
Williams Water Department

2010 Annual Water Quality Report

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2010 ANNUAL WATER QUALITY REPORT

Este informe contiene informacfon muy importante sobre su agua potable. Trad'uzcalo o hable con alguien que lo entienda bien.

The Williams Water Department is committed to supplying our customers with high-quality water. Please review this annual water quality report, which includes information about where your water comes from and what it may contain along with how it compares to State and Federal standards. *Most importantly, it confirms that your water met or surpassed all water quality standards during this reporting period.* We test the drinking water quality for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of Jan. 1 thru Dec. 31, 2010. Please note that the Williams City Council meets on the first and third Wednesdays of each month.

Should you have any questions about this report you may call or visit our office at 735 7th Street, Monday - Friday and view a copy of our Source Assessment report. As with many wells, our vulnerability to contamination is due to sewer collections systems and high density housing.

Our Commitment to Our Customers

We know that water quality is important to you, and we are committed to providing water that meets or surpasses all water quality standards. Towards that end, our team of water operators, maintenance staff, billing and, administration are always looking for opportunities to improve our water operations.

Recommendations for Those Who May Have Special Water Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly people, 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 at (800) 426-4791.

General Information About Water

The sources of drinking water (both tap and bottled) include rivers, 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 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, which 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, and septic systems.

RADIOACTIVE CONTAMINANTS, which can be naturally occurring or be the result of oil and gas production and mining activities. **Water Hardness** Water is considered soft if total hardness is less than 75 ppm; moderately hard at 75 to 150 ppm; hard at 150 to 300 ppm; and very hard at 300 ppm or higher. To determine total hardness of your water in grains per gallon, simply divide amount given in parts per million by 17.1.

Drinking Water Source Assessment and Protection Program (DWSAPP)

By the end of 2002 the City of Williams had submitted to the California Department of Health Services a DWSAPP report for each water source in the water system. The DWSAPP report identifies possible sources of contamination to aid prioritizing cleanup and pollution prevention efforts. All reports are available for viewing or copying at our Public Works Office.

The water sources in our area are considered most vulnerable to the following activities associated with possible contaminants detected in the water supply: agricultural drainage, parks, RV parks, sewer collection systems, schools, chemical/petroleum processing/ storage, farm chemical distributor/ application service, pesticide/fertilizer/petroleum storage and transfer areas, fertilizer/pesticide/ herbicide application, grazing, septic systems, and irrigated crops.

The water sources are considered most vulnerable to the following activities, for which no associated contaminant has been detected: fleet/truck/bus terminals, utility stations (maintenance areas), underground storage tanks, (confirmed leaking tanks), above ground storage tanks, gas stations, automobile repair shops, chemical/petroleum pipelines,

machine shops, dredging, and wells (water supply, agricultural).

We encourage customers to join us in our efforts to prevent water pollution and protect our most precious natural resource. A copy of this assessment may be viewed at:

DHS Valley District Office
415 Knollcrest Drive, Suite 110
Redding, CA 96002

The City is coordinating with state and federal agencies to enhance the security of our water supplies. Please report any suspicious activities near water facilities immediately.

How to Read the Table

We test your water for more than 100 contaminants for which state and federal standards have been set. **THIS TABLE LISTS ONLY THOSE THAT WERE DETECTED.** 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 indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (USEPA's) Safe Drinking Water Hotline at (800) 426-4791. The water quality test results shown in this table are divided into two main sections: those related to "primary standards" and those related to "secondary standards". Primary standards protect public health by limiting the levels of contaminants in the drinking water. Secondary standards are limits for substances that could affect the water's taste, odor, and appearance.

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 economically and 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 U.S. Environmental Protection Agency (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 highest level of a disinfectant allowed in 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 the benefits of the use of disinfectants to control microbial contaminants.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): 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 that a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit.

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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.

About Your Water Supply

The City operates three regular production wells located at the following areas: Well 8 on 6th street. Well 9 on Cupello street. Well 10 on Mills street. We also have two standby wells we may use as backup. Our water tower has a capacity of 100,000 gallons. During the summer months we may produce up to two million gallons a day. In 2010 the City pumped 256,546,000 gallons of potable drinking water through almost 20 miles of pipe lines. You may meet with the Water Operators Monday thru Thursday 8:00 a.m. to 5:00 p.m. at 735 7th Street.

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

	No. Samples	90th %	No. Sites Exceeding AL	Action Level	Public Health Goals	Typical Sources of Contamination
Lead (ppb)	10	0.004	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits
Copper (ppb)	10	0.121	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Violation Information:

State records indicate the City of William Wells # 8, 9, 10 exceeded the MCL for Manganese and Iron which are on the State's Secondary Standards list of chemicals and is not associated with any health risk for these levels of Manganese or Iron in this drinking water and the State has requested no further action on our part at this time.

Also please be aware that the City failed to collect the lead and copper samples during 2010 monitoring which is a violation of the State requirements.*

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. In our distribution system, we test the water six times per month for coliform bacteria. The highest number of samples found to contain coliform bacteria during any one month in 2010 was zero.

SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of Months In Violations	MCL	MCLG	Typical Sources of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month detected	0	Naturally present in the environment
Fecal Coliform or E coli	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E coli		Human & animal fecal waste

Chemical Detected	Well	Year	Level	MCL	PHG
Aluminum	9	2008	0.12	1.0	0.6
	10	2010	0.13		
Arsenic	10	2010	2.1	10	0.004
Fluoride	6	2008	.45	2	1.0
	8	2008	.44		
	9	2008	.36		
	10	2010	.35		
Nitrate (No. 3)	3	2010	0.8	45	45
	6	2010	3.1		
	8	2010	2.1		
	9	2010	0.27		
	10	2008	.71		
Hardness	3	2008	339 mg/l	none	none
	8	2008	250		
	10	2008	207		
TDS	3	2010	859	none	none
	9	2008	701		
	10	2010	499		
Chloride	3	1999	150	600	none
	6	2008	76		
	8	2008	34		
	9	2008	102		
	10	2008	207		
Sulfate	6	2008	100	600	
	8	2008	74		
	10	2010	85		
Iron	3	1993	140	300	none
	8	2007	45		
	9	2008	1340		
	10	2008	660		
Manganese	3	1999	140	50	none
	6	2007	23		
	8	2007	53		
	9	2008	203		
	10	2007	90		
Sodium	3	1993	180	none	none
	6	1993	120		
	10	2007	100		
Specific Conductance	3	2001	1380	1600	none
	8	2007	785		
	9	2008	1040		
	10	2008	940		
Turbidity	10	2008	.22	5 ntu	none

	Year Tested	No. Samples	No. required	90th% result	Action Level
Lead	2004	20	20	ND	15
Copper	2004	20	20	480	1300