

DESERT SPRINGS PUBLIC WATER SYSTEM

Consumer Confidence Report – 2010

Covering Calendar Year – 2009



Water Quality Data, continued.

Radionuclides	Collection Date	Compliance Value	Range	Unit	MCL	MCLG	Typical Source
GROSS ALPHA PARTICLE ACTIVITY	2009	8.2	ND - 8.2	pCi/L	15	0	Decay of natural and man-made deposits
GROSS BETA PARTICLE ACTIVITY	2009	5.2	ND - 9	pCi/L	50	0	Decay of natural and man-made deposits
RADIUM, COMBINED (226, 228)	2009	1.4	ND - 2	pCi/L	5	0	Erosion of natural deposits
URANIUM	2006	13	ND - 13	ppb	30	0	Erosion of natural deposits

Secondary Regulated Contaminants	Collection Date	Compliance Value	Range	Unit	Secondary Standard
ALKALINITY	2008	200	20 - 200	ppm	No MCL
ALUMINUM	2008	0.02	ND - 0.02	ppm	0.2
CALCIUM	2004	60	9.1 - 60	ppm	No MCL
CHLORIDE	2007	100	2.5 - 100	ppm	400
HARDNESS	2008	198	41 - 198	ppm	No MCL
IRON	2008	0.082	ND - 0.082	ppm	0.6
MAGNESIUM	2008	21	3.4 - 21	ppm	150
MANGANESE	2008	0.054	0.001 - 0.054	ppm	0.1
NICKEL	2008	0.0055	ND - 0.0055	ppm	0.1
PH	2008	8.34	6.64 - 8.34	pH	6.5-8.5
SODIUM	2007	96	21 - 96	ppm	No MCL
SULFATE	2008	321	12 - 321	ppm	500
TOTAL DISSOLVED SOLIDS (TDS)	2007	580	4.3 - 580	ppm	1000
ZINC	2008	0.03	ND - 0.2	ppm	5

Microbiological	Result	MCL	MCLG	Typical Source
No detected results were found in the calendar year of 2009.				

Violations

There were no violations during the 2009 calendar year.

Contact information

If you have any questions regarding water quality or the material in this report, please contact the Washoe County Department of Water Resources at: 4930 Energy Way Reno, NV 89502 (775) 954-4612 www.washoecounty.us/water

The Washoe County Department of Water Resources is a leader in providing integrated water resources. These services are critical to the region's quality of life. They include utility services (water, sewer, and reclaimed water) and water resource planning services (flood management, remediation of contaminated groundwater, and development of water resource plans).

The Department of Water Resources is committed to be the leader in the provision of integrated water resource services to our community. Our mission is to provide quality product and service to our community through teamwork, accountability and professionalism.

Regular testing of the water resources is one way we fulfill that mission. This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems.

Your water comes from:

Source Name	Source Water Type
Desert Springs Well 1	Ground Water
Desert Springs Well 2	Ground Water
Desert Springs Well 3	Ground Water
Desert Springs Well 4	Ground Water
Consecutive Connection from Spring Creek Public Water System NV004082	Ground Water
Consecutive Connection from Spring Creek East Public Water System NV000800	Ground Water
Consecutive Connection from Truckee Meadows Water Authority NV000190	Surface Water

Your drinking water is supplied from groundwater sources and through Consecutive Connections (CC) with the Spring Creek Public Water System, Spring Creek East Public Water System, and Truckee Meadows Water Authority. We blend water to meet compliance for arsenic and nitrate, and we add disinfectant to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of your source water. For results of the Source Water Assessment, please contact the Department of Water Resources at (775) 954-4612.

Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer under going 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/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).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) included rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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 before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

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. We aim to provide water that meets EPA's regulations. We treat your water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.



Well Head Protection Program

Much of the water we use everyday comes from groundwater wells operated by the Washoe County Department of Water Resources. Well Head Protection Programs (WHPPs) help ensure the safety of your drinking water by protecting underground aquifers from contamination. The WHPPs developed by the Department of Water Resources meet or exceed all State and Federal requirements and are specific to your region. For more information about Well Head Protection in your community or to learn how you can help protect the groundwater, contact the Department of Water Resources at (775) 954-4612. You can view the WHPP for your community online at www.washoecounty.us/water.

Terms & Abbreviations

In this report you may find terms or abbreviations that may not be familiar. To help you better understand these terms we have provided the following definitions:

Terms and Abbreviations	Definition
Action Level (AL)	the concentration of a contaminant that, if exceeded, triggers requirements that a water system must follow.
Maximum Contaminant Level (MCL)	the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG)	the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.
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.
Non-Detects (ND)	laboratory analysis indicates that the constituent is not present.
Parts per Billion (ppb)	or micrograms per liter (µg/L)
Parts per Million (ppm)	or milligrams per liter (mg/L)
Picocuries per Liter (pCi/L)	picocuries per liter is a measure of the radioactivity in water.
Running Annual Average (RAA)	running annual average (RAA) is calculated by averaging the four (4) most recent quarters of readings.

Health Information About Water Quality

Arsenic is a naturally occurring element found in many of the nation's groundwater supplies. In January, 2006, the EPA lowered the arsenic Maximum Contaminant Level (MCL) from 50 part per billion (ppb) to 10 ppb to reduce the risk to public health. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

The Department of Water Resources recently completed construction of the Lazy Five water transmission main project. The project consists of approximately three miles of new pipeline designed to dilute the arsenic concentrations of the existing groundwater wells in the Spanish Springs Valley. This project also serves as a new source of high quality Truckee River water provided by the Truckee Meadows Water Authority. This new pipeline has been in use since March, 2009. Water quality samples will continue to be routinely collected to ensure the average arsenic concentration of water supplied to customers remains below 10 parts per billion. If you have any questions regarding arsenic concentrations in Spanish Springs please call 954-4612.

Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Turbidity is a measure of the cloudiness of the water. High turbidity can hinder the effectiveness of disinfectants.

Water Quality Data

The tables following below list all of the drinking water contaminants, which were detected during the 2009 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2009. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. The bottom line is that the water that is provided to you is safe.

Testing Results for Desert Springs Public Water System

Primary Regulated Contaminants	Collection Date	Compliance Value	Range	Unit	MCL	MCLG	Typical Source
ANTIMONY	2009	3.1	ND - 6.3	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC	2009	Running Annual Average = 3.0	ND - 6	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM	2009	0.02	ND - 0.02	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	2008	3.4	ND - 3.4	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE	2008	0.7	ND - 0.7	ppm	2	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	2009	6.8	1.5 - 6.8	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	2005	11	ND - 11	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TETRACHLOROETHYLENE	2009	2.9	ND - 2.9	ppb	5	0	Discharge from factories and dry cleaners
TURBIDITY	2009	0.084	0.020 - 0.084	NTU	5	No MCLG	Soil runoff

Disinfectants and Disinfection By-Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
CHLORINE (as Cl2)	2009	0.7	0.2 - 1.4	ppm	4	4	Water additive used to control microbes
TOTAL HALOACETIC ACIDS (HAA5)	2009	7	ND - 32	ppb	60	0	By-product of drinking water chlorination
TOTAL TRIHALOMETHANES (TTHM)	2009	16	ND - 51	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Date	90 TH Percentile	Range	Unit	AL	Sites Over AL	Typical Source
COPPER	2007	0.18	0.003 - 0.19	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2007	ND	ND - 1	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits