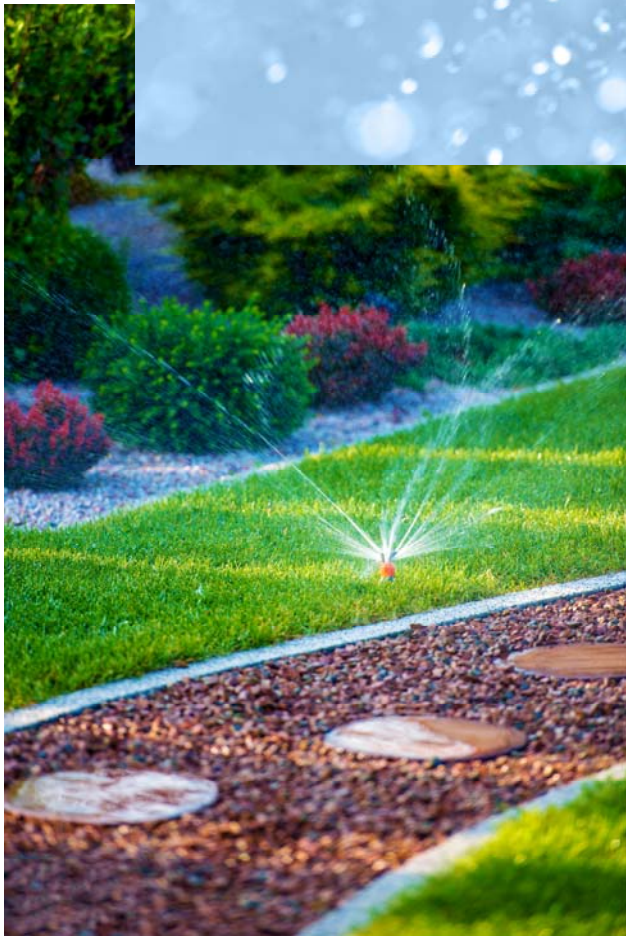


# CITY OF ALAMO HEIGHTS

## 2016 WATER QUALITY REPORT



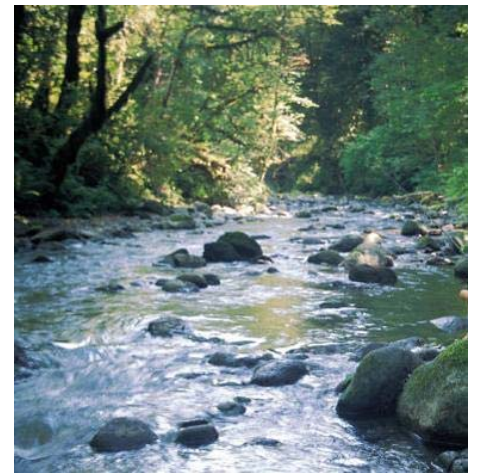
# Providing Quality Water

2016  
Water Quality Report

The City of Alamo Heights is proud to present its 2016 Water Quality Report. This report reflects all testing completed from January 1 through December 31, 2016. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. Over the years, we have dedicated ourselves to provide drinking water that meets all state and federal drinking water standards. The City continually strives to adopt new and better methods of delivering the best quality drinking water to its residents. As regulations and drinking water standards change, it is the City's commitment to meet the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our residents.

## Drinking Water Source

The City of Alamo Heights' sole source of water is the Edwards Aquifer which is one of the world's most unique groundwater resources. The Edwards Aquifer has supported civilization for more than 8,000 years and today is the primary source of water for 1.3 million people. The aquifer is about 180 miles long and five to 40 miles wide at different points. It reaches from Bracketville in the west to Kyle in the east. The aquifer covers over a 3,000 square mile area. The primary geologic component of the Edwards Aquifer is Edwards Limestone. It occurs in three distinct segments: the drainage area, the recharge zone and the artesian zone. Each area is equally important to the health and viability of the Edwards Aquifer as a whole.



## Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by ***Cryptosporidium*** are available from the Safe Drinking Water Hotline **(800-426-4791)**.

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. We are responsible for providing high quality drinking water, but we 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 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 Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## I N F O R M A T I O N   A B O U T   S E C O N D A R Y C O N T A M I N A N T S



Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water. For more information regarding this report contact: Patrick Sullivan, Public Works Director 822-1506.

Further details about sources and source-water assessments are available in Drinking Water Watch at the following <http://dww.tceq.texas.gov/DWW>

## I N F O R M A T I O N   A B O U T   S O U R C E   W A T E R A S S E S S M E N T S

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Patrick Sullivan, Public Works Director 822-1506.

## G E N E R A L   I N F O R M A T I O N

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 at (800) 426-4791.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

## Detected Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2014	2	1.5-1.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2014	5	5.4-5.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2016	0.0468	0.0444-0.0468	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal
Chromium	09/20/2011	7.19	7.19 - 7.19	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natu-
Fluoride	7/25/2014	0.19	0.18-0.19	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and
Nitrate [measured as Nitrogen]	2016	2	1.94-2.03	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Combined Radium	2016	2.52	1.5-2.52	0	5	pc/L	N	Erosion of natural deposits.

## Lead and Cooper

Lead and Cooper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Cooper	2014	1.3	1.3	0.139	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2014	0	15	3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Source	Water Name	Type of Water	Report Status
2-CITY HALL	CITY HALL	GW	Y
3-CITY HALL	CITY HALL	GW	Y
4-HIGH SCHOOL	HIGH SCHOOL	GW	Y
5-TX MIL INST	TX MIL INST	GW	Y
6-CITY HALL	CITY HALL	GW	Y
7-CITY HALL	CITY HALL	GW	Y

### Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	01/01/2016	03/31/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. <b>Reason: Monitoring report submitted after due date</b>
Disinfectant Level Quarterly Operating Report (DLQOR).	07/01/2016	09/30/2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. <b>Reason: Monitoring report submitted after due date</b>

### E. Coli

Fecal coliforms and E. Coli are bacteria whose presence indicates that the water may be contaminated with human or wastes. Microbes these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms, They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITOR GWR TRIGGERED/ADDITIONAL, MINOR	04/01/2013	2016	We failed to collect all the required follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected. <b>Reason: This well was taken out of service immediately after results received. After all necessary testing was performed well was placed back into service.</b>

### Lead and Copper Rule

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2014	2016	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

### Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g. a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	09/25/2013	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. <b>At the time of violation the City followed all required public notification requirements as per the information provided by TCEQ.</b>
PUBLIC NOTICE RULE LINKED TO VIOLATION	10/13/2016	2016	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. <b>At the time of violation the City followed all required public notification requirements as per the information provided by TCEQ.</b>

\* The levels of the disinfection are taken daily - a total of 14 bacteriological samples are taken monthly and 6 production wells are sampled monthly to address an potential hazards throughout the water system

## Definitions

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

**ALG (Action Level Goal)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**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.

**MFL** – Million fibers per liter (a measure of asbestos)

**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.

**NA** – Not applicable

**ND** – Not detected

**NTU** – Nephelometric Turbidity Units

**pCi/L** – Picocuries per liter (a measure of radioactivity)

**ppm** – Parts per million or milligrams per liter (mg/L)

**ppb** – Parts per billion or micrograms per liter (µg/L)

**ppt** – Parts per trillion or nanograms per liter (ng/L)

**ppq** – Parts per quadrillion or picograms per liter (pg/L)

**TT** – Treatment technique

**µmhos/cm** – Micromhos per centimeter (a measure of conductivity)

The adopted Stage Water Restrictions are as follows:

Critical Period (Reduction) Stage*	Index Well J-17 Level (MSL)	San Marcos Springs Flow (CFS)	Comal Springs Springs Flow (CFS)	Withdrawal Reduction – San Antonio Pool
I	<660	<96	<225	20%
II	<650	<80	<200	30%
III	<640	N/A	<150	35%
IV	<630	N/A	<100	40%

\* Implementation of Stage I is based on a 10-day average. A change to a critical period stage with higher withdrawal reduction percentages is triggered if the 10-day average of daily springflows at the Comal Springs or the San Marcos Springs or the 10-day average of daily aquifer levels at the J-17 Index Well drops below the lowest number of any of the trigger levels. A change to a critical period stage with lower withdrawal reduction percentages is triggered only when the 10-day average of daily springflows at the Comal Springs or the San Marcos Springs and the 10-day average of daily aquifer levels at the J-17 Index Well are all above the same stage trigger level.

**Stage 1** - Landscape watering using automatic or manual irrigation systems is permitted only once a week **before 10 a.m. and after 8 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, hand-held hose or bucket (5-gallon or less container) during any day at any time.

**Stage 2** - Landscape watering using automatic or manual irrigation system is permitted **only once a week** between the hours **7 a.m. and 11 a.m. and between the hours of 7 p.m. and 11 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, or bucket (5-gallon or less container) during **any day of the week but only** between the hours of **7 a.m. and 11 a.m. and between the hours of 7 p.m. and 11 p.m.** A hand-held hose may be used during any day of the week at any time.

**Stage 3** - Landscape watering using automatic or manual irrigation system is permitted **only every OTHER week** between the hours **7 a.m. and 11 a.m. and between the hours of 7 p.m. and 11 p.m.** The last number of your address determines what day you are able to water. You may use drip irrigation, soaker hose, hand-held hose or bucket (5-gallon or less container) during **any day of the week but only** between the hours of **7 a.m. and 11 a.m. and between the hours of 7 p.m. and 11 p.m.**

**Stage 4** - **Stage III landscape irrigation restrictions remain in effect.** When Stage IV is in effect, the City Council may hold emergency sessions to consider other restrictions on water use or to allow special uses.

<b>Last number of your Address</b>	<b>Watering Day</b>
0 or 1	Monday
2 or 3	Tuesday
4 or 5	Wednesday
6 or 7	Thursday
8 or 9	Friday
<b>Multi-Family premises, schools, churches and commercial users</b>	<b>Wednesday</b>

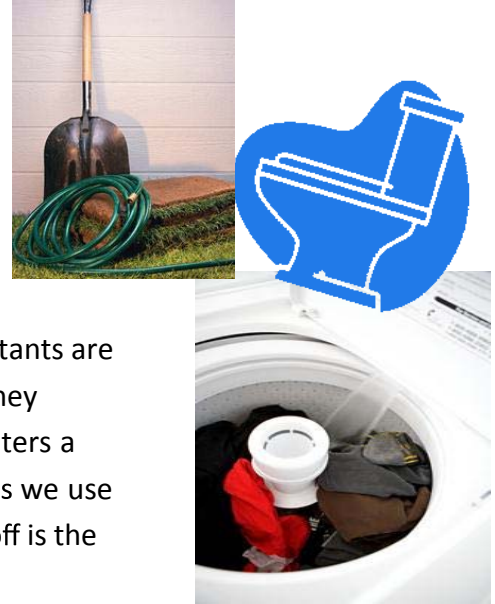
A full water restriction informational flyer is available either on the City website [www.alamoheightstx.gov](http://www.alamoheightstx.gov) or can be picked up at City Hall. We strongly urge compliance to water restrictions to avoid costly sanctions against users in violation of water restrictions AND the City of Alamo Heights by the Edwards Aquifer Authority. Individual offenses may be fined up to \$2,000.00. Each day's violation may constitute a separate offense.

## Did You Know That Runoff And Debris Collected In Storm Drains Goes Straight To Waterways?

Stormwater pollution is a problem that can impact the quality of our drinking water. Rainwater and urban runoff can flow from our streets and yards and carry pollutants into local storm drains.

As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. These pollutants are carried, untreated, directly to creeks, streams, and lakes where they eventually end up in our drinking water supply. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water.

By practicing healthy household habits, homeowners can keep common pollutants like pesticides, pet waste, grass clippings, and automotive fluids off the ground and out of stormwater. Adopt these healthy household habits and help protect drinking water supply.



## Public Participation Opportunities

To get involved in decisions affecting your drinking water, attend and comment at the Alamo Heights City Council meetings, the 2nd and 4th Monday of each month. The meetings are held in City Council Chambers located at 6116 Broadway and begin at 5:30 p.m. Agendas are available on the City's website at [www.alamoheightstx.gov](http://www.alamoheightstx.gov).

### City of Alamo Heights Officials

**Mayor:** Bobby Rosenthal

**City Council:** Place 1 - Lawson Jessee - Mayor Pro-Tem, Place 2 - Wes Sharples, Place 3 - Fred Prassel, Place 4 - Lynda Billa Burke and Place 5 - John Savage

*En Español*—Este informe incluye información importante sobre el potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. 882-1518 - para hablar con una persona bilingüe en español.