

CALENDAR YEAR 2010  
ANNUAL WATER QUALITY REPORT  
ALPINE SPRINGS COUNTY WATER DISTRICT

Dear District Customer:

Our goal is and always has been to provide you with a safe and dependable supply of drinking water. We are pleased to report that your drinking water is safe and meets all State and Federal requirements. This 2010 report contains information on the water we provide to you and represents the most recent testing done. Some data are more than a year old. The State Health Department determines which chemicals we are required to sample as well as the time frame for sampling based on the sampling history and quality of our water. The complete list of Inorganic Contaminants, General Minerals, and Organics was last sampled in 2005, the results of which are shown on the spread sheet on the back page. Only detected results are shown. We will re-test for these constituents as required. We test for Nitrates yearly and for Microbiological contaminants semimonthly. Although not required, we tested for Radon in 1999 for our general knowledge and the results are listed. The lead and copper results shown were tested in 2009.

Source Water Assessment

The District utilizes four horizontal wells and two vertical wells for its water sources. All of the horizontal wells are located on the south side of Alpine Meadows in somewhat remote areas. The Alpine Meadows Estates Well (AMEW) is a vertical well which is located in the central part of the valley, and R-1 well is located near the District Office.

The State Health Department required all districts to perform a source water assessment prior to December 31, 2003. A source water assessment is a study to determine the vulnerability of our sources to any form of contamination. We hired Ecologic Engineering to perform this study for us. The results of the assessment show that our sources are most vulnerable to, but not necessarily affected by, sewer collection systems and utility stations/maintenance areas. A copy of the assessment is available for viewing at the District Office.

If you rent or lease your house in Alpine Meadows, we would appreciate your making this report available to your tenants. If you have any questions about this report or the District, please feel free to contact me at (530) 583-2342 or toll-free in California and Nevada at (800) 244-2342. I am also available by email at [lew@alpinesprings.org](mailto:lew@alpinesprings.org). The Board of Directors also invites you to attend any of its meetings. The Board usually meets on the second Friday of every month, at 8:30 a.m. at the District Office, located at 270 Alpine Meadows Road.

Sincerely,

Lew Tift  
Operations Department  
Alpine Springs County Water District

## 2010 Consumer Confidence Report

Water System Name: ALPINE SPRINGS COUNTY WATER DISTRICT Report Date: June 30, 2011

*We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring from 2005 to current.*

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

Type of water source(s) in use: Springs & Wells

Name & location of source(s): SP-1, SP-2, SP-3, SP-4 - Alpine Meadows Estates Well, and R-1 Well

Drinking Water Source Assessment information: Completed Dec. - 03/ Copy at Office/ Summary of Vulnerability - attached

Time and place of regularly scheduled board meetings for public participation: ASCWD Office - 2<sup>nd</sup>  
Friday of the Month, Posted

For more information, contact John Collins, General Manager Phone: (530) 583-2342 x 12

### TERMS USED IN THIS REPORT:

**Maximum Contaminant Level (MCL):** 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 MCLs are set to protect the odor, taste, and appearance of drinking water.

**Primary Drinking Water Standards (PDWS):** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (ug/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**Public Health Goal (PHG):** 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.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**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:**

- *Microbial 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 production, mining, or farming.
- *Pesticides and herbicides*, which 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 from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink:** USEPA and the State Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The spreadsheet attached lists all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department 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, are more than one year old.

**Additional General Information on Drinking Water:** 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 (1-800-426-4791).

**About Radon:** Even though not required, for our general knowledge we tested all our sources for Radon and found it to be present in all, as indicated on the spread sheet under Radionuclides. There is no Federal regulation for Radon in drinking water (maximum contaminant level, testing requirements etc.), however if we decide to test for it and find it we must report the results of those tests in the CCR. Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into the indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (*pCi/L*) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

**Spreadsheet results notes:** 89 constituents and other items including color, corrosivity, foaming agents, odor, turbidity, filterable residue, specific conductance, Alkalinity, PH, and hardness were tested in our water system. Of those tested, 32 items were detected or had results which are listed below. **If an item is not listed, it was not detected.**

**ANNUAL WATER  
QUALITY REPORT**

*NOTE: Only constituents that were detected are listed below, many more were tested.*

ASCWD											
Primary											
Inorganic Contaminants	Sample Date	MCL	PHG-(MCLG)	Spring 1	Spring 2	Spring 3	Spring 4	AMEW	R-1	Typical Source of Contaminant	
				level detect.	level detect.	level detect.	level detect.	level detect.	level detect.		
Arsenic (PPB)	2005	10		ND	ND	ND	ND	ND	3.1	Erosion of natural deposits, runoff from orchards and glass & electronics production wastes	
Barium (PPB)	2005	2000	2000	23.8	26.9	36.4	27.2	63.1	59.4	Erosion of natural deposits	
Chromium (PPB)	2005	0.1	0.1	N/D	N/D	N/D	N/D	0.0019	ND	In nat. deposits & disch. from steel/pulp mills	
Nitrates (PPB)	2010	10,000		90	120	120	150	220	50	Runoff from fertilizer, septic tanks, nat. deposits	
Nitrites (PPB)	2008	1000		<50	<50	<50	<50	<50	<50	Runoff from fertilizer, septic tanks, nat. deposits	
<b>Secondary Contaminants</b>											
Color (UNITS)	2005	15	N/A	3	3	N/D	N/D	4	ND	Natural occurring materials	
Iron (PPB)	2005	300	N/A	N/D	N/D	N/D	N/D	438 **	78	Leaching from natural deposits, corroding well plumbing	
Odor-Threshold(units)	2005	3	N/A	N/D	N/D	N/D	1	N/D	ND	Natural occurring organic materials	
<b>Specific Conductance -</b>											
(Micro ohms)	2007	1600	N/A	90.4	92.9	140	101	222	592	Substances that form ions when in water; Sea water influence	
Turbidity (Units)	2005	5	N/A	N/D	0.14	0.19	N/D	4.8	0.2	Runoff/ leaching from rice herbicide	
Zinc (PPB)	2005	5000	N/A	N/D	N/D	N/D	N/D	123	ND	Runoff/leaching from natural deposits; industrial wastes	
<b>Total Dissolved Solids-</b>											
TDS (PPB)	2005	1,000,000	N/A	65,000	69,000	86,000	72,000	106,000	401,000	Runoff/leaching from natural deposits	
Chloride (PPB)	2005	500,000	N/A	200	200	200	300	1200	3100	Runoff/leaching from natural deposits; sea water influence	
Sulfate (PPB)	2005	500,000	N/A	200	500	500	500	2900	154,000	Erosion of natural deposits	
PH	2005	N/A	N/A	7.3	7.7	7.4	7.6	7.7	7.8		
Total filterable residue	2005	500-1000		65	69	86	72	106	401	Suspended solids	
Silver (PPB)	2005	100		11	11	12	13	N/D	N/D	Erosion of natural deposits	
Manganese (PPB)	2005	50	N/A	N/D	N/D	N/D	N/D	17	18	Naturally occurring metal in rock	
<b>General Mineral</b>											
Calcium (PPM)	2005	None	N/A	10.1	9.3	15.3	10.5	33.1	24.2	Erosion of natural deposits	
Bicarbonate (PPM)	2005	None	N/A	57.9	57.2	88.4	65.3	141	193		
Total Alkalinity (PPM)	2005	None	N/A	47.4	46.9	72.5	53.5	115	158		
Magnesium (PPM)	2005	None	N/A	3	3.4	4.8	3.8	2.2	22.4	Naturally occurring	
Sodium (PPM)	2005	None	N/A	2.8	2.8	4	2.7	7.5	29.5	Generally found in ground & surface water	
Hardness (PPM)	2005	None	N/A	37	37	58	42	92	153	Generally found in ground & surface water	
<b>Radionuclides</b>											
Gross Alpha pCi/L	2010	15 pCi/L		1.26	0.987	0.487	0.467	0.606	0.87	Erosion of natural deposits	
Gross Beta pCi/L	2010	50 pCi/L		0.546	1.61	2.45	0.706	0.351	3.82	Decay of natural & man made deposits-minerals	
Radon pCi/L	1999	N/A	N/A	302	675	437	688	307	372	Erosion of natural deposits	
Radium 228 pCi/L	2006	2		N/D	0.2	0.06	0.04	N/D	N/D	Erosion of natural deposits	
<b>Microbiological</b>											
<b>Contaminants</b>											
Total Coliform Bacteria	Monthly	more than 1								Naturally present in the environment	
		positive monthly									
		sample									
<b>Lead &amp; Copper</b>											
	Date	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	PHG					
Lead (ppb)	2009	11	4	0	15	2				Corrosion of household plumbing systems, erosion of natural deposits.	
Copper (ppb)	2009	11	170	0	1300	170				Corrosion of household plumbing systems, erosion of natural deposits.	

**Summary Information for Contaminants Exceeding an MCL, AL, or Violation of any Treatment or Monitoring and Reporting Requirement**

**Iron MCL Violation** – In 2005 iron was found in water from the Alpine Meadows Estates Well at levels that exceed the secondary MCL of 300 ppb. The Iron MCL was set to protect you against unpleasant aesthetic effects such as color, taste, odor, and the staining of plumbing fixtures and clothing while washing. The high iron levels are due to leaching of natural deposits and corrosion of the well plumbing.

**Explanation of Violation** - The well was not flushed to atmosphere adequately prior to sampling.

**Duration of the violation** – The well is a back-up source and is only used approximately two to four days a year. It was started (off-line) for sampling purposes only. It was immediately shut down.

**There are no potential adverse health effects at this level.**

We re-sampled the well in September 2007 during the middle of the time period that it ran. The result was below the maximum contaminant level.