

**City of Colusa - 2009 Water Quality  
Consumer Confidence Report - Public Water System # 0610002**

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

**Water in the City of Colusa originates from five groundwater sources** known as Well #2, Well #3, Well #4, Well #5, and Well #6. For additional information about the drinking water, contact **Public Works at 458-2032**.

**Public Meetings:** Regularly scheduled public meetings occur on first and third Tuesdays of every month at the City Hall located at 425 Webster St.

**DEFINITIONS OF TERMS USED IN THIS 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 technologically, and economically 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. PHGs are set by the California Environmental Protection Agency.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water for which there is no known or expected risk to health. The Federal Environmental Protection Agency (USEPA) set all MCLGs.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in the drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect for control of microbial contaminants.

**ppb:** parts per billion or micrograms per liter

**ppm:** parts per million or milligrams per liter

**pCi/L:** picocuries per liter (a measure of radioactivity)

**NTU:** Nephelometric Turbidity Units

**TDS:** Total Dissolved Solids

**MICROBIOLOGICAL WATER QUALITY:**

Testing for bacteriological contaminants in the distribution system is required by State regulations. This testing is done regularly to verify that the water system is free from coliform bacteria. The minimum number of tests required per month is six. Water in the distribution system is sampled 6 times per month for coliform bacteria and no coliform bacteria were found in samples taken during any month in 2009.

**LEAD & COPPER TESTING RESULTS:**

Lead & copper testing of water from individual taps in the distribution system is required by State regulations. The table below summarizes the

most recent sampling for lead and copper. No results were over the action level. 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. City of Colusa is responsible for providing high quality drinking water, but 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 your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

Chemical	Year Tested	Number of samples collected	Number of samples required	90 <sup>th</sup> Percentile Result (ppb)	Action Level (ppb)
Lead	2007	20	20	7.6	15
Copper	2007	20	20	67	1300

**Detected Contaminants in our water:** The following table lists all detected chemicals in our water during most recent sampling. Note: not all sampling is required annually so in some cases our results are more than one year old. As of 5/17/10

Chemical Detected	Water Source	Year Tested	Level Detected	MCL	PHG	Origins
Arsenic	Well 2	2008	3.4 ppb	10 ppb	4 ppb	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
	Well 3	2007	7.4 ppb			
	Well 4	2006	4.5 ppb			
	Well 6	2006	5.4 ppb			
Barium	Well 2	2005	71 ppb	1000 ppb	100 ppb	Waste from Oil drilling and/or metal refineries, erosion of natural deposits
	Well 4	2008	108 ppb			
	Well 5	2008	121 ppb			
	Well 6	2001	56 ppb			
Calcium	Well 2	2005	14 ppm	none	None	Naturally occurring
	Well 3	2005	13.4 ppm			
	Well 4	2005	21.8 ppm			
	Well 5	2005	15.1 ppm			
	Well 6	2005	11.9 ppm			
Chloride	Well 2	2001	20 ppm	600 ppm	None	Naturally occurring
	Well 3	2001	28 ppm			
	Well 4	2008	56.8 ppm			
	Well 5	2008	27.6 ppm			
	Well 6	2001	20 ppm			
Chlorine	System avg. (range)	2008	1.1 ppm (0.2 – 1.8)	MRDL 4	None	Drinking water disinfectant
Fluoride	Well 2	2001	.19 ppm	1.7 ppm	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
	Well 3	2001	.21 ppm			
	Well 4	2008	.53 ppm			
	Well 6	2001	.77 ppm			
Foaming Agents	Well 2	2008	100 ppb	500 ppb	None	Municipal and industrial waist discharges
	Well 3	2005	80 ppb			
	Well 4	2005	50 ppb			
	Well 5	2005	100 ppb			
	Well 6	2005	70 ppb			
Gross Alpha	Well 5	2005	4.3 pCi/L	15	None	Erosion of natural deposits
Hardness	Well 2	2001	77 ppm	None	None	Naturally occurring
	Well 3	2001	68 ppm			
	Well 4	2001	95 ppm			
	Well 5	2001	70 ppm			
	Well 6	2001	48 ppm			
* Iron (average)	Well 2	2009	*582 ppb	300 ppb	None	Erosion of natural deposits
	Well 3	2009	*379 ppb			
	Well 4	2009	83 ppb			
	Well 5	2009	85 ppb			
	Well 6	2009	49 ppb			
Magnesium	Well 2	2005	12.1 ppm	none	None	Naturally occurring

	Well 3 Well 4 Well 5 Well 6	2005 2005 2005 2005	9.5 ppm 14.9 ppm 11.1 ppm 8.4 ppm			
* Manganese (average)	Well 2 Well 3 Well 4 Well 5 Well 6	2009 2009 2009 2009 2009	* 108 ppb * 83 ppb *88 ppb 46 ppb 39 ppb	50 ppb	None	Erosion of natural deposits
Odor Threshold	Well 2 Well 3 Well 5 Well 6	2005 2008 2008 2008	2 units 1 unit 1 unit 1 unit	3 units	None	Hydrogen Sulfide
Radium 228	Well 2 Well 3 Well 6	2007 2007 2007	1.7 1.5 1.5	none	1.0	Erosion of natural deposits
Sodium	Well 2 Well 3 Well 4 Well 5 Well 6	2005 2005 2005 2005 2005	88.7 ppm 81.2 ppm 94.3 ppm 80.0 ppm 69.8 ppm	None	None	Naturally occurring
Sulfate	Well 2 Well 3 Well 4 Well 5 Well 6	2001 2001 2008 2008 2008	17 ppm 8.3 ppm 111 ppm 28.2 ppm 2.5 ppm	600 ppm	None	Naturally occurring
TDS	Well 2 Well 3 Well 4 Well 5 Well 6	2001 2001 2006 2001 2001	335 ppm 326 ppm 450 ppm 342 ppm 279 ppm	1500 ppm	None	Naturally occurring
Tert-Butyl Alcohol	Well 6	2007	4.93 ppb	None	None	Solvents, fuel additive
Turbidity	Well 2 Well 3 Well 4 Well 5 Well 6	2005 2005 2005 2005 2005	0.82 NTU 0.65 NTU 0.24 NTU 0.21 NTU 0.97 NTU	5 NTU	None	Naturally occurring
Vanadium	Well 2	2005	27.4 ppb	50 ppb	3 ppb	Erosion of natural deposits
Zinc	Well 6	2005	79 ppb	5000 ppb	None	Erosion of natural deposits; industrial wastes

\*ALL RESULTS EXCEEDING STANDARDS ARE MARKED WITH AN ASTERISK

**GENERAL INFORMATION ON DRINKING WATER:**

All 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 mean the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791 or visit website: "www.epa.gov/safewater"

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 individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and well. As water travel 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 and gas production, mining, or farming

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

**Organic chemical contaminants**, including synthetic and volatile chemicals, that are by-products of industrial processes and 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 and gas production and mining activities.

#### SOURCE WATER ASSESSMENT:

A source water assessment was completed by the City of Colusa on April 30, 2001. The assessment determined the contaminant hazards near the well sites, which would most likely threaten its water quality. The sources are considered most vulnerable to the following activities not associated with any detected contaminants.

- Sewer collection systems (Wells 2 & 5)
- Automobile-gas stations (Wells 2 & 6)
- Underground injection of commercial/industrial discharges (Well 3)
- Underground storage tanks – confirmed leaking tanks (Well 3)
- Historic waist dumps (Well 4)
- Dry cleaners (Well 6)

For further information on this source water assessment, call the City Public Works Department at (530) 458-4941 or contact DPH Redding, 415 Knollcrest Dr. #110, Redding, CA 96002; telephone (530) 224-4800

**VIOLATION INFORMATION:** State records indicate that Wells 2, 3, 4 and 5 exceed the MCL for Manganese and Wells 2, 3 and 5 exceed the MCL for Iron. Manganese and Iron are on the state's Secondary Standards list of chemicals, as there are no associated health risks for these levels of manganese or iron in the drinking water. The State has requested no further action on our part at this time. The City is considering treatment methods to reduce the amount of these contaminants in the water.

#### ADDITIONAL INFORMATION:

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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 problems.