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.

Contaminates 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 California 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 contaminates in bottled water that must provide the same protection for public health.
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminates. The presence of contaminants does not necessarily indicate that the water poses a health risk.
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-comprised 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 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 contaminates and potential health effects are available from the Safe Drinking Water Hotline @ 1-800-426-4791

Nitrates:

Nitrate 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.

Is It Safe to Drink from a Garden Hose?

Substances used in vinyl garden hoses to keep them flexible can get into the water as it passes through the hose. These chemicals are not good for you, nor are they good for your pets. Allow the water to run for a short time in order to flush the hose before drinking or filling your pet's drinking containers. Hoses made of food-grade plastic will not contaminate the water. Check your local hardware store for this type of hose.

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 Knollcrest Drive Suite 110, Redding, CA 96002 Richard Hinrichs at 530-224-4867	or at	City of Wheatland P.O. Box 395 Wheatland, CA 95692 Don Scott at 530-633-2785

Cross-Connections:

Cross-connections risk contamination of the water distribution system when pressure in drinking water lines drop (backsiphonage) 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

Water Conservation:

Water conservation is the most cost-effective and environmentally sound way to reduce our demand for water. It is important to remember that water conservation is not just for drought or times of water shortage, but should be practice all the time. Sound water use practices reduce the amount of stress that we place on our city on our sewage treatment facilities. So we all must do our part to learn and teach the importance of water and the wise use of it. Water conservation stretches our supplies farther and will ensure an adequate supply of water for us and future generations. The following tips will get you started and get you saving.

Ten things that will save the most water:

1. Water your lawn only when it needs it. Step on your grass. If it springs back, when you lift your foot, it doesn't need water. So set your sprinklers for more days in between watering. Saves 750-1,500 gallons per month. Better yet, especially in times of drought, water with a hose. And best of all, convert your lawn to native plants.
2. Fix leaky faucets and plumbing joints. Saves up to 600 gallons per month for every leak stopped.
3. Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end. Saves 150 gallons each time. For a two-car family that's up to 1,200 gallons a month.
4. Install water-saving shower heads or flow restrictors. Saves 500 to 800 gallons per month.
5. Run only full loads in the washing machine and dishwasher. Saves 300 to 800 gallons per month.
6. Shorten your showers. Even a one or two minute reduction can save up to 700 gallons per month.
7. Use a broom instead of a hose to clean driveways and sidewalks. Saves 150 gallons or more each time. At once a week, that's more than 600 gallons a month.
8. Don't use your toilet as an ashtray or wastebasket. Saves 400 to 600 gallons per month.
9. Capture tap water. While you wait for hot water to come down the pipes, catch the flow in a watering can to use later on house plants or your garden. Saves 200 to 300 gallons per month.
10. Don't water the sidewalks, driveway, or gutter. Adjust your sprinklers so that water lands on your lawn or garden where it belongs--and only there. Saves 500 gallons per month

CITY OF WHEATLAND

2003 WATER QUALITY CONSUMER CONFIDENCE REPORT

2008 Water Quality Consumer Confidence Report
Public Water System Number 5810004

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

Once again the City of Wheatland is pleased to present our annual water quality report to our customers. This edition covers all testing completed from January 1 through Dec 31, 2008. 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 gals and one elevated storage tank that hold 72,000 gals. 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 well's 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 1,250,000 gals per day with a peak demand of 1,700,000 gals 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.

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 MCLGs)
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.

MRDLG's 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.

	Year Tested	Number of samples collected	Number of above action level	90th Percentile Result (ppb)	Action Level (ppb)
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. Please note that not all sampling is required annually so in some cases results are more that one year old. The following tables list only organic, inorganic, and secondary chemicals that were detected in your water. Your water is tested for nearly 100 other chemicals including the gas additive MTBE, mercury, pesticides, herbicides, and other non-regulated compounds that were **not detected**. The minimum detection level is typically in parts per million, parts per billion, or parts per trillion.

	Source	Year Tested	Level Detected	MCL	PHG	Major Source
INORGANIC CONTAMINANTS						
Fluoride	Well3 Well 4 Well 5 Well 7 Well 8	2004 2008 2005 2008 2006	170 ppb 160 ppb 200 ppb 271 ppb 340 ppb	1400	1000	Erosion of natural deposits; water additive which promotes strong teeth;
Nitrate (NO_3)			Range-ppm			
	Well 3	2008	3.75-4.10			Runoff and leaching from fertilizer use; leaching from septic tanks, sewage
	Well 4	2008	5.03-5.37			
	Well 5	2008	1.66-2.12			
	Well 6	2008	4.66-6.40			
	Well 7	2008	1.79-1.83			
	Well 8	2008	0.598-0.673	45	45	
Selenium	Well 5 Well 6	2003 2003	5.5 ppb 8.2 ppb	50	None	Erosion/leaching of natural deposits
Cadmium	Well 5	2003	1.2 ppb	5	0.07	Erosion of natural deposits

SODIUM AND HARDNESS TEST RESULTS						
Sodium	Well 3	2002	32 ppm			
	Well 4	2006	29 ppm			
	Well 5	2006	15 ppm			
	Well 6	2006	25 ppm			
	Well 7	2001	123 ppm			
	Well 8	2006	63.1 ppm	None	None	Erosion of natural deposits
Total Hardness	Well 3	2003	31 ppm			
	Well 4	2006	273 ppm			
	Well 5	2006	134 ppm			
	Well 6	2006	242 ppm			
	Well 7	2006	240 ppm			
	Well 8	2006	66 ppm	None	None	Erosion 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 are 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.

Fluoridation: At this time the city does not add fluoride to the water supply. Fluoride occurs naturally in the groundwater at a level of approximately 0.25 ppm.

	Source	Year Tested	Level Detected	MCL	PHG	Major Source
SECONDARY STANDARDS						
Iron	Well 3	2004	130 ppb	300	None	Erosion/Leaching of natural deposits
Color	All Wells	2006	1 unit	15 units	None	Erosion/leaching of natural deposits
Odor Threshold	Well 6	2006	1 unit	3 Unit	3 Unit	Erosion/leaching of natural deposits
Turbidity	Well # 3	2006	0.10 NTU			
	Well # 4	2006	0.25 NTU			
	Well # 5	2006	0.15 NTU			
	Well # 6	2006	0.20 NTU			
	Well # 7	2006	0.25 NTU			
	Well # 8	2006	0.20 NTU	5 NTU	None	Erosion/ leaching of natural deposits
Total Dissolved Solids	Well 3	2004	290 ppm			
	Well 4	2005	310 ppm			
	Well 5	2008	310 ppm			
	Well 6	2008	330 ppm			
	Well 7	2008	450 ppm			
	Well 8	2003	263 ppm	1000	None	Erosion / leaching of natural deposits
Chloride	Well 3	2004	21.9 ppm			
	Well 4	2004	34.3 ppm			
	Well 5	2008	40 8 ppm			
	Well 7	2004	287 ppm			
	Well 8	2006	61.1 ppm	600	None	Erosion / leaching of natural deposits
Sulfate	Well 3	2004	55.4 ppm			
	Well 4	2004	94.5 ppm			
	Well 5	2008	22.0 ppm			
	Well 6	1999	48.0 ppm			
	Well 7	2001	37.2 ppm			
	Well 8	2006	25.5 ppm	600	None	Erosion / leaching of natural deposits

UNREGULATED CONTAMINANTS						
Boron	Well 6	2003	340 ppb			
	Well 7	2003	100 ppb			
	Well 8	2006	360 ppb	UCMR	1000	Erosion / leaching of natural deposits
Vanadium	Well 3	2003	8.6 ppb			
	Well 4	2002	6.7 ppb			
	Well 5	2002	9.2 ppb			
	Well 6	2002	6.4 ppb			
	Well 7	2003	5 ppb			
	Well 8	2004	21 ppb	UCMR	None	Erosion /leaching of natural deposit

DISINFECTANT ADDED TO WATER						
Chlorine (Sodium Hypochlorite)	Sample Points	2008	Average (ppm)	Range (ppm)	MRDL	MRDLG
			0.52	0.42 - 0.71	4.0	4.0

Microbiological Water Quality:

The simple fact is bacteria and other microorganisms inhabit our world. They 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 contaminates 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. Coliforms 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 for the year. The highest number of samples found to contain coliform bacteria during any one month was **zero (0)**.