N/A	2.6-7.7.6	ug/L	80	By-Product of drinking water disinfection
Haloacetic Acids	2.2	N/A	0-10.8	ug/L	60	By-Product of drinking water disinfection
Aluminum	13	60	0-98	ug/L	200	Erosion of natural deposits; residue from some surface water treatment processes

We are pleased to present this year's Annual Water Quality Report. 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 comes from wells located throughout the Running Springs Water District and from water purchased from Crestline-Lake Arrowhead Water Agency, and from Arrowbear Park County Water District.

"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 of our customers help us protect our water sources. If you have suggestions to help us improve our service, please contact us at (909) 867-2766."

**Crestline-Lake Arrowhead Water Agency - 2013 Water Quality Report**

TEST RESULTS						
Contaminant	Average Level Detected	Range of Levels Detected	Units	MCL	PHG	Major Sources in Drinking Water

PRIMARY STANDARDS						
Turbidity	0.1	N/A	0- 2	TT	5	Soil runoff.
Radioactive Contaminants						
Alpha Activity, Gross	0.0	N	0.0-0.0	pCi/l	15	(N/A) Erosion of natural deposits.
Uranium	0.0	N	0.0-0.0	pCi/l	20	(N/A) Erosion of natural deposits.
Inorganic Chemicals						
Nitrate (as NO3)	ND	N	None	ug/l	45	Runoff from fertilizer use.
Iron	ND	N	None	ug/l	300	NS
Fluoride	.124	N	0.0- .19	mg/l	2	1
Chloride	3.72	N	1.9-6.0	mg/l	500	NS
Sulfate	2.16	N	1.7- 2.6	mg/l	500	NS
Specific Conductance	248	N	230-270	uS	1600	NS
Natural occurring or leachates.	1	Units	3			
Total Dissolved Solids (TDS)	150	N	140-160	mg/l	1000	NS
Other Constituents*	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Calcium	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Magnesium	2.34	N	1.9-2.6	mg/l	NS	Erosion of natural deposits.
Sodium	15	N	13-19	mg/l	NS	Erosion of natural deposits.
Potassium	ND	N	None	mg/l	NS	Erosion of natural deposits.
Total Hardness	98.8	N	91-120	mg/l	NS	Erosion of natural deposits.

SECONDARY STANDARDS						
Chloride	73-120	mg/L	500	N/A	500	Runoff/leaching from natural deposits; seawater influence
Sulfate	41-68	mg/L	500	N/A	500	Runoff/leaching from natural deposits; industrial wastes
Zinc	4.94	ug/L	5000	N/A	5000	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	300	mg/L	220-350	N/A	1000	Erosion of natural deposits

OTHER CONSTITUENTS						
Sodium	69.13	mg/L	56-82	N/A	N/A	"Sodium" refers to the salt present in the water and is generally naturally occurring
Total Hardness	132.06	mg/L	98-310	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
Lead	.61	ug/L	0-9.7	15	2	Internal corrosion of household water systems; discharges from industrial manufacturers; erosions of natural deposits
Odor-Threshold	1	TON	1-1	3	N/A	Naturally-occurring organic materials
Boron	150.63	ug/L	110-220	1000	N/A	Erosion of natural deposits
Vanadium	1.35	ug/L	0-6.3	50	N/A	Erosion of natural deposits
pH	8	Unit	7.8-8.2	6.5-8.5	N/A	

UNREGULATED CONTAMINANTS						
Iron	17.5	ug/L	0-280	300	N/A	Leaching from natural deposits; industrial wastes
Lead	.61	ug/L	0-9.7	15	2	Internal corrosion of household water systems; discharges from industrial manufacturers; erosions of natural deposits
Odor-Threshold	1	TON	1-1	3	N/A	Naturally-occurring organic materials
Boron	150.63	ug/L	110-220	1000	N/A	Erosion of natural deposits
Vanadium	1.35	ug/L	0-6.3	50	N/A	Erosion of natural deposits
pH	8	Unit	7.8-8.2	6.5-8.5	N/A	

TEST RESULTS						
Contaminant	Average Level Detected	Range of Levels Detected	Units	MCL	PHG	Major Sources in Drinking Water

TEST RESULTS						
Contaminant	Column	Violation Y/N	Avg. Level Detected	Range	Unit (MCLG)	Likely Source of Contamination
Turbidity**	0.1	N	<0.1-0.1	NTU	5	Soil runoff.
Microbiological Contaminants						
Major Sources in Drinking Water						
Average Level Detected	Range of Levels Detected	Units	MCL	PHG		

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 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 presence 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 (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, 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 also available from the Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, USEPA and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH 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 at <http://www.epa.gov/safewater/lead>."

If you have any questions about this report, please contact Running Springs Water District, Safety Compliance Operator, Kent Jenkins 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. Please call for meeting time at (909) 867-2766.

**Arrowbear Park County Water District - 2013 Water Quality Report**

TEST RESULTS						
Contaminant	Column	Violation Y/N	Avg. Level Detected	Range	Unit (MCLG)	Likely Source of Contamination
Turbidity**	0.1	N	<0.1-0.1	NTU	5	Soil runoff.
Microbiological Contaminants						
Major Sources in Drinking Water						
Average Level Detected	Range of Levels Detected	Units	MCL	PHG		

PRIMARY STANDARDS						
Turbidity	0.1	N	<0.1-0.1	NTU	5	Soil runoff.
Radioactive Contaminants						
Alpha Activity, Gross	0.0	N	0.0-0.0	pCi/l	15	(N/A) Erosion of natural deposits.
Uranium	0.0	N	0.0-0.0	pCi/l	20	(N/A) Erosion of natural deposits.
Inorganic Chemicals						
Nitrate (as NO3)	ND	N	None	ug/l	45	Runoff from fertilizer use.
Iron	ND	N	None	ug/l	300	NS
Fluoride	.124	N	0.0- .19	mg/l	2	1
Chloride	3.72	N	1.9-6.0	mg/l	500	NS
Sulfate	2.16	N	1.7- 2.6	mg/l	500	NS
Specific Conductance	248	N	230-270	uS	1600	NS
Natural occurring or leachates.	1	Units	3			
Total Dissolved Solids (TDS)	150	N	140-160	mg/l	1000	NS
Other Constituents*	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Calcium	36.6	NS	32-44	mg/l	NS	Erosion of natural deposits.
Magnesium	2.34	N	1.9-2.6	mg/l	NS	Erosion of natural deposits.
Sodium	15	N	13-19	mg/l	NS	Erosion of natural deposits.
Potassium	ND	N	None	mg/l	NS	Erosion of natural deposits.
Total Hardness	98.8	N	91-120	mg/l	NS	Erosion of natural deposits.

SECONDARY STANDARDS						
Chloride	73-120	mg/L	500	N/A	500	Runoff/leaching from natural deposits; seawater influence
Sulfate	41-68	mg/L	500	N/A	500	Runoff/leaching from natural deposits; industrial wastes
Zinc	4.94	ug/L	5000	N/A	5000	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	300	mg/L	220-350	N/A	1000	Erosion of natural deposits

OTHER CONSTITUENTS						
Sodium	69.13	mg/L	56-82	N/A	N/A	"Sodium" refers to the salt present in the water and is generally naturally occurring
Total Hardness	132.06	mg/L	98-310	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
Lead	.61	ug/L	0-9.7	15	2	Internal corrosion of household water systems; discharges from industrial manufacturers; erosions of natural deposits
Odor-Threshold	1	TON	1-1	3	N/A	Naturally-occurring organic materials
Boron	150.63	ug/L	110-220	1000	N/A	Erosion of natural deposits
Vanadium	1.35	ug/L	0-6.3	50	N/A	Erosion of natural deposits
pH	8	Unit	7.8-8.2	6.5-8.5	N/A	

UNREGULATED CONTAMINANTS						
Iron	17.5	ug/L	0-280	300	N/A	Leaching from natural deposits; industrial wastes
Lead	.61	ug/L	0-9.7	15	2	Internal corrosion of household water systems; discharges from industrial manufacturers; erosions of natural deposits
Odor-Threshold	1	TON	1-1	3	N/A	Naturally-occurring organic materials
Boron	150.63	ug/L	110-220	1000	N/A	Erosion of natural deposits
Vanadium	1.35	ug/L	0-6.3	50	N/A	Erosion of natural deposits
pH	8	Unit	7.8-8.2	6.5-8.5	N/A	

TEST RESULTS						
Contaminant	Column	Violation Y/N	Avg. Level Detected	Range	Unit (MCLG)	Likely Source of Contamination
Turbidity**	0.1	N	<0.1-0.1	NTU	5	Soil runoff.
Microbiological Contaminants						
Major Sources in Drinking Water						
Average Level Detected	Range of Levels Detected	Units	MCL	PHG		

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

- Micro contaminants