

## CONSUMER CONFIDENCE REPORT

Report Covers Calendar Year: January 1 – December 31, 2012

Este informe contiene información muy importante sobre el agua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.

### I. Public Water System (PWS) Information

<b>PWS Name:</b>	City of Williams				
<b>PWS ID #</b>	AZ04-03026				
<b>Owner / Operator Name:</b>	City of Williams				
<b>Telephone #</b>	(928) 635-4451				
We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact <u>City of Williams</u> at <u>          </u> above for additional opportunity and meeting dates and times.					

### II. Drinking Water Sources

The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.	
<b>Our water source(s):</b>	The City provides essential municipal services for its residents. Among these are water treatment/supply and wastewater treatment. The drinking water (potable) in Williams is produced at the City's Water Filter Plant at 600 South 6 <sup>th</sup> Place. The City has two source water systems which include Surface water (lakes) and Groundwater (wells). Surface water is the City's major source and the system consists of 5 reservoirs: City Dam, Santa Fe Dam, Cataract Lake, Dogtown Lake and Kaibab Lake. Groundwater may be blended with lake water in raw water lines, treated at the Water Plant and delivered to our customers.

### III. Consecutive Connection Sources

A public water system that receives some or all of its finished water from one or more wholesale systems by means of a direct connection or through the distribution system of one or more consecutive systems. Systems that purchase water from another system report regulated contaminants detected from the source water supply in a separate table. City of Williams does not buy or sell water to any other public water system.
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### IV. Drinking Water Contaminants

<p><b>Microbial contaminants</b>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</p> <p><b>Inorganic contaminants</b>, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</p> <p><b>Pesticides and herbicides</b> that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.</p> <p><b>Organic chemical contaminants</b>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.</p> <p><b>Radioactive contaminants</b>, that can be naturally occurring or be the result of oil and gas production and mining activities.</p>
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### V. Vulnerable Population

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. 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 be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by <i>Cryptosporidium</i> and microbiological contaminants call the EPA <i>Safe Drinking Water Hotline</i> at 1-800-426-4791.
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### VI. Source Water Assessment

The City's public water system received a Source Water Assessment (SWA) as follows: Based on the information currently available on the hydrogeologic settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality has given a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection. Specific water quality data has not been included in this report however, that information can be obtained by contacting ADEQ at (602) 771-4641.
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### VII. Definitions

<p><b>AL = Action Level</b> - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements.</p> <p><b>MCL = Maximum Contaminant Level</b> - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water.</p> <p><b>MCLG = Maximum Contaminant Level Goal</b> - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health.</p> <p><b>MFL = Million fibers per liter.</b></p> <p><b>MRDL = Maximum Residual Disinfectant Level.</b></p> <p><b>MRDLG = Maximum Residual Disinfectant Level Goal.</b></p> <p><b>MREM = Millirems per year</b> – a measure of radiation absorbed by the body.</p> <p><b>NA = Not Applicable</b>, sampling was not completed by regulation or was not required.</p> <p><b>NTU = Nephelometric Turbidity Units</b>, a measure of water clarity.</p> <p><b>PCi/L = Picocuries per liter</b> - picocuries per liter is a measure of the radioactivity in water.</p> <p><b>PPM = Parts per million</b> or Milligrams per liter (mg/L).</p> <p><b>PPB = Parts per billion</b> or Micrograms per liter (µg/L).</p> <p><b>PPT = Parts per trillion</b> or Nanograms per liter.</p> <p><b>PPQ = Parts per quadrillion</b> or Picograms per liter.</p> <p><b>TT = Treatment Technique</b> - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.</p>	<table border="1" style="border-collapse: collapse;"> <tr> <td>ppm x 1000 = ppb</td> </tr> <tr> <td>ppb x 1000 = ppt</td> </tr> <tr> <td>ppt x 1000 = ppq</td> </tr> </table>	ppm x 1000 = ppb	ppb x 1000 = ppt	ppt x 1000 = ppq
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ppt x 1000 = ppq				

### VIII. Health Effects Language

<b>Nitrate</b> in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods-of-time because of rainfall or agricultural activity. If you are caring for an infant, and detected
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nitrate levels are above 5 ppm, you should ask advice from your health care provider.

If **arsenic** is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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.

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. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

IX. Water Quality Data

Microbiological	Violation Y or N	Number of Samples Present <u>OR</u> Highest Level Detected	Absent (A) or Present (P) <u>OR</u> Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Total Organic Carbon (ppm)	N	7	1 – 7	TT	n/a	2012	Naturally present in the environment
Turbidity (NTU), surface water only	N	0.80	0.00 – 0.80	TT	n/a	2012	Soil Runoff
Disinfectants	Violation Y or N	Running Annual Average (RAA)	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine (ppm)	N	0.72	0.56 – 0.72	MRDL = 4	MRDLG = 4	2012	Water additive used to control microbes
Disinfection By-Products	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (ppb) (HAA5)	N	40	40	60	n/a	2012	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	N	70	50 - 70	80	n/a	2012	Byproduct of drinking water disinfection
Chlorite (ppm)	N	0.3	0.1 – 0.3	1	0.8	2011	Byproduct of drinking water disinfection
Radionuclides	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha emitters (pCi/L)	N	1.1	1.1	15	0	Sept. 2008	Erosion of natural deposits
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alkalinity (ppm)	N	805	36 - 805	n/a	n/a	2012	
Arsenic (ppb)	N	1	1	10	0	Sept. 2008	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.05	0.05	2	2	May 2011	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Calcium (ppm)	N	21	10 - 21	n/a	n/a	2012	Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paint
Fluoride (ppm)	N	0.08	0.08	4	4	Sept. 2008	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sodium (ppm)	N	20	20	n/a	n/a	May 2011	

X. *Cryptosporidium* Monitoring (surface water systems only)

The City of Williams sampled for and did not detect any *Cryptosporidium* in any finished water or source water.

Additional treatment is necessary if *Cryptosporidium* is found at greater than 0.075 oocyst per liter.

We believe it is important for you to know that *Cryptosporidium* may cause serious illness in 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. These people should seek advice from their health care providers.

XI. Stage 2 Disinfectants and Disinfection By-Products Rule

Stage 2 DBP Rule required some systems to complete an Initial Distribution System Evaluation (IDSE) to characterize DBP levels in their distribution systems and identify locations to monitor DBPs for Stage 2 DBP Rule compliance. The following table summarizes the individual sample results for the IDSE standard monitoring performed in <year>

Contaminant	Number of Analyses	Minimum Level Detected	Highest Level Detected
Haloacetic Acids (HAA5) (ppb)	n/a		
Total Trihalomethanes (TTHM) (ppb)	n/a		

XII. Violations

Type / Description	Compliance Period	Corrective Actions taken by PWS
none		

An explanation of the violation(s) in the above table, the steps taken to resolve the violation(s) and any required health effects information are required to be included with this report. (Attach copy of Public Notice if available.)