

### Carpinteria Valley Water District

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GENERAL MANAGER Charles B. Hamilton

### **Dear Carpinteria Valley Resident,**

July 2003

Carpinteria Valley Water District is pleased to present you with this Annual Drinking Water Consumer Confidence Report for the year 2002. Operating under a water supply permit issued by the California Department of Health Services, the Carpinteria Valley Water District supplies water to about 18,200 people at their homes and businesses throughout the Valley. Half of the District's water is **surface water** that comes from Lake Cachuma, including any 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 comes from **groundwater** pumped from four wells in the Carpinteria Valley Groundwater Basin. A fifth well, the Headquarters Well, was recently drilled next to the abandoned Santa Ynez Well, and is expected to be in service by October of this year. 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 in a distribution system that includes the **Ortega Reservoir** at the western end of the Valley, and the **Carpinteria Reservoir** located in the eastern end of the Valley. These open reservoirs met health standards of the day when constructed in the early 1950's. Current water works standards, however, in order to prevent contamination from birds, windblown material, and vandalism, do not allow for the construction of uncovered reservoirs containing treated drinking water. The District is now in the process of covering the Carpinteria Reservoir and expects completion by the end of this year. The Ortega Reservoir is expected to be covered by Spring of 2005.

In the meantime, to minimize the problems caused by the lack of reservoir covers, the District takes several precautions. The reservoirs are surrounded with six-foot chain link fences, and are inspected twice a day 365 days per year. Water entering the reservoirs contains chlorine residual, and to ensure disinfection, additional amounts of chlorine are added when water leaves the reservoirs. Every year the reservoirs are emptied and cleaned. Should a water quality problem arise due to the open reservoirs, the District is prepared to take remedial operational and maintenance action as set forth in the District's operational and monitoring plan on file with the Department of Health Services.

The U.S. Environmental Protection Agency (EPA) recently developed a new drinking water standard for a group of five haloacetic acids (HAA5) and implemented a more stringent standard for a group of four trihalomethanes (TTHM). Water systems were required to meet these new standards starting in January 2002. Currently, while operating under optimum conditions, the Carpinteria Valley Water District cannot meet the new standards on a consistent basis. However, under the new regulation EPA allows for a two-year extension to comply with the new standards if capital improvements are necessary to meet the new standard. The District applied for and received a two-year extension until the end of 2003 and is aggressively moving forward on four major capital improvements, including a new well, a three million gallon storage tank, a cover on the Carpinteria Reservoir, and in partnership with Montecito Water District, a cover on the Ortega Reservoir. In the meantime, the District must continue to meet all of the monitoring requirements and notify the public if the state standard for TTHM is exceeded. Moreover,

Carpinteria Valley Water District must meet the deadlines in an **EPA-developed construction compliance schedule**. Construction on the Carpinteria Reservoir Project is scheduled to be completed by the end of this year. Construction of the three million gallon storage tank is expected to begin in 2004.

The District also remains concerned about the potential for a nitrate problem to evolve in its groundwater. In 1996 the District adopted an AB 3030 Groundwater Management Plan, and with the voluntary cooperation of many growers began a systematic monitoring program of private irrigation wells throughout the District. As a part of this effort, the District identified the potential for improperly abandoned old wells throughout the District to act as conduits for nitrate pollution from shallow to deeper aquifers. Five abandoned private irrigation wells were destroyed by the District in 2002 using State grant funds.

Thank you for taking the time to review this report. If you have any questions or concerns please feel free to call Bob McDonald, District Engineer, or myself at the District office at 684-2816.

Sincerely.

Charles B. Hamilton

Charles S. Stambton

General Manager

## Questions & 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. For more information about contaminants and potential health effects call 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. 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).

### How do contaminants get into my 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.

### What types of contaminants could be found in my drinking water?

Contaminants that may be present in untreated source water 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, animal waste, fertilizer and farming operations.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

<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 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 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.

### En Español

Este folleto le muestra como es que la oficina de la Carpinteria Valley Water District continúa proveyéndolo a usted de un servicio de agua potable y segura. Si usted tiene preguntas acerca del agua del Districto, por favor llame a Norma Rosales, a la oficina de Carpinteria Valley Water District, al teléfono (805) 684-2816, durante las horas de 8:00 am a 5:00 pm

### What about radon?

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 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).

Currently there is no MCL for radon in drinking water but the District has tested all of its ground water sources and found levels up to 963 pCi/L but on average 487 pCi/L.

Possible future MCL may be set by the EPA at as high as 4000 pCi/L or as low 300 pCi/L.

### **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 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.

**Other Constituents Monitored** Some of this information was collected from July 1997 to December 1998 as part of a federal study to evaluate disinfectants and disinfection byproducts.

### Legend

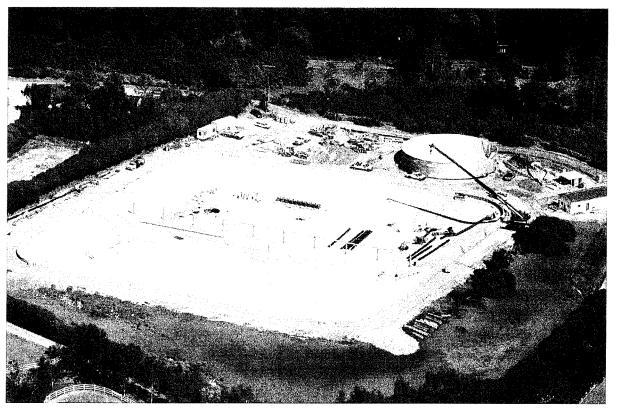
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### **Customer Views Welcome**

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 Avenue.

# Annual California Drinking Water Consumer Confidence Report for 2002

Vital Information on Water Quality for Residents of the Carpinteria Valley



### What's happening at the Carpinteria Reservoir...

The District is halfway to completion on its Reservable. Shown left is the project. Shown left is the project site from the air. Repairs to the existing concrete liner, not foundations for the proposed roof and piping modifications are complewe are ready to start constructing the cover.

# Carpinteria Valley Water District Annual Water Quality Report for 2002

	Substance/(Parameter)	Public Health Goal or MCLG	Maximum Contaminant Level (MCL)	SURFACE (Cater Treatr Range * Detected		GROUND (District Range ** Detected	Wells)	Likely Source of Substance
	Monitored Before Distribution							
PRIMARY STANDARDS	Turbidity (NTU)	None	TT = 1 NTU TT=Percentage of samples <0.3 NTU	0.02-0.08	0.08	0.1-0.6	0.60	Natural river sediment, soil run-off
	Arsenic (µg/L)	None	50	ND	ND	ND-5.5	2.9	Erosion of natural deposits
	Aluminum (mg/L)	0.6	1	0.051-0.233	0.117	ND-0.054	0.014	Residue from some water treatment processes
	Fluoride (mg/L)	1	2	0.29-0.47	0.34	0.14-0.61	0.3	Natural geology
	Nitrate as Nitrate (mg/L)	45	45	ND	ND	ND-13	5.4	Natural deposit, fertilizer
I A	Gross Alpha Particle Activity (pCi/L)	None	15	1.6-2.9	1.69	ND-6.7	1.6	Erosion of natural deposits
MARYS	Beta particles and photon emitters (pCi/L)	(0)	50	1.6-4.3	2.68	NA	NA	Decay of natural deposits
	Radon 222 (pCi/L)	None	None	ND	ND	190-963	487.0	Decay of naturally occuring radium
E	Barium (µg/L)	(2)	1	ND	ND	ND12	0.03	Erosion of natural deposits
	Monitored in the Distribution System							
	Total Coliform Bacteria	0	< 5% positive	ND	ND	ND	ND	Naturally present in the environment
	Total Trihalomethanes (µg/L)	NA	80	NA	NA	21.5-107.9	65.2	By-product of water chlorination
İ	Haloacetic acids - HAA 5 (μg/L)	NA	60	NA	NA	7.8 -146.7	56.9	By-product of water chlorination
	Chlorine Residual (Free chlorine) (mg/l)	4.0	4.0	NA	NA	0.1-2.78	1.2	Disinfectant used in water treatment
			MRLDG as CL2		MRLD as CL2			
LEAD COPPER RULE	Monitored at the Customer's Tap	33 sites sai	mpled. 0 samples e	exceeded action le	evel for coppe	r; 0 samples exc	ceeded the act	ion level for lead
걸음	Lead (µg/L)	2	15 (AL)	NA	NA NA	ND	ND	Corrosion of household water plumbing and
-8-	Copper (mg/L)	0.17	1.3 (AL)	NA	NA	0.05-0.13	0.17	errosion of natural deposits
SECONDARY STANDARDS	Monitored Before Distribution	Aesthetic Sta	ndards Established	By the State of Ca	alifornia, Depa	rtment of Health	Services	-
	Color (units)	None	15	ND	ND	ND	ND	Naturally-occuring organic materials
	Threshold Odor Number at 60 oC	None	3	5-25	12	1	1.00	Naturally-occuring organic materials
	Aluminum (µg/L)	None	200	51-233	117	ND-54	13.50	Residue from some water treatment processes
	Chloride (mg/L)	None	500	18-22	19	20-62	34.25	Runoff/Leaching from natural deposits
	Iron (μg/L)	None	300	ND	ND	ND	ND	Erosion of natural deposits
Ž	Manganese (μg/L)	None	50	ND	ND	ND-23	5.75	Erosion of natural deposits
STA	Sulfate (mg/L)	None	500	238-223	266	69-140	112.25	Runoff/Leaching from natural deposits
Ě	Specific Conductance (µmhos)	None	1600	793-975	840	790-930	837.50	Substances that form ions in water
<u>8</u>	Total Dissolved Solids (mg/L)	None	1000	536-733	632	490-530	502.5	Runoff/Leaching from natural deposits
ģ	pH (units)	None	None	7.7-8.3	8.10	7.3-7.5	7.38	Runoff/Leaching from natural deposits
SE	Total Alkelisits as CaCO3 (mg/L)	None	None	342-433	369	310-380	342.50	Runoff/Leaching from natural deposits
	Total Alkalinity as CaCO3 (mg/L)	None	None	164-205	171	260-340	292.50	Runoff/Leaching from natural deposits
	Calcium (mg/L)	None	None	74-94	79	89-110	102.25	Runoff/Leaching from natural deposits
	Magnesium (mg/L)	None	None	32-55	41	19-29	23.50	Runoff/Leaching from natural deposits
	Sodium (mg/L) Potassium (mg/L)	None None	None	25-53	2.1	21-82 ND 0.5	49.80	Runoff/Leaching from natural deposits
	Methyl Tertiary-Butyl Ether (MTBE) (µg/L)	13	None 13	1.8-2.8 ND	ND	ND-2.5 ND	1.30 ND	Runoff/Leaching from natural deposits
	i welly fertially-buty Ether (WTDE) (pg/E)	10	13	ND	ND	ND	ND	Leaking underground tanks, discharge from petroleum or chemical factories
	Unregulated Constituents - Additional	Paremeters	Analyzed					
OTHER CONSTITUENTS MONITORED	Hexavalent Chromium (µg/L)	None	None	ND	ND	ND-0.1	0.03	Erosion of natural deposits
	Boron (µg/L)	None	1000 (AL)	280-480	340.0	ND-180	70	Erosion of natural deposits
	Vanadium (µg/L)	None	50 (AL)	ND-4.9	2.2	ND	ND	Erosion of natural deposits
	Control of DBP precursers- TOC (mg/L)	NA	TT	2.59-3.22	2.9	NA	NA	TOC has no known adverse health effects but provides a medium for the formation of disinfection by products. Sources include plant decay and other natural processes
	Haloacitilenitrite- HAN (μg/L)	NA	NA	1.7-6.7	4.7	NA	NA	
	Chloropicrin -CP (μg/L)	NA	NA	0.0-1.2	0.4	NA	NA	
	Chloral Hydrate-CH (µg/L)	NA	NA	0.0-33	7.9	NA	NA	
8-	Total Organic Halides -TOX (μg/L) Chlorate (g/L)	NA NA	NA NA	50-450 4.9-15	178.0 8.9	NA	NA	

Note—Listed in the table above are substances detected in the District's drinking water or of special interest to certain consumers. All are below the MCL. Not listed are approximately 125 substances which were below the laboratory detection levels. If you wish to obtain the information on any of these constituents please contact the District.

<sup>\*</sup>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.