
Williams Water Department

2011 Annual Water Quality Report

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2011 ANNUAL WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo 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, 2011. 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.

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 seven. In our distribution system, we test the water seven times per month for coliform bacteria. The highest number of samples found to contain coliform bacteria during any one month in 2011 was zero.

Violation Information:

Violation	Explanation	Duration	Actions Taken To Correct the Violation	Health Effects Language
The City did not collect samples for the Disinfection By-products Rule	Unfamiliar with the monitoring frequency	One Year	The City will sample and report in the summer of 2012	These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects and may lead to an increased risk of cancer.
The City did not collect quarterly raw water bacteriological samples	Personnel were not aware of collecting quarterly samples	One Year	We have developed a quarterly sampling schedules for each source.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detection	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Manganese	1999- 2008	101.8	203-23	50	None	Erosion of natural deposits
Iron	1993- 2008	546.25	1340-45	300	None	Erosion of natural deposits

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detection	Notification Level	Health Effects Language
Naphthalene	2010	<1.0	0.50	17 ppb	None

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.

Additional General Information on Drinking Water

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 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. Immunocompromised 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 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 (1-800-426-4791).

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detection	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	1993-2007	133	100-180	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2008-2009	265	207-339	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring.
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detection	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum	2008-2010	0.125	0.12-0.13	1.0	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic	2010	2.1	2.1	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Fluoride	2008-2010	0.4	0.45-0.35	2.0	1.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90th % level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	20	Not detected	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	20	0.2	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections (In a mo.)	No of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	None	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. Coli	None	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. Coli	0	Human and animal fecal waste

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. PGHs 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.

Variations 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 2011 the City pumped 255,096,300 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.