

# 2018 WATER QUALITY REPORT

Outperforming  
ALL Federal  
Standards for  
Safe Drinking  
Water

- Where your water comes from
- How your water is made safe to drink
- Results of EPA-required sampling and testing
- Understanding water quality regulations
- Where to find more information



PREPARED FOR CUSTOMERS OF THE

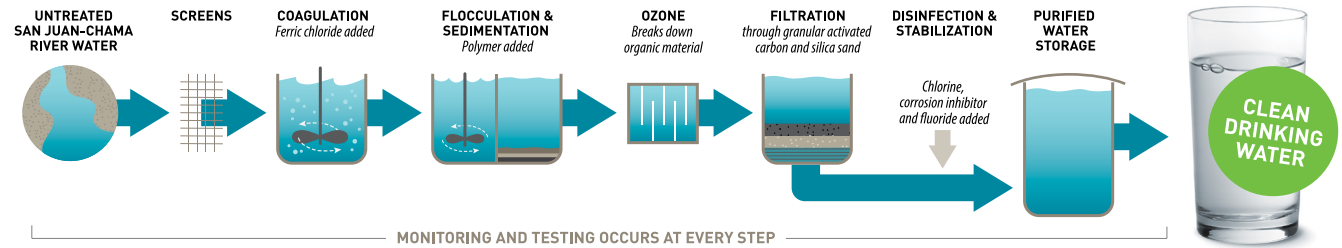


Albuquerque Bernalillo County  
Water Utility Authority

# YOUR DRINKING WATER

## HOW IT'S MADE SAFE TO DRINK

Groundwater requires little treatment other than disinfection via chlorination, and in some cases undergoes additional filtering for arsenic removal. Surface water, however, requires extensive purification before distribution, using a series of mechanical and chemical processes, as shown below. Treatment occurs at the San Juan-Chama Drinking Water Project surface-water treatment plant near Albuquerque's Renaissance Center.



## WHERE IT COMES FROM

Water Authority customers rely on locally pumped groundwater plus surface water imported from the Colorado River basin via the San Juan-Chama Project. Surface water comprises about 70 percent of the local supply. The utility works with the New Mexico Environment Department (NMED) and other agencies to conduct periodic source water assessments to determine the susceptibility of local drinking water to contamination. The latest assessment is available online at [www.abcwua.org/source-water-protection-program.aspx](http://www.abcwua.org/source-water-protection-program.aspx)

## HOW IT'S MONITORED & TESTED



Making sure that treatment processes are working correctly requires careful monitoring by a full-time staff of trained water quality engineers, scientists, and technicians. In 2018 the Water Authority collected and tested more than 5,500 water samples from wells, storage tanks, customer taps, and the surface-water treatment plant. Some of the testing is required by the Environmental Protection Agency (EPA) and some of it is voluntary, but it's all done to ensure that Albuquerque and Bernalillo County have a municipal water supply that's second to none in terms of quality.

**SEE THE 2018 TEST RESULTS**

LEGEND  
■ Surface Water  
■ Groundwater  
■ Diversion Facility  
▶▶ Tunnel/Channel

# 2018 COMPLIANCE MONITORING RESULTS (Albuquerque Water System, NM35-10701; see page 3 for definitions)



SUBSTANCE OR CONDITION	Source	Sample Year(s)	Detection Limit <i>Lowest amount that can be detected with available technology</i>	Minimum Detected	Average Detected System-wide	Average Detected at San Juan-Chama Drinking Water Plant	Maximum Detected	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	
<b>As</b> Arsenic <i>See Common Concerns on page 4</i>	Erosion of natural volcanic deposits	2017-2018	1 PPB	Zero PPB	2 PPB	Zero PPB	9 PPB	10 PPB	Zero PPB	✓
<b>Ba</b> Barium	Erosion of natural deposits	2017-2018	0.1 PPM	Zero PPM	0.017 PPM	Zero PPM	0.2 PPM	2 PPM	2 PPM	✓
<b>Cr</b> Chromium	Erosion of natural deposits	2017-2018	1 PPB	Zero PPB	1 PPB	Zero PPB	7 PPB	100 PPB	100 PPB	✓
<b>F<sup>-</sup></b> Fluoride*	Erosion of natural deposits	2017-2018	0.10 PPM	0.25 PPM	0.48 PPM	0.35 PPM	1.18 PPM	4 PPM	4 PPM	✓
<b>NO<sub>3</sub></b> Nitrate	Erosion of natural deposits	2018	0.05-0.10 PPM	Zero PPM	0.38 PPM	0.17 PPM	3.04 PPM	10 PPM	10 PPM	✓
<b>C<sub>8</sub>H<sub>10</sub></b> Total Xylenes	Discharge from petroleum or chemical factories	2018	0.0005 PPM	Zero PPM	Zero PPM	Zero PPM	0.00059 PPM	10 PPM	10 PPM	✓
<b>☞</b> Gross Alpha Particle Activity	Erosion of natural deposits	2014-2018	0.7 - 0.9 pCi/L	Zero pCi/L	0.8 pCi/L	Zero pCi/L	2.5 pCi/L	15 pCi/L	Zero pCi/L	✓
<b>Ra</b> Radium 226 + 228	Erosion of natural deposits	2014-2018	0.01 - 0.21 pCi/L	0.02 pCi/L	0.17 pCi/L	0.05 pCi/L	0.41 pCi/L	5 pCi/L	Zero pCi/L	✓
<b>U</b> Uranium	Erosion of natural deposits	2014-2018	1.0 PPB	Zero PPB	2 PPB	Zero PPB	9 PPB	30 PPB	Zero PPB	✓
<b>BrO<sub>3</sub></b> Bromate	By-product of drinking water disinfection	2018	1.0 PPB	Zero PPB	Not Applicable	1.3 PPB	2.6 PPB	10 PPB	Zero PPB	✓
<b>Cl</b> Chlorine	Disinfectant (sodium hypochlorite)	2018	0.1 PPM (distribution system)	0.3 PPM	0.9 PPM	Not Applicable	1.5 PPM	4 PPM (MRDL)	4 PPM (MRDLG)	✓
			0.03 PPM (surface water)	0.6 PPM	Not Applicable	1.4 PPM	1.9 PPM	4 PPM (MRDL)	4 PPM (MRDLG)	
			0.03 PPM (groundwater)	TT met at 100% of sites				TT= Maintain required chlorine level or restore within 4 hours	Not Applicable	
<b>☉</b> Cryptosporidium (in untreated water)	Human and animal fecal waste	2015-2017	1 Oocyst	Zero Oocysts/L	Not Applicable	0.004 Oocysts/L	0.093 Oocysts/L	TT	Zero Oocysts/L	✓
<b>☁</b> Turbidity (cloudiness; indicates effectiveness of filtration and disinfection)	Soil runoff	2018	0.002 NTU	0.02 NTU	Not Applicable	Not Applicable	0.16 NTU	1 NTU in all finished water samples, 95% of the finished water samples must be less than 0.3 NTU	Zero NTU	✓
				100% of samples taken in each month were less than 0.3 NTU						
<b>C</b> Total Organic Carbon	Naturally present in the environment	2018	1.0 PPM	Zero PPM	Not Applicable	0.6 PPM	1.3 PPM	TT	Not Applicable	✓
<b>🍃</b> Total Coliform	Coliforms are bacteria that are normally present in the environment	2018	Not Applicable	Not Applicable	Not Applicable	Not Applicable	1 of 245 samples or 0.41% of samples taken in a month had detectable total coliform bacteria. No total coliform bacteria was detected in any repeat sample at any location.	Presence of coliform bacteria in 5.0% or more of samples in any month	0% of samples with detectable coliform bacteria	✓

SUBSTANCE	Source	Sample Year	Detection Limit	Range of Results***	Maximum LRAA	Maximum Contaminant Level (MCL) <i>Disinfection by-products are regulated based on the LRAA</i>	Maximum Contaminant Level Goal (MCLG)	
<b>TTHM</b> Total Trihalomethanes	By-product of chlorination	2018	0.50 PPB	11 - 62 PPB	50 PPB	80 PPB	Not Applicable	✓
<b>HAA5</b> Haloacetic Acids	By-product of chlorination	2018	0.50 PPB	3.4 - 21.0 PPB	14.3 PPB	60 PPB	Not Applicable	✓

SUBSTANCE	Source	Sample Year	Detection Limit	90th Percentile	Number of Samples that Exceed Action Level	Maximum Detected	Action Level (Compared to the concentration detected in the 90th percentile sample.)	Maximum Contaminant Level Goal (MCLG)	
<b>Pb</b> Lead <i>See Common Concerns on page 4</i>	Corrosion of household plumbing	2018	1.0 PPB	1 PPB	Zero	3 PPB	15 PPB	Zero PPB	✓
<b>Cu</b> Copper	Corrosion of household plumbing	2018	0.01 PPM	0.25 PPM	Zero	0.36 PPM	1.3 PPM	Zero PPM	✓

(See footnotes on page 4)

# STANDARDS OF QUALITY

## YOUR DRINKING WATER

To protect public health and safety, the EPA limits the amount of certain substances, known as contaminants, in drinking water. The table on the preceding page shows the latest test results for these regulated substances in drinking water distributed by the Water Authority to its customers in Albuquerque and Bernalillo County.

## YOUR WATER AUTHORITY

The Water Authority has been nationally recognized not only for its highly successful conservation program, but for the quality and affordability of its drinking water and for its efforts to preserve and manage the community's precious water resources. In 2018 it earned a AAA bond rating from S&P.



### RECENT AWARDS

**Platinum Award for Utility Excellence (2018)**  
Association of Metropolitan Water Agencies

**Exemplary Source Water Protection Award (2018)**  
American Water Works Association

**Renewable Energy Project of the Year (2017, drinking water treatment plant solar array)**  
N.M. Association of Energy Engineers

**Utility of the Future Today (2016)**  
National Association of Clean Water Agencies & the Water Environment Federation

**Third Place, National Drinking Water Taste Test (2015)**  
American Water Works Association



## DRINKING WATER CONTAMINANTS: WHAT EPA SAYS

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 U.S. Environmental Protection Agency (EPA) Safe Drinking Water Hotline (800-426-4791).

Contaminants come in many forms, both natural and manmade, and can enter the sources of our drinking water in a number of ways, including dissolution of naturally occurring minerals. Contaminants in drinking water sources may include **microbial contaminants** (e.g., viruses and bacteria); **inorganic contaminants**, such as salts and metals; **pesticides and herbicides**; **organic chemical contaminants** from industrial processes, gas stations, septic systems, etc.; and **radioactive contaminants**, both naturally occurring and as a result of human activity.

In order to ensure drinking water safety, EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) establishes limits for contaminants in bottled water that provide the same protections for public health.

## DEFINITIONS

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Cryptosporidium** is a microbial pathogen found in surface water throughout the U.S. We monitor the river for Cryptosporidium. The San Juan-Chama Drinking Water Plant was designed to provide a multi-barrier approach (pre-sedimentation, clarification, and filtration) to removing Cryptosporidium in order to meet the EPA requirements.

**Locational Running Annual Average (LRAA):** The average of analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Maximum Contaminant Level (MCL):** 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.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

**Nephelometric Turbidity Unit (NTU):** A measure of cloudiness or haziness caused by suspended solids.

**Parts Per Billion (PPB):** Parts per billion or micrograms per liter (ug/L). 1 PPB = 0.001 PPM. Example: one drop of water in an Olympic-size swimming pool.

**Parts Per Million (PPM):** Parts per million or milligrams per liter (mg/L). 1 PPM = 1,000 PPB. Example: four drops of water in a 55-gallon barrel.

**picoCuries per liter (pCi/L):** A measure of radioactivity.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

# WHAT ABOUT UNREGULATED CONTAMINANTS?

Some substances commonly found in drinking water are not regulated by the EPA. Under the Unregulated Contaminant Monitoring Rule (UCMR), the agency seeks to learn more about such contaminants by requiring water systems to test for them. It uses the data generated to develop better understanding and new regulations over time.

## 2018 UNREGULATED CONTAMINANT MONITORING RESULTS\*\*

SUBSTANCE	Sample Year	Minimum Reporting Level	Range of Results	Average of Results
Total HAA5	2018	0.2 ug/L	1.6 - 17.0 ug/L	7.8 ug/L
Total HAA6Br	2018	0.2 ug/L	2.4 - 17.0 ug/L	9.1 ug/L
Total HAA9	2018	0.2 ug/L	3.1 - 27.0 ug/L	14.9 ug/L
Source Water TOC	2018	0.2-0.3 mg/L	2.2 - 3.7 mg/L	2.9 mg/L
Source Water Bromide	2018	5 ug/L	26.0 - 45.5 ug/L	35.0 ug/L

\* Samples collected throughout the distribution system showed an average fluoride concentration of 0.63 mg/L after supplemental fluoridation. The Water Authority continues working to meet a target fluoride range of 0.65 to 0.72 mg/L. More information on supplemental fluoridation can be found on the Water Authority website at [www.abcwua.org](http://www.abcwua.org).

\*\* Sampling for all other UCMR4 substances is scheduled to be completed in 2019. Results for the UCMR3 sampling event are available online at [www.abcwua.org](http://www.abcwua.org). Local drinking water remains protected from contaminants including the manmade chemicals known as Per- and Polyfluoroalkyl Substances (PFASs). All water system sources were tested as part of UCMR3 with no detections of PFASs.

\*\*\*The range represents the minimum and maximum of all quarterly analytical results at all 12 locations.

# COMMON CONCERNS

1

## Should I be concerned about lead?

Although the Water Authority has removed all known lead components from its water distribution system, lead may still be present in home plumbing – especially in older homes. The Water Authority offers free lead and copper testing for concerned customers. Just visit our website and fill out a request form ([www.abcwua.org/lead-survey.aspx](http://www.abcwua.org/lead-survey.aspx)) or call 289-3653 to schedule a sample collection.

RESULTS OF 2018 CUSTOMER-REQUESTED TESTING (41 SAMPLES)

SUBSTANCE	Minimum	Maximum	90th Percentile	Action Level
<b>Pb Lead</b>	Zero PPB	12.3 PPB	0.8 PPB	15 PPB
<b>Cu Copper</b>	Zero PPM	0.4 PPM	0.2 PPM	1.3 PPM

Here's what the EPA has to say about lead: *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. Your local Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the federal Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.*

2

## Is there arsenic in my drinking water?

All of Albuquerque's drinking water meets EPA standards for arsenic, which have become much more stringent since 2006. Allowable levels of arsenic are present in some locations, however, mainly due to the erosion of natural geologic deposits. EPA continues to research the health effects of low levels of arsenic, which is a metal known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

3

## What if I am immuno-compromised?

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 about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

4

## What about sodium?

Sodium levels for all Water Authority distribution zones range from 20 to 99 PPM. The system-wide average is 37 PPM. For more information, please visit the Water Authority website at [www.abcwua.org](http://www.abcwua.org) and click on the Your Drinking Water tab on the home page.

# WANT TO KNOW MORE?

## CONTACT THE WATER AUTHORITY

Call **842-WATR (9287)** to

- Report a water or sewer emergency
- Report water waste
- Pay a bill over the phone
- Report unusual activity at water facilities
- Make billing inquiries

Call **289-3653** (the Water Quality Information Line) with questions about your water quality, or email us at [waterquality@abcwua.org](mailto:waterquality@abcwua.org).

## OTHER SOURCES OF INFORMATION

Water Authority website: [www.abcwua.org](http://www.abcwua.org)

U.S. Environmental Protection Agency: [www.epa.gov/safewater](http://www.epa.gov/safewater)

New Mexico Environment Department Drinking Water Bureau:  
[www.env.nm.gov/dwb](http://www.env.nm.gov/dwb)



Check us out on Facebook and Nextdoor!

**En Español:** Este reporte contiene informacion muy importante acerca de la calidad del agua. Para recibir una copia en español, llamen al **505-842-9287** o visita la pagina: [www.abcwua.org/Download\\_Report.aspx](http://www.abcwua.org/Download_Report.aspx)

## GET INVOLVED!

Want to do more to help protect local drinking water supplies? You can start by staying informed! Links to up-to-date information about watershed and source-water protection can be found at [www.NMSourceWaterProtection.com](http://www.NMSourceWaterProtection.com).

Other opportunities for involvement include attendance at one of our monthly board meetings, where issues concerning water quality are discussed. Meetings are open to the public and held in the Vincent E. Griego Council Chambers in the basement of the City/County Government Center at One Civic Plaza. Meeting schedules and agendas are available at [www.abcwua.org](http://www.abcwua.org). You'll also find meeting schedules for the community's Water Protection Advisory Board.

This report has been re-designed for easier readability with input from customers like you! The Water Authority wishes to thank everyone who got involved and contributed suggestions via the Customer Conversations process.