

The Santa Clarita Valley

2009 Water Quality Report

The Castaic Lake Water Agency (CLWA) and the local water retailers are committed to maintaining high quality water for their customers, and you will find detailed information about the Santa Clarita Valley's (SCV) water in this 2009 Annual Water Quality Report. The California Department of Public Health (DPH) requires that water agencies publish a report like this to provide background on the quality of your water, and show you how it meets or exceeds federal and state drinking water standards.

CLWA and the retailers also work to ensure you and your neighbors have a reliable water supply at a reasonable price. In February, responding to the third consecutive year of drought conditions, Governor Schwarzenegger declared a state of emergency due to the current drought and requested an immediate reduction in water use.

Along with all valley water retailers, CLWA is taking action by supplementing imported State Water Project (SWP) water with banked supplies. At this time, we need residents to also do your part by conserving water inside and outside homes. Fixing leaks, planting drought tolerant plants, and making sure your sprinklers water your lawn—and not your sidewalk—are just a few easy ways you can save water. To reach conservation goals, residents must reduce outdoor watering to no more than three times per week during the early morning or evening hours.

Additionally, our new rebate program for water-saving tools makes it even easier for residents save water and money. Visit us on the web at www.clwa.org, www.scvh2o.org or your retailer's website for more information, and be sure to check out our easy water conservation tips.

If you have any questions about this report or water quality, please contact us at 661-297-1600. Additional information is available from local water retailers, whose contact information is supplied at the end of this report.

Sincerely,

Dan Masnada
General Manager
CLWA

Steve Cole
General Manager
NCWD

Mauricio Guardado
Retail Manager
SCWD

Robert DiPrimio
President
VVC

NOTE: All of the test results in this report were run in 2008 unless noted otherwise. If you do not find a chemical listed in this report, it was not found in any test performed on local water. Your local water supplier is therefore in compliance with all drinking water regulations unless a specific violation is noted.



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WATER
AGENCY

CASTAIC LAKE
WATER AGENCY



CLWA SANTA CLARITA
WATER DIVISION



NCWD

NEWHALL COUNTY-
WATER DISTRICT



VALENCIA WATER
COMPANY

REMEMBER: Use Water Wisely, It's a Way of Life

Here in the Santa Clarita Valley, we receive so little rain. So just like we asked you last summer, Castaic Lake Water Agency wants all customers to rethink household and outdoor water habits and reduce water use even more during hot, dry months.

We have three easy ways to save water in your yards and gardens this summer.

ONE. Make sure your sprinklers work and don't aim at the sidewalk. You'll save 500 gallons per month.

TWO. Don't forget a 25 cent washer to fix leaks and save 600 gallons per month.

THREE. Plant drought tolerant plants and save 750 gallons per month.

And don't forget - it's important to water only between the hours of 9 p.m. and 6 a.m. for no more than 10 minutes per station.

**By conserving water, you help your water providers help you.
To find out how, visit clwa.org or scvh2o.org**

FOR MORE INFORMATION

CASTAIC LAKE WATER AGENCY

David Kimbrough | 661-297-1600 x223

E-mail: dkimbrough@clwa.org | Website: www.clwa.org

The Castaic Lake Water Agency is governed by a Board of Directors that meets at 6:30 pm on the second and fourth Wednesdays of each month at the Rio Vista Administration Building, 27234 Bouquet Canyon Road.

CLWA SANTA CLARITA WATER DIVISION

Cathy Hollomon | 661-259 -2737

E-mail: chollomon@scwater.org | Website: www.clwa.org

The Santa Clarita Water Division is a division of the CLWA. The CLWA Retail Operations Committee meets at 6:30 pm on the second Monday of each month at the SCWD office, 22722 Soledad Canyon Road.

NEWHALL COUNTY WATER DISTRICT

Ryan Bye | 661-259-3610

E-mail: rbye@ncwd.org | Website: www.ncwd.org

The Newhall County Water District is governed by a Board of Directors that meets at 6:30 pm on the second Thursday of each month at the District Board Room, 23655 Newhall Avenue, Suite "C."

VALENCIA WATER COMPANY

James Saenz | 661-294-0828

E-mail: jsaenz@valenciawater.com | Website: www.valenciawater.com

The Valencia Water Company is a public water utility regulated by the California Public Utilities Commission. The office is located at 24631 Avenue Rockefeller.

Este informe contiene información muy importante sobre su agua beber. Si usted quisiera el texto en español para este reporte, comuníquese con David Kimbrough al numero de teléfono 661-297-1600 x223.

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METALS AND SALTS

Metals and salts are tested in wells once every three years and in Castaic Lake water every month. Small quantities of naturally occurring arsenic are found in Castaic Lake and in a few wells. These are present due to the natural erosion of the rocks that water travels over or through. Inorganic compounds such as salts and metals can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

A number of naturally occurring salts are found in both surface and well water. These include chloride, fluoride, nitrate, nitrite, calcium, magnesium, potassium, and sodium. Taken together they are called Total Dissolved Solids (TDS). Calcium and magnesium together are called "hardness" and can deposit as scale.

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are pregnant or caring for an infant, you should ask for advice from your health care provider. Nitrates are tested at least annually.

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 costs of removing arsenic from drinking water. The USEPA 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.

DISINFECTION BY-PRODUCTS

The CLWA uses ozone and chloramines to disinfect its water. Disinfection By-Products (DBPs), which include Trihalomethanes (THMs) and Haloacetic Acids (HAA5) are generated by the interaction between naturally occurring organic matter and disinfectants such as chlorine and ozone. THMs and HAA5 are measured at several points in each system and averaged once per quarter and reported as a running annual average.

Ozone is a very powerful disinfectant that not only kills organisms that no other disinfectant can but also destroys organic chemicals that causes unpleasant tastes and odors. However, ozone can also interact with bromide, a naturally occurring salt, to produce bromate. According to the USEPA and the DPH some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer. As a result, CLWA is required to analyze the water leaving its two treatment plants for bromate once per month under federal regulations (State has also adopted D/DBP Rule).

MICROBIOLOGICAL

Microbial contaminants, such as viruses and bacteria, can be naturally occurring or result from urban storm water runoff, sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

The most important microbiological drinking water tests are for bacteria. Water is tested throughout the systems weekly for Total Coliform bacteria and for *Escherichia coli* (*E. coli*). The presence of *E. coli* indicates fecal contamination of waters. No *E. coli* was detected in any drinking waters in the SCV last year. Total coliforms are a group of bacteria that indicate water quality may have deteriorated. The MCL for total coliforms is 5% of all monthly tests showing positives for larger systems.

Additional microbiological tests for the water-borne parasites *cryptosporidium parvum* and *giardia lamblia* were performed on Castaic Lake water, and none were detected.

RADIOLOGICAL TESTS

Radioactive compounds can be found in both ground and surface waters, and can be naturally occurring or be the result of oil and gas production and mining activities. Testing is conducted for two types of radioactivity: alpha and beta. If none is detected at concentrations above five picoCuries per liter no further testing is required. If it is detected, the water must be checked for uranium and radium.

LEAD AND COPPER

The local water retailers are required to sample for lead and copper at specific consumer taps every three years. The results for lead and copper are reported as the 90th percentile. The 90th percentile is the result that is greater than 90% of all the results. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a private laboratory and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline 1-800-426-4791.

ORGANIC COMPOUNDS

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems. Organic compounds also include pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Water is tested for two types of organic compounds: volatile organic compounds (VOCs) and non-volatile synthetic organic compounds (SOCs). These organic compounds are synthetic chemicals produced from industrial and agricultural uses. Castaic Lake is checked annually for VOCs and SOCs. Local wells are tested at least annually for VOCs and periodically for SOCs. Tetrachloroethylene (PCE) was found in trace levels (below the MCL in groundwater in the SCV. Some people who use water containing tetrachloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.

DRINKING WATER SOURCE ASSESSMENT AND PROTECTION

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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.

In order to ensure that tap water is safe to drink, the USEPA and the DPH 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 provide the same protection for public health.

As part of DPH requirements, the retailers of the SCV conducted a Drinking Water Source Assessment and Protection (DWSAP) study for all of their groundwater sources. This study enables DPH and water utilities to collect information about each drinking water source and surrounding residential, commercial, and industrial activities. It was completed and provided to DPH in 2002.

As part of the program, "surrounding activities" which include schools, medical offices, gas stations and various other facilities around each water source are categorized and ranked as "possible contaminating activities" (PCA). Below is a list of PCAs that may have contributed to trace levels of contaminants in local wells. Trace levels of PCE (below the MCL) have been detected in three wells.

- Automobile/gas stations, auto shops - tetrachloroethylene (PCE)
- Dry cleaners - PCE
- Known contaminant plumes - perchlorate

In addition, a known perchlorate contaminant plume has been identified and several wells have tested positive for perchlorate. In October 2007, DPH adopted an MCL of 6 ug/L for this contaminant. Prior to October, a PHG of 6 ug/L and a notification level (NL) of 6 ug/L were established by the Office of Health Hazard Assessment and the DPH respectively.

In 2008, all of the surface water supplied to the SCV was provided by or delivered through the SWP via Castaic Lake. The Department of Water Resources produces a watershed sanitary survey (WSS) of the SWP watersheds every five years. The last survey was published in 2001. Based on that WSS, a DWSAP study for Castaic Lake was completed in 2003. The study found that Castaic Lake supplies are considered to be most vulnerable to septic and sewage lift stations, recreational activities, boating, traffic accidents and spills, grazing livestock, algal blooms and fires.

Additional DWSAP information is available upon request from your local water retailers. Contact names and numbers are supplied at the end of this report.

The Results of Thousands of Tests on Your Water

PARAMETERS/ CONSTITUENTS	Units	MCL (AL)	MCLG (PHG)	DLR	Castaic Lake Water Agency Wholesale Division			Castaic Lake Water Agency Santa Clarita Division			Valencia Water Company			Newhall County Water District Castaic			Newhall County Water District Newhall			Newhall County Water District Pinetree			Newhall County Water District Tesoro ¹			
					Minimum	Maximum	Typical	Minimum	Maximum	Typical	Minimum	Maximum	Typical	Minimum	Maximum	Typical	Minimum	Maximum	Typical	Minimum	Maximum	Typical	Minimum	Maximum	Typical	
INORGANICS																										
Aluminum	ug/L	1000	(60)	50	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	250	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	
Arsenic	ug/L	10	0.004	2	2.0	5.4	3.1	<DLR	2.3	<DLR	<DLR	3.8	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	3.9	2.3				
Fluoride ²	mg/L	2	(1)	0.1	<DLR	<DLR	<DLR	0.30	0.50	0.3	0.24	0.8	0.4	0.37	0.54	0.44	0.31	0.40	0.31	0.37	0.44	0.38				
Nitrate (as NO3)	mg/L	45	(45)	2	2.1	3.4	2.7	12	31	21	6.3	20	12.4	<DLR	9	2.3	8	32	23	11	27	12				
ORGANICS																										
Tetrachloroethylene ³	ug/L	5	(0.06)	0.5	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	0.5	<DLR				
DISINFECTION BY-PRODUCTS																										
Bromate RVTP	ug/L	10	0	5	<DLR	6.0	<DLR																			
Bromate ESPF	ug/L	10	0	5	<DLR	11	8.4																			
Haloacetic Acids (HAA5)	ug/L	60	N/A	1.0	2.0	8.1	4.4	0	31	5.2	0	18	3.8	1.3	10.0	4.7	<DLR	7.8	1.7	1.1	10.0	4.6	3.9	11.0	6.8	
Trihalomethanes, Total (THMs)	ug/L	80	N/A	0.5	8.0	23.0	16.0	0	120	25.5	0	56	22	6.8	53.0	21.1	<DLR	31.0	7.7	2.4	30.0	16.3	21.0	52.0	31.8	
MICROBIOLOGICAL																										
Coliform % Positive Samples	%	5	0		0	4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLARITY / TURBIDITY																										
Surface Water Only RWTP	NTU	TT = 1 NTU	None		0.05	0.25	0.09																			
		TT = 95% of Samples < 0.2 NTU			100	100	100																			
Surface Water Only ESPF	NTU	TT = 1 NTU	None		0.05	0.20	0.11																			
		TT = 95% of Samples < 0.2 NTU			100	100	100																			
RADIOLOGICAL																										
Alpha Activity, Gross	pCi/L	15	0	3	<DLR	5.4	<DLR	<DLR	5.3	<DLR	<DLR	11	<DLR	<DLR	7.6	<DLR	3.4	3.4	3.4	<DLR	8	6				
Beta Activity, Gross	pCi/L	50	0	4	<DLR	8.8	<DLR							<DLR	<DLR	<DLR										
Radium 228	pCi/L	5	0.019	1	<DLR	<DLR	<DLR	<DLR	1.2	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR	<DLR				<DLR	<DLR	<DLR				
Uranium	pCi/L	20	(0.5)	2			NA	<DLR	4.4	<DLR	<DLR	2.9	<DLR	<DLR	<DLR	<DLR				<DLR	7.4	2.7				
Year of Analysis						2008			2005			2008			2008			2008			2005					
LEAD AND COPPER (Retailers Only)																										
								90th Percentile	Tested	Above the AL	90th Percentile	Tested	Above the AL	90th Percentile	Tested	Above the AL	90th Percentile	Tested	Above the AL	90th Percentile	Tested	Above the AL	90th Percentile	Tested	Above the AL	
Copper	ug/L	(1300)	(170)	50			NA	489	30	0	690	32	1	769	21	0	1121	31	2	1003	20	2	180	20	0	
Lead	ug/L	(15)	(2)	5			NA	6	30	0	6	32	1	8.4	21	0	5.7	31	0	2.6	20	0	12	20	1	
Year of Analysis								2006			2007			2006			2006			2006			2008			
SECONDARY STANDARDS																										
Chlorides ⁴	mg/L	250/500/600			69	77	71	64	102	84	26	123	67	72	98	79	38	44	41	76	130	99				
Color	Units	15			5	10	5	<5	<5	<5	<5	<5	<5	<5	5	<5	<5	<5	<5	<5	<5	<5				
Odor-Threshold	Units	3			1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1				
Sulfates ⁴	mg/L	250/500/600		1	38	55	49	96	172	143	122	390	214	120	310	185	160	210	185	110	140	120				
Turbidity	NTU	5			0.44	1.87	1.02	0.08	0.13	0.09	0.01	.44	.11	0.05	0.64	0.33	0.05	0.18	0.12	0.10	0.15	0.11				
Total Dissolved Solids ⁴	mg/L	500/1000/1500			251	360	297	599	786	716	359	975	717	468	652	576	526	638	582	552	826	653				
Conductivity ⁴	uS / cm	900/1600/2200			474	597	529	981	1242	1128	933	1308	1098	761	1240	946	822	972	897	955	1060	1155				
ADDITIONAL TESTS																										
Calcium	mg/L				24	32	28	85	130	108	77	140	99	55	110	76	83	110	97	80	100	90				
Magnesium	mg/L				11	13	12	23	43	32	22	40.4	30.5	22	39	29	19	28	24	18	25	22				
Sodium	mg/L				50	62	55	83	93	88	56	105	81.2	60	89	73	49	57	53	76	160	115				
Potassium	mg/L				2.4	3.1	2.7	2	4	3.3	1.7	4.6	3.3	3.1	4.5	3.8	2.2	2.2	2.2	2.9	4.0	3.5				
Hardness as CaCO3	mg/L				105	133	121	328	457	407	223	516	369	228	435	308	285	390	338	274	353	315				
pH	Units				7.41	8.06	7.85	7.2	7.4	7.2	7.26	7.63	7.45	7.40	7.56	7.52	7.29	7.35	7.32	7.25	7.27	7.26				
Alkalinity as CaCO3	mg/L				79	97	88	291	344	314	194	285	231	113	181	142	151	166	159	215	272	239				

Key for the Charts used in this Report
 1 All values for Tesoro Water are the same as CLWA, except in the specific rows shown.
 2 Depending on annual temperatures.

3 Some people who use water containing tetrachloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.
 4 There are three MCLs for these parameters: The first is the recommended, long term.

The second is the upper, long term.
 The third is short term.
 AL Action Level
 DLR Detection Limit for Reporting

ESFP Earl Schmidt Filtration Plant
 MCL Maximum Contaminant Level
 MCLG Maximum Contaminant Level Goal
 ug/L Microgram / Liter

mg/L Milligram / Liter
 mS Millisiemens / Centimeter
 NTU Nephelometric Turbidity Units
 NA Not Analyzed/Not Applicable

pCi/L PicoCurie / Liter
 PHG Public Health Goal
 RVTP Rio Vista Treatment Plant