

Town of Payson Water Dept 303 A North Beeline Hwy. Payson, AZ 85541 Presort Std U.S. Postage PAID Payson, Arizona Permit No. 31

# Town of Payson Resolution No. 1742 Water Conservation Level I Restrictions Now in Effect

- Water conservation resolution applies to public water system customers and users of private wells.
- 2. No NEW grass or EXPANSION of existing grass areas from seed or sod.
- Outside watering for even numbered addresses on Wednesdays, Fridays and Sundays and for odd numbered addresses on Tuesdays, Thursdays and Saturdays.
- 4. No watering between 9:00 AM and 6:00 PM.
- 5. No hosing sidewalks, driveways or parking lots.
- 6. No water waste allowed.
- 7. No water leaks allowed
- 8. No water running off property.
- 9. No watering native pine trees or native plants.
- 10. No water running down street.
- No washing house or building unless with high pressure washer prior to painting.
- 12. Car washing at commercial car wash, or on allowed days with a bucket and hose equipped with a positive cutoff nozzle.
- Fill or refill pools, spas or wading pools only on oddeven address schedule.
- No new outdoor swimming pools (built-in or above ground.)
- 15. No water features larger than fifty (50) gallons capacity (must be equipped with a recirculating pump).
- 16. Penalties for violation = \$20.00 \$200.00 and possible discontinuance of water service.

# Is My Water Really Safe To Drink?



Since its inception in 1980, the goal of the Payson Water Department has been to produce a safe, dependable water supply for our customers. We are proud to report that our drinking water is in full compliance with the stringent Drinking Water Standards established by the United States Environmental

Protection Agency (USEPA) and the Arizona Department of Environmental Quality (ADEQ).

In order for the public to make well-informed personal health decisions, EPA requires the Town of Payson and all other public water systems to provide the following information to our customers:

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, person who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/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).

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 pick up substances resulting from the presence of animals or from human activity.

The Town of Payson Water Department appreciates the time you are spending to learn more about the quality of the water we provide to you and your family. If you have any questions or comments about your drinking water, please call us at (928) 474-5242.

#### How Is Our Water Tested?

In order to ensure that we not only have water of sufficient quantity, but also of sufficient quality, the U.S Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality require all public water systems to test the water they deliver on a frequent basis.

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**Postal Customer** 

Payson, Arizona

**ECRWSS** 

Water from each approved drinking water well is tested for several different types of contaminants, which include the following:

- 1) Biological Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, and feedlots.
- 2) Inorganic Contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- 3) Pesticides and Herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- 4) Organic Chemicals, including synthetic and volatile organics which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff, and septic systems.
- 5) Radiochemicals, which may be naturally-occurring or result from man-made activities, such as nuclear power plants or uranium mining.

The Water Quality Table on Page 3 of this brochure, lists the quantities of substances that were detected in our water. None of the substances found in Payson's water exceeds the MCLs established by EPA for healthful water.

# PROTECTING OUR WATER QUALITY

The Town of Payson Water Department tests the quality of Payson's drinking water for over 100 different substances. Our rigorous testing program ensures that your water meets or surpasses all federal and state requirements.

Health standards for drinking water are designed to detect and eliminate any unwanted substances long before they pose a threat to public health. If an unwanted contaminant is detected, the Town of Payson Water Department implements a strict set of established procedures to correct any problems immediately.

The Payson Water Department has now developed a web site with additional information about your drinking water. For a current update, visit us at: www.paysonaz.gov

The Town of Payson is committed to providing a safe and

sufficient supply of drinking water for our community both now and in the future. If you have any questions about your drinking water, please call us at 474-5242.

We've included information on radon gas in this report to inform you about this contaminant as we prepare for upcoming regulations.

#### WHAT IS RADON?

Radon is a naturally-occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Radon is formed from the normal radioactive decay of uranium. It is colorless, odorless and chemically inert.

The Payson Water Department has tested our groundwater wells for radon to prepare for future drinking water regulations. The amount of radon measured in our wells and reservoirs ranges from 315 to 7,710 pCi/L. If the proposed radon rule is finalized and implemented by the EPA, water systems in Arizona will probably be required to comply with an alternative maximum level for radon of 4,000 pCi/L. If this standard is utilized, the Town of Payson will be required to install treatment devices at several well sites to reduce the amount of naturally-occurring radon in the water.

Although the reduction of radon in drinking water may help to reduce the levels of radon in homes, this reduction is usually only about 1-2% of the total radon exposure from indoor air. In most cases, the main health risk is lung cancer from radon gas entering indoor air from soil under homes. The best way to reduce the overall risk from radon exposure is to test your home for radon gas and reduce radon levels if necessary. Testing your home for radon is simple and inexpensive. Fix your home if the level of radon in your air is 4 pCi/L or higher. To obtain more information, call the Radon Hotline (1-800-767-7236) or visit their website at www.epa.gov/iaq/radon/.

#### WHAT CAN YOU DO TO HELP?

It's much easier and far less expensive to prevent a water pollution problem than it is to clean it up. You can help protect the quality of our drinking water by following these simple guidelines:

- Use lawn and garden fertilizers sparingly
   Recycle old car batteries, used motor oil and other
- 3) Take hazardous household products, including solvents, paints and chemicals (including unused medicines and pharmaceutical/prescription products) to a proper disposal center.

# 2011 WATER QUALITY REPORT

#### From a Well Into Your Home or Business

The Town of Payson Water Department is a public water utility that supplies drinking water to approximately 17,700 customers within a 16 square mile area. The water system includes 40 active production wells, 8.1 million gallons storage capacity, nine booster pumping stations, two groundwater recharge projects, one water remediation facility and more than 150 miles of pipe lines. A staff of 19 full-time employees provides a variety of services for our customers.

Payson obtains all its water supply from groundwater stored in a series of complex and random cracks and fractures in the granite rock beneath the town. The only substance that is added to the water is a small amount of chlorine to disinfect the water and prevent bacterial growth. To ensure that the water is microbiologically safe, the Town collects samples throughout the system at least once every month.

#### Payson Cragin Water Pipeline Project – Phase I

The C.C. Cragin Surface Water Project has been moving forward with phase 1 nearing completion.

- Water treatment piloting: Complete.
- Water filtration plant preliminary design and engineering: 98% complete
- Finish water (filtered) pipeline design engineering: Complete
- Environmental Assessment: Complete, a finding of "no significant impact" has been made by the U.S. Forest Service.
- SCADA control systems design (preliminary): Complete
- Advance purchase of 12.5 miles of 18 inch pipe: Complete
- Aquifer storage and recovery wells (included drilling and testing): Complete

The Water Department plans to implement initial construction elements of the Project in Fiscal Year 2012-13, with much of this work involving "in-Town" improvements.

#### FOR MORE INFORMATION ABOUT YOUR DRINKING WATER

For specific information about this report, contact Dan Utz, Water Quality Specialist at (928) 474-5242, Ext. 235.

Town of Payson's Web Site - www.paysonaz.gov

Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791

www.epa.gov/safewater/

Arizona Department of Environmental Quality - (800) 234-5677 www.adeq.state.az.us/environ/water/dw/health.html

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#### HEALTH AND SAFETY STANDARDS



Drinking water standards in Arizona are placed into two major categories: primary and secondary, with upper limits, known as maximum contaminant levels (MCLs) established for each primary, regulated contaminant.

Primary standards specifically relate to your health and are generally based on health effects which may occur if a person were to drink two

liters (about two quarts) of water each day for 70 years. Secondary standards relate to the aesthetic qualities of your water, such as taste, odor, and color.

These standards are continually reviewed and revised, as laboratories develop new methods of analyzing samples. Many drinking water samples are tested for contaminants in quantities lower than one part per billion. This quantity is so small, that it's equivalent to taking a one second vacation in 35 years!

Water suppliers are challenged every day to meet dramatically increasing standards for the treatment and distribution of an often limited water supply. As technology improves, laboratories are able to detect lower concentrations of substances in water, and the water standards change in response. Currently, the Payson Water Department tests the town's drinking water for over 100 different contaminants.

Maximum Contaminant Levels (MCLs) and Action Levels (Als) are used to evaluate water quality and protect public health. The standards are shown in the Water Quality Chart on Page 3 and explained in detail throughout the section below.

#### ADDITIONAL HEALTH AND MONITORING INFORMATION

#### **Nitrate Information**

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 for advice from your health care provider.

Standards for drinking water are established to provide a wide margin of safety between the level at which a contaminant is first detected and the level where a potential threat to public health could occur. Although nitrate has been detected in the town's drinking water wells, the level is well below the limits established by federal and state agencies.

#### What is the UCMR2 and how does it affect you?

Beginning in 2008, public water systems were required to begin monitoring drinking water for a new series of unregulated contaminants for which EPA has not developed standards. The purpose of the Unregulated Contaminant Monitoring Rule (UCMR2) is to assist EPA in determining if these contaminants exist in drinking water, and whether future regulation is needed.

The Town of Payson Water Department tested all active water sources during 2010 for the following contaminants as required:

Dimethoate EPA 527

Terbufos sulfone EPA 527

- 2,2',4,4'-tetrabromodiphenyl ether (BDE-47) EPA 527
- 2,2',4,4',5-pentabromodiphenyl ether (BDE-99) EPA 527
- 2,2',4,4',5,5'-hexabromobiphenyl (HBB) EPA 527
- 2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153) EPA 527
- 2,2',4,4',6-pentabromodiphenyl ether (BDE-100) EPA 527
- 1,3-dinitrobenzene EPA 529
- 2.4.6-trinitrotoluene (TNT) EPA 529

Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)

We are pleased to report that none of these contaminants were detected in our drinking water.

#### UNDERSTANDING WATER QUALITY RESULTS

The Water Quality Table on Page 3 shows the results of our water testing. Every regulated substance that was detected in the water, even in the most minute quantities, is listed

Results listed in the table are from 2010 and 2011 which presents the most recent information acquired in accordance with drinking water regulations.

The sample results are organized into two major tables:

- 1) The Primary Drinking Water Standards, which are limits established for regulated substances (either a Maximum Contaminant Level or Action Level), and
- 2) The Secondary Drinking Water Standards, which contain unregulated substances that public water systems are required to monitor, but that have no established regulatory limits.

The tables contains the name of each substance tested (parameter), the unit of measurement used (parts per million, parts per billion, or PicoCuries per liter), the highest level of that substance allowed by regulation (MCL), and the ideal limit of that substance established as a public health goal by federal and state agencies (MCLG).

Health-related information and potential sources of detected substances are also listed below to assist you in interpreting the test results.

#### **Maximum Contaminant Level (MCL)**

The highest level of a substance that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available technologies for treatment.

#### **Maximum Contaminant Level Goal (MCLG)**

The level of a substance in drinking water below which there is no known or anticipated adverse health effects. This level is a non-enforceable health goal which allows an adequate margin of safety.

#### Action Level (AL)

The concentration of a substance, which if exceeded, triggers treatment or other requirements which a water system must follow.

PARAMETER	MAJOR POTENTIAL SOURCES OF DETECTED SUBSTANCES			
Arsenic	Erosion of natural deposits; Runoff from herbicide use			
Barium	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits			
Chromium	Erosion of natural deposits.			
Copper	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives			
,2 Dichloroethane	Fluid From Damaged Pump Casing			
Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories			
Gross Alpha	Erosion of natural deposits			
Haloacetic Acids	Byproduct of drinking water chlorination			
Lead	Corrosion of household plumbing systems; Erosion of natural deposits			
Nitrate	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits			
Combined Radium	Erosion of natural deposits			
Tetrachloroethylene	Discharge from dry cleaners			
Toluene	Discharge from drilling tape			

Total Trihalomethanes By-product of drinking water chlorination

## WATER QUALITY ANALYSIS

PARAMETER	DATE	UNIT	MCL	MCLG	Town of Payson Drinking Water S	Sources	
					Payson Groundwater		
PRIMARY DRINKING WA	TER STA	NDARD	S - Manda	tory Healtl	-Related Levels Established by EPA and ADEQ.		
BIOLOGICAL MONITORING	- 20 Sam	ples requi	red each r	nonth for t	e entire water distribution system.		
Total Coliform	2011		1	0	Highest Monthly Number of Positive Samples = 0		
DISINFECTANT RESIDUALS -	- 20 Samp	oles requi	red each m	nonth for th MRDLG	e entire water distribution system. Running Annual Average Range		
Chlorine (Free)	2011	ppm	4	4	0.45 N.D. – 2.3		
LEAD AND COPPER - Complia	nce with	Action Le	vels based	on sample	s collected at source wells and thirty (30) custon	mer taps.	
Lead Results - Homes Copper Results- Homes Lead Results- Sources Copper Results-Sources	2010	ppb ppm ppb ppm	15 1.3 ~ ~	0 1.3 ~	90 <sup>th</sup> Percentile = 7 0 Households >Action Level 90 <sup>th</sup> Percentile = 0.37 0 Households >Action Level Town-wide Source Level Range = 0.5 – 8.4 Town-wide Source Level Range = <0.002 – 0.04		
RADIOCHEMICAL MONITORING					Average Range		
Gross Alpha Combined Radium	2010 2010	pCi/l pCi/l	15 5	0 0	6.6 2.5 - 13.0 0.6 N.D 0.6		
REGULATED INORGANIC COMPOUNDS					Average Range		
Arsenic Barium Chromium Fluoride Nitrate (as N)	2010 2010 2010 2010 2011	ppb ppb ppb ppm ppm	10 2,000 100 4 10	0 2,000 100 4 10	0.62 N.D2.6 61 6.4 - 340 0.048 N.D 1.4 0.61 0.23 - 1.7 1.9 0.33 - 5.0		
REGULATED ORGANIC COMP	OUNDS		•		Average Range		
1,2 Dichloroethane Tetrachloroethylene Toluene	2011 2011 2011	ppb ppb ppm	5 5 1	0 0 1	0.012       N.D 0.6         0.14       N.D 0.56         0.00002       N.D 0.001		
DISINFECTION BYPRODUCT MONITORING				Average Range			
Total Trihalomethane (TTHM) Haloacetic Acids (HAA)	2010 2010	ppb ppb	80 60	0 N/A	7.1 3.0 – 11.2 1.3 N.D 2.6		
SECONDARY DRINKING W	ATER S	TANDA	RDS - Aest	thetic Level	Established by EPA and ADEQ.		
UNREGULATED INORGANIC C	OMPOUN	DS			Range		
Alkalinity Calcium Chloride Hardness, Total Iron Magnesium Manganese Nickel pH Sodium Sulfate Total Dissolved Solids	2010	ppm ppm ppm ppm ppm ppm ppm ppm ppm sU ppm ppm ppm		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	66 - 320 16 - 84 3.6 - 78 62 - 370 (3.6 - 21.6 gpg) N.D 18 5.6 - 32 N.D 0.52 N.D 0.009 6.9 - 8.3 11-55 4.4 - 53 140 - 450 N.D 0.98		

\*Refer To The Additional Reporting Requirements Section On Page 4 For Further Information

#### **KEY TO CHART**

MCL Maximum Contaminant Level ~ Li
MCLG Maximum Contaminant Level Goal Range Le
MFL Million Fibers per liter Pci/l Pi
(<) Less than amount indicated gpg Gr
MRDL Maximum Residual Disinfection Level MRDLG M

Limits are not set for these parameters
 Range Low to high measurements reported during the year
 Pci/I Pico Curies per liter, measurement for radiochemicals
 gpg Grains per gallon (Water Softener Terminology)
 MRDLG Maximum Residual Disinfection Level Goal

N.D. Not Detected
N/A Not Applicable
ppm Parts per million
ppb Parts per billion

# TOWN OF PAYSON CONSUMER CONFIDENCE REPORT ADDITIONAL REPORTING REOUIREMENTS - 2012

Source Water Assessment

On August 05, 2003, Arizona Department of Environmental Quality (ADEQ) staff published a Source Assessment document that provides detailed information on the Town of Payson's drinking water sources and the vulnerability of those sources to contamination.

Based on currently available information, ADEQ determined that our source water is susceptible to possible future contamination. For further infomation or to request a copy of the final source water assessment report, contact the Payson Water Department at (928) 474-5242, Ext 235.

Monitoring Violation - Nitrate

All public water systems are required to monitor annually at each entry point to the distribution system (EPDS) to determine compliance with the maximum contamination level for nitrate. In November and December of 2011, the Town of Payson tested twenty eight of our twenty nine EPDS for nitrate. Test results proved the twenty eight wells to be well below the maximum contamination level of 10 mg/L nitrate with an average of 1.9 mg/L. Woodland Meadows #2 Well (EPDS 022) was shut down from September 6th, 2011 to January 19, 2012 for modification and maintenance. Woodland Meadows #2 Well was not sampled for nitrate during 2011. However, Woodland Meadows #2 Well was sampled on January 19, 2012 with a result of 2.1 mg/L nitrate and on January 11, 2010 with a result of 1.8 mg/L nitrate, both well below the Maximum Contamination Level of 10 mg/L.

The Town of Payson drinking water system is currently in full compliance with federal and state drinking water standards and has not violated the Maximum Contaminant Level (MCL) of 10 mg/L for Nitrate.

For more information, please call Dan Utz, Water Quality Specialist for the Town of Payson Water Department at (928) 474-5242, Ext 235.