

CARMICHAEL WATER DISTRICT WATER QUALITY IN 2002

A CONSUMER CONFIDENCE REPORT

SUMMER 2003

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

This report contains important information about your drinking water. Please translate it or speak with someone who understands it.

High Quality Water

Carmichael Water District's 39,000-plus customers receive approximately 70 percent of their water from the American River, which is among the most pristine watersheds in the country. Twenty percent comes from district groundwater wells. With the district's new microfiltration water treatment plant, which uses the latest water purification technology, you can be assured that your water is high quality.

In addition, your water is tested for more than 200 elements on a daily, weekly, monthly, and/or annual basis. Water samples are subject to the most up-to-date testing methods and then are re-tested to verify accuracy. Samples are then measured against state and federal standards to ensure quality.

Protecting Future Water Quality

Carmichael Water District's new microfiltration plant will continue to provide a high level of public health protection as the American River watershed develops over the decades and federal and state water quality standards become more stringent.

The Water Quality Chart

The water quality chart identifies any constituent detected at a "threshold" level as determined by state and federal regulations. Each constituent is then compared to state and federal goals – the Maximum Contamination Level Goal (MCLG) and Public Health Goal (PHG).

How to Read the Data

- 1) Identify constituents in the left-hand column.
- 2) Compare the detection range to the state Maximum Contamination Level (MCL) in the third column and federal

Constituent	Source	MCL	Ground-water		Surface Water		PHG/ MCLG
			Range	Average	Range	Average	
Primary Drinking Water Standards							
Turbidity (ntu)	Suspended matter present in water that creates cloudiness.	0.3	.10-.76	.21	.02-.06	.04	n/a
Arsenic (ppb)	Erosion of natural deposits.	50	0 – 3.2	1.7	ND	ND	n/a
Tetrachloroethylene (ppb)	Organic solvent, widespread in the environment. It is used as a solvent in the manufacturing of fluorocarbons.	5	ND-1.4	.15	ND	ND	.06
Secondary Drinking Water Standards							
Hardness (ppb)	Naturally occurring in water, generally from magnesium and calcium.	NE	55-149	93	18-33	26.3	NE
Iron (ppb)	Erosion of natural deposits.	300	ND-48	8	ND	ND	NE
Manganese (ppb)	Erosion of natural deposits.	50	ND-50	6.4	ND	ND	NE

Maximum Contamination Level Goal and Public Health Goal (MCLG/PHG) in the last column.

- 3) Confirm that your water meets all federal and state drinking water health standards.

Water Quality Definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed by the state of California in drinking water. Primary maximum contaminant levels are set as close to the public health goals (or maximum contaminant level goals) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. Public health goals 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. Maximum contaminant level goals are set by the United States Environmental Protection Agency.

Primary Drinking Water Standards: Maximum contaminant levels

Key to Abbreviations

n/a	Not applicable
ntu	Nephelometric units
ppb	Parts per billion
ND	Not detected
NE	None established
PHG	Public health goal
MCL	Maximum contamination level
MCLG	Maximum contamination level goal

for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

Secondary Drinking Water Standards: Maximum contaminant levels for contaminants that affect taste, odor or appearance of the drinking water. Contaminants with secondary drinking water standards do not affect health at the MCL levels.

Want to Know More?

While Carmichael Water District is required to list only those constituents detected at a threshold level as determined by state and federal regulations, a complete listing of all tested constituents is available by contacting the district at (916) 483-2452.

Information You Should Know

Drinking Water — 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 (800) 426-4791.

Drinking Water Contaminants — The sources of drinking water (both tap 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.

In order to ensure that tap water is safe to drink, the EPA and California DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants that may be present in source water 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 or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

- **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.

Special Information for Sensitive Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as cancer patients undergoing chemotherapy, people 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. EPA/Centers for Disease Control 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 (800) 426-4791.

Source Water Assessment Available

The California Department of Health Services (DHS) requires water providers to conduct a source water assessment to help protect the quality of future water supplies. This assessment describes where a water system's drinking water comes from, the types of polluting activities that may threaten source water quality and an evaluation of the water's vulnerability to those threats.

To meet the DHS requirements and provide our customers with information about our water supply, the district completed its surface water assessment in May 2003 and its groundwater assessment in July 2003.

The results indicate that our surface water source (the American River) is considered most vulnerable to contamination from sewer system spills, body contact recreation, urban runoff and discharge of regulated and unregulated contaminants. The contaminants to which the surface water sources are considered most vulnerable include the following:

- Perchlorate, nitrosodimethylamine and volatile organic chemicals discharged into the American River by the Aerojet General Corporation. Aerojet is under the joint regulatory oversight of the EPA, California Department of Toxic Substance Control and the California Regional Water Quality Control Board. The groundwater sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: dry cleaners and manufacturers of rocket fuel. In addition, the groundwater sources are considered most vulnerable to these activities:

- Illegal activities and unauthorized dumping
- Sewer collection systems
- Dry cleaners
- Automobile repair shops
- Chemical/petroleum pipelines
- Electrical/electronic manufacturing
- Underground storage tanks
- Gas stations

A copy of the complete assessment is available for inspection at the Carmichael Water District offices, 7837 Fair Oaks Boulevard, Carmichael California, 95609. You may request a summary of the assessment be sent to you by contacting General Manager, Steve Nugent at (916) 483-2452.

The information included in this water quality chart is required by law to be provided to every water user.