



Annual
WaterQuality
Report

Water testing performed in 2010



Presented By _____
Town of Buckeye

Quality First Quality

The Town of Buckeye Water Resources Department is once again proud to present our annual water quality report. This report covers all testing performed between January 1 and December 31, 2010. Know that we will always stand behind the drinking water we work diligently to produce and provide to our customers.

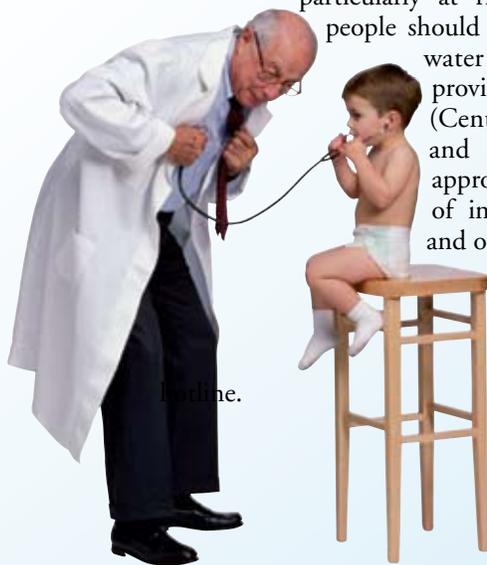
We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.

Community Participation

You are invited to participate in our public forums related to your drinking water. The Town of Buckeye council meets two times per month on the first and third Tuesday, beginning at 6:00 p.m., at Town Hall, 530 E. Monroe Ave., Buckeye, AZ 85326. For more information on the exact meeting days, please see our Web site at www.buckeyeaz.gov/currentevents.aspx or call the Town Clerk's office at (623) 349-6000.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 or <http://water.epa.gov/drink/>



line.

Public Notice

PWS ID #07-089 Town of Buckeye Failure to Monitor

Between the months of July to September of 2010, we did not monitor for the presence of Nitrate in the public drinking water system. Upon being notified of this violation by Arizona Department of Environmental Quality (ADEQ), we immediately analyzed our water supply for the Nitrate. Results of the analysis have been received and properly recorded as required by state and federal law. We do not believe that missing this monitoring requirement had any impact on public health and safety. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

Nitrate 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 you should ask advice from your health care provider.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before being replaced.

Fluoride in Drinking Water

A concentration above 2 ppm is above the secondary standard level (MCL). This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 ppm of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).

Where Does My Water Come From?

Our water source is supplied by groundwater pumped from the West Salt River Valley and Hassayampa Sub-basins. This water is treated, disinfected, and stored in reservoirs in various locations and elevations within the Town of Buckeye's four service areas. Production facilities within these service areas operate 24 hours a day, 7 days a week. The Water Production Division continually monitors the treatment process, making any necessary adjustments for the changing water supply. The treated water then leaves the storage reservoirs and is distributed to the Town's many customers through its extensive distribution systems within those areas. The Environmental Compliance Division performs over 1,000 tests per year in order to monitor the quality of the water that is sent to the customers within the Town's service areas. Through this continuous process, the Water Resources Department ensures that all drinking water delivered is safe and in full regulatory compliance.

Lead and Drinking Water

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. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing 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 by a private testing laboratory. 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 www.epa.gov/safewater/lead.

Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Water Resources at (623) 349-6800 during the normal business hours of 7:00 a.m. to 6:00 p.m., Monday through Thursday.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the Arizona Department of Environmental Quality prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants in tap water and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791, or visit online at <http://water.epa.gov/drink/hotline>. Information on bottled water can be obtained from the U.S. Food and Drug Administration.

Source Water Assessment

For water systems Tartesso 0407526 and Festival Ranch 0407765:

The Source Water Assessment Program (SWAP) is part of a nationwide effort initiated in 1996 by amendments to the Safe Drinking Water Act (SDWA). The intent of the Program is to complete an evaluation of all sources of water (wells, surface water intakes, and springs) that provide drinking water to public water systems in Arizona. This evaluation determines the degree to which the source of water is protected. Arizona's SWAP was approved by the U.S. EPA in November 1999. The goal of the SWAP is to promote community awareness and to facilitate and encourage source water protection at the community level. These sources are currently protected by well contraction and system operations and management. The Arizona Department of Environmental Quality (ADEQ) has not performed a Source Water Assessment for water systems Tartesso 0407526 and Festival Ranch 0407765. Once an assessment is completed by ADEQ, we will include a summary of the report in our Water Quality Report.

SWAP provides detailed information on public water system drinking water sources by evaluating the hydrogeologic setting in which the source is located and any adjacent land uses that are in a specified proximity of the drinking water source. Once this information is gathered, it is evaluated to determine the extent to which the drinking water sources are protected from future natural or man-made contamination. Water sources are then categorized as either "high risk" or "low risk". A designation of high risk indicates there are additional source water protection measures that can be implemented at the local level. A low risk designation indicates that either most source water protection measures are already implemented and/or the hydrogeologic setting is such that it is protective of the source water.

All public water systems are required to comply with the federal and state laws for monitoring and reporting to ensure the water they serve to the public meets national drinking water standards. Regardless of the risk rating, ADEQ encourages local communities to actively engage in source water protection activities. If you have any questions regarding the Source Water Assessments, please contact ADEQ at (602) 771-4644 or view ADEQ's Source Water Assessment and Protection Unit website at www.azdeq.gov/environ/water/dw/swap/html or the EPA's website at www.epa.gov.

For water system Town of Buckeye 0407089: SWA conducted in November 2002

Based on the information currently available on the hydrogeologic settings 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 (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination.

For water system Sundance/Sunora 0407154: SWA conducted in May 2003

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 department 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 drinking water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.

Sampling Results

We are pleased to report that, during the past year, the water delivered to your home or business complied with all state and federal drinking water health standards. The tables below list all of the drinking water contaminants that were detected in our drinking water during the 2010 calendar year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in these tables are from testing performed in the calendar year of the report.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES													
				Town of Buckeye 0407089		Sundance/Sunora 0407154		Tartesso 0407526		Festival Ranch 0407765			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2009	15	0	2.5	1.7-3.3	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits
Antimony (ppb)	2008	6	6	NA	NA	1.0	NA	1.0	NA	1.0	NA	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic ¹ (ppb)	2008	10	0	NA	NA	1.2/4.7	NA	4.0	NA	9.0	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Arsenic ¹ (ppb)	2009	10	0	4.6	ND-4.6	5.2	4.3-6.1	NA	NA	NA	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Arsenic ¹ (ppb)	2010	10	0	NA	NA	5.3	4.2-6.4	NA	NA	NA	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2008	2	2	NA	NA	0.15	NA	0.064	NA	0.079	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Barium (ppm)	2009	2	2	0.24	ND-0.24	NA	NA	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2010	[4]	[4]	0.81	0.75-0.86	0.93	0.83-1.01	0.92	0.81-1.07	0.87	0.83-0.89	No	Water additive used to control microbes
Chromium (ppb)	2008	100	100	NA	NA	25	NA	3.2	NA	7.8	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Chromium (ppb)	2009	100	100	22	ND-22	NA	NA	NA	NA	NA	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	2008	4	4	NA	NA	1.9	NA	2.5	NA	1.2	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (ppm)	2009	4	4	0.89	ND-0.89	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2010	60	NA	NA	NA	1.3	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2010	10	10	7.2	5.64-9.7	2.0	NA	1.5	NA	4	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2009	50	50	11	ND-11	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes] (ppb)	2010	80	NA	5.6	NA	8.53	NA	11.7	NA	7.16	NA	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

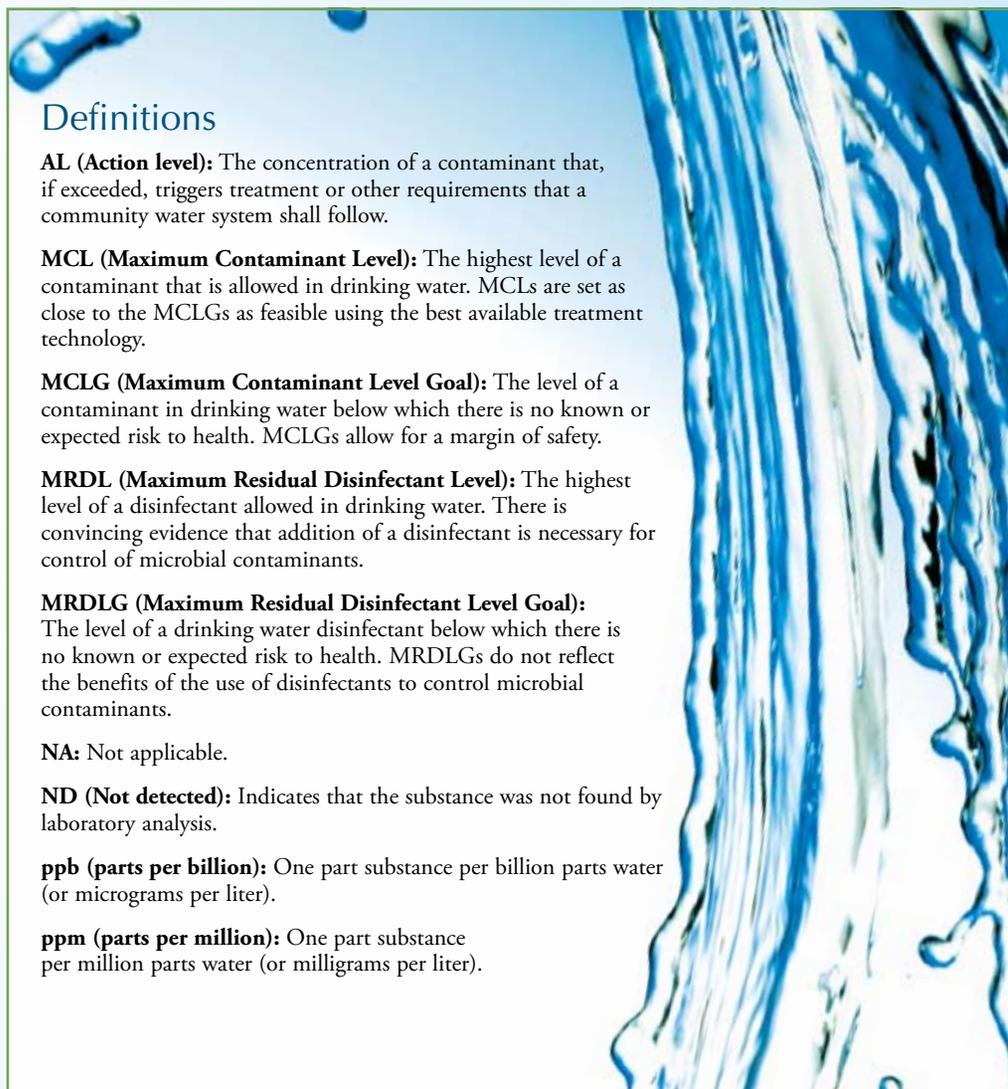
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2009	1.3	1.3	0.323	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2009	15	0	2.4	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits

INITIAL DISTRIBUTION SYSTEM EVALUATION RESULTS ²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Town of Buckeye 0407089		Sundance/Sunora 0407154		Tartesso 0407526		Festival Ranch 0407765		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Haloacetic Acids [HAA]–IDSE Results (ppb)	2010	1.6	NA	NA	NA	2.6	NA	1	NA	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]–IDSE Results (ppb)	2010	12.5	NA	NA	NA	27.8	NA	7.95	NA	By-product of drinking water disinfection

¹While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. 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.

²We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.



Definitions

AL (Action level): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system shall follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).