
what's
in your
water?
CITY OF
PEORIA
1954
Water Quality
Report
JUNE 2014

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 2013, Peoria received its drinking water from the following supplies:

Quintero:

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

Vistancia:

- 100% groundwater from wells.

All other areas served by the city:

- 44% from the Colorado River via the Central Arizona Project.
- 32% from the Salt and Verde Rivers via the Salt River Project.
- 24% groundwater from wells (recovered water)

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.

This brochure provides information on what you can do to keep our drinking water safe as well as your Annual Water Quality Report. This report is a summary of the thousands of tests and measurements performed by the city during the 2013 calendar year. Our dedicated staff of certified and highly trained water professionals works to ensure the City provides drinking water that is treated, tested and safe.

Sincerely,
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)

OUR WATER IS SAFE. LET'S KEEP IT THAT WAY!

Do your part. Prevent pollution with these good practices:

- ☑ Safely dispose of household & hazardous waste.*
- ☑ Cool Fats, Oils, and Grease after cooking and secure in a container to dispose in a trash can.
- ☑ Don't flush these items: medication, personal care products, paint, cleaning chemicals, pesticides. These products can make their way into our aquifers!

* Household & Hazardous Waste Disposal
www.peoriaaz.gov/hhw

Unlike a sanitary sewer system that carries water to a wastewater treatment plant, storm sewers carry untreated rain water and urban runoff into washes, rivers, retention basins, canals and parks. Flowing storm water picks up dirt, debris, chemicals, oil, grease and many other pollutants. This water re-enters the water cycle without being treated. Polluted storm water is a serious threat to clean water for us and the environment. **Please prevent contamination of our drinking water.**

- Fix oil leaks in vehicles
- Pick up pet waste
- Properly drain pool water using home's sewer clean-out, not into the street
- Minimize the use of chemicals on yards, especially prior to rain
- Use a broom, not a hose, to clean up your garage or driveway
- Adjust your irrigation system to avoid overwatering

For more information, visit www.azstorm.org and www.peoriaaz.gov/stormwater.

TRASH THAT TRASH!

These items belong in the trash can, not the toilet.

The label may say "flushable", but these "disposable" items are clogging residential pipes and sewer lines as well as damaging expensive pumps and treatment plant components. Help stop costly repairs and equipment downtime. Don't flush trouble down the toilet!

For more information, call 623.773.7286 or visit www.peoriaaz.gov/envresources

Prescription Drug Collection Program

Leftover prescription medicine inside our homes is highly susceptible to misuse, theft and abuse. To help with this growing problem, the Peoria Police Department is offering a safe and responsible way to dispose of these drugs.

You can drop off potentially dangerous expired, unused, and unwanted prescription drugs anonymously in the Green boxes at each Police precinct station, available during normal lobby hours. Items such as needles, liquids, or aerosols (such as inhalers) are NOT accepted.

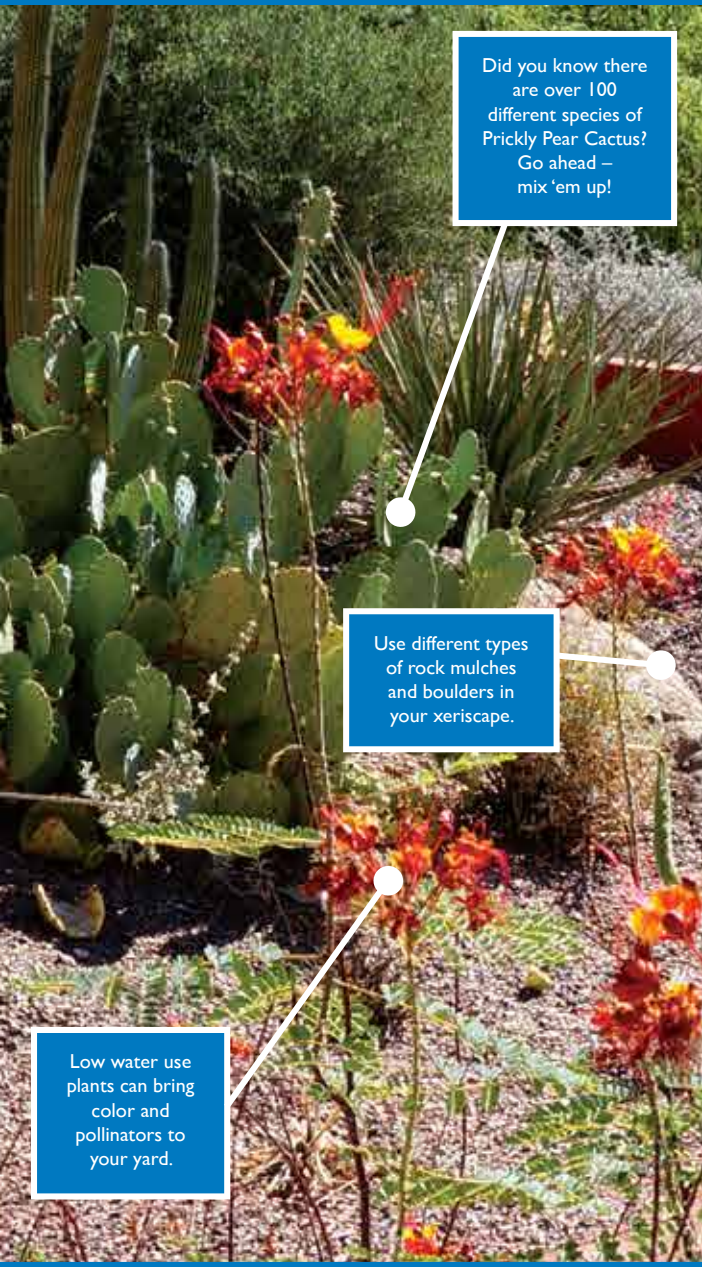
Locations & Hours:

Public Safety Administration Building
8351 W. Cinnabar Avenue
Monday–Friday 6a.m. to 6p.m.

Pinnacle Peak Public Safety Building
23100 N. Lake Pleasant Parkway
Monday–Thursday 7a.m. to 6p.m.

Desert Fusion Garden

Need ideas on how to create a great looking landscape that utilizes low water plant material? Head to Peoria's Desert Fusion Garden at City Hall. The Desert Fusion Garden utilizes a wide variety of low water and desert adapted plants to form five different environmentally responsible landscapes.



Visit www.peoriaaz.gov/waterconservation for more information on the Desert Fusion Garden and other water conservation and low water landscaping tips.

2013 Water Quality Report

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	ppm	138-202	157	132 - 146	140	200 *(2011)*	200 *(2011)*	N/A	N/A	Naturally present
Calcium	ppm	13-56	37	70	70	62 *(2011)*	62 *(2011)*	N/A	N/A	Erosion of natural deposits
Hardness	grains/gal	4 - 17	10	16 - 17	16	14.5 - 16.1	15.3	N/A	N/A	Naturally present
pH	pH Units	7.1 - 8.3	7.7	7.5 - 8.4	8.0	7.2 - 7.6	7.4	N/A	N/A	N/A
Magnesium	ppm	8 - 28	19	25	25	25 *(2011)*	25 *(2011)*	N/A	N/A	Erosion of natural deposits
Sulfate	ppm	37.6	37.6	260 *(2008)*	260*(2008)*	77 *(2011)*	77 *(2011)*	N/A	250	Naturally present
Sodium	ppm	31 - 187	55	95 - 98	96	52	52	N/A	N/A	Naturally present
Total Dissolved Solids	ppm	294	294	N/A	N/A	440 *(2011)*	440 *(2011)*	N/A	N/A	Naturally present
Bromate	ppb	ND - 23.2	4.4*	N/A	N/A	N/A	N/A	10	0	By-product of drinking water ozonation
Total Organic Carbon % Removal	%	22.2% - 46.8%	34.7%	14.8% - 48.8%	26.5%	N/A	N/A	TT	N/A	Naturally present in the environment
Total Trihalo-methanes	ppb	3.5 - 74	50	ND - 2.1	0.09	7.1 - 31.5	14.5	80	N/A	By-product of drinking water chlorination
Total Haloacetic Acids	ppb	ND - 35	16	ND	ND	1.3 - 5.5	2.6	60	N/A	By-product of drinking water chlorination
Arsenic	ppb	1.6 - 9.1	7.0	2.9 - 3.2	3	4.9 - 5.6	5.2	10	0	Erosion of natural deposits; Runoff from orchards
Barium	ppm	0.01 - 0.11	0.04	0.1 - 0.11	0.1	0.04 - 0.05	0.04	2	2	Erosion of natural deposits
Chromium	ppb	ND - 38	11.5	ND	ND	ND	ND	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	ppm	0.10 - 0.78	0.35	0.30 - 0.32	0.31	0.21 - 0.23	0.22	4	N/A	Erosion of natural deposits; Water additive to promote strong teeth
Nitrate	ppm	0.41 - 8.9	3.50	ND - 0.34	0.29	1.69	1.69	10	10	Fertilizer runoff; erosion of natural deposits
Selenium	ppb	ND - 5.6	3.1	3.0 - 3.1	3.0	3 - 5	4	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Dibromochloro-propane	ppt	ND - 30	1.9	ND	ND	ND	ND	200	0	Runoff/leaching from soil fumigant used on soybeans, and vegetables
Dinoseb	ppb	ND - 0.2	0.05	ND	ND	ND	ND	7	7	Runoff from herbicides used on soybeans and vegetables
Xylenes	ppb	ND - 0.8	0.05	ND	ND	ND	ND	10,000	10,000	Discharge from petroleum factories; Discharge from chemical factories
Gross Alpha	pCi/L	1.5 - 3.2	2.32	3.4	3.4	3.3 - 4.2	3.6	15	0	Erosion of natural deposits
Gross Alpha Adjusted	pCi/L	ND	ND	ND	ND	N/A	N/A	15	0	Erosion of natural deposits
Uranium	ppb	1.9 - 4.9	3.4	4.9	4.9	3.9 *(2011)*	3.9 *(2011)*	30	0	Erosion of natural deposits
Turbidity	NTU	0.23	N/A	0.14	N/A	N/A	N/A	TT=1 NTU	0	Soil Runoff
	NTU	100.0%	N/A	100.0%	N/A	N/A	N/A	TT=% of samples <0.3 NTU	0	Soil Runoff
Total Coliforms	Present/ Absent	0%	N/A	0**	N/A	0**	N/A	5% of monthly samples are positive	0	Naturally present
Chlorine Residual	ppm	0.23 - 2.08	1.24	0.09 - 2.07	1.77	0.42 - 1.95	1.25	4	4	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	ppm	0.33	One	1.06	None	0.39 (2012)	None	1.3	1.3	Erosion of natural deposits; Corrosion of home plumbing systems
Lead	ppb	2	None	8	None	2.9 (2012)	None	15	0	Erosion of natural deposits; Corrosion of home plumbing systems

2013 Results for Unregulated Contaminant Monitoring Rule (UCMR3)

ANALYTE	UNITS	RANGE	AVERAGE	MRL
Bromochloromethane	ppt	62	62	60
Chromium	ppb	0.21 - 0.24	0.22	0.2
Chromium-6	ppb	0.043 - 0.078	0.057	0.03
Molybdenum	ppb	4 - 4.6	4.2	1
Strontium	ppb	920 - 1000	957	0.3
Vanadium	ppb	0.48	0.48	0.2

Peoria is committed to protecting public health. The US Environmental Protection Agency (EPA) requires us to collect data on 28 currently unregulated contaminants. They then use the results from this monitoring to determine whether or not to regulate these substances in the future. There are no Maximum Limits at this time. Instead, results are reported to the Minimum Reporting Level (MRL - the lowest accurately reportable limit). Only the 6 substances listed were detected. This monitoring study will continue through the end of 2015. Should new regulations be developed, Peoria will ensure that your drinking water continues to be treated, tested and safe.

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.

MRL **Minimum Reporting Level -** The lowest accurately reportable concentration

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.

N/A **not applicable**

ND **not detected**

NTU **Nephelometric Turbidity Unit -** Measure of how light is scattered by particulate matter in water

pCi/L **pico-Curies per liter -** Measure of radioactivity

ppb **Parts per Billion -** Unit of measurement equal to micrograms per liter

ppm **Parts per Million -** Unit of measurement equal to milligrams per liter

ppt **Parts per Trillion -** Unit of measurement equal to nanograms per liter

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.

**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.

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 becoming 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.

To learn more about water quality...

Peoria:	www.peoriaaz.gov/utilities
USEPA:	http://water.epa.gov/drink
ADEQ:	www.azdeq.gov
Maricopa County:	www.maricopa.gov/envsvc
Tap Into Quality:	www.tapintoquality.com
Water Use It Wisely:	www.wuiw.com

TAP INTO QUALITY

WATER USE IT WISELY

A 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, TRIHALOMETHANES AND TURBIDITY

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 **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.