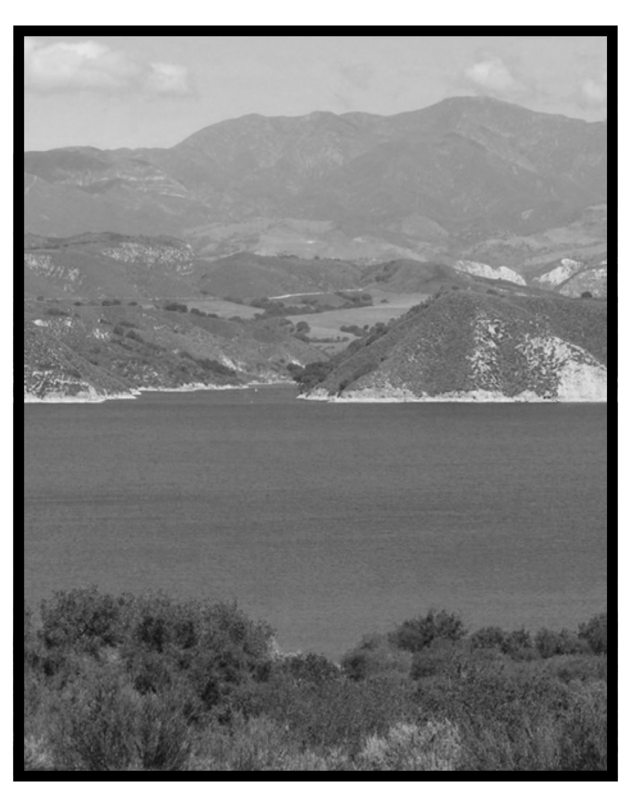
Carpinteria Valley Water District

2011 Consumer Confidence Report

Vital Information on Water Quality
for Residents of the Carpinteria Valley

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



Dear Carpinteria Valley Residents,

Carpinteria Valley Water District is pleased to present you with this Annual Drinking Water Consumer Confidence Report for the 2011 calendar year. Half or more of the District's water delivered to about 16,000 people at their homes and businesses in the Carpinteria Valley comes from **Lake Cachuma**, including water delivered to Lake Cachuma through the State Water Project Facilities. The balance of the District's water supply comes from local **groundwater** pumped from up to four wells in the Carpinteria Valley Groundwater Basin.

A new replacement well (El Carro) has been drilled and related pipeline has been constructed, and will soon be delivering groundwater to Carpinteria Valley customers. The new well will increase the District's ability to utilize higher quality groundwater with little disinfection by-product production. This will assist the District in its on-going efforts to improve drinking water quality and comply with drinking water standards mandated by the U.S Environmental Protection Agency (EPA) and enforced by the California Department of Public Health (DPH). **DPH reviews the District's drinking water quality data on a regular basis and issues the water supply permit under which the District may deliver drinking water.**

By early 2013, or sooner, an advanced treatment facility, utilizing ozone, will come online at the Cater Treatment Plant in Santa Barbara. This facility is being constructed in response to EPA regulations for safe drinking water. All of Carpinteria Valley Water District's Cachuma and State Water passes through the Cater Treatment Plant for filtration and treatment before flowing through the South Coast Conduit system to Carpinteria Valley. The total construction cost of this advanced treatment facility is estimated to be about $20 million and CVWD's estimated share will be about $4 million, funded by District issued Certificates of Participation (COPs).

<u>The District in 2011 met all the state and federal monitoring and drinking water standards.</u>

If you have any questions or concerns about this report please call me at the District office at (805) 684-2816.

Sincerely,

Charles B. Hamilton

Charles B. Hamilton
General Manager

Carpinteria Valley Water District
1301 Santa Ynez Avenue
Carpinteria, CA 93013

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Definitions

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.

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 **(SMCL)** are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG) The level of a disinfectant (chlorine) added for water treatment at which there is no known or expected risk to health. MRDLGs are set by the USEPA.

Maximum Residual Disinfectant Level (MRDL) The level of a disinfectant (chlorine) added for water treatment that may not be exceeded at the customer's tap.

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

Treatment Technique (TT) A required process intended to reduce the level of contaminant in 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 drinking water. Secondary Contaminants are not based on health effects at MCL levels.

Notification Level (NL) Notification levels are health-based levels established by CDPH for chemicals in drinking water that lack MCLs.

Legend

Symbol "<"	denotes 'less than'
µg/L	Micrograms per liter (parts per billion)
mg/L	Milligrams per liter (parts per million)
µmho/cm	Micro Ohms per centimeter
pCi/L	Picocuries per liter (a measure of radiation)
NA	Not Applicable
ND	Not detected at testing limit
NTU	Nephelometric Turbidity Units
None	None Required
RAA	Running Annual Average

Questions and Answers about your drinking water….

Is my drinking water pure?
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 (1-800-426-4791).**

How can I know that my drinking water is safe?
In order to ensure that tap water is safe to drink, USEPA and the California 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.

Is there a risk to Immuno-compromised persons?
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 available from the **Safe Drinking Water Hotline** at **(1-800-426-4791)**.

What types of contaminants can be found in drinking water, including bottled water?
Contaminants that may be present in source water (prior to treatment) include:
<u>Microbial contaminants</u>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
<u>Inorganic contaminants</u>, 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, animal waste, fertilizer and farming operations.
<u>Organic chemical contaminants</u>, 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.
<u>Radioactive contaminants</u>, which can be naturally occurring or be the result of oil and gas production and mining activities.

California Department of Public Health Services Lead Information Public Education

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. Carpinteria Valley 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 (1-800-426-4791).** It is also available on the EPA's website at **<u>http://www.epa.gov/safewater/lead</u>.**

Source Water Assessment

The Source Water Assessment for Carpinteria Valley Water District was completed in 2012. A copy of the complete assessment is available at the Carpinteria Valley Water District Office, 1301 Santa Ynez Ave., Carpinteria, CA 93013.

Carpinteria Valley Water District is governed by a five member Board of Directors elected by you, the customers. The Board meetings may be held on the second and fourth Wednesday of every month at 5:30 p.m. at Carpinteria City Hall, 5775 Carpinteria Avenue. The Board may also hold regular meetings other Wednesdays of the month at 5:30 p.m. at the District Offices at 1301 Santa Ynez Avenue.

The Board agenda is posted by the front door of the office three days prior to the meeting. You can also access the agenda from our website at ***www.cvwd.net***

Annual Water Quality Report for 2011

The data below lists all the drinking water contaminants that were **detected** during the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2011. The State requires that we monitor for certain contaminants less frequently than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. As a result, some of the data, though representative of water quality, is more than one year old.

	SUBSTANCE/(Parameter)	Public Health Goal (MCLG)	Maximum Contaminant Level (MCL)	SURFACE WATER (SANTA BARBARA CATER TREATMENT PLANT) Range Detected	**Reporting Value	GROUNDWATER (CVWD WELLS) Range Detected	**Reporting Value	CVWD Last Sample Date	Likely Source of Substance/Notes
PRIMARY STANDARDS	Monitored at Water Source								
	Turbidity (NTU)		TT = 1 NTU (Max.)	0.00-0.09	Highest Single Measurement 0.09	ND	ND	2009	Natural river sediment; soil runoff
		None	TT=95% sample ≤ 0.3 NTU	NA	100%	NA	NA		
	Aluminum (µg/L)	600	1000	10 - 150	50	ND	ND	2009	Erosion of natural deposits
	Arsenic (µg/L)	0.004	10	ND - 2.0	0.6	ND	ND	2009	Erosion of natural deposits
	Barium (mg/L)	2	1	NA	NA	0.0384 - 0.0561	0.0561	2009	Erosion of natural deposits
	Flouride (mg/L)	1	2	0.31 - 0.42	0.37	0.30	0.30	2009	Erosion of natural deposits
	Nitrate as NO_3 (mg/L)	45	45	NA	ND	7.60 - 13.50	10.60	2011	Natural deposit, fertilizer
	Gross Alpha Particle Activity (pCi/L)	0	15	NA	ND	ND	ND	2006	Erosion of natural deposits
	Radon 222 (pCi/L)	None	None	NA	ND	NA	NA	None	Decay of naturally occuring radium
	Uranium (pCi/L)	0.43	20	NA	ND	NA	NA	None	Erosion of natural deposits
	Control of Disinfection By-Products Precursers (DBP) -Total Organic Carbon (TOC) (mg/L)	None	TT	2.22 - 2.79	2.47	NA	NA	None	TOC has no known adverse health effects and provides a medium for the formation of disinfection by-products. Sources include plant decay and other natural processes.
	Monitored in the Distribution System								
	Total Coliform Bacteria	0	No more than 1 Mo. sample	ND	ND	ND	ND	2011	Naturally present in the environment
				System Wide Average		System Wide Average			
	Total Trihalomethanes -TTHM (µg/L)	None	RAA 80	NA	NA	31.00 - 46.70	39.90	2011	By-Product of water chlorination
	Haloacetic acids - HAA 5 (µg/L) ***	None	RAA 60	NA	NA	10.30 - 34.80	22.10	2011	By-Product of water chlorination
	Chlorine Residual (Free chlorine) (mg/L)	MRDLG as CL_2 4.0	MRDL as CL_2 4.0	NA	NA	ND	ND	2011	Used to disinfect potable water
LEAD/COPPER RULE	Monitored at the Customer's Tap		*30 sites sampled in 2010*			*0 samples exceeded the action levels for copper and lead.*			
	Copper (mg/L)	0.30	1.3 (AL)	NA	NA	0.01 - 0.68	0.09	2010	Internal corrosion of household water plumbing and erosion of natural deposits
	Lead (µg/L)	0.20	15 (AL)	NA	NA	0	0	2010	
SECONDARY STANDARDS	Monitored at Water Source	*Aesthetic Standards Established By the State of California Department of Health Services*							
	Chloride (mg/L)	None	500	13.40 - 20.90	18.00	28 - 32	30	2009	Leaching of natural deposits
	Color (units)	None	15	NA	ND	ND	ND	2009	Naturally-occuring organic materials
	Copper (µg/L)	None	1000	10 - 20	10	50	50	2009	Corrosion of household water plumbing and errosion of natural deposits
	Iron (µg/L)	None	300	ND - 135	15	ND - 200	28.30	2011	Leaching of natural deposits
	Manganese (µg/L)	None	50	NA	ND	ND	ND	2011	Naturally occurring organic materials; causes discoloration of water
	Specific Conductance (µmhos)	None	1600	729 - 946	833	829 - 843	836	2009	Runoff/Leaching of natural deposits
	Sulfate (mg/L)	None	500	198 - 280	239	111 - 146	129	2009	Substances that form ions in water
	Threshold Odor Number at 60°C (TON) *exceeded SMCL*	None	3	1 - 12	6	ND	ND	2009	Naturally occurring organic materials
	Total Dissolved Solids (mg/L)	None	1000	514 - 710	608	480 - 550	515	2011	Runoff/Leaching of natural deposits
	Turbidity, Laboratory (NTU)	None	5	0.05 - 0.52	0.11	ND	ND	2009	Soil runoff; Objectional taste and odor; not a health concern
	Zinc (mg/L)	None	5	0.010 - 0.030	0.010	ND	ND	2009	Runoff/Leaching from natural deposits; industrial wastes
Other Constiuants Monitored	pH (units)	None	None	7.86 - 8.30	8.07	7.48 - 7.50	7.49	2011	Varies in water; 0-6=acidic; 7=neutral; 8-14=alkaline
	Calcium (mg/L)	None	None	76.90 - 93.70	87.00	91 - 108	100	2009	Leaching of natural deposits
	Magnesium (mg/L)	None	None	30.50 - 45.80	38.00	23 - 27	25	2009	Leaching of natural deposits
	Methyltertbutylether (MTBE) (µg/L)	13	13	NA	ND	ND	ND	2009	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories
	Potassium (mg/L)	None	None	2.90 - 19.50	4.60	1	1	2009	Leaching of natural deposits
	Sodium (mg/L)	None	None	37.70 - 51.40	44.00	35 - 61	48	2009	Leaching of natural deposits
	Total Hardness as CaCO3 (mg/L)	None	None	326 - 410	371	322 - 381	352	2009	Leaching of natural deposits
	Total Alkalinity as CaCO3 (mg/L)	None	None	178 - 210	193	250 - 270	260	2009	Leaching of natural deposits
*UCMR	*Additional Parameters Analyzed*								
	Boron (µg/L)*	None	1000 (NL)	NA	390	100	100	2009	Erosion of natural deposits
	Hexavalent chromium, Cr VI (µg/l)	None	None	ND - 0.055	0.021	NA	NA	None	
	Vanadium (µg/L)*	None	50 (AL)	NA	NA	ND	ND	2009	Erosion of natural deposits
	Chromium (Total Cr) (µg/l)	(100)	50	ND - 6.40	2.50	ND	ND	2009	Erosion of natural deposits
	Methylene Blue Active Substances - MBAS (mg/L)	None	0.5	NA	NA	ND	ND	2009	Municipal and industrial waste discharges
	Perchlorate	6	6	NA	NA	ND	ND	2009	Municipal and industrial waste discharges. Environmental contamination from aerospace or industrial operations that used, store, or dispose of perchlorate and its salts
*UCMR 2	UCMR2 List 1 Contaminants	*2 Priority Compounds (1 insecticide and 1 insecticide degradate) EPA Method 527*							
	Dimethoate 60-51-5 (µg/L)	None	None	NA	NA	0	ND	2010	Insecticide used on Cotton and other field crops, orchard crops, in forestry and for residential use
	Terbufos sulfone 56070-16-7	None	None	NA	NA	0	ND	2010	Degradate of the parent compound, terbufos; terbufos used for systemic control of soil borne insects and nematodes in fields of corn, grain, sorghum, and sugar beets
		Flame Retardants, EPA Method 527							
	2,2' , 4,4' - tetrabromodiphenyl ether (BDE-47) 5436-43-1	None	None	NA	NA	0	ND	2010	Flame retardants added to plastics (for products such as computer monitors, televisions, textiles, and plastic foams)
	2,2' , 4,4' , 5- pentabromodiphenyl ether (BDE-99) 60348-60-9	None	None	NA	NA	0	ND	2010	
	2,2' , 4,4' , 5,5' - hexabromodiphenyl (BDE-153) 68631-49-2	None	None	NA	NA	0	ND	2010	
	2,2' , 4,4' , 6- pentabromodiphenyl ether (BDE-100) 189084-64-8	None	None	NA	NA	0	ND	2010	
	2,2' , 4,4' , 5,5' - hexabromobiphenyl (HBB) 59080-40-9	None	None	NA	NA	0	ND	2010	Flame retardant additive; production of polybrominated biphenyls ended in 1976 in U.S. after an incident of significant agriculturas contamination in 1973
		Explosives, EPA Method 529							
	2,4,6-trinitrotoluene (TNT) 118-96-7	None	None	NA	NA	0	ND	2010	Used as an explosive in bombs and grenades, also used as a propellant; small amounts used for industrial explosive applications, such as deep well and underwater blasting; chemical intermediate in manufacturing of dyestuffs and photographic chemicals
	1,3-dinitrobenzene 99-65-0	None	None	NA	NA	0	ND	2010	Used in explosives; also formed as a by-product during the manufacture of the explosive TNT; used in the manufacture of aramid fibers, spandex and dyes
	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) 121-82-4	None	None	NA	NA	0	ND	2010	Used in detonators, primers, mines, rocket boosters, and plastic explosives; used in fireworks and demolition blocks, and as a rodenticide

Surface Water: All water open to the atmosphere and subject to surface runoff such as lakes, reservoirs and rivers. Water from Lake Cachuma and Gibraltar Reservoir is treated at the William B. Cater Water Treatment Plant.
Groundwater: All subsurface water found underground in cracks and spaces in soil, sand and rock. The area where water fills these spaces is the saturated zone, the top of this zone is called the water table.
For Water Softeners: The District's water has a hardness range of 19 to 25 grains per gallon. One grain per gallon equals 17 milligrams per liter.

Note: Listed in the table above are substances detected in the District's drinking water or of special interest to certain consumers. Not listed are approximately 135 constituents which were below the laboratory detection levels.

* UCMR - Unregulated Constituents Monitoring Rule was promulgated by the EPA to study other constituents.

* * Reporting values are determined by methods set by the State depending on the constituent. Most constituent reporting values are determined by simple averaging.

* * * For more information on a specific constituent contact the District.

Disinfection by-products including Haloacetic acids (HAA5) and Total Trihalomethanes (TTHM) form when naturally occurring organic materials found in potable water react with disinfectants such as Chlorine. In particular, elevated HAA5 or TTHM levels in drinking water pose the following health risk: Some people who drink water containing HAA5 or TTHM in excess of the MCL over many years may develop an increased risk of getting cancer.