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

PRSRT STD US POSTAGE PAID PERMIT 1233 OXNARD CA

ECRWSS
POSTAL CUSTOMER

# Carpinteria Valley Water District 2007 Drinking Water Quality Report

Vital Information on Water Quality for Residents of the Carpinteria Valley





## Carpinteria Valley Water District

1301 Santa Ynez Avenue • Carpinteria, CA 93013 Phone (805) 684-2816 • Fax (805) 684-3170

BOARD OF DIRECTORS

Frederick Lemere
President
June Van Wingerden
Vice President
Robert R. Lieberknecht
Matthew T. Roberts
James W. Drain

June/July 2008

GENERAL MANAGER

Charles B. Hamilton

Dear Carpinteria Valley Resident,

Carpinteria Valley Water District is pleased to present you with this Annual Drinking Water Consumer Confidence Report for the year 2007. Operating under a water supply permit issued by the California Department of Health Services, the District supplies water to about 19,000 people at their homes and businesses throughout the Valley. Half or more of the District's water is *surface water* that comes from Lake Cachuma, including water delivered to Lake Cachuma through the State Water Project facilities. To protect the quality of this water source, only light recreation is allowed on Lake Cachuma. The surrounding watershed is also protected. The balance of the District's water supply comes from *groundwater* pumped from up to five wells in the Carpinteria Valley Groundwater Basin. Small amounts of chlorine are added at the wells to ensure disinfection.

Lake Cachuma surface water is treated at the City of Santa Barbara's Cater Treatment Plant. After treatment it flows toward the Carpinteria Valley through a federally owned distribution system including the South Coast Conduit (transmission main), the **Ortega Reservoir** at the western end of the Valley in Summerland, and the **Carpinteria Reservoir** located in the eastern end of the Valley. Both reservoirs are essential for the storage and distribution of water in the Carpinteria Valley. The District uses this federally owned system in combination with its own distribution system to deliver both surface water and locally produced groundwater to its customers.

The District in 2003 covered and improved the **Carpinteria Reservoir** at a cost of about \$5.7 million. The cover for the **Ortega Reservoir** was completed at the end of 2007 at an estimated cost to the District of \$9.95 million. As part of its ongoing effort to comply with all safe drinking water standards, the District also constructed a new **well and filtration plant** at a cost of about \$2.4 million. A new **three million gallon storage tank (Foothill Reservoir) with distribution lines** was also completed by the end of 2007, at an estimated cost of \$9.7 million.

The District in 2007 met all state and federal monitoring and primary drinking water standards.

If you have any questions or concerns about this report please call Bob McDonald, District Engineer, or myself at the District office at 684-2816.

Sincerely

Charles B. Hamilton

Charles A. Stamilton

General Manager

### **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).

#### 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 could be found in my drinking water?

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.

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, 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 stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

#### 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.

#### **CUSTOMER VIEWS WELCOME:**

If you are interested in learning more about Carpinteria Valley Water District and water quality, or participating in the decision making process, opportunities are available. You can simply come into the District offices and speak to any one of the employees, or call the office at 684-2816. Board of Directors meetings are normally held on the third or fourth Wednesday of the month beginning at 4 pm in the Board room at 1301 Santa Ynez Ave.

## **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 effect taste, odor, or appearance of drinking water. Secondary Contaminants are not based on health effects at MCL levels.

#### Legend

Symbol "<" denotes 'less than'

Micrograms per liter (parts per billion) μg/L mg/L Milligrams per liter (parts per million)

ND Not detected at testing limit INTU Nephelometric Turbidity Units

pCi/L Picocuries per liter (a measure of radiation)

Micro Ohms per centimeter umho/cm

NA Not Analyzed None None Required

RRA Running Annual Average

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

Annual Water Quality Report for 2007

			ater Qua	SURFACE	WATER	GROUNI	DWATER			
	SUBSTANCE/(Parameter)	Public Health Goal	Maximum Contaminant Level(MCL)	(CATER TREAT Range Detected	**Reporting Value	(DISTRIC <sup>*</sup> Range Detected	T WELLS)  **Reporting  Value	Likely Source of Substance/Notes		
	·	(MCLG)	Level(WCL)	Detected	value	Detected	value	Likely Source of Substance/Notes		
DS	Monitored Before Distribution					0.04.0.00		Natural river sediment; soil runoff		
	Turbidity (NTU)		TT = 1 NTU (Max.) TT=95% smpl	0.02-0.06	0.06	0.01-0.30	0.13			
		NA	≤ 0.3 NTU	NA	100%	NA	NA			
	Aluminum (μg/L)	600.0	1000.0	23.0 - 263.0	104.0	ND-2500.0	830.0	Erosion of natural deposits		
	Barium (mg/l)	2.0	1.0	No Range	ND	ND-0.11	0.03	Erosion of natural deposits		
	Flouride (mg/l)	1.0	2.0	0.33 - 0.49	0.42	ND - 0.30	0.15	Erosion of natural deposits		
	Nitrate as Nitrate NO <sub>3</sub> (mg/L)	45.0	45.0	ND	ND	5.6 - 27.3	15.0	Natural deposit, fertilizer		
STANDARDS	Gross Alpha Particle Activity (pCi/L) Radon 222 (pCi/L) 2005 Reporting Data,	NA	15.0	ND	ND	ND - 1.9	1.9	Erosion of natural deposits		
Σ	2009 next reporting date	NA	NA	ND	ND	190.0 - 963.0	487.0	Decay of naturally occuring radium		
	Uranium (pCi/L)	NA	30.0	2.40 - 2.86	2.6	ND	ND	Erosion of natural deposits		
<b>JAR</b>	Radium 228 (pCi/L)	NA		_	_	ND	ND	Erosion of natural deposits		
PRIMARY	Control of Disinfection By-Products Precursers (DBP)- Total Organic Carbon (TOC) (mg/L)	NA	Treatment Requirements	2.28 - 3.07	2.1	NA	NA	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		
	Tetrachloroethylene (PCE) (µg/L)	0.06	5	No Range	ND	ND	ND	Discharge from factories, dry cleaners, an auto shops		
	Monitored in the Distribution System									
	Total Coliform Bacteria	0	No more than 1 Mo. sample	ND	ND	ND	ND	Naturally present in the Environment		
	Total Trihalomethanes (μg/L)	NA	RAA.80.0	3.2 - 92.0	60.8	48.5 - 115.8	60.0	By-product of water chlorination		
	Haloacetic acids - HAA 5 (μg/L) ***	NA	RAA 60.0	ND - 24.0	12.4	0.0 - 56.1	20.7	By-product of water chlorination		
	Chlorine Residual (Free chlorine) (mg/l)	MRLDG as CL <sub>2</sub> 4.0	4.0	ND - 1.56	0.6	0.5 - 1.7	1.2	Used to disinfect potable water		
Ä	Monitored at the Customer's Tap	30 sites sampled September 2007			s completed late been collected in			0 samples exceeded the action level for lead and copper.		
LEAD/COPPER RULE	Lead (μg/L)	2.0	15.0 (AL)	NA	NA	ND	ND	Corrosion of household water plumbing and errosion of natural deposit		
LEA	Copper (mg/L)	0.17	1.3 (AL)	NA	NA	0.05 - 0.35	0.14			
	Monitored Before Distribution	Aesthetic Standa	ards Established By	the State of Califo	ornia, Departme	ent of Health Sei	rvices			
ARDS	Zinc (mg/L)	None	5.0	NA	NA	ND	ND	Runoff/Leaching from natural deposits; industrial wastes		
	Chloride (mg/L)	None	500.0	16.0 - 20.0	18.0	27.0 - 55.0	38.0	Leaching of natural deposits		
	Iron (μg/L)	None	300.0	ND	ND	ND - 80.0	4.0	Leaching of natural deposits		
STANDARDS	Manganese (mg/L)	None	0.1	ND	ND	ND - 0.07	0.0	Naturally occurring organic materials; cau discoloration of water		
SECONDARY S	Color (units)	None	15.0	ND	ND	ND	ND			
	, ,							Naturally-occuring organic materials		
	Sulfate (mg/L)	None	500.0	246.0 - 281.0	264.0	104.0 - 151.0	131.0	Substances that form ions in water		
	Specific Conductance (μmhos)	None	1600.0	849.0 - 928.0	880.0	829.0 - 966.0	883.0	Runoff/Leaching of natural deposits		
	Total Dissolved Solids (mg/L)	None	1000.0	598.0 - 677.0	641.0	660.0 - 750.0	698.0	Runoff/Leaching of natural deposits		
	Threshold Odor Number at 60°C (TON) exceeded SMCL	None	3.0	6.0 - 12.0	9.0	1.0 - 3.0	1.6	Naturally occurring organic materials		
Other Constituents monitored	pH (units)	None	None	7.92 - 8.27	8.15	6.90 - 7.20	7.03	Varies in water; 0-6=acidic; 7=neutral; 8-14=alkaline		
	Total Hardness as CaCO3 (mg/L)	None	None	267.0 - 404.0	374.0	300.0 - 417.0	360.0	Leaching of natural deposits		
	Total Alkalinity as CaCO3 (mg/L)	None	None	172.0 - 194.0	182.0	260.0 - 290.0	272.0	Leaching of natural deposits		
	Calcium (mg/L)	None	None	80.0 - 91.0	86.0	84.0 - 116.0	101.0	Leaching of natural deposits		
	Magnesium (mg/L)	None	None	37.0 - 44.0	40.0	22.0 - 31.0	27.0	Leaching of natural deposits		
	Sodium (mg/L)	None	None	39.0 - 47.0	43.0	37.0 - 65.0	52.0	Leaching of natural deposits		
	Potassium (mg/L)	None	None	2.5 - 5.1	3.0	1.0 - 2.0	1.0	Leaching of natural deposits		
	- Gaodani (mg/L)	INOTIC	INOLIC	2.0 - 0.1	J.0	1.0 - 2.0	1.0	Leaking from underground gasoline storage		
	Methyltertbutylether (MTBE) (µg/L)	13.0	5.0	NA	NA	ND	ND	tanks; discharge from petrolium and chemical factories		
*UCMR	Additional Paremeters Analyzed		1000 0	202.5	007.5	ND 0.15	2.25			
	Boron (μg/L)* Vanadium (μg/L)*	None None	1000.0 (AL) 50.0 (AL)	260.0 - 270.0 ND - 4.9	265.0	ND - 0.12 ND - 5.0	0.06 1.0	Erosion of natural deposits  Erosion of natural deposits		
	ναπασιαπ (μg/L)	None	50.0 (AL)	ND - 4.9	۷.۷	טאו - 5.0	1.0	Erosion of natural deposits		

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 substances which were below the laboratory detection.

- \* 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.

  \*\* Distribution 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 cance

The State allows us to monitor for some contaminants less than once per year because the concentration do not change very frequently. Some of the data shown, although representative of your water, is more than