

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.

#### 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 Vallev Water District*, al teléfono (805) 684-2816, durante las horas de 8:00 a.m. a 5:00 p.m.

Carpinteria Valley Water District P.O. Box 578 Carpinteria, CA 93014

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# **Carpinteria Valley Water District 2004 Drinking Water Quality Report**

Vital Information on Water Quality for Residents of the Carpinteria Valley



What's happening at the Ortega Reservoir...

Shown on the left is a photo of the construction underway at the Ortega Reservoir, in preparation for the installation of an aluminum cover. Ortega Reservoir stores much of the drinking water needed to supply customers in Montecito, Summerland, and Carpinteria Valley. The project will help assure that mandated water quality standards are met.



## **Carpinteria Valley Water District**

1301 Santa Ynez Avenue • PO Box 578 • Carpinteria, CA 93014 Phone (805) 684-2816 • Fax (805) 684-3170

BOARD OF DIRECTORS Frederick Lemere

June Van Wingerden Vice President

Robert Lieberknecht Matthew T. Roberts James W. Drain

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 2004. Operating under a water supply permit issued by the California Department of Health Services, the Carpinteria Valley Water District supplies water to about 19,000 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 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. It then flows toward the Carpinteria Valley through a federally owned distribution system including the South Coast Conduit, 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.

In 2003 the District covered and improved the Carpinteria Reservoir at a cost of about \$6.5 million. The Ortega Reservoir is expected to be covered by the end of 2006 at an estimated cost to the District of \$8.5 million. In the meantime, to minimize the problems caused by the lack of a reservoir cover at Ortega, Montecito Water District, permit holder for reservoir, takes several precautions. The reservoir is surrounded with six-foot chain link fences and inspected twice a day 365 days per year. Water entering the reservoir contains chlorine residual, and to ensure disinfection, additional amounts of chlorine are added when water leaves the reservoir. Should a water quality problem arise due to this open reservoir, both Carpinteria Valley and Montecito Water Districts are prepared to take remedial operational and maintenance action as set forth in each District's operational and monitoring plans on file with the Department of Health Service.

The U.S. Environmental Protection Agency (EPA) recently developed a new drinking water standard for a group of five <u>Haloacetic acids</u> and established a more stringent standard for a group of four Trihalomethanes. Both compounds are common by-products of disinfection of drinking water. Water systems were originally required to meet these new standards starting in January of 2002. The District applied for and received a two-year compliance extension until the end of 2003. The extension was conditioned with an EPA developed construction compliance schedule for two major capital projects to help the District meet the new standards. The first project, a new well and filtration plant, was completed in August of 2004 at a cost of about \$1.8 million. The second, a new three million gallon storage tank and **distribution lines** connected to the District's wells is under construction and expected to be completed by mid 2006 and is estimated to cost \$10 million. In the meantime, the District continues to meet all monitoring requirements and drinking water standards and must notify the public if any standard is exceeded.

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. Results of this monitoring program continue to indicate no significant problem for the District's groundwater.

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

Sincerely,

Charles S. Hamilton

Charles B. Hamilton 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. 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).

#### 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 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.

		<u>Annual</u>	water G	lualit	<u>y Report</u>	<u>tor 20</u>	<u>04</u>	
			SURFACE WATER GROUNDW (CATER TREATMENT PLANT) (DISTRICT V					
	SUBSTANCE/(Parameter)	Public Health Goal ( MCLG)	Maximum Contaminant Level (MCL)	Range Detected	**Reporting Value	Range Detected	**Reporting Value	Likely Source of Substance
	Monitored Before Distribution							
PRIMARY STANDARDS	Turbidity (NTU)	None	TT = 1 NTU	0.02-0.14	.14	NA	NA	Natural river sediment; soil run-off
			TT= 95 Percentage of samples <0.3NTU	NA	100%	NA	NA	
	Aluminum (mg/L)	0.6	1	.014310	0.064	ND010	0.0025	Erosion of natural deposits
	Arsenic (µg/L)	0.004	50	ND-3.0	2.0	ND	ND	Erosion of natural deposits
	Barium (mg/l)	2	1	NA	0.06	ND-0.121	0.05	Erosion of natural deposits
	Chromium (Total Cr) (µg/l)	(100)	50	ND	ND	ND-1	0.25	Erosion of natural deposits
	Nitrate as Nitrate (mg/L)	45	45	ND	ND	0.9-14.9	8.0	Natural deposit, fertilizer
	Mercury (µg/L)	1.2	2	ND	ND	ND-0.02	0.02	Erosion of natural deposits; sometime from runoff in cropland
	Fluoride (mg/l)	1	2	0.17	0.42	0.28-0.40	0.3	Erosion of natural deposits
	Gross Alpha Particle Activity (pCi/L)	None	15	ND	ND	ND-6.7	1.6	Erosion of natural deposits
	Radon 222 (pCi/L)	None	None	ND	ND	190-963	487.0	Decay of naturally occurring radium
	Uranium (pCi/L)	0.43	20	NA	2.8	NA	NA	Erosion of natural deposits
	Monitored in the Distribution System							
	Total Coliform Bacteria	0	< 1 sample per month positive	NA	NA	ND	ND	Naturally Present in the Environment
	Total Trihalomethanes (µg/L)	NA	80	NA	NA	ND-98	59.4	By-product of water chlorination
	Haloacetic acids - HAA 5 (µg/L) ***	NA	60	NA	NA	ND-63	26.7	By-product of water chlorination
	Chlorine Residual (Free chlorine) (mg/l)	MRLDG as CL <sub>2</sub> 4.0	MRLD as CL <sub>2</sub> 4.0	NA	NA	.15-3.6	1.4	Used to disinfect drinking water
LEAU/ COPPER RULE	Monitored at the Customer's Tap 33 sites sampled. 0 samples exceeded the action level for copper; 0 samples exceeded the action level for lead							
	Lead (µg/L)	2	15 (AL)	NA	NA	ND-7.0	<0.005	Corrosion of household water plumbing and erosion of natural deposits
	Copper (mg/L)	0.17	1.3 (AL)	NA	NA	ND180	<0.05	
SECONDARY STANDARDS	Monitored Before Distribution	Aesthetic Standa	ords Established By t	he State of C	alifornia, Department	of Health Serv	vices	
	Chloride (mg/L)	None	500	22-28	25	25-51	35.33	Runoff/Leaching from natural deposits
	lron (μg/L)	None	300	ND	ND	ND-180	90.3	Leaching of natural deposits
	Manganese (µg/L)	None	50	ND	ND	ND-170	42.5	Leaching of natural deposits
	Color (units)	None	15	ND	ND	ND-12	4.00	Naturally-occurring organic materials
	Sulfate (mg/L)	None	500	240-297	265	82-145	115.67	Runoff/Leaching from natural deposits
	Specific Conductance (µmhos)	None	1600	829-1003	904	770-952	862.00	Substances that form ions in water
	Total Dissolved Solids (mg/L)	None	1000	536-716	629	520-590	542.50	Runoff/Leaching from natural deposits
	Surfactants (MBAS) (µg/L)	None	500	0.055	0.055	ND	ND	
Other Constituents monitored	pH (units)	None	None	8.0-8.28	8.13	7.4-7.8	7.57	Runoff/Leaching from natural deposits
	Total Hardness as CaCO3 (mg/L)	None	None	331-396	365	290-375	331.67	Runoff/Leaching from natural deposits
	Total Alkalinity as CaCO3 (mg/L)	None	None	165-189	174	260-320	286.70	Runoff/Leaching from natural deposits
	Calcium (mg/L)	None	None	70-84	77	70-120	98.00	Runoff/Leaching from natural deposits
	Magnesium (mg/L)	None	None	33-52	41	25-28	27.00	Runoff/Leaching from natural deposits
	Sodium (mg/L)	None	None	34-55	44	35-78	56.00	Runoff/Leaching from natural deposits
	Potassium (mg/L)	None	None	2.0-3.6	2.8	1.0-1.4	1.13	Runoff/Leaching from natural deposits
	Control of DBP precursers- TOC (mg/L)	NA	TT	2.63-3.93	3.4	NA	NA	TOC has no known adverse health effects but provides a medium for the formation of disinfection by products. Sources include plant
	Additional Parameters Analyzed							decay and other natural processes.
*UCMR	Additional Parameters Analyzed	None	1000 (AL)	280-480	340.0	0-200	50	Erosion of natural deposits
	Boron (μg/L) Vanadium (μg/L)	None	50 (AL)	280-480 ND-4.9	2.2	ND	0	Erosion of natural deposits
-	vanaanin (μg/ב)	HONG		10.7.0	L.L	110	J	

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 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) form when naturally occurring organic materials found in potable water react with disinfectants such as chorine. In particular elevated Haa5 levels in drinking water pose the following health risk: Some people who drink water containing Haa5 in excess of the MCL over many years may develop an increased risk of getting cancer.

# **Carpinteria Valley Water District**

### Annual Water Quality Report for 2004

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 one year old.

### 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 by-products.

Legend

Symbol	"<" denotes 'less than'
μ <b>g/L</b>	Micrograms per liter (parts per billion)
mg/L	Milligrams per liter (parts per million)
NĎ	Not detected at testing limit
NTU	Nephelometric Turbidity Units
PCi/L	Picocuries per liter
	(a measure of radiation)
μmho/cr	n Micro Ohms per centimeter
NA	Not Analyzed
None	None Required

#### 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.