

# What's in your water?

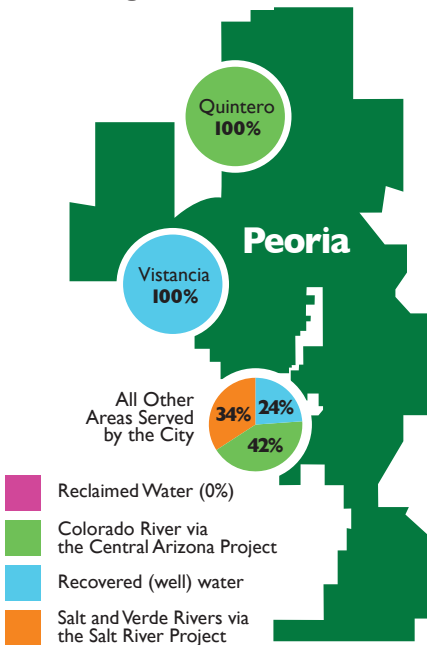


**2019  
Water Quality  
Report**

# Peoria Tap Water – Highest Quality, Best Value

In the desert southwest, 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 your drinking water meets all federal, state and local water quality standards.

- Peoria's conservative fiscal practices coupled with state-of-the-art technology ensure excellent value per gallon.
- Peoria has continuous access to its secure, diverse water sources.
- Dedicated, certified operations and engineering personnel treat, test and deliver safe water, conveniently on demand.
- Water conservation is a necessary way of life in the desert southwest. Remember, **Peoria has enough water to use, but never enough to waste.**<sup>TM</sup>



## 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 St., Phoenix, AZ 85007 between the hours of 8 a.m. – 5 p.m. Electronic copies are available from ADEQ at [recordscenter@azdeq.gov](mailto:recordscenter@azdeq.gov).

# 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. Following are contaminants that may be present in source water:

- 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 those undergoing chemotherapy, who have undergone organ transplants, have HIV/AIDS or other immune system disorders and some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC (Centers 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, 1-800-426-4791.

## 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, you should 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](http://www.epa.gov/lead).

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. 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.

## MONITORING & TESTING

The EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) required Peoria and other large water systems to conduct monthly monitoring for *Cryptosporidium* in their source water. In 2015, Peoria began the 24-month LT2ESWTR source water monitoring for *Cryptosporidium*. The results of the monitoring have shown that no additional treatment is required to remove the level of *Cryptosporidium* found. Results range from not detected to 0.667 organisms per liter.

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants and small children and the elderly are at greater risk of developing life-threatening illness. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates, although infrequent, these organisms are present in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease.

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*Este informe contiene información importante sobre su agua potable. Si usted tiene preguntas sobre este informe, por favor llame al 623-773-7561.*

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, Rose Valley or EPCOR water companies, you should contact your water supplier directly for water data that affects you:

**Sunrise:** 623-972-6133

**Rose Valley:** 623-889-2275; [info@rosevalleywaterco.com](mailto:info@rosevalleywaterco.com)

**EPCOR:** 800-383-0834 (Agua Fria District)

Published June 2020

# 2019 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	mg/L	106 - 174	131	~	~	~	~	N/A	N/A	
Arsenic	µg/L	2.2 - 7.2	5.3	~	~	~	~	10	0	
Barium	mg/L	0.01 - 0.079	0.036	~	~	~	~	2	2	
Bromate*	µg/L	ND - 13.8	1.7	~	~	~	~	10	0	
Chromium	µg/L	ND - 39	7.2	~	~	~	~	100	100	
Dalapon	µg/L	~	~	1.3	1.3	~	~	200	200	
Endrin	µg/L	ND - 0.12	0.003	~	~	~	~	2	2	
Ethylbenzene	µg/L	ND	ND	~	~	~	~	0.7	700	
Fluoride	mg/L	0.16 - 0.62	0.27	~	~	~	~	4	N/A	
Gross Alpha	pCi/L	1.9 - 3.4	2.52	~	~	~	~	15	0	
Hardness	Gr/gal	4 - 17	10	16 - 17	16	14 - 16	15	N/A	N/A	
Nitrate	mg/L	0.26 - 5.67	2.900	ND - 1.35	0.67	1.04	1.04	10	10	
pH	pH Units	7.25 - 8.15	7.6	~	~	~	~	N/A	N/A	
Selenium	µg/L	ND - 4.6	2.4	~	~	~	~	50	50	
Sodium	mg/L	28 - 68	47.3	~	~	~	~	N/A	N/A	
Total Organic Carbon % Removal	%	28 - 78%	46%	~	~	~	~	TT	N/A	
Total Haloacetic Acids*	µg/L	7.5 - 16.7	12.4	~	~	~	~	60*	N/A	
Total Trihalomethanes*	µg/L	29.4 - 59.4	44.9	ND - 5	ND	6.7 - 20	13.35	80*	N/A	
Xylenes	µg/L	ND - 6	0.029	~	~	~	~	10	10	
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	ND - 0.02	0.0006	~	~	~	~	2	0	
2,4-D	µg/L	ND - 0.1	0.005	~	~	~	~	70	70	

Turbidity	NTU	0.18	N/A	0.098	N/A	~	~	TT=1 NTU	0	
		100.00%	N/A	100.00%	N/A	~	~	TT=% of samples <0.3 NTU	0	

Total Coliforms	Present/Absent	0.00%	N/A	0**	N/A	0**	N/A	5% of monthly samples are positive	0	
Fecal coliform or E. coli bacteria	Present/Absent	0.00%	N/A	0**	N/A	0**	N/A		0	
Chlorine Residual	mg/L	0.2 - 1.97	1.02	0.2 - 1.56	0.72	0.63 - 1.17	1.17		4	4

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	0.266	None	0.91	None	0.18 (2018)	None	1.3	1.3	
Lead	µg/L	<5	None	0.007	Two	<5 (2018)	None	15	0	

Peoria is committed to protecting public health. The US Environmental Protection Agency (EPA) requires us to collect data on currently unregulated contaminants. The EPA then uses 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 eight substances listed were detected. Should new regulations be developed, Peoria will ensure that your drinking water continues to be treated, tested and safe.

## UNREGULATED CONTAMINANTS

ANALYTE	UNITS	PEORIA WATER SYSTEM		QUINTERO WATER SYSTEM		VISTANCIA WATER SYSTEM	
		RANGE	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE
Bromide	µg/L	~	~	~	~	120 - 170	146.25
Bromochloroacetic Acid	µg/L	~	~	~	~	0.69 - 1.4	1.045
Bromodichloroacetic Acid	µg/L	~	~	~	~	ND - 0.52	0.26
Chlorodibromoacetic Acid	µg/L	~	~	~	~	0.41 - 0.63	0.52
Total HAA5	µg/L	~	~	~	~	1.2 - 2.2	1.7
Total HAA6Br	µg/L	~	~	~	~	4.4 - 6.6	5.5
Total HAA9	µg/L	~	~	~	~	4.8 - 7.4	6.1
Tribromoacetic acid	µg/L	~	~	~	~	2.5 - 2.6	2.55

**Main System:** During 2019, the city had one "missed monitoring" event in the Main Peoria System (07-096) due to late reporting. All samples were collected as required. The system was returned to compliance upon submittal of the data. Late Revised Total Coliform Data - May 2019.

**Vistancia:** During 2019, the city had one "missed monitoring" event in the Vistancia System (07-520) due to late reporting. All samples were collected as required. The system was returned to compliance upon submittal of the data. Late Revised Total Coliform Data - May 2019.

**Quintero:** During 2019, the city had four "missed monitoring" events in the Quintero Area Public Water System (07-513) due to late reporting. All samples were collected as required. The system was returned to compliance upon submittal of the data. Late Surface Water Treatment Operational Report - March 2019. Late Stage 2 Disinfection By-Product Data - 1st Quarter 2019. Late Revised Total Coliform Data - May 2019.

## 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** **Max. 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** **Max. 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** **Min. Reporting Level** - The lowest accurately reportable concentration.

**MRDL** **Max. 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** **Max. 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.**

**Gr/Gal** **Grains per Gallon.**

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

**pCi/L** **Picocuries per Liter** - Measure of radioactivity.

**mg/L** **Parts per million** - Unit of measurement equal to milligrams per liter.

**µg/L** **Parts per billion** - Unit of measurement equal to micrograms per liter.

**ng/L** **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.

\*\*\* Only one sample collected.

~ Not required

## LEGEND



Residue from banned insecticide



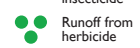
By-product of drinking water chlorination



Discharge from steel and pulp mills



Naturally present in the environment



Runoff from herbicide



By-product of drinking water ozonation



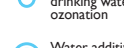
Discharge from mines



Erosion of natural deposits



Soil runoff



Water additive used to control microbes



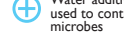
Discharge from petroleum factories



Human or animal fecal waste



Runoff from orchards



Water additive used to promote strong teeth



Discharge from chemical factories



Corrosion of home plumbing systems



Fertilizer runoff



N/A

## To learn more about water quality...

**Peoria:** [www.peoriaaz.gov/envresources](http://www.peoriaaz.gov/envresources) or 623-773-7561

**USEPA:** <http://water.epa.gov/drink>

**ADEQ:** [www.azdeq.gov](http://www.azdeq.gov)

**Maricopa County:** [www.maricopa.gov/envsvc](http://www.maricopa.gov/envsvc)

**Tap Into Quality:** [www.tapintoquality.com](http://www.tapintoquality.com)

**Water Use It Wisely:** [www.wateruseitwisely.com](http://www.wateruseitwisely.com)



Cryptosporidium was tested for, but not found, at Pyramid Peak and Greenway Water Treatment Plants.