



CARPINTERIA VALLEY WATER DISTRICT

2016 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.*

June 2017

Dear Carpinteria Valley Residents,

Carpinteria Valley Water District is pleased to present you with this Annual Drinking Water Consumer Confidence Report for the 2016 calendar year.

The District in 2016 met and currently meets or exceeds all state and federal drinking water standards.

As we begin to see signs that the historic state-wide drought may be over, such as heavy precipitation in Northern California and enough locally to refill the almost empty **Lake Cachuma to 50%**, we can breathe a sigh of relief. I am cautiously optimistic that the wet conditions we saw last winter will return this winter, alleviating our region of drought conditions as well. However, I dare not count on it. The fact remains, that **all local water supplies have been strained** for the last 6 years and need to recover. Some supplies, such as groundwater, may take several years to recover. For this reason, the District is planning to take more State Water this year, allowing the local groundwater basin to rest and hasten its recovery. The Division of Drinking Water 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.

Water conservation is also an essential part of the solution to recovery and sustainability. Although I'm relieved and even excited that the drought may come to an end soon, I am convinced that there will be another drought in the coming years. Water conservation, now and into the future, is a vital part of adapting to our semi-arid climate. I would encourage you all to continue to work to sustain Carpinteria's water supplies by fixing leaks, shortening shower times and considering drought tolerant landscaping among other things. These small actions really do help toward the recovery of local supplies as well as prepare for the inevitable future droughts. My sincerest thanks to all the Carpinterians that did and continue to do such an incredible job of cutting water use throughout the drought. **Great job Carpinteria!** For tips and advice on ways to conserve contact Conservation Specialist Rhonda Gutierrez at the District.

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

Sincerely,

Bob McDonald
General Manager

WHERE YOUR DRINKING WATER COMES FROM



DEFINITIONS

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.

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

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.

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

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.

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

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

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.

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.

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

LEGEND

Symbol "<"	denotes 'less than'
ppb	parts per billion
ppm	parts per million
µmho/cm	Micro mhos per centimeter
ng/L	nanogram per liter (parts per trillion)
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

BOARD MEETINGS

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, 1301 Santa Ynez Avenue.

The Board agenda is posted by the front door of the office three days prior to the meeting and on the District website, cvwd.net.

Carpinteria Valley Water District's Annual Water Quality Report 2016

The data noted in the tables identifies all the drinking water contaminants that were detected during the 2016 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, 2016. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

P R I M A R Y S T A N D A R D S	REGULATED CONTAMINANTS WITH PRIMARY MCLS, MRDLS OR NLS				GROUNDWATER CVWD WELLS				SURFACE WATER CITY OF SANTA BARBARA CATER TREATMENT PLANT			MAJOR SOURCES OF CONTAMINATION IN DRINKING WATER
	CONTAMINANTS	Units	PHG (MCLG)	MCL (MRDL) NL	Range Detected		Reporting Value ₁	Last Date Sampled	Range Detected		Reporting Value ₁	Footnote
	Monitored at Water Source				Low	High			Low	High		
	Turbidity	NTU	NA	TT=1 NTU	NA	NA	NA	NA	0.00	0.08	Highest Single Measurement 0.08	4
				TT=95% of samples ≤0.3 NTU							Samples ≤ 0.3 NTU 100%	
	Cryptosporidium	oocysts/L	NA	TT	NA	NA	NA	NA	NA	NA	ND	25
	INORGANIC CONTAMINANTS											
	Aluminum	ppm	0.6	1	ND	ND	ND	2015	ND	0.03	0.1	5
	Arsenic	ppb	0.004	10	ND	ND	ND	2015	1.0	30	6.9	5
	Barrium	ppm	2	1	0.06	0.09	0.08	2015	ND	ND	ND	5
	Fluoride (F)	ppm	1	2	0.20	0.30	0.27	2016	0.39	0.52	0.45	5
	Nitrate as N (nitrogen)	ppm	10	10	2.1	3.3	2.8	2016	ND	ND	ND	5, 24
	Perchlorate	ppb	1	6	ND	ND	ND	2015	ND	ND	ND	22
	Hexavalent Chromium CrVI	ppb	0.02	10	ND	ND	ND	2016	NA	NA	ND	5, 23
	Chromium (Total Cr)	ppb	(100)	50	ND	ND	ND	2015	ND	1.7	0.54	5,6
	RADIOACTIVE CONTAMINANTS											
	Gross Alpha Particle Activity	pCi/L	(0)	15	2.30	2.30	2.30	2016	NA	NA	ND	5
	Uranium	pCi/L	0.43	20	NA	NA	NA	NA	NA	NA	1.5	5
	VOLATILE ORGANIC CONTAMINANTS											
	Methyl tert Butyl Ether (MTBE)	ppb	13	5	ND	ND	ND	2015	ND	ND	ND	20
	MONITORED IN THE DISTRIBUTION SYSTEM OR AT DESIGNATED POINTS OF USE											
	MICROBIOLOGICAL CONTAMINANT SAMPLES											
	Total Coliform Bacteria	Sample	0	5% of monthly samples test positive	ND	ND	ND	2016	NA	NA	Highest % of Positives 0.05%	10
	DISINFECTION BYPRODUCTS, DISINFECTION RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS System Wide Average											
	Total Trihalomethanes - TTHM ₂	ppb	NA	80	9.1	91.6	50.7	2016	NA	NA	NA	11
	Haloacetic Acids 5 - HAA5 ₂	ppb	NA	60	1	32	16.8	2016	NA	NA	NA	11
	Chlorine Residual	ppm	4.0	4	0.7	2.2	1.2	2016	NA	NA	NA	12
	Bromate	ppb	0.1	10	NA	NA	NA	NA	4.3	8.4	5.6	11
	Control of Disinfection Byprod- ucts Precursors (DBP) Total Organic Carbon (TOC)	ppm	NA	TT	NA	NA	NA	NA	2.52	3.12	2.79	8,9

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S E C O N D A R Y	REGULATED CONTAMINANTS WITH SECONDARY MCLS, MRDLS, OR NLS				GROUNDWATER CVWD WELLS				SURFACE WATER CITY OF SANTA BARBARA CATER TREATMENT PLANT			MAJOR SOURCES OF CONTAMINATION IN DRINKING WATER
	CONTAMINANTS	Units	PHG (MCLG)	MCL (MRDL) NL	Range Detected		Reporting Value	Last Date Sampled	Range Detected		Reporting Value	Footnote
	Monitored at Water Source				Aesthetic Standards Established by the State of California Department of Public Health.							
					Low	High			Low	High		
	Chloride (Cl)	ppm	NA	500	27	41	35	2016	46.1	71.0	56.5	14
	Color	units	NA	15	ND	ND	ND	2016	NA	NA	ND	15
	Copper	ppm	NA	1	ND	ND	ND	2016	0.004	0.02	0.01	5,13
	Iron	ppb	NA	300	ND	120	24	2016	NA	NA	ND	14
	Manganese	ppb	NA	50	ND	ND	ND	2016	NA	NA	ND	15,16, causes discoloration
	Methylene Blue Active Substances - MBAS	ppb	NA	500	ND	ND	ND	2015	ND	ND	ND	21
S T A N D A R D S	Specific Conductance	us/cm	NA	1600	863	926	890	2016	990	1045	1010	17
	Sulfate (SO4)	ppm	NA	500	111	146	129	2016	229	246	238	18
	Odor	TON	NA	3	ND	ND	ND	2016	3	12	6	15,16 causes objectionable taste and odor
	Total Dissolved Solids	ppm	NA	1000	560	580	570	2015	630	694	669	17
	Turbidity, Laboratory	NTU	NA	5	0.3	0.4	0.3	2016	0.04	0.11	0.06	4
	Zinc	ppm	NA	5	ND	ND	ND	2016	NA	NA	ND	19
	UNREGULATED CONTAMINANTS WITH NO MCLS											
	Boron	ppm	NA	NL=1	0.1	0.1	0.1	2015	NA	NA	0.39	5
	ph	Std Units	NA	NA	7.4	7.6	7.5	2016	7.55	7.97	7.77	Varies in water 0-6=acidic, 7=neutral 8-14=alkaline
	Total Hardness as CaCO3	ppm	NA	NA	304	356	333	2016	328	344	337	14
Total Alkalinity as CaCO3	ppm	NA	NA	230	330	290	2016	160	193	179	14	
Calcium	ppm	NA	NA	84	100	92	2016	68.0	74.5	72.1	14	
Magnesium	ppm	NA	NA	23	26	25	2016	39	45	43	14	
Sodium	ppm	NA	NA	34	57	48	2016	74	90	82	14	
Potassium	ppm	NA	NA	1	1	1	2016	4.2	4.7	4.5	14	

LEAD AND COPPER RULE

Monitored at the Customer's Tap

30 sites sampled in 2016

0 samples exceeded the action levels for copper and lead. Reporting level is equal to 90th percentile of all 30 samples

CONTAMINANTS	Units	PHG (MCLG)	AL	Range Detected		Reporting Value	Last Date Sampled	Footnote
Lead	ppb	NA	AL=15	Low	High	1.13	2016	13
				ND	3.20			
Copper	ppb	NA	AL=1.3	0.003	0.540	0.207	2016	13

LEAD IN PLUMBING: 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 at 1-800-426-4791](http://www.epa.gov/safewater/lead). It is also available on the EPA's website at: <http://www.epa.gov/safewater/lead>.

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UNREGULATED CONTAMINANTS MONITORING (UCMR3) LIST 1				GROUNDWATER CVWD WELLS			
CONTAMINANTS	Units	PHG (MCLG)	MCL (MRDL) NL	Range Detected		Reporting Value	Last Date Sampled
				Low	High		
Chlorate	ppb	NA	NL=800	86	410	225	2015
Molybdenum	ppb	NA	NA	1.2	13.0	5.2	2015
Strontium 90	pCi/L	NA	NA	720	870	803	2015
1,2,3-Trichloropropane	ppt	NA	NL=5	ND	ND	ND	2016
Vanadium	ppb	NA	NL=50	ND	ND	ND	2015

FOOTNOTES: Listed in the tables are substances detected in the District's drinking water or of special interest to certain consumers.
Not listed are approximately 139 constituents which were below the laboratory detection levels.

1. Reporting values are determined by methods set by the State depending on the constituent. Most constituent reporting values are determined by simple averaging.
2. 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 Bromate, HAA5 or TTHM in excess of the MCL over many years may develop an increased risk of getting cancer.
3. 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.
4. Natural Sediment; soil runoff.
5. Erosion of natural deposits.
6. Discharge from steel and pulp mills and chrome plating.
7. Natural deposit; fertilizer.
8. 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.
9. Sample taken at City of Santa Barbara Cater Treatment Plant.
10. Naturally present in the environment.
11. By-product of water chlorination.
12. Used to disinfect potable water.
13. Internal corrosion of household water, plumbing, and erosion of natural deposits.
14. Leaching of natural deposits.
15. Natural occurring organic materials.
16. An aesthetic concern.
17. Runoff/Leaching of natural deposits.
18. Substances that form ions in water.
19. Industrial waste.
20. Leaking from underground gasoline storage tanks, discharge from petroleum and chemical factories.
21. Foaming agents found in detergents.
22. Municipal and industrial waste discharges. Environmental contamination from aerospace or industrial operations that used, stored, or dispose of perchlorate and its salts.
23. Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities
24. Runoff and leaching from fertilizer use; leaching from septic tanks and sewage.
25. **Cryptosporidium** is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. The City of Santa Barbara monitoring indicates the presence of these organisms in its source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

WATER SOFTENER SETTINGS: The District's water has a hardness range of **18 to 21 grains per gallon**. One grain per gallon equals **17** milligrams per liter.

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.

FREQUENTLY ASKED QUESTIONS

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 at 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 State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB 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. 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 at 1-800-426-4791.

What types of contaminants can be found in drinking water, including bottled water?

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 (prior to treatment) include:

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

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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, animal waste, fertilizer and farming operations.

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.

DROUGHT CONTINUES, KEEP CONSERVING CARPINTERIA!

The Carpinteria Valley continues to experience drought conditions. As a result, the District's Stage Two Regulations remain in effect. If you are not already doing so, please take the following actions:

- Attach pressure activated spray nozzles to garden hoses.
- Irrigate landscapes no more than two (2) days per week.
 - Fixed System Irrigating Hours: 6 p.m. to 8 a.m.
 - Handwater Irrigating Hours: 4 p.m. to 10 a.m.
- Eliminate run-off from landscape irrigation onto hardscape.
- Install drought tolerant or native shrubs and trees.
- Convert sprinkler to drip irrigation in plant beds.
- Mulch plant beds to keep soil moist and minimize evaporation.
- Capture the cold water in a bucket before you shower to water plants.
- Fix leaking or broken plumbing and landscape irrigation fixtures ASAP.
- Replace inefficient plumbing fixtures or appliances.

For a complete summary of the Stage Two Regulations and rebate information, visit cvwd.net