



# CONSUMER CONFIDENCE REPORT 2012

## A message from the United States Environmental Protection Agency (USEPA) and California Department of Public Health Services (CDPH)

In order to ensure that tap water meets all regulations for drinking, the USEPA and the CDPH prescribe regulatory requirements that limit the amount of certain contaminants in water provided by public water systems. The regulations establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Rancho California Water District is responsible for providing high-quality drinking water, yet cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in drinking water, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

**All water produced and delivered by RCWD meets or exceeds standards for public drinking water established by the California Department of Public Health Services and the United States Environmental Protection Agency. This yearly report describes where your water comes from, what is in it and how its quality compares with the regulatory standards set by the California Department of Public Health.**

This edition of WaterNews contains the Consumer Confidence Report which explains data regarding Rancho California Water District's (RCWD/District) water quality for the 2012 calendar year, and is from the most recent testing completed in accordance with state and federal regulations, and represents only a fraction of the activity the District engages in, to provide you, the consumer, a high level of confidence in the water you drink.



RCWD drinking water is tested extensively, and results consistently show that regulated contaminants are either not detected, or are present in amounts far below the limits permitted by state and federal drinking water standards. In fact, more than 2,000 tests are conducted annually by an independent laboratory. These tests monitor tap water for microbial organisms, minerals and organic substances that could cause disease or other adverse health effects. Testing is done for over 120 different contaminants including bacteria, metals, organic chemicals and pesticides. Only substances that are detected in the water are included in this report.

## INFORMATIONAL STATEMENT

While RCWD works hard to be certain that its water meets or exceeds state and federal regulations, all drinking water, including bottled water, may reasonably be expected to contain at least a small amount of some contaminants; however, the presence of contaminants does not necessarily indicate that water poses a health risk.

This is the nature of water. The sources of drinking 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. Water industry professionals are dedicated to removing any materials that might prove harmful to consumers. RCWD uses effective, multi-barrier treatment processes to ensure its water continues to meet state and federal standards. Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as individuals with cancer undergoing chemotherapy, individuals who have undergone organ transplants, individuals with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers.

# HEALTH EFFECTS

**Manganese** The District has detected Manganese levels above the secondary MCL of 50 ug/L in two (2) of its 44 active wells. Manganese is a naturally occurring substance found in many types of rock and soil; it is ubiquitous in the environment and found in ground water. Manganese at low levels is nutritionally essential in humans. The District has implemented sequestration treatment to reduce the Manganese levels to below the secondary MCL at these wells.

**Nitrate** The District has detected nitrates at 22 mg/L, but less than the MCL of 45 mg/L in one (1) of its 44 active wells. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six (6) months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.



**Arsenic** While your drinking water meets the USEPA standard for arsenic, it does contain low levels of this constituent. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory system problems. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

The District has detected levels of arsenic above the MCL in three of its 44 active wells. These wells are treated by blending with waters from other sources in order to reduce the concentration of arsenic to below the MCL.

**Fluoride** The District has detected levels of fluoride above the MCL in two of its 44 active wells. These wells are treated by blending with waters from other sources in order to reduce the concentration of fluoride to below the MCL. Prior to treatment, 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

**Radioactive contaminants**, that can be naturally-occurring or the result of oil and gas production.

## DEFINITIONS

In the following tables, you will find detailed information about the water that comes from your tap. Your water is regularly tested for more than 120 chemicals and other substances, as well as radioactivity. Only substances that were detected in the water are listed in the tables. This information is provided to help you understand the terms used in this Consumer Confidence Report.

### 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 or technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

### 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 USEPA.

### 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 Residual Disinfectant Level (MRDL)

The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

### Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the USEPA.

### Primary Drinking Water Standard (PDWS)

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

### Treatment Technique

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

### Regulatory Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

## Primary Drinking Water Standards

Clarity	Units	State MCL	PHG (MCLG)		Result
Effluent Turbidity of Imported Water	NTU	0.3		Highest Result	0.06
	%	95(a)	NA	% < 0.3	100
Effluent Turbidity of GWUI Water	NTU	0.3		Highest Result	0.39
	%	95(a)	NA	% < 0.3	99.5

## Inorganic Chemicals

Constituents Detected	Units	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date
Aluminum	µg/L	1000	600	ND	ND*	ND	ND	2009-2012
Arsenic	µg/L	10	0.004	ND	ND*	ND-20	3.2	2009-2012
Barium	mg/L	1000	2000	ND	ND*	ND-0.63	ND	2009-2012
Fluoride	mg/L	2	1	0.7-0.9	0.8	0.1-5.4	0.6	2009-2012
Nitrate	mg/L	45	45	ND	ND*	ND-22	7.9	2009-2012
Perchlorate	µg/L	6	6	ND	ND*	ND-5.3	ND	2009-2012
Selenium	µg/L	50	30	ND	ND*	ND-7.6	ND	2009-2012

## Radionuclides

Constituents Detected	Unit	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date
Gross Alpha	pCi/L	15	(0)	ND-3.0	ND	ND-6.9	2.7	2003-2012
Gross Beta	pCi/L	50	(0)	ND-5	ND	ND	ND	2003-2009
Radium-228	pCi/L	5	0.019	ND	ND	ND-2.99	ND	2005-2010
Uranium	pCi/L	20	0.43	ND-2.0	1	ND-8.9	3.8	2003-2011

## Disinfection By-Products

	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	Distribution System Range	Distribution System Average	Typical Sources in Drinking Water
Total Trihalomethanes	µg/L	80	NA	8.7-32	19.5	By-product of drinking water chlorination
Haloacetic Acid	µg/L	60	NA	ND-14	6	By-product of drinking water chlorination
Total Chlorine Residual	mg/L	[4]	[4]	0.2-2.6	1.0	By-product of drinking water chlorination

## Lead and Copper Survey

		State AL	PHG	Number of Samples Taken	90th Percentile	Sample Date	Number of Sites that exceed action level	Typical Sources in Drinking Water
Lead	µg/L	15	0.2	51	ND	2010	1	Internal corrosion of household plumbing; erosion of natural deposits
Copper	mg/L	1.3	0.3	51	190	2010	0	

\* - Average was determined by the highest running annual average



# QUALITY WATER, RELIABLE SERVICE

RCWD provides water and sewer services to meet the diverse needs of the people who live and work in the Temecula and Murrieta Valleys.

## WHERE DOES OUR WATER COME FROM?

RCWD is fortunate to have three “local” sources of water. In addition, RCWD has access to purchase imported water from the Metropolitan Water District of Southern California (MWD). Surface water runoff into Vail Lake is captured during the winter and released to replenish our local underground aquifers when available. Native groundwater supplies (29%) are pumped from the large underground basin aquifers that underlie portions of the District. The District also purchases untreated imported water for additional groundwater basin recharge (21%). Recycled water (highly treated, filtered and disinfected wastewater) is also used on some landscaping, park and golf courses within the District (5%). The District purchases additional water (45%) from MWD. The two primary sources for MWD water are from the Colorado River and from Northern California.

An assessment of the drinking water sources was completed in December 2002. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: crop irrigation, dry cleaners, electrical manufacturing, grazing, gas stations, mining,

photo processing, septic systems, and sewer collection systems. You may request a summary of the assessment be sent to you by contacting the District. Also in December 2002, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWD at (800) 225-5693.



## ODOR THRESHOLD

MWD was conducting quarterly monitoring for the water produced at its Skinner Treatment facility due to a secondary MCL violation in 2008. This requirement was reduced to annual monitoring in May 2012 when the RAA returned to <3 TON. No taste or odor complaints were received during this period.

## Secondary Drinking Water Standards

	Unit	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date	Typical Sources in Drinking Water
Aluminum	µg/L	200	600	ND	ND*	ND	ND	2009-2012	Erosion of natural deposits; residue from some surface water treatment
Chloride	mg/L	500	NA	75-77	76*	36-230	98.5	2009-2012	Runoff/leaching from natural deposits
Color	Unit	15	NA	1	1*	ND-10	2.5	2009-2012	Naturally occurring organic materials
Foaming Agents	µg/L	500	NA	ND	ND*	ND-80	3	2009-2012	Municipal and industrial waste discharges
Iron	µg/L	300	NA	ND	ND*	ND-250	6	2009-2012	Leaching from natural deposits
Manganese	µg/L	50	NL=500	ND	ND*	ND-490	3.1	2009-2012	Leaching from natural deposits
Odor	TON	3	NA	1.0-2.0	2*	ND-2	ND	2009-2012	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	NA	440-780	640*	380-1300	807	2009-2012	Substances that form ions when in water
Sulfate	mg/L	500	NA	96-120	110*	4.2-240	97	2009-2012	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	mg/L	1000	NA	360-400	380*	280-1000	468	2009-2012	Runoff/leaching from natural deposits
Turbidity	NTU	5	5	ND-0.1	ND*	ND-0.39	0.06	2009-2012	Soil runoff

\* - Average was determined by the highest running annual average

## Unregulated Constituents

Constituents Detected	Unit	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date	Typical Sources in Drinking Water
Boron	µg/L	NL=1000	NA	130	130	ND-1600	327	2009-2012	Runoff/leaching of natural deposits; industrial wastes
Chromium, Hexavalent	µg/L	NA	NA	ND	ND*	ND-3.8	1.6	2009-2012	Industrial waste discharge
Vanadium	µg/L	NA	NL=50	ND	ND	ND-85	23	2009-2012	Naturally occurring, industrial waste discharge

## Federal Unregulated Constituents (UCMR2)

Constituents Detected	Unit	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date	Typical Sources in Drinking Water
N-Nitrosodimethylamine	ng/L	NL=10	3	ND	NA	ND-3.5	ND	2010	By-product of drinking water chlorination; industrial processes
N-Nitrosodiethylamine	ng/L	NL=10	NA	ND	ND	ND-8.4	ND	2008	By-product of drinking water chlorination; industrial processes

Unregulated contaminant monitoring helps the EPA and the California Department of Public Health to determine where certain contaminants occur and whether the contaminant needs to be regulated.

## Additional Parameters

Constituents Detected	Unit	State MCL	PHG (MCLG)	Imported Water Range	Imported Water Average	Well Water Range	Well Water Average	Sample Date	Typical Sources in Drinking Water
Alkalinity	mg/L	NA	NA	75-110	93*	57-530	150	2009-2012	
Bromate	µg/L	10	0.1	1.2-11	6.5	NC	NA	2012	Disinfection by-product of Ozonation
Calcium	mg/L	NA	NA	34-41	38*	1.3-110	43	2009-2012	
Chlorate	µg/L	NL=800	NA	50	ND-80	NC	NA	2012	Disinfection by-product of chlorination
Hardness	mg/L	NA	NA	120-220	170*	3.4-400	159	2009-2012	
Magnesium	mg/L	NA	NA	15.0-17.0	16*	ND-26	11	2009-2012	
pH	Unit	NA	NA	8.1-8.5	8.3	7.4-9.4	8	2009-2012	
Potassium	mg/L	NA	NA	3.4-3.6	3.5*	ND-5.6	2.5	2009-2012	
Sodium	mg/L	NA	NA	65-66	66*	45-170	101	2009-2012	
Total Organic Carbon	mg/L	TT	NA	1.8-2.3	2.1*	NC	NA	2008-2010	Various natural and man-made sources

\* - Average was determined by the highest running annual average

## MONITORING & SAMPLING FREQUENCY

### DISTRIBUTION SYSTEM

**Bacteriological** - Weekly  
**Trihalomethanes** - Quarterly  
**Color** - Monthly  
**Odor** - Monthly  
**Turbidity** - Monthly

### WELL WATER

**Bacteriological** - Quarterly  
**Inorganic Chemicals** - Once every 3 yrs.  
**Color** - Once every 3 yrs.  
**Odor** - Once every 3 yrs.  
**Turbidity** - Once every 3 yrs.  
**VOCs** - Once every 3 yrs.  
**SOCs** - Once every 3 yrs.  
**Radionuclides** - Once every 3 yrs. to 9 yrs.

### ACRONYMS

**DLR** - Detection Limit for purposes of Reporting  
**MCL** - Maximum Contaminant Level  
**MCLG** - Maximum Contaminant Level Goal  
**NA** - Not Applicable  
**NC** - Not Collected  
**ND** - Not Detected  
**mg/L** - Milligrams per Liter or parts per million (ppm). (Equivalent to 1 second in 11 1/2 days)  
**NL** - Notification Level (also known as Action Level throughout 2004)

**NTU** - Nephelometric Turbidity Units (suspended material)  
**pCi/L** - Pico Curies per Liter  
**ppt** - Parts per Trillion (1 second in 31,700 years)  
**TT** - Treatment Technique  
**ug/L** - Micrograms per Liter or parts per billion (ppb) (Equivalent to 1 second in 31.7 years)  
**uS/cm** - MicroSeimen per centimeter  
**GWUI** - Ground water under the direct influence of surface water  
**Sequestration** - Phosphates used in water treatment to control metal releases

## FREQUENTLY ASKED QUESTIONS

### Q. What is the fluoride level of Rancho California Water District's (RCWD) water?

A. RCWD does not add fluoride to its water, however, fluoride occurs naturally in RCWD's groundwater. MWD started adding fluoride at each of its five water treatment plants in fall 2007, adjusting the natural fluoride level in water (ranging from 0.1 - 0.2 ppm) to the optimal range of 0.7 - 1.3 ppm, as state regulations required. RCWD's average fluoride level is 0.6 ppm, or milligrams per liter (mg/L). The maximum allowable level of fluoride at the state level is 2.0 milligrams per liter (mg/L). Moderate levels of fluoride are helpful in preventing tooth decay. For additional information on your needs for fluoride, please consult your family dentist.

### Q. Does Temecula have hard or soft water?

A. During the past year, RCWD's water hardness averaged 159 milligrams per liter (mg/L) (equal to 9 grains per gallon, 1 grain = 17.1 mg/L). This is considered "hard" water. Hard water may cause ice cubes to be cloudy, and leave water spots on glasses. The two most common components of hard water are calcium and magnesium, both important to good health. Some scientific studies

have shown people who receive hard water have reduced cardiovascular problems such as stroke, hypertension, and heart problems.

### Q. What about water softeners?

A. There is more to water softeners than soft water. Softeners typically waste more water than they process because of the need to "flush" the softening system. In addition, softeners can release considerable salt by-products into wastewater treatment facilities and groundwater supplies, resulting in increased mineral levels. This is a particular concern in areas like ours where wastewater is reclaimed and returned to the community for landscape irrigation or is disposed of in onsite septic tanks.

### Q. Who regulates drinking water quality?

A. The USEPA establishes and enforces national drinking water standards. In California, enforcement of drinking water standards falls under the Department of Health Services (DHS), Drinking Water Division. Both agencies set MCLs for various compounds in water to provide safe drinking water supplies.

### Board of Directors

Ben R. Drake, President  
 Stephen J. Corona, Sr. Vice President  
 Lisa D. Herman, Vice President  
 John E. Hoagland, Vice President  
 William E. Plummer, Vice President  
 Roland C. Skumawitz, Vice President  
 James F. Stewart, Vice President

### District Administrative Officers

Matthew G. Stone, General Manager  
 Richard S. Williamson, Assistant  
 General Manager  
 Jeffrey D. Armstrong, Chief Financial  
 Officer/Treasurer  
 N. Craig Elitharp, Director of  
 Operations and Maintenance  
 Andrew L. Webster, Chief Engineer  
 Kelli E. Garcia, District Secretary  
 Meggan A. Valencia, WaterNews Editor

The Board of Directors meets regularly on the second Thursday of every month at 8:30 a.m. at the District Headquarters. The public is welcome to attend.



*This special report meets state and federal requirements for annual customer notification regarding water quality. This Consumer Confidence Report was produced and mailed to residences and businesses in RCWD's service area. Direct mailing of this report allows RCWD to provide virtually all of its customers with information they should have about drinking-water quality, supply and system reliability in a cost-efficient manner. If you are a landlord or manage a multi-unit dwelling, please contact us to order additional copies of this report to ensure your tenants receive this important information.*

*If you have additional questions or concerns regarding the quality of your water, please contact Rich Ottolini, Operations Manager or Randy Hagan Water Quality Supervisor at (951) 296-6900.*

### ¡ATENCIÓN RESIDENTES!

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



**Rancho California Water District**

42135 Winchester Rd.  
 Temecula, CA 92590  
 (951) 296-6900  
 (951) 296-6877 fax

PublicInfo@RanchoWater.com  
 www.RanchoWater.com  
 7:30 a.m. to 5:00 p.m. MON-THUR  
 8:00 a.m. to 5:00 p.m. FRI