

# Rancho Murieta Community Services District

## 2009 CONSUMER CONFIDENCE REPORT



### District's Mission Statement:

*The mission of Rancho Murieta Community Services District is to take a leadership role in responding to the needs of the residents. The District will deliver superior community services efficiently and professionally at a reasonable cost while responding to and sustaining the enhanced quality of life the community desires.*



### Annual Water Quality Report

We are very pleased to provide you with this year's Consumer Confidence Report. We want to keep you informed about the excellent water services we delivered to you in the year 2008. Our goal is, and always has been, to provide to you a clean, safe and dependable supply of drinking water at a reasonable cost.

### About Your Water Supply

Our water source is the Cosumnes River. Because of its pristine nature, the Cosumnes River is considered low risk for many regulated contaminants, either man-induced or naturally occurring. Water from the river is pumped into Calero during the winter months for storage and is gravity fed or siphoned into Chesbro as needed for drinking water production. All water is treated at the District's water treatment facilities below Lake Chesbro. The treatment process consists of aeration, screening, coagulation, flocculation, sedimentation, filtration through anthracite and sand filter beds and disinfection with chlorination. Chlorine is added to drinking water as a disinfectant to kill bacteria and other disease-causing microorganisms and is also added to provide continuous disinfection throughout the distribution system. Treated water is then stored in one of the two above ground tanks before distribution to you.

### Source Water Assessment

An assessment of the Cosumnes River as the community's surface water source was completed in 2006. The river is most vulnerable to historic mining operations. Water pumped from the river is stored in Calero, Chesbro, and Clementia, with Clementia being utilized only as an emergency source. A copy of the assessment is available for public review at the District offices and will be available upon request.

### Important Information about the Consumer Confidence Report

This Consumer Confidence Report (CCR) is a report that summarizes the testing of contaminants in drinking water. Every year, the District and other water providers are required to prepare and distribute a CCR to all water customers. This CCR includes a comparison of the District's water to water quality standards set by the California Department of Public Health (CDPH) and the US Environmental Protection Agency. The purpose of the report is to let you – our customer – know the quality of your water.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health 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 provide the same protection for public health.

In the past, it was necessary to list all of the analytes tested by the District. We *still* test for them on a regular basis. However, only those analytes that are detected are required to appear on the new water quality chart.

### Questions...??

If you want to learn more about the District, visit our web site at [ranchomurietacsd.com](http://ranchomurietacsd.com) or attend our Board meetings, held at the District Office. If you have questions about this report, please contact Paul Siebensohn at (916) 354-3700. ***Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.***

# WATER QUALITY ANALYSIS for 2008

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The data represents the results of our monitoring for the period of January 1 to December 31, 2008. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More

## Water Quality Measurement Units

### Nephelometric Turbidity Units (NTU)

A measure of water's clarity. Turbidity in excess of 5 NTU is just noticeable to the average person.

### Parts per million (ppm) or (mg/L)

A measurement of the concentration of a substance roughly equivalent to one drop in 42 gallons or one penny in \$10,000.

## Important Definitions

### Maximum Contaminant Level (MCL)

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the public health goals and maximum contaminant level goals as feasible using the best available treatment technology. MCLs are enforceable standards.

### Public Health Goals (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. See reference website below.

<http://www.oehha.ca.gov/water/phg/d97phgs.html>

### Primary Drinking Water Standards

Primary maximum contaminant levels, specific treatment techniques adopted in lieu of primary MCLs and monitoring and reporting requirement for MCLs that are specified in regulation.

### 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.

### Treatment Technique (TT):

A required process intended to reduce the level of a contaminant in drinking water.

## AND WHAT YOU SHOULD KNOW ABOUT . . .

- 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 (1-800-426-4791).

- The sources of drinking water (both tap and bottled water) may 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 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 & gas production, mining, or farming; Pesticides & herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; Organic chemical contaminants, including synthetic & volatile organic chemicals, that are byproducts of industrial processes & petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems; Radioactive contaminants, that can be naturally-occurring or be the result of oil & gas production and mining activities.

information about contaminants and potential health effects can be obtained by calling the USPA's Safe Drinking Water Hotline (1-800-426-4791) or EPA's website (<http://www.epa.gov/safewater/hfacts.html>). If a contaminant was found at an unsafe level, we would notify the community and CDPH immediately.

Below is a list of the analytes detected this year. A more detailed list is available on the District website or can be requested at the Main Office. Analytes of general interest not detected in our water this year: arsenic, lead, nitrate, fluoride, perchlorate, MTBE, iron, and manganese. The California Department of

Public Health requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old. Complete reports are available at our District Office.

Additional references are on the California Department of Health Services Drinking Water Program website at: <http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Regulations.aspx>

Constituent	Major Sources	Public Health Goal	MCL in mg/L	District Results in mg/L
Turbidity (See below *)	Suspended matter present in water that creates cloudiness	None established	>0.5 NTU TT*	0.055 NTU (avg)
Hardness	Runoff and leaching from natural deposits.	None est.	None est.	38 mg/L
Total Dissolved solids (TDS)	Runoff and leaching from natural deposits.	None est.	1000	61 mg/L
Sodium	Runoff and leaching from natural deposits.	None est.	500	4.3 mg/L
Chloride	Runoff and leaching from natural deposits.	None est.	500	2.8 mg/L
Zinc	Runoff and leaching from natural deposits.	None est.	5.0	0.18 mg/L
Total Trihalomethanes	Disinfection byproduct	None est.	0.08	0.0624** (0.025-0.081)
Total Haloacetic Acids	Disinfection byproduct	None est.	0.06	0.0405 ** (0.0199-0.0565)
Total Organic Carbon	Various natural & manmade	None est.	TT***	2.3** (1.1-4.5)
Calcium	Runoff and leaching from natural deposits.	None est.	None est.	8.2 mg/L
Magnesium	Runoff and leaching from natural deposits.	None est.	None est.	4.3 mg/L
Alkalinity	Runoff and leaching from natural deposits.	None est.	None est.	42 mg/L
Sulfate	Runoff and leaching from natural deposits.	None est.	500	4.3 mg/L
Chlorine	Disinfectant	None est.	4	0.97 mg/L av. (0.87-1.23 range)
Lead @ 20 sites	Old pipe solder	0.002	0.015	90 <sup>th</sup> % result = 0
Copper @ 20 sites	Leaching from copper pipes	0.17	1.3	90 <sup>th</sup> % result = 0

\* Turbidity additional reporting information:

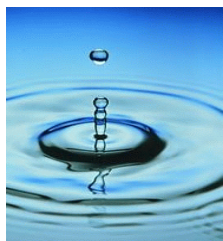
1. Lowest monthly percentage of samples that met 0.3 NTU: 100%

2. Highest single turbidity measurement during the year: 0.21

3. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

\*\*\* Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.

\*\* Running Annual Average



# General Mineral Analysis 2009

MCL	REPORTING UNITS	CHEMICAL	ANALYSES RESULTS
-	mg/L = ppm	Hardness, (Total) as CaCO <sub>3</sub>	38
-	mg/L	Calcium (Ca)	8.2
-	mg/L	Magnesium (Mg)	4.3
-	mg/L	Sodium (Na)	8.8
-	mg/L	Potassium (K)	ND
-	mg/L	Alkalinity, (Total) (as CaCO <sub>3</sub> equivalents)	42
-	mg/L	Hydroxide (as OH)	ND
-	mg/L	Carbonate (as CO <sub>3</sub> )	ND
-	mg/L	Bicarbonate (as CaCO <sub>3</sub> )	42
*	mg/L +	Sulfate (SO <sub>4</sub> )	4.3
*	mg/L +	Chloride	2.8
45	mg/L	Nitrate (NO <sub>3</sub> )	ND
2.0	mg/L	Fluoride (F) (Natural-Source)	ND
	Std Units +	pH, Laboratory	7.71
**	umhos +	Specific Conductance (E.C.)	100
***	mg/L +	Total Filterable Dissolved Residue @ 180 C (TDS)	61
15	UNITS	Color, Apparent (Unfiltered)	ND
3	TON	Odor Threshold @ 60 C	1
0.5	mg/L +	MBAS	ND
1000	ug/L = ppb	Aluminum (Al)	ND
6	ug/L	Antimony	ND
10	ug/L	Arsenic (As)	ND
1000	ug/L	Barium (Ba)	ND
4	ug/L	Beryllium	ND
5	ug/L	Cadmium (Cd)	ND
50	ug/L	Chromium (Total Cr)	ND
1000	ug/L +	Copper (Cu)	ND
300	ug/L +	Iron (Fe)	ND
	ug/L	Lead (Pb)	ND
50	ug/L +	Manganese (Mn)	ND
2	ug/L	Mercury (Hg)	ND
100	ug/L	Nickel	ND
50	ug/L	Selenium (Se)	ND
100	ug/L +	Silver (Ag)	ND
2	ug/L	Thallium	ND
5000	ug/L	Zinc (Zn)	180

ND = None Detected mg/L = Milligrams per liter=parts per million ug/L=Parts per billion



# VOC Analysis 2009

(Volatile Organic Compounds)

ND=Not Detected ug/L=Parts per billion

Analyte	Result
Acetone	ND
Benzene	ND
Bromobenzene	ND
Bromochloromethane	ND
Bromodichloromethane	1.4 ug/L
Bromoform	ND
Bromomethane	ND
2-Butanone	ND
n-Butylbenzene	ND
sec-Butylbenzene	ND
tert-Butylbenzene	ND
Carbon tetrachloride	ND
Chlorobenzene	ND
Chloroethane	ND
Chloroform	13 ug/L
Chloromethane	ND
o-Chlorotoluene	ND
p-Chlorotoluene	ND
Dibromochloromethane	ND
1,2-Dibromo-3-chloropropane	ND
1,2-Dibromoethane	ND
Dibromomethane	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Dichlorodifluoromethane (Freon 12)	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND
cis-1,2-Dichloroethene	ND
trans-1,2-Dichloroethene	ND
1,2-Dichloropropane	ND
1,3-Dichloropropane	ND
2,2-Dichloropropane	ND
1,1-Dichloropropene	ND
cis-1,3-Dichloropropene	ND
trans-1,3-Dichloropropene	ND
Ethylbenzene	ND
1,1,2-Trichloro-1,2,2-trifluoroethane(Freon 113)	ND
Hexachlorobutadiene	ND
2-Hexanone	ND
Isopropylbenzene	ND
p-Isopropyltoluene	ND
Methylene chloride	ND
4-Methyl-2-pentanone	ND
Methyl tert-butyl ether (MTBE)	ND
Naphthalene	ND
n-Propylbenzene	ND

Styrene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	ND
1,2,3-Trichlorobenzene	ND
1,2,4-Trichlorobenzene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND
1,2,3-Trichloropropane	ND
1,2,4-Trimethylbenzene	ND
1,3,5-Trimethylbenzene	ND
Vinyl chloride	ND
Xylenes(total)	ND
Perchlorate	ND