

DISINFECTANT ADDED TO WATER

Chlorine Sodium Hypochlorite	Sample Points	Avg. (ppm)	Range (ppm)	MRDL	MRDLG
		0.54	0.42-0.71	4.0	4.0

Microbiological Water Quality: The simple fact is bacteria and other microorganisms are naturally present in the environment and can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Testing for bacteriological contaminants in the distribution system is required by State regulations. The testing is done regularly to verify that the water system is free from coliform bacteria which are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. The minimum number of tests required by CA Dept. of Public Health per month is four (4). The City collects five (5) per month with a total of 60 samples collected annually. The highest number of samples found to contain coliform bacteria during any one month was one (1).

General Information:

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 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 tanks, 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 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, agricultural application, and septic systems.

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

Important Health Information:

In order to ensure that tap water is safe to drink, USEPA and the CA Dept of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791). 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 particularly be 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 lesson the risk of infection by Cryptosporidium and more information about contaminants and potential health effects are available from the USEPA's Safe Drinking and Water Hotline at (800) 426-4791 or go online to www.epa.gov/safewater.

Nitrates:

Nitrates in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in 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 specific enzyme deficiencies. If you are caring for an infant you should ask advice from your health care provider.

Lead:

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).



CITY of WHEATLAND

2010 WATER QUALITY CONSUMER CONFIDENCE REPORT



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plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (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. City of Wheatland is responsible for providing high quality drinking water, but cannot control the variety of materials used in building 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>.

SOURCE WATER ASSESSMENT:

A source water assessment has been completed for the wells serving the City of Wheatland. The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Well 3: Above ground storage tanks, construction/demolition staging areas, equipment storage areas, water supply wells, chemical/petroleum pipelines, gas stations.

Well 4: Gas stations, sewer collection systems

Well 5: Chemical/petroleum pipelines, sewer collection systems.

Well 6: Auto repair & machine shops, bus terminals, grazing, septic systems, existing and historic gas stations.

Well 7: Grazing, home manufacturing, sewer collection systems.

Well 8: Sewer collection systems.

A copy of the complete assessment may be viewed at:
CDPH Valley District Office
415 Kholcroft Drive
Suite 110, Redding, CA 96002

Richard Hinrichs at (530) 224-4867
City of Wheatland
111 C Street
Wheatland, CA 95692

Cross-Connections:

Cross-connections risk contamination of the water distribution system when pressure in drinking water lines drop (backwashage) or is less than pressure in equipment attached to the system (backpressure). Community water supplies are continually jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed. We survey all industrial, commercial facilities in the service area to ensure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also test each backflow preventer owned by the city annually and also require annual testing by privately owned backflow preventers to provide maximum protection to our water system

The Truth about Bottled Water:

Did you know that the average bottle of water can cost up to 1,000 times more than tap water? Despite what it's higher cost would lead us to believe, estimates are that 25-40% of the bottled water on the market is simply repackaged tap water. Tap water is regulated by the Environmental Protection Agency (EPA) under the Safe Drinking Water Act, while bottled water is considered a food and is thus regulated by the Food and Drug Administration (FDA). Though some bottlers may voluntarily exceed FDA standards, those standards are less stringent than for tap water. Info visit www.DrinkTap.org.

Your Options — During these economically sensitive times, it's important to know that you have other, more affordable, options to bottled water.

Chill a pitcher of tap water in your refrigerator. To enhance the taste of tap water, one simple suggestion is to leave an open pitcher in the refrigerator overnight. The exposure to the air allows the small amount of chlorine, which is added to all tap water to ensure adequate disinfection and maintain high quality, to evaporate. Using the chilled water pitcher with refillable water bottles or thermoses allows for an inexpensive way to achieve portability and a refreshing taste.

Water Filtration Systems—Another possibility is to install a home water filter system. These systems are convenient, easy to use, and enhance the taste of water. These systems achieve the same desired results, while still costing a fraction of the price of bottled water. For info on CA certified water filtration systems, click on the Devices and Machines of Public Health website: www.cdpb.ca.gov.

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2010 Water Quality Consumer Confidence Report

Public Water System Number 5810004

Este informe contiene información muy importante sobre su agua para usted. Tradúcelo ó hable con alguien que lo entienda bien.

The City of Wheatland is pleased to present our 2010 annual water quality report to our customers. This edition covers all testing completed from January 1, 2010 through Dec. 31, 2010. We are pleased to tell you that our compliance with the state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source protection, water conservation, and community education, while continuing to serve the needs of all of our water users. This report tells you where our water comes from, what our test show about it, and other information. The safety of our water supply has remained our top priority and we will notify you immediately if there is any reason for concern. We are providing this information to you so you can make informed choices about your water supply. For additional information concerning your drinking water, contact Donald R. Scott at 530-633-2785.

Where does my water come from?

Water supply for the City of Wheatland originates from six deep groundwater sources known as Wells #3, #4, #5, #6, #7, and #8. Sodium hypochlorite solution (bleach) is added at each well source head to disinfect and kill any possible disease causing bacteria. The water system has one ground level storage tank which holds 660,000 gallons and one elevated storage tank that hold 72,000 gallons. The elevated storage tank is used primarily to keep a constant pressure of approximately 50-52 psi throughout the water system grid. SCADA (Supervisory Control and Data Acquisition) computer system controls and monitors the complete water system and the operator can observe or control the On/Off status, flow rate, pressure (psi), chlorine residual level, and wells' on/off tank levels at each well site. This computer system also has an alarm system that dials a 24 hr standby operator on duty if problems occur after hours or weekends. The average water consumption in the summer months is approximately 1,300,000 gallons per day with a peak demand of 8,000,000 gallons per day. The Wheatland Water Department is inspected annually by the CA Dept. of Public Health. We are required to follow all regulations set forth by U.S. Environmental Protection Agency and Ca. Dept. of Public Health, including a strict sample monitoring schedule. A copy of the inspection report is available upon request. Your water meets or exceeds all state and federal standards.

Definitions of some of the 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 MCLCs) as is technologically and economically feasible.

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 Disinfection Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for water treatment below which there is no known or expected risk to health.

MRDLGs are set by the U.S. Environmental Protection Agency.
ppb: parts per billion or micrograms per liter
ppm: parts per million or milligrams per liter
nd: non detectable at testing limit
UCMR: unregulated chemical with no MCL

Lead & Copper Testing Results:
 Lead & copper testing of water from individual household taps in the distribution system is required by State regulations. Typically copper and lead sources come from internal corrosion of household plumbing systems. The table below summarizes the most recent monitoring for these constituents. The 90th percentile level for lead and copper must be less than the action level.

Chemical Detected	Source	Year Tested	Level Detected	MCL	PHG	Major Source
Lead	2008	41	0	3.2	15	
Copper	2008	40	0	284	1300	

DETECTED CONTAMINANTS IN OUR WATER:

The following tables give a list of all detected chemicals in our water during the most recent sampling. The US Environmental Protection Agency (EPA) and the Ca. Dept of Public Health (DPH) set the testing schedule. Please note that not all sampling is required annually so in some cases results are more than one year old.

water. Your water is tested for nearly 100 other chemicals that if not listed, were found to be **not detected**. The minimum detection level is typically in parts per million, parts per billion, or parts per trillion. Test results are then compared to state and federal standards to confirm your water meets all drinking water health standards.

Chemical Detected	Source	Year Tested	Level Detected	MCL	PHG	Major Source
Color	Well 4	2009	1 Unit	15	None	
Odor	Well 5	2009	2 Units	3 Units	3 Units	
Threshold	Well 6	2009	1 Unit			

Fluoride (Natural Source)	Well 3	2004	170 ppb	Erosion of natural deposits, water additive which promotes strong teeth.	Leaching of natural deposits
	Well 5	2005	200 ppb		
	Well 6	1999	130 ppb		
	Well 7	2008	271 ppb		
	Well 8	2009	355 ppb		

Nitrate (NO ₃)	Well 4	2010	17.3 ppm	Rainoff and leaching from fertilizer use	Leaching of natural deposits
	Well 5	2010	21.2 ppm		
	Well 6	2010	21.5 ppm		
	Well 7	2010	8.1 ppm		
	Well 8	2010	2.6 ppm		

Cadmium	Well 5	2003	1.2 ppb	5	0.07	Erosion/leaching of natural deposits
	Well 6	2003	0.50 ppb			
	Well 7	2003	5.0 ppb			
	Well 8	2003	5.5 ppb			
	Selenium	Well 5	50	None		Erosion/leaching of natural deposits
	Well 6	2009	8.2 ppb			
	Barium	Well 3	1000	None		Erosion/leaching of natural deposits
	Nitrite (as N)	Well 7	1000	None		Erosion/leaching of natural deposits

SODIUM AND HARDNESS TEST RESULTS						
	Well 3	2002	32 ppm			
	Well 4	2006	15 ppm			
	Well 5	2006	24 ppm			
	Well 6	2006	15 ppm			
	Well 7	2010	71 ppm			
	Well 8	2006	63.1 ppm			
	Total Hardness (as CaCO ₃)	2003	222 ppm			
	Well 3	2006	273 ppm			
	Well 4	2006	134 ppm			
	Well 5	2006	242 ppm			
	Well 6	2006	204 ppm			
	Well 7	2006	86 ppm			
	Well 8	2006				
	Sulfate	Well 5	2004			
	Well 8	2009	51.3 ppm			
			27.1 ppm			
		<td></td> <td>600</td> <td>None</td> <td>Erosion/ Leaching of natural deposits</td>		600	None	Erosion/ Leaching of natural deposits

Total Water Hardness Table

Soft-	0-60 ppm	= 0-3 Grains/Gal
Semi-Hard -	61-120 ppm	= 4-7 Grains/Gal
Hard -	121-180 ppm	= 8-10 Grains/Gal
Very Hard -	Over 180 ppm	= Over 10 Grains/Gal

Turbidity is the measurement of the cloudiness of the water.

Total Dissolved Solids (TDS) is a measure of the total amount of all material that is dissolved in water.

Odor Threshold is the minimum odor of water sample that can just be detected after successive dilutions with odorless water.

Color is determined by visual comparison of the sample with known concentrations of colored solutions.

Fluoride: At this time the city does not add fluoride to the water supply. Fluoride occurs naturally in the groundwater at a level of approximately 0.21 ppm.

For questions concerning your water quality or test results or to make comments please do not hesitate to call the Wheatland Water Department at 530-633-2785.