

# Treated, Tested and Safe

## A Message from the Director

In our desert environment, water resource management and planning are important to ensure that current and future generations have an adequate water supply. Every drop of Peoria's drinking water is treated using modern, state-of-the-art treatment technology. Hundreds of tests are performed each day to be certain that drinking water meets all federal, state and local water quality standards. This ensures that your drinking water is safe; every drop, every day.

In 2011, Peoria received its drinking water from the following supplies:

### Quintero:

- 100 percent from the Colorado River via the Central Arizona Project.

### Vistancia:

- 100 percent groundwater from wells.

### All other areas served by the city:

- 44 percent from the Colorado River via the Central Arizona Project.
- 42 percent from the Salt and Verde rivers via the Salt River Project.
- 14 percent groundwater from wells.

Peoria's water supply is one of our most valuable assets, making water conservation a necessary way of life. We encourage every citizen to use water wisely and adapt to a water-saving lifestyle.

Within this brochure you'll find valuable information on what you can do to keep our drinking water safe as well as city programs to help you save water, and money. You'll also find our annual water report as mandated by the U.S. Environmental Protection Agency.

If you have questions regarding Peoria's drinking water and programs, feel free to contact me at 623-773-7286.

**William Mattingly, P.E., R.L.S.**  
*Public Works-Utilities Director*

*Este informe contiene información importante sobre su agua potable.  
Si usted tiene preguntas sobre este informe, por favor llame al 623-773-7286.*

The information and data contained in this report apply only to those who receive their water from the city of Peoria. There are several private water companies that serve residents in certain areas of the city. If you receive your water from the Sunrise, New River, Rose Valley or EPCOR water companies, you should contact your water supplier directly for water data that affects you:

Sunrise: 623-972-6133

New River: 623-561-1848

Rose Valley: 623-889-2275; info@rosevalleywaterco.com

EPCOR: 800-383-0834 (Agua Fria District); formerly Arizona-American

PRSR STD  
U.S. POSTAGE  
PAID  
PEORIA, AZ  
PERMIT NO. 44

ECRWSS  
Postal Customer

**City of Peoria**  
Public Works - Utilities Department  
9875 N. 85th Avenue  
Peoria, Arizona 85345



# what's in your WATER?



**Water Quality Report**

JUNE 2012

# YOUR WATER IS SAFE LET'S KEEP IT THAT WAY

Do your part. Prevent pollution with these small actions:

- Fix oil leaks in cars
- Properly drain pool water using home's sewer clean-out, not into the street
- Minimize use of chemicals on yards
- Pick up pet waste
- Safely dispose of household hazardous waste\*

For more information, visit [www.azstorm.org](http://www.azstorm.org) and [www.peoriaaz.gov/stormwater](http://www.peoriaaz.gov/stormwater).  
Illegal Dumping Hotline (623) 773-7226  
Storm Sewer Maintenance (623) 773-7432

\* Household Hazardous Waste Disposal [www.peoriaaz.gov/hhw](http://www.peoriaaz.gov/hhw)

## Fats, Oils, and Grease (FOG) Can Spell Trouble

FOG clings to the inside of pipes, eventually causing complete blockages in homes and are often the cause of damage to the city's main sanitary sewers.

**Don't** pour fat trimmings, cooking oil, and greasy leftovers down a sink drain, garbage disposal, or toilet. Instead, **do** pour cooled oils into a disposable container then place in the trash. Use paper towels to wipe up spills and scrape greasy leftovers from dishes and pots into the trash, before washing or placing in the dishwasher.

# SAVE WATER SAVE MONEY!

Peoria's water resources are critical for the future. The city encourages its citizens to implement water conservation measures in and around their homes. Free information booklets and brochures are available to those interested in learning more about water conservation, Xeriscape and landscape irrigation. The Peoria Utilities Department also offers a variety of free water conservation classes and has information booths at various city events. Check out the rebate program to save money while conserving water.



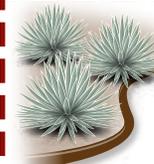
## \$100 REBATE

A \$100 rebate towards installation of a hot water recirculator.



## UP TO \$100 REBATE

Up to a \$100 rebate for customers who upgrade high water use toilets to high-efficiency EPA WaterSense units. **Maximum of 3 rebates per customer account.** High-efficiency toilets (HETs) use less than 1.3 gallons per flush.



## SAVE UP TO \$1,650

A credit of up to \$1650 for converting high water use landscaping (i.e. grass) to Xeriscape (low water use landscaping that includes plant material).



## SAVE UP TO \$150

A credit of up to \$150 for customers who choose Xeriscape landscaping for a newly constructed home.



## SAVE UP TO \$250

A credit of up to \$250 towards purchase and installation of a new water-efficient controller/timer.

For more information on classes and rebates (some restrictions apply), visit [conserve.peoriaaz.gov](http://conserve.peoriaaz.gov) or call 623-773-7286.

Water saving tips can be found at [wateruseitwisely.com](http://wateruseitwisely.com)

# Water Quality Report (for calendar year 2011)

ANALYTE	UNITS	PEORIA WATER SYSTEM 04-07-096		QUINTERO WATER SYSTEM 04-07-513		VISTANCIA WATER SYSTEM 04-07-520		EPA LIMIT	EPA LIMIT	POSSIBLE SOURCES
		RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	MCL	MCLG	
Alkalinity	mg/L	120 - 190	144	110 - 140	128	200‡	200‡	N/A	N/A	Naturally present
Aluminum	µg/L	ND - 210	112	~	~	~	~	N/A	N/A	NA
Calcium	mg/L	14 - 44 ◊	32 ◊	~	~	62‡	62‡	N/A	N/A	Erosion of natural deposits
Hardness	Gr/gal	4.3 - 11.5 ◊	7.6 ◊	~	~	15‡	15‡	N/A	N/A	Naturally present
pH	pH Units	6.99 - 8.7	7.73	7.1 - 8.6	7.9	7.1 - 8.1	7.4	N/A	N/A	NA
Magnesium	mg/L	9.7 - 21 ◊	15.2 ◊	~	~	25‡	25‡	N/A	N/A	Erosion of natural deposits
Sulfate	mg/L	27 - 67.4 ◊	40.2 ◊	260 ◊	260 ◊	77‡	77‡	N/A	250	Naturally present
Sodium	mg/L	31 - 73	49	99‡	99‡	46 - 55	50	N/A	N/A	Naturally present
Total Dissolved Solids	mg/L	260 - 374 ◊	307 ◊	~	~	440‡	440‡	N/A	N/A	Naturally present
Bromate*	µg/L	ND - 7.1	1.2	~	~	~	~	10	0	By-product of drinking water ozonation
Total Organic Carbon % Removal	%	20.5 - 46.3%	39.6%	14.0 - 36.2% (15% required)	22.2%	~	~	TT	N/A	Naturally present in the environment
Total Trihalo-methanes*	µg/L	ND - 87*	49**	ND - 2.7	0.56	7.9 - 11.2	9.4	80*	N/A	By-product of drinking water chlorination
Total Haloacetic Acids	µg/L	ND - 35	19**	ND	ND	ND - 3.6	2.0	60*	N/A	By-product of drinking water chlorination
Arsenic*	µg/L	ND - 8.2*	8.1**	2.8 - 3.6	3.5	3.5 - 5.7	4.5 (average)	10	0	Erosion of natural deposits; Runoff from orchards
Barium	mg/L	0.02 - 0.12	0.05	0.13‡	0.13‡	0.03 - 0.05	0.04	2	2	Erosion of natural deposits
Chromium	µg/L	ND - 29	7.23	ND	ND	ND - 8	0.49	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	mg/L	0.13 - 0.76	0.24	0.30 - 0.33	0.32	0.19 - 0.29	0.24	4	N/A	Erosion of natural deposits
Nitrate	mg/L	0.32 - 9.41	6.63	ND - 0.33	0.16	1.53 - 2.21	1.89	10	10	Fertilizer runoff, erosion of natural deposits
Selenium	µg/L	2 - 5	2.6	3.0‡	3.0‡	ND - 3.0	1.9	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Dibromochloro-propane	ng/L	ND - 30	5.6	ND	ND	ND	ND	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb	µg/L	ND - 0.2	0.02	ND	ND	ND	ND	7	7	Runoff from herbicides used on soybeans and vegetables
Ethylbenzene	µg/L	ND - 0.5	0.02	ND	ND	ND	ND	700	700	Discharge from petroleum refineries
Pentachlorophenol	µg/L	ND	ND	ND	ND	ND - 0.05	0.006	1	0	Discharge from wood preserving factories
Xylenes	mg/L	ND - 0.0018	0.00017	ND - 0.0006	0.0004	ND	ND	10	10	Discharge from petroleum factories; Discharge from chemical factories
Gross Alpha*	pCi/L	1.3 - 2.8	2.2	ND ◊	ND ◊	3.1 - 4.3	3.7	15	0	Erosion of natural deposits
Gross Alpha	pCi/L	ND - 2.2	1.0	N/A	N/A	N/A	N/A	15	0	Erosion of natural deposits
Adjusted* Gross Beta	pCi/L	ND - 6	2.5	N/A	N/A	N/A	N/A	50^	0	Erosion of natural deposits
Uranium	µg/L	1.6 - 5	2.95	4.5-4.9 Ж	4.7 Ж	3.9‡	3.9‡	30	0	Erosion of natural deposits
Turbidity	NTU	0.078	N/A	0.07	N/A	~	~	TT=1 NTU	0	Soil Runoff
		100.0%	N/A	100.0%	N/A	~	~	TT=% of samples <0.3 NTU	0	Soil Runoff
Total Coliforms	P/A	0.00%	N/A	0***	N/A	0***	N/A	5% of monthly samples are positive	0	Naturally present
Fecal coliform or E. coli bacteria	P/A	0.00%	N/A	0***	N/A	0***	N/A		0	Human or animal fecal waste
Chlorine Residual	mg/L	0.2 - 2.4	0.98	0.13 - 1.69	0.97	0.37 - 1.88	1.04	4 (MRDL)	4 (MRDL)	Water additive used to control microbes
ANALYTE	UNITS	90TH PERCENTILE REPORTED	NUMBER OF SITES ABOVE AL	90TH PERCENTILE REPORTED	NUMBER OF SITES ABOVE AL	90TH PERCENTILE REPORTED	NUMBER OF SITES ABOVE AL	EPA ACTION LEVEL (AL)	EPA LIMIT MCLG	POSSIBLE SOURCES
Copper	mg/L	0.31 ◊	None	0.34 ◊	None	0.24 ¥	None	1.3	1.3	Erosion of natural deposits, corrosion of home plumbing systems
Lead	µg/L	2 ◊	None	15 ◊	One	2.2 ¥	None	15	0	Erosion of natural deposits, corrosion of home plumbing systems.

## KEY TO TABLE

- AL** Action level - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must 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.
- µg/L** Micrograms per liter - Unit of measurement equal to parts per billion
- mg/L** Milligrams per liter - Unit of measurement equal to parts per million
- 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.
- ng/L** Nanograms per liter - Unit of measurement equal to parts per trillion.
- N/A** Not applicable
- ND** Not detected
- NTU** Nephelometric Turbidity Unit - Measure of how light is scattered by particulate matter in water.
- P/A** Presence/Absence
- pCi/L** pico-Curies per liter - Measure of radioactivity
- TT** Treatment Technique - Required process intended to reduce the level of a contaminant in drinking water.

\* MCL is based on a running annual average. The average given is the highest average.

\*\* Reported RAA for quarters 1-3 are based on results from previous quarters not reported on this table.

\*\*\* If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.

^ EPA considers 50 pCi/L to be the level of concern for beta particles.

‡ Only one sample collected.

~ Not Required

◊ Data from 2010

¥ Data from 2009

Ж Data from 2008

### Source Water Assessment

The Arizona Department of Environmental Quality (ADEQ) performed a source water assessment for 24 wells used by the City. The assessment reviewed the adjacent land uses that may pose a potential risk to the sources. One of Peoria's wells was found to have one adjacent land use that posed a high risk of contamination. Please understand that this one well's high risk rating does not imply poor water quality, only its potential to become contaminated. The assessment report is available for review at ADEQ, 1110 W. Washington Street, Phoenix, AZ 85007 between the hours of 8 am - 5 pm. Electronic copies are available from ADEQ at [dml@azdeq.gov](mailto:dml@azdeq.gov).

#### To learn more about water quality...

- ADEQ: [www.azdeq.gov](http://www.azdeq.gov)
- Maricopa County: [www.maricopa.gov/envsvc](http://www.maricopa.gov/envsvc)
- Peoria: [www.peoriaaz.gov/utilities](http://www.peoriaaz.gov/utilities)
- Tap Into Quality [www.tapintoquality.com](http://www.tapintoquality.com)
- USEPA: [www.water.epa.gov/drink](http://www.water.epa.gov/drink)

## Message from the Environmental Protection Agency

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. More information about contaminants and potential health effects can be obtained by calling the **EPA's 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.

- **Microbial contaminants**, such as viruses and bacteria that may be from sewage treatment plants, septic systems, agricultural livestock operations, or 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** that 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; and
- **Radioactive contaminants** that can be naturally-occurring or can be the result of oil and gas production and mining activities.

### SPECIAL HEALTH INFORMATION

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 from infections. These people should seek advice from their health care

providers. EPA/CDC (Center for Disease Control) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants along with more information about contaminants and potential health effects are available from the **Safe Drinking Water Hotline (800-426-4791)**.

### NITRATE, ARSENIC, LEAD & COPPER, TURBIDITY AND TRIHALOMETHANES

Nitrate at levels above 10 mg/L 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, ask advice from your health care provider.

While your drinking water meets EPA's standard for Arsenic, it does contain low levels. 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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.

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. The City of Peoria is 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 drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from **EPA's Safe Drinking Water Hotline, 1-800-426-4791**, or at <http://www.epa.gov/lead>.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.