



City of Dalworthington Gardens

2017 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of Dalworthington Gardens

Water Department

817.274.7368

817.275.1234 after hours

Administrative Office:

City of Dalworthington Gardens City Hall

2600 Roosevelt Dr.

The Water Department is part of the City of Dalworthington Gardens city government. The City Council meets the third Thursday of each month. The meetings are at 7p.m. Check the website online to make sure a meeting is not cancelled or rescheduled.

Frequently asked questions about this report

Why am I receiving this report?

In 1996, Congress amended the Safe Drinking Water Act to include a requirement that water utilities annually notify customers about their drinking water quality.

The law is quite specific regarding what information must be included.

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.

For more information regarding this report contact Sherry Roberts, City Administrator at 817.274.7368.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 817.274.7368.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

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 water 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 storm water runoff, and residential uses.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

-Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water system. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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.

How is this report distributed?

The direct web address of the CCR Report will be listed on the monthly bill mailed to all utility accounts, posted on the city website: www.cityofdwc.net, and posted in the lobby of City Hall at 2600 Roosevelt Dr. The lobby area is open to the public 24 hours a day, 365 days a year.

Information for immunocompromised people

The following information is not meant to alarm or scare you. It is meant to make you aware. The exact wording shown below is required by state regulations.

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, those 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 provider.

Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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>.

Source water assessments

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Sherry Roberts, City Administrator at 817.274.7368.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>.

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

Where do we get our drinking water?

Dalworthington Gardens' drinking water during 2017 consisted of 100% surface water. City of Dalworthington Gardens purchases treated **surface** water from the City of Fort Worth and the City of Arlington. The Fort Worth main comes into the Dalworthington Gardens pump station located at 3214 Arkansas Lane. The Arlington main comes into the Dalworthington Gardens system at the intersection of Pleasant Ridge and Kay Lynn Drive.

The City of Fort Worth Drinking Water Quality Report is included in this report. An electronic copy is available on the City of Fort Worth website:

<http://fortworthtexas.gov/tapwater/>

The City of Arlington Drinking Water Quality Report is included in this report. An electronic copy is available on the City of Arlington website:

<https://view.joomag.com/consumer-confidence-report-water-quality-report-2017-eng/0047056001525271471?short>

Water quality test results

Definitions/Abbreviations – The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

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.

MFL: Million fibers per liter (a measure of asbestos).

na: Not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body).

NTU: Nephelometric turbidity units (a measure of turbidity).

City of Dalworthington Gardens
2017 Annual Drinking Water Quality Report
(Consumer Confidence Report)

pCi/L: Picocuries per liter (a measure of radioactivity).

ppb: Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

ppm: Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

ppt: Parts per trillion, or nanograms per liter (ng/L).

ppq: Parts per quadrillion, or pictograms per liter (pg/L).

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

City of Dalworthington Gardens Regulated Contaminants Detected

Inorganic Contaminants

Year	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2014	Fluoride	1.75	1.75	1.75	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2016	Barium	0.016	0.016	0.016	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2016	Chromium	2	2	2	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
2014	Cyanide	46.4	46.4	46.4	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2017	Nitrate Measured as Nitrogen	1	0.332	0.7	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2017	Nitrite Measured as Nitrogen	0.269	0.269	0.269	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2016	Selenium	1.2	1.2	1.2	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Disinfection Byproducts

Year	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2017	Haloacetic Acids (HAAS)	8	5.7	6.9	60	No goal for the total	ppb	N	By-product of drinking water disinfection.

* The value in the Highest Level or Average Detected column is the highest average of all HAAS sample results collected at a location over a year

2017	Trihalomethanes (TTHM)	13	6.86	9.81	80	No goal for the total	ppb	N	By-product of drinking water disinfection.
------	---------------------------	----	------	------	----	-----------------------	-----	---	--

* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Radioactive Contaminants

Year	Contaminants	Highest Level Detected	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2015	Beta/photon emitters	4.7	4.7	4.7	4	0	mrem/yr	N	Decay of natural and man-made deposits

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

2015	Combined Radium 226/228	1.5	1.5	1.5	5	0	pCi/L	N	Erosion on natural deposits
------	-------------------------	-----	-----	-----	---	---	-------	---	-----------------------------

Lead and Copper

Year	Contaminants		The 90th Percentile	Number of Sites Over All	Action Level	MCLG	Unit of Measure	Violation	Source of Contaminant
2017	Lead		2.1	0	15	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
2017	Copper		0.289	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfectant Residual

Year	Contaminants	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Contaminant
2017	Chloramines & Free Chlorine	2.4	1.1	3.7	4	4	mg/L	N	Water additive used to control microbes

Violations Table			
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)	10/1/2017	12/31/2017	<p>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.</p> <p>DISCLAIMER: The testing and DLQOR report for the 4th Quarter was completed by the City, but failed to be mailed to the TCEQ.</p>
Due to staff turnover, this report was missed getting mailed.. The City has implemented a calendar to ensure all deadlines are met in the future.			

2017

ARLINGTON WATER UTILITIES Water Quality Report

Water for Your Life

Arlington Water Utilities takes pride in meeting or exceeding all federal and state requirements for water quality. The story of how that water gets to homes, schools, and businesses starts at the source.

The reservoir or "surface water" is treated at Arlington's state-of-the-art Pierce-Burch and John F. Kubala Water Treatment Plants. Ozone is used as the primary disinfectant. Aluminum sulfate and a cationic polymer are added to help dirt and other particles clump together and settle out during treatment. The water is then filtered through granular activated carbon beds to remove smaller particles and dissolved substances. It is treated with chloramine (chlorine and ammonia) as it enters storage. Chloramine is a disinfectant that keeps the water safe on its way to your faucet.

Arlington Water plans to update and improve several systems at the John F. Kubala and Pierce-Burch Treatment Plants over the next two years, including high service pumps, filters, chemical processes, and electrical systems. New laboratory and maintenance buildings are also planned. To make these projects as cost effective as possible, the City has pursued and received several Texas Water Development Board-administered low-interest loans and grants since 2014.



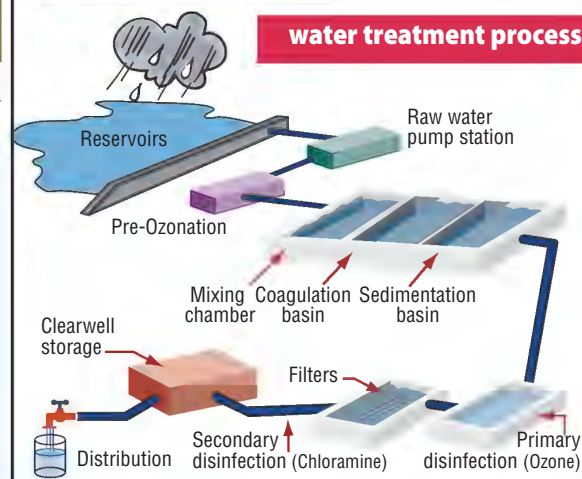
Health information for special populations

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; those 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 health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).



Where does Arlington drinking water come from?

Arlington gets its water for treatment from the Tarrant Regional Water District. The water comes from four reservoirs - Cedar Creek, Richland-Chambers, Lake Arlington and Lake Benbrook.



Este informe incluye información importante sobre su agua potable, si necesita ayuda para entender esta información por favor llame al 817-575-8984.

Ban bao cao nay bao gom nhung thong tin can biet ve nuoc uong. Moi chi tiet va thac mac xin lien lac 817-575-8984.



Drinking Water Quality Report

2017 Data

City of Fort Worth Water Department

Water Customer Service: 817-392-4477
Speakers Bureau: wpe@FortWorthTexas.gov
www.FortWorthTexas.gov/water
www.SaveFortWorthWater.org
Facebook: [Fort Worth Water](https://www.facebook.com/FortWorthWater)
Twitter: [@fwwater](https://twitter.com/fwwater)
Instagram: [@savefwwater](https://www.instagram.com/savefwwater)

Administrative Office:

Fort Worth City Hall, 2nd Floor, 200 Texas St.,
Fort Worth, Texas 76102

The Water Department is part of the Fort Worth city government. City Council meetings, which are open to the public, are conducted weekly at 7 p.m. on Tuesdays in the Council Chamber at City Hall, 200 Texas St., unless otherwise posted.

On the cover

A variety of glassware, including vials, beakers, and flasks, are used at the Water Laboratory located at Rolling Hills Water Treatment Plant. Microbiologists and chemists test the water quality 365 days a year.

In 2017 the laboratory performed 50,361 analyses on 17,822 water samples. Some tests are done in the field and other tests are done in the laboratory. Process control testing is performed at the treatment plants.

For more about Fort Worth's accredited lab, [see page 10](#).

Lakes are our source for drinking water

Fort Worth uses surface water from Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, Lake Benbrook and the Clear Fork Trinity River.

Fort Worth owns Lake Worth. The U.S. Army Corps of Engineers is responsible for Benbrook Lake. The other four lakes are owned and operated by the Tarrant Regional Water District.

As water travels over the land or through the ground, it dissolves naturally occurring minerals and radioactive material. Water also can pick up substances resulting from animal waste or human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate the water poses a health risk.

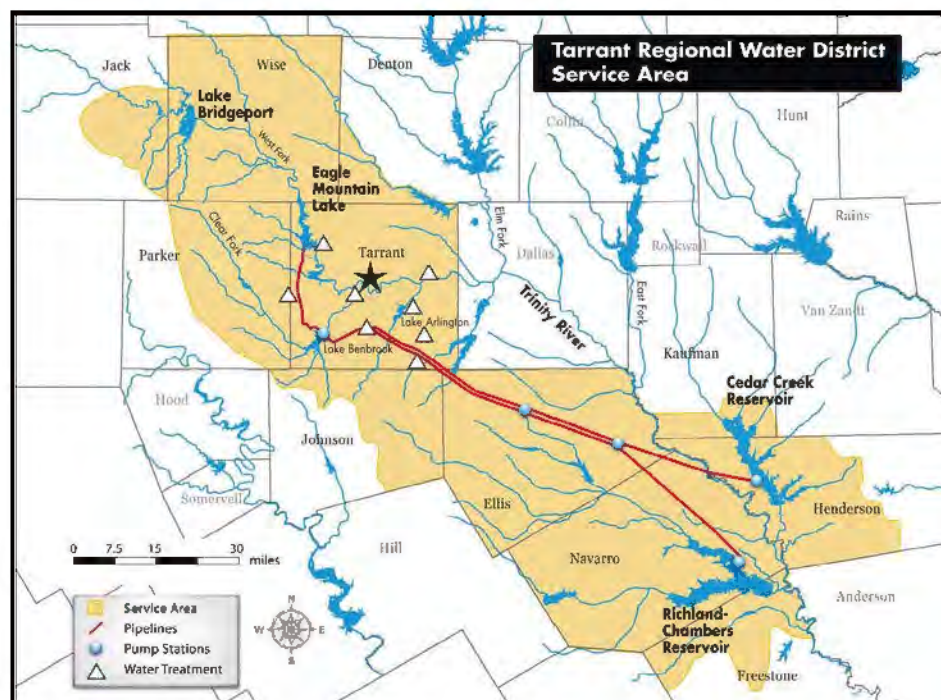
Contaminants that may be in source water before treatment include microbes, inorganic contaminants, pesticides, herbicides, radioactive materials

and organic chemical contaminants.

In addition, contaminants found in drinking water may cause taste, color or odor issues. These types of issues are not necessarily cause for health concerns.

For more information on taste, odor or the color of your drinking water, please contact the Water Department at 817-392-4477 or email wpe@FortWorthTexas.gov.

To ensure tap water is safe to drink, the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality regulate the amount of certain contaminants in water provided by public systems.



Tarrant Regional Water District supplies Fort Worth with raw water.

TCEQ assesses raw water supplies for susceptibility

The Texas Commission on Environmental Quality completed an assessment of Fort Worth's source waters ([see Page 1 for a list of those source waters](#)). TCEQ classified the risk to the City of Fort Worth's source waters as high for most contaminants.

High susceptibility means there are activities near the source water or

watershed that make it very likely that chemical constituents may come into contact with the source water. It does not mean that there are any health risks present.

Further details about the source-water assessments are available through the [Texas Commission on Environmental](#)

[Quality's Drinking Water Watch database](#). For more information on source water assessments and protection efforts of the City of Fort Worth's water system, contact Stacy Walters, regulatory environmental administrator, at 817-392-8203 or email Stacy.Walters@FortWorthTexas.gov.

Intake location	<i>Giardia Lamblia</i>	<i>Cryptosporidium</i>	Adenovirus	Enterovirus
Richland-Chambers Reservoir	Not detected	Not detected	Not detected	Not detected
Cedar Creek Lake	March	Not detected	Not detected	Not detected
Lake Benbrook	May	Not detected	Not detected	Not detected
Eagle Mountain Lake	January	Not detected	Not detected	Not detected
Lake Worth	January	Not detected	Not detected	Not detected
Clear Fork of Trinity River	January, February, April, May, June	Not detected	Not detected	Not detected

People with compromised immune systems may be more vulnerable to contaminants in water

The exact wording shown below is required by state regulations. The information is not meant to alarm or scare you. It is meant to make you aware.

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/CDC 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.

Raw water quality monitored regularly

Tarrant Regional Water District monitors the raw water at all lake intake sites for *Cryptosporidium*, *Giardia Lamblia* and viruses. The source is human and animal fecal waste in the watershed.

The 2017 sampling showed low level detections of *Giardia Lamblia*, which is common in surface water. *Cryptosporidium* and viruses were not detected in any of the samples.

Viruses are treated through disinfection processes. *Cryptosporidium* and *Giardia Lamblia* are removed through disinfection and/or filtration.

See chart to the left

We've been delivering high-quality drinking water for more than a century



Working hard for you!

Eugene Kwan is one of many who keeps the water treatment equipment running smoothly. He has been with the City of Fort Worth for 13 years. Eugene is a senior mechanic in the plant operations division. He maintains and repairs water treatment equipment at the Holly Complex, which includes North Holly and South Holly water treatment plants.

The history of the City of Fort Worth public water system dates back to 1884. The initial water source was the Clear Fork of the Trinity River. The 6.5-mile pipeline bringing water to the Holly plant from Lake Worth was not completed until May 1916. After a major expansion in 1948, it became the North Holly Water Treatment Plant. The South Holly Water Treatment Plant – built just south of the North Holly plant was in operation by 1958. The “Holly” name came from the original pumping engines and boilers, purchased in 1891 from the Holly Manufacturing Co. of Lockport, N.Y.

The City of Fort Worth provides drinking water to a growing retail and wholesale population base that currently exceeds 1.2 million people. The Water Department consists of approximately 950 dedicated individuals with a commitment to provide safe and reliable drinking water to customers. On behalf of the City of Fort Worth, I am pleased to present this Annual Drinking Water Quality Report which provides a year end summary of the quality of our drinking water and monitoring data for 2017.

The City of Fort Worth has been providing drinking water to the public for more than 100 years, beginning with the North Holly Water Filtration plant, which went into service in 1912 (in full operation in 1918), to the most recent water treatment plant, the Westside Plant, which went into service 100 years later in 2012.

Fort Worth has five water plants that can produce 500 million gallons per day of high-quality drinking water delivered to individual customers through the 3,400 miles of transmission and distribution lines.

In addition to providing sufficient and reliable quantity, Fort Worth has also invested in providing the highest quality of water to customers through treatment process improvements. As an example, as of 2012, all five of Fort Worth’s water treatment plants use ozone as part of the disinfection process.

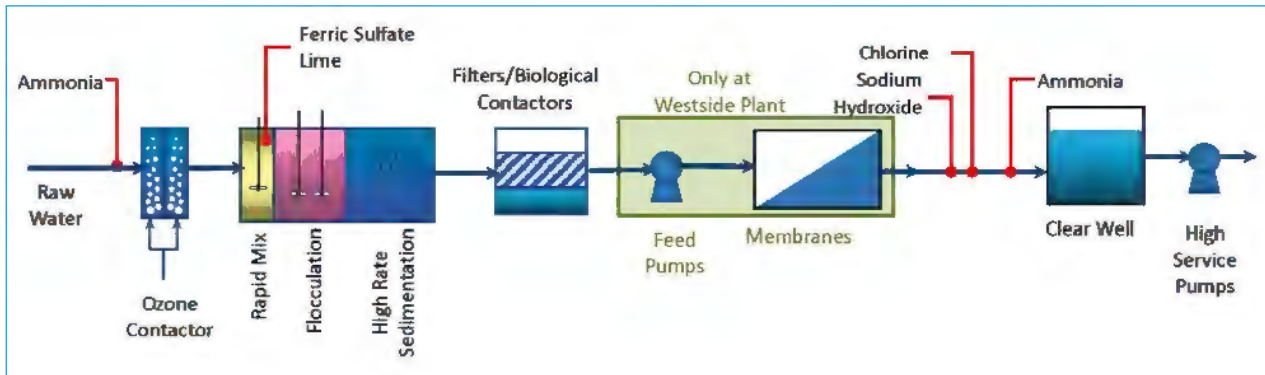
Ozone has also been shown to be highly effective at treating seasonal taste and odor episodes that can occur when the source of supply is from surface water reservoirs.

The City of Fort Worth operates a nationally accredited laboratory with talented staff responsible for performing water quality testing both at the water plants as well as numerous points within the distribution system. Our testing protocols and results are monitored by state and federal authorities to ensure compliance with regulations. The results are presented annually to customers within this Drinking Water Quality Report.

We understand the trust the public places in us to provide safe drinking water, and therefore would recommend reviewing this annual report and contacting us if you have any questions. Call Customer Service at 817-392-4477 or email wpe@FortWorthTexas.gov.

Delivery of high-quality drinking water at a reasonable price has been the city’s legacy for more than 100 years. We look forward to many more years of service to you, our customers.

Chris Harder
Interim Water Director



Water treatment process to protect your health includes seven steps

A multi-barrier approach is used in treating drinking water. The treatment process may vary between utilities based on source water quality.

In Fort Worth, the process starts with adding ozone to kill bacteria and viruses. Adding ammonia prior to ozonation decreases bromate formation. Bromate is a regulated contaminant formed when ozone combines with bromide in the source water, which can be a health concern.

Chemicals, called coagulants and polymers,

are added to the water to cause small particles to adhere to each other, forming clumps. This process is called coagulation and flocculation.

In the sedimentation basins, the particles, called floc, settle to the bottom of the basin and are removed. A small amount of fluoride is added to the amount naturally present for dental health.

Water is filtered through four feet of biologically active granular anthracite coal. At the Westside Water Treatment Plant, the water then passes through membrane filters.

Monochloramine is added to provide disinfection all the way to your tap. The chlorine kills bacteria and viruses. Ammonia is added to increase how long the chlorine lasts, reduce the chlorine odor and reduce the amount of chlorine byproducts created, another health concern.

Water is stored at the plants in clear wells, before it is pumped to the public.

Help us improve by taking a brief survey

The City of Fort Worth has been producing an annual water quality report for more than 20 years. It is a state and federal requirement for water utilities to produce and distribute a water quality report annually.

While much of the information is required and some of the language is mandatory, the Water Department has always tried to add additional information that is interesting and useful for our customers. Added content lets customers know what the City of Fort Worth Water Department is doing to protect public health and the environment, as well as how your utility is striving to be good stewards of resources.

We want to know what you think. Please take five minutes to respond to a [short online survey](#).

Follow Us on Social Media!



Follow us on Instagram
[@savefwwater](#)



Follow us on Twitter
[@fwwater](#)



Like us on Facebook
[Fort Worth Water](#)

www.SaveFortWorthwater.org

www.FortWorthTexas.gov/water



Only Tap Water Delivers

...Public health protection

...Fire protection

...Support for the economy

...The overall quality of life we enjoy

American Water Works Association

2017

WATER CONSERVATION REPORT

Each year, Fort Worth is met with a growing population and new challenges to bring safe, reliable drinking water to the residents of Fort Worth. In 2017, we exceeded our citywide goal for water conservation by reducing our water use per capita to 158 gallons per day. We're continuing to save each day, because it's YOUR water... here's a snapshot of our 2017 water-saving achievements...



2,207
toilets

SMARTFLUSH

**SMARTWATER
(ICI)**

53
audits



359
check-ups

**SMART IRRIGATION
PROGRAM (SIP)**

**EPA WATERSENSE
EXCELLENCE
AWARD** for Education and Outreach



SaveFortWorthWater.org



Water loss control audits water supply

Water loss control is how water utilities provide accountability by reliably auditing their water supplies and implementing controls to minimize system losses.

Water loss control programs can potentially defer, reduce or eliminate the need for a facility to expend resources on costly repairs, upgrades or expansions.

Many variables influence water loss, including meter inaccuracy, data discrepancies, reported breaks and leaks, and unauthorized consumption (theft of water).

The utility's leak detection efforts are aimed at finding and repairing leaks before they turn into main breaks.

In the water loss audit submitted to the [Texas Water Development Board](#) for calendar year 2017, the Fort Worth system lost an estimated 8.6 billion gallons of water from the almost 68 billion gallons of water purchased.

Fort Worth's Water Conservation Plan addresses water loss and has goals for lowering this over time. Customers are encouraged to report visual leakage by calling 817-392-4477.

If you have any questions about the water loss audit, please contact Water Conservation Manager Micah Reed at 817-392-8211 or email Micah.Reed@FortWorthTexas.gov.

Drinking Water Quality Test Results

Contaminant	Measure	MCL	MCLG	Your water	Violation	Common Sources of Substance
Turbidity	NTU	TT=1 TT= Lowest monthly % of samples ≤ 0.3 NTU	N/A	0.6 99.8%	No	Soil runoff (Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.)

Contaminant	Measure	MCL	MCLG	Your water	# Positive E.coli or fecal coliform samples	Violation	Common Sources of Substance
Total Coliforms (including fecal coliform & E. coli)	% positive samples	Presence in 5% or less of monthly samples	0	Presence in 1.4% of monthly samples	0	No	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.

Contaminant	Measure	MCL	MCLG	Your water	Range	Violation	Common Sources of Substance
Beta particles & photon emitters	pCi/L	50	0	5.6	4.4 to 5.6	No	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Combined Radium (-226 & -228)	pCi/L	5	0	2.5	NA	No	Erosion of natural deposits
Uranium	ppb	30	0	1.1	0 to 1.1	No	Erosion of natural deposits
Arsenic	ppb	10	0	2	0 to 2	No	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production waste
Atrazine	ppb	3	3	0.1	0 to 0.1	No	Runoff from herbicide used on row crops
Barium	ppm	2	2	0.08	0.06 to 0.08	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (Total)	ppb	100	100	1.6	0 to 1.6	No	Discharge from steel and pulp mills, erosion of natural deposits
Cyanide	ppb	200	200	57.0	0 to 57.0	No	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
Di (2-Ethylhexyl) phthalate	ppb	6	0	1.2	0 to 1.2	No	Discharge from rubber and chemical factories
Fluoride	ppm	4	4	0.66	0.32 to 0.66	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	0.76	0.13 to 0.76	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	0.03	0.01 to 0.03	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Simazine	ppb	4	4	0.06	0 to 0.06	No	Herbicide runoff
Bromate	ppb	10	0	1.89	0 to 13	No	By-product of drinking water disinfection.
Haloacetic Acids	ppb	60	N/A	11.2	3.0 to 22.0	No	By-product of drinking water disinfection
Total Trihalomethanes	ppb	80	N/A	17.1	1.4 to 28.1	No	By-product of drinking water disinfection

Contaminant	Measure	MRDL	MRDLG	Your water	Range	Violation	Common Sources of Substance
Chloramines	ppm	4	4	3.9	1.5 to 4.3	No	Water additive used to control microbes

Contaminant	MCL	MCLG	High	Low	Average	Violation	Common Sources of Substance
Total Organic Carbon	TT = % removal	N/A	1	1	1	No	Naturally occurring
It is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.							

Abbreviations used in tables

MCL: Maximum Contaminant Level – the highest level of a contaminant 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.

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/does not apply

NTU – Nephelometric Turbidity Unit; a measure of water turbidity or clarity

pCi/L – Picocuries per liter; a measure of radioactivity

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

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

TT: Treatment Technique – a required process intended to reduce the level of a contaminant in drinking water

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Contaminant	Measure	MRDL	MRDLG	Your Water	Range of Detects	Common Sources of Substance
Chloral Hydrate	ppb	Not regulated	0	0.70	0.18 to 0.70	By-product of drinking water disinfection
Bromoform	ppb	Not regulated	0	5.83	1.19 to 5.83	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	Not regulated	0	7.81	3.37 to 7.81	
Chloroform	ppb	Not regulated	0.07	7.96	2.58 to 7.96	
Dibromochloromethane	ppb	Not regulated	0.06	8.51	4.33 to 8.51	
Dibromoacetic Acid	ppb	Not regulated	N/A	15.3	11.9 to 15.3	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
Dichloroacetic Acid	ppb	Not regulated	0	8.6	4.70 to 8.60	
Monobromoacetic Acid	ppb	Not regulated	N/A	3.10	1.60 to 3.10	
Monochloroacetic Acid	ppb	Not regulated	0.07	0	0	
Trichloroacetic Acid	ppb	Not regulated	0.02	1.60	0 to 1.60	

Secondary Constituents

These items do not relate to public health but rather to the aesthetic effects. These items are often important to industry.

Item	Measure	Your Water
Bicarbonate	ppm	108 to 144
Calcium	ppm	37.4 to 50.6
Chloride	ppm	11.6 to 36.1
Conductivity	µmhos/cm	299 to 456
pH	units	7.8 to 8.6
Magnesium	ppm	2.69 to 7.78
Sodium	ppm	9.57 to 25.9
Sulfate	ppm	24.8 to 34.4
Total Alkalinity as CaCO ₃	ppm	108 to 145
Total Dissolved Solids	ppm	116 to 255
Total Hardness as CaCO ₃	ppm	113 to 157
Total Hardness in Grains	grains/gallons	7 to 9

Emergency interconnection

From April 24 to April 25, 2017, Fort Worth used the emergency interconnection with the Trinity River Authority of Texas-Tarrant Water Supply Project to supply water to the CentrePort portion of the Fort Worth distribution system while repairs were made to a pipeline.

An equivalent volume of water was returned to TRA the following day.

To obtain the TRA-TCWSP water quality data, please email the City of Fort Worth Water Department at wpe@FortWorthTexas.gov or call 817-392-4477.

What you should know about lead in drinking water

If present, elevated lead levels can cause serious health problems, especially for pregnant women and young children. Fort Worth's drinking water does not contain lead when it leaves the treatment plant.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The City of Fort Worth is responsible for providing customers with high-quality drinking water. The material used in a customer's service line and/or plumbing fixtures is not under the Water Department's control.

When water has been sitting for several hours, you can minimize the potential for lead exposure by running or flushing the tap for 30 seconds to two minutes before using the tap water for drinking or cooking.

If you are concerned about lead in your water, the Fort Worth Water Department Laboratory offers testing to customers. The cost is \$15 per sample. Call 817-392-4477 to make the arrangements.

Information on lead in drinking water, testing methods and steps

Contaminant	Year of testing	Measure	90th percentile	# of sites exceeding action level	Action Level	Common Sources of Substance
Lead	2016	ppb	3.2	0	15	Corrosion of household plumbing systems; erosion of natural deposits
Copper	2016	ppm	0.6	0	1.3	

90th Percentile Value: 90 percent of the samples were at or below this value. EPA considers the 90th percentile value the same as an "average" value for other contaminants. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10 percent of tap water samples exceed the action level, water systems must take additional steps.

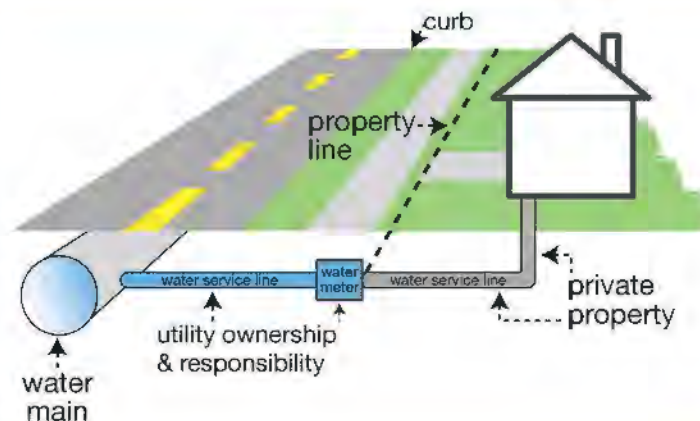
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

you can take to minimize your exposure is available from the [Safe Drinking Water Hotline](#) or call 800-426-4791.

Fort Worth has been on reduced monitoring for lead and copper, meaning we sample 50 homes every three years. Additionally, in 2009, monitoring for one apartment complex, one daycare and one school that met the lead criteria based on material found during construction and known lead lines located throughout the city was added.

Compliance sampling was performed in 2016 and will be performed again in 2019.

Eliminating lead plumbing is a shared responsibility



EPA defines the service line as from the main to the point it enters the home. There is a shared ownership.

The utility owns the portion from the main to the meter, including the meter.

The property owner is responsible for the line exiting the meter and all plumbing and fixtures inside the home.

Fort Worth is working to eliminate city-owned lead service lines

The Fort Worth Water Department's goal is to eliminate all city-owned lead service lines. More than 50 percent of the meters have been inventoried, since this goal was set in 2016.

In April 2016, the Water Department began obtaining GPS coordinates for every water meter and recording the service line material on both sides of the meter. The Water Department is systematically using billing cycles and routes to ensure every meter is touched.

The goal is to complete the meter inventory inside Loop 820 because these older areas are where lead service lines are more likely to be found. Homes built after 1988 would not have lead service lines.

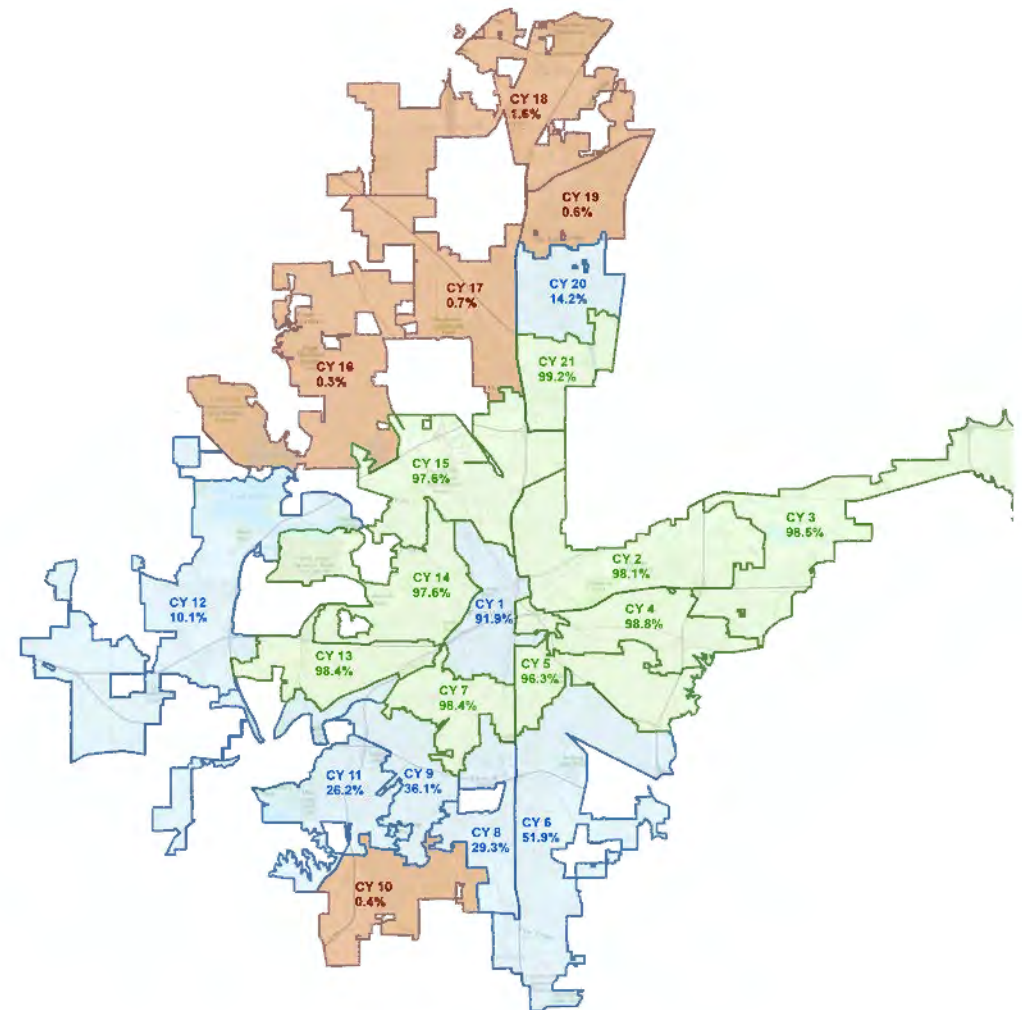
As of May 1, 2018, 97 percent of the meters inside Loop 820 and 55 percent of the meters within the city limits had been surveyed. During the surveying, more than 1,100 lead service lines were found on the city side of the meter, and 11 on the customer side of the meter.

Property owners and tenants are being notified by letter when a lead service line is found.

Field crews are replacing lead service lines found during the course of maintenance work. If customers are home, contact is made and a packet of information is provided. The crew also works with the customer to remove faucet aerators and run the taps for a few minutes.

If the customer is not home, information that a lead service line was replaced is left along with instructions on how to run fresh water through the taps.

All customers with known lead service lines are offered a free test. The packet contains instructions for requesting the free test.



- Green: Areas completed
- Blue: Areas in progress
- Brown: Areas not completed

Learn more at www.FortWorthTexas.gov/water/lead

Other resources

Learn more about water by visiting the following websites. Many of these sites offer resources for teachers and children.

**Environmental
Protection Agency**

www.epa.gov



**Texas Commission
on Environmental Quality**

www.tceq.texas.gov

Texas Water Development Board

www.twdb.texas.gov

Texas American Water Works Association

www.tawwa.org

www.drinktap.org

Water Environment Federation

www.wef.org

National Sanitation Foundation

www.nsf.org

**Texas Water
Conservation Association**

www.twca.org

Staff tests quality by taste and smell

Rolling Hills Water Laboratory staff conduct taste and odor tests on water samples three times a week. Taste and odor is recognized as a factor affecting the acceptability of drinking water. Every water treatment plant and raw water source is checked for acceptability and any abnormalities.

The City of Fort Worth's laboratory was the first municipal lab and third overall in Texas to be accredited in 2006 through the National Environmental Laboratory Accreditation Program. The Texas Commission on Environmental Quality requires the lab to reapply annually, and an onsite audit is done every two years.

Résumés and backgrounds of each employee are examined to ensure that they meet rigorous minimum requirements. Then the lab must successfully complete two rounds of proficiency testing.

Known samples are sent to the lab by a select test provider and lab staff must process the samples, with routine samples, and report correct results to pass.

Certified laboratory inspectors then conduct a full-scale detailed audit at the lab. Employees are interviewed and the quality assurance and analytical processes are scrutinized. When the lab passes all of the steps, accreditation is granted and maintained.



Tanks, planes and mains keep the water moving

You call them water towers, we call them elevated storage tanks and ground storage tanks. They are vital for:

- Maintaining pressure within the water distribution system and,
- Providing storage for peak demands for water (weather, fire events & main breaks).

The city's water mains and water service lines are responsible for moving water from a water treatment plant to the customer's home or business. Providing adequate storage is required by the Texas Commission on Environmental Quality. Tanks are routinely checked for compliance.

Fort Worth's water tanks come in different shapes and sizes. Some are made from steel or reinforced concrete or a combination of both.

The city currently operates 28 water storage tanks within the distribution system with a total storage capacity of 95.3 million gallons.

Distribution system

The distribution system consists of 11 pressure planes - East Side (one), North Side (three), West Side (four), South Side (two), and Holly. Pressure planes are isolated areas of the

distribution system that are based on the elevations of the area to ensure reasonable water pressure.

The East Side has three elevated tanks and three ground storage reservoirs. North Side includes five elevated tanks and three ground storage reservoirs. On the West Side there is one elevated tank, three ground storage reservoirs and one standpipe. Three elevated tanks and two ground storage reservoirs make up the South Side Pressure Plane, and the Holly Pressure Plane consists of four ground storage reservoirs.

Newest water tank

Caylor, #2, north of Timberland Road, is the newest tank in the City of Fort Worth's system. It is a five-million gallon pre-stressed concrete tank that was put into operation in 2016. It is located adjacent to Caylor #1, which is a five-million gallon steel tank built in 1988. Caylor #1 was repainted in 2018. The next new tank to be constructed will be a one-million gallon elevated tank in far west Fort Worth.

Maintenance

The city takes pride in the external appearance of our storage tanks. Some tanks are identifiable with the city's "Molly" logo. Steel tanks



are repainted to maintain a positive appearance. The Calmont elevated storage tank located between Calmont Avenue and the I-30 West freeway is scheduled to be repainted in the fall.

Fort Worth has an aggressive program to regularly clean and inspect the tank interiors, which helps maintain water quality and provides for quicker maintenance and repair cycles.

Unless a storage tank is taken out of service for cleaning, inspection or rehabilitation, the water level inside a storage tank is kept above a minimum level while in operation. From that level, staff can cycle the water level up and down to minimize the age of the water and maximize mixing. Operators can control water levels within storage tanks by using pump stations and gravity transfers from one pressure plane to another.

Speakers available!

We welcome the opportunity to speak to neighborhood groups and civic organizations about the city's utility services.

wpe@FortWorthTexas.gov



Table A. Regulated Substances. These substances are regulated or are required to be monitored and were detected in Arlington tap water in 2017. Arlington had no violations of state or federal guidelines in 2017

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Atrazine	ppb	0.16	0.10	0.23	3	3	Runoff from herbicide used on row crops
Barium	ppm	0.052	0.047	0.057	2	2	Naturally present
Arsenic	ppb	1.0	ND	1.0	10	10	Naturally present & runoff from herbicides
Chromium	ppb	1.1	ND	1.1	100	100	Naturally present & industrial sources
Cyanide	ppb	106	ND	106	200	200	Discharge from metal/plastic/fertilizer factories
Bromate ³	ppb	<5	<5	<5	10	10	Byproduct of drinking water disinfection
Chloramines ²	ppm	3.5	3.3	3.6	MRDL=4	MRDLG=4	Water additive used to control microbes
Fluoride	ppm	0.65	0.45	0.83	4	4	Water additive promoting strong teeth
Nitrate as Nitrogen	ppm	0.447	0.151	0.829	10	10	Runoff from fertilizers
Nitrite as Nitrogen	ppm	0.089	ND	0.499	1	1	Runoff from fertilizers
Total Coliform ^{4,7}	%		ND	2.02%	5%	NA	Naturally present in the environment
Total Organic Carbon (TOC)							Naturally present in the environment
PB Plant (raw)	ppm	4.9	3.9	6.5			(PB = Pierce-Burch Plant)
PB Plant (drinking)	ppm	2.6	2.4	3.1			
PB Removal ratio ⁵	%	1.4%	1.3%	1.5%			
JK Plant (raw)	ppm	4.7	4.2	5.3			(JK = John F. Kubala Plant)
JK Plant (drinking)	ppm	2.4	2.0	2.9			
JK Removal ratio ⁵	%	1.3%	1.2%	1.4%			
Total Trihalomethanes ²	ppb	10.2	8.6	11.8	80	NA	By-product of drinking water chlorination
Haloacetic Acids (HAA5) ²	ppb	11.9	9.1	13.1	60	NA	By-product of drinking water chlorination
Turbidity ⁶							
Highest single measurement	NTU	0.07	0	0.34	TT = 1.0	0	Soil runoff
% of samples < 0.3 NTU	%	99.9%	99.9%	100%	TT = 95%	NA	
Substance	Units	Action Level	No. Sites > Action Level		90 th %-tile	Range	Possible Source
Lead (2015) ¹	ppb	AL = 15	1		1.44	ND-46.8	Corrosion of household plumbing systems
Copper (2015) ¹	ppm	AL = 1.3	0		0.166	ND-0.49	Corrosion of household plumbing systems
Substance			PB Plant 2017	JK Plant 2015			Possible Source
Radium 228	pCi/L		1.43	<1.0	5	NA	Decay of natural and man-made deposits Testing for radiological substances required every 3 years.
Beta/Photon Emitters	pCi/L		4.8	<4.0	50	NA	
Gross Alpha Particle Activity	pCi/L		<2.0	<2.0	15	NA	

¹Instead of MCLs for lead and copper, EPA requires that 90 percent of water samples obtained from customers' taps contain less than the Action Level for each metal. Sampling is required every 3 years.

²Compliance is based on a calculated annual average of all samples at routine sites.

³Compliance is based on a calculated running annual average of the quarterly averages.

⁴Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm blooded animals. While not themselves disease producers, they are often found in association with other microbes that

are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms. Therefore their absence from water is a good indication that the water is bacteriologically safe for human consumption. The percentages shown represent the presence in samples in one month.

⁵Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. Based on running annual average of ratios.

⁶Turbidity 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, including bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

⁷In 2017, Tarrant Regional Water District analyzed all raw water sources for cryptosporidium and giardia each month. One of the samples taken during 2017 contained 0.09 organisms per liter for giardia. No cryptosporidium was found. Cryptosporidium is a pathogen which may be found in water contaminated by feces. Although filtration removes cryptosporidium and giardia, it cannot guarantee 100% removal.



The Environmental Protection Agency (EPA) Safe Drinking Water Hotline

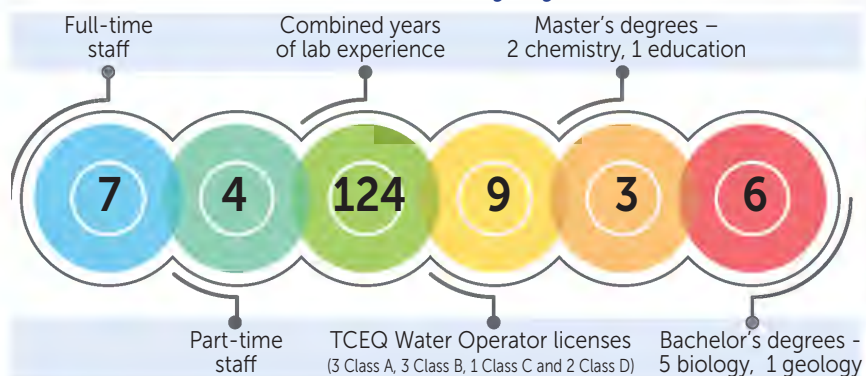
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain substances in water provided by public water systems.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791 or visiting the website at www.epa.gov/safewater.



Arlington Water Utilities tests drinking water at over **120 sample sites** all over the city each month. In 2017, the laboratory collected **7,327 samples** and performed **16,829 tests** monitoring **229** different analytes. This report contains data collected from Jan. 1, 2017 through Dec. 31, 2017, unless another time frame is noted. Here's a little more about the laboratory team that performs that work.

Water Utilities Laboratory by the Numbers:



Arlington Water Utilities Lab Staff



Table B. Unregulated Substances. These substances are not currently regulated by EPA. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Chloroform	ppb	3.5	2.4	4.3	Not Regulated	NE	By-product of drinking water disinfection; not regulated individually; included in Total Trihalomethanes.
Bromodichloromethane	ppb	3.3	3.0	3.6	Not Regulated	NE	
Chlorodibromomethane	ppb	3.2	3.0	3.4	Not Regulated	60	
Bromoform	ppb	0.3	0.2	0.5	Not Regulated	NE	
Dichloroacetic Acid	ppb	4.64	3.06	5.88	Not Regulated	NE	By-product of drinking water disinfection; not regulated individually; included in Haloacetic Acids.
Bromoacetic Acid	ppb	3.08	2.71	4.03	Not Regulated	NE	
Dibromoacetic Acid	ppb	5.38	1.28	8.53	Not Regulated	NE	
Chloroacetic Acid	ppb	1.5	0.78	2.01	Not Regulated	NE	
Trichloroacetic Acid	ppb	0.19	0.02	0.44	Not Regulated	300	

Other Substances of Interest

Substance	Units	Avg	Min	Max
Total:				
Alkalinity	ppm	84.5	44	119
Hardness	ppm	89.3	50	150
Hardness	grains/gal.	5.2	2.9	6.1
Calcium	ppm	33	16	41
Sodium	ppm	19.9	10.2	27
Magnesium	ppm	3.6	2.7	4.5
Chloride	ppm	15	10	22
Total Dissolved Solids	ppm	132	96	169
pH	units	8.2	7.7	8.6

Table Definitions

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

< less than the amount listed.

≥ equal to or greater than the amount listed.

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 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 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 contamination.

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.

NA Not applicable

ND (Not Detected) No level of the parameter was detected.

NE Not established

NTU (Nephelometric Turbidity Units) A unit used when measuring turbidity, a measure of the cloudiness of the water.

pCi/L (picocuries per Liter) A measure of radioactivity in the water.

ppb (parts per billion, ug/L) A unit of measurement roughly equal to 1 drop in 100,000 gallons.

ppm (parts per million, mg/L) A unit of measurement roughly equal to 1 drop in 100 gallons.

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

Sky high improvements in storage

Water storage tanks are an essential part of any water distribution system. Arlington has ten elevated storage tanks, or water towers, located throughout the city, with capacities from 1 million to 2.5 million gallons each and a total storage capacity of 17.5 million gallons.

As needs change throughout the day, Arlington Water Utilities releases water from elevated storage tanks throughout the city to meet demand. The tanks are also essential for maintaining water pressure. They are part of the hydraulic model that provides some of the top fire protection in the country.

Keeping them in excellent condition is a high priority. So, in 2018, Arlington's Golden West Elevated Storage Tank, located at 3205 Pleasant Valley Lane, is getting an update. The 2.5-million-gallon tank, which was built in

1983, was evaluated in 2014 to identify needed updates. Arlington City Council approved project costs of up to \$1,239,950 in 2017. A full rehabilitation, including several repairs and a new coating for the exterior and interior of the tank, started in late January. The City of Arlington logo will also be updated. The work is expected to last several months.

Planning for the future is important, too. In January, the Arlington City Council approved



a design contract for a new elevated storage tank to be located near the corner of New York Avenue and Craig Hanking Drive, adjacent to the East Arlington Police Service Center. The 1.5-million-gallon tank will improve water pressures in the area.

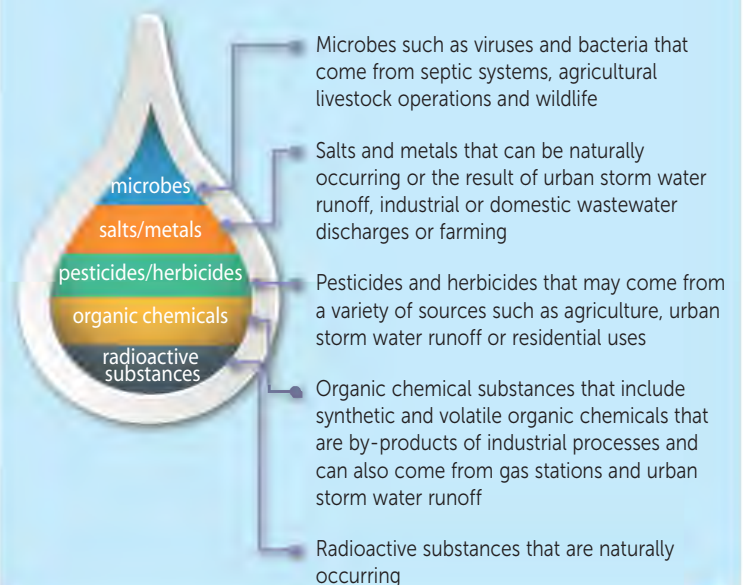
Arlington Water Utilities treated more than **18 billion gallons** of water in 2017.

Limiting how much of the water is lost to water main breaks, leaks, and unauthorized consumption is a priority. Over the last few years, Arlington has made significant improvements in two water industry measures: – percentage of water loss and reductions in water use in gallons per resident. These decreases have resulted in significant savings in raw water, chemical, and electrical costs.



Substances Expected to be in Drinking Water

The City of Arlington and the State of Texas both analyze your drinking water. Any regulated substances that were detected during the last year are shown in Table A. As shown in the table, all are well below the established maximum contaminant levels. All water dissolves substances from the ground as it flows over and through it. Substances that may be present in raw water include such things as:



Contaminants may be found in drinking water that may cause taste, color, or odor problems but are not necessarily causes for health concerns. For more information, call Laboratory Services at 817-575-8984.

AMI project hits milestone in 2018

Arlington Water Utilities' 10-year plan for installing automated metering infrastructure, or (AMI), throughout the city hits the halfway mark in spring 2018. As of March 30, 2018, 54,202 AMI units were being used in homes, schools, and businesses throughout the city. AMI technology helps customers keep better tabs on their day-to-day water usage and make adjustments when necessary. It also improves the accuracy of water billing. Below are answers to some questions that residents have when an AMI is installed in their homes.

What is an AMI meter? AMI stands for Advanced Metering Infrastructure. AMI uses communication technology to allow meters to be read remotely. The AMI system transmits these readings over a private, secure and licensed radio network. Only the meter reading and the unique meter identifier are transmitted. No customer information is transmitted with the reading.

Why are the traditional meters being replaced? AMI meters represent a significant improvement over previous metering technology. AMI brings savings in employee and vehicle costs, improves accuracy, and eliminates a need for in-person first time and final meter readings. By producing daily and hourly information, AMI allows our staff to

help customers troubleshoot billing concerns and improve conservation efforts by providing information about consumption patterns.

Will a meter reader still need to visit to read the meter? Arlington Water Utilities staff will not be on site to read meters monthly.

Is my AMI meter accurate? By ordinance, all meters must meet the accuracy test guidelines of the American Water Works Association when installed and are guaranteed by the manufacturers. Please note that new meters typically measure usage more accurately and this may result in a higher billed consumption.

Installation of an advanced metering infrastructure, or AMI, unit takes about 30 minutes. Customers are notified by mail and with a door hanger.



Arlington Water and UT Arlington deliver large diameter main assessments



A unique collaboration between Arlington Water Utilities and The University of Texas at Arlington is already saving residents millions in avoided costs associated with wastewater services. Replacing sanitary sewer mains that need it before they fail prevents emergencies that can have environmental health consequences and cost 10 times as much as preventative measures. The Large Diameter Sanitary Sewer Assessment Project started in 2016 with a goal of examining about 48 miles of large diameter sanitary sewer main with a multi-sensor robot that uses sonar, lasers and images.

The team of engineers, field crews, GIS technicians, students and professors finished their assessments in early 2018. The data they have collected will help them make smart, cost-effective replacement decisions and keep Arlington's infrastructure strong.



Is your bill higher than expected?

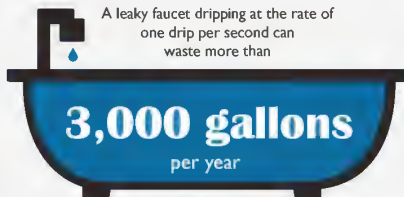
Summer months are when Arlington residents use the most water, whether they are filling swimming pools or irrigating lawns. We know some water use can come as a surprise. Here are some common causes of unexpected usage and resources to help.



- A leaky toilet can be a sneaky water waster because the "leak" isn't outwardly visible. But, a running toilet can waste as much as 200 gallons of water a day and that can add up to 6,000 a month or more. Visit the EPA's Fix a Leak Week website to learn more about how to fix household leaks. www.epa.gov/watersense/fix-leak-week.
- An irrigation system that is switching on when you don't expect it to or one that has one or more leaks can add up quickly on your water bill. Just a leak 1/32nd of an inch in diameter (about the thickness of a dime) can waste about 6,300 gallons of water per month. Arlington Water Utilities and Tarrant Regional Water District offer free sprinkler system assessments to homeowners. Visit www.savearlingtonwater.com to sign up.
- Arlington Water Utilities provides options for customers facing emergencies that affect their ability to pay. Visit www.arlingtontx.gov/water or call 817-275-5931 to learn more.

10

percent of homes have leaks that waste 90 gallons or more per day



Did you know?

Minor water leaks account for nearly



trillion gallons

of wasted water each year and is equal to annual household water use in nearly

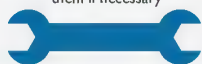


million homes



REPAIR

leaks by checking faucet washers and gaskets for wear and replacing them if necessary



epa.gov/watersense



Get online and be in the know

Arlington Water Utilities wants to keep residents informed about their water service. A new email system notifies customers with active email accounts on file when an emergency or planned service interruption is happening in their neighborhood.

Later this year, we'll also be introducing new features that will help many customers keep track of their daily water usage online. Water customers who have registered to view their bills online will be able to immediately take advantage of these new services.



STEP 1

CREATE AN ACCOUNT

Go to www.arlingtontx.gov/wateronline. You will need your Arlington Water Utilities account number.



STEP 2

PROVIDE CONTACT INFORMATION.

Email address required.



STEP 3

ACTIVATE YOUR ACCOUNT.

You will receive an email from water@arlingtontx.gov with a link. Follow it and log in to activate.

Backflow Prevention

When you turn on the faucet you expect the water to be as safe as it was when it left the water treatment plant. However, when a **backflow** incident occurs, water can flow backwards into our safe drinking water. The danger comes from a **cross connection**, which is when a water line is in contact with a harmful substance. Examples of these hazards include secondary water sources such as water wells, hose end chemical dispensers for lawn treatment, a water hose in a bucket of non-potable liquid or a swimming pool, washing machines, and irrigation systems.



Fortunately, keeping our precious water resource safe from contaminants such as fertilizers or household cleaners is easy. Take the following precautions:

NEVER submerge hoses in buckets, pools, tubs, sewer cleanouts or sinks.

DO NOT use spray attachments without a backflow prevention device, such as a hose bib vacuum breaker. The chemicals used on your lawn are toxic and can be fatal if ingested.

INSTALL and TEST appropriate backflow prevention assemblies when required, such as on your irrigation system.

Don't put your neighbors or yourself at risk. If you believe you have a backflow concern and would like more information, please contact Water Resource Services at 817-459-5902 or visit Backflow Information at www.arlingtontx.gov/water.

The Arlington Water Utilities laboratory staff is available to answer your questions about water quality at 817-575-8984. Here are some answers to the most asked questions.



My water sometimes appears cloudy or milky when I first turn on the tap. Why?

This can be caused by tiny air bubbles that are in the water. It is common for this to happen when it's colder outside or the water pressure changes because air becomes more soluble in water under these conditions. Once the water comes out of your tap, the water is no longer under pressure and the air comes out of solution as bubbles. Cloudy water caused by tiny air bubbles is not harmful to health. An easy way to test whether the cloudiness is caused by air bubbles is to fill a clear glass with water and let it sit on the counter for a minute. If the cloudiness clears from the bottom to the top, then you can be assured that this is air dissipating from your water.

A fire hydrant on my block was open and gushing water. Why would you do that?

The practice of opening a fire hydrant and letting the water run for several minutes is known as flushing. This practice improves water quality and ensures you are getting the freshest, highest quality water to your home. Build-up of sediment can occur in mains and flushing can help minimize any discoloration or sediment in your water. If you notice sediment or discoloration in your water, try letting the tap run for several minutes. If this does not clear up the issue, please notify the water department.

Why does my water smell musty sometimes?

During certain times of the year, it is not uncommon to experience some taste and odor issues with your tap water. A naturally occurring compound called geosmin is produced by algae found in surface water. Extreme temperatures can kill off algae in surface water, which releases the geosmin into the water. While the taste and odor can be unpleasant, geosmin is not toxic or harmful. The water remains safe to drink. Heating the water increases the volatility of these compounds, which explains why the smell is more easily detected when you are in the shower or when water is used for hot beverages. To make the water taste better, try chilling it, adding ice cubes, a slice of lemon, or a few drops of lemon juice. And remember that the change in taste and odor is only temporary.

For more information:

Water Quality:817-575-8984

Laboratory services, water quality questions or water quality problems. If you have questions concerning this brochure, ask for the laboratory.

Customer Care:.....817-275-5931

Open new or transfer account, billing inquiries, water conservation, water and sewer rates.

Emergency Water, and

Sewer Services (24 hours):.....817-459-5900

Service interruptions, water leaks, sewer problems

Texas Commission on Environmental

Quality (TCEQ):512-239-1000

To participate in decisions concerning water:

Attend the Arlington City Council meetings held in City Hall, 101 West Abram Street.

Meeting schedule is posted online at www.arlingtontx.gov/citycouncil/meeting-schedule/

To view City Council Agenda or to watch a City Council meeting webcast, please visit www.arlingtontx.gov/citycouncil/agendas/

Visit our website at:

www.ArlingtonTX.gov/water/CCR



Water Utilities staff participated in more than 40 school, library, and community presentations in 2017. Interested in taking a tour of one of our facilities or having a speaker visit your classroom? Contact Traci Peterson, Arlington Water Utilities communications coordinator, at traci.peterson@arlingtontx.gov.

Should I be worried about lead in my drinking water? The City of Arlington tests for lead every three years at 50 sites across the city, as required by the Texas Commission on Environmental Quality. Because of its history of testing results registering well below established limits, Arlington's lead testing frequency was decreased from every six months to a three year schedule by the TCEQ. 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. Arlington Water Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials use in plumbing components. Older homes (built before 1930) are more likely to have plumbing fixtures containing lead. 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 two 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 www.epa.gov/safewater/lead.

What should I do if I see small black particles in my water? Usually, the culprit is a faucet or water heater in need of maintenance. If the problem is in just one faucet, it's likely that the black, rubber o-ring at the tip of the faucet needs replacing because it is breaking apart. Problems in the water heater can come from deteriorating supply hoses or lime buildup.

Want to learn more about Arlington's water? Visit us at www.arlingtontx.gov/water or follow us on Facebook (www.facebook.com/arlingtonwater) or Twitter (@arlingtonwater). You can also find useful information about efficient water use at www.SaveArlingtonWater.com.