City of Sunset Valley (TX2270004) 2022 Drinking Water Quality Consumer Confidence Report

January 2022 to December 2022

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. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers on an annual basis.

If you would like to participate in public decisions that may affect the quality of water the Sunset Valley City Council meets the first and third Tuesday of each month at 6 pm. Information on these meetings can be found by visiting the City web site at www.sunsetvalley.org, or by calling 512-892-1383. City Hall is located at 3205 Jones Road, Sunset Valley, Texas 78745.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 892-1383.

Sources of Drinking Water

The City of Sunset Valley purchases surface water from the City of Austin. Customers of the City of Sunset Valley receive their drinking water from two water treatment plants that pump surface water from the Colorado River as it flows into Lake Austin. The Austin Water Utility treats and filters the water according to federal and state standards to remove any possible harmful contaminants. Additional monitoring and testing is provided by the City of Sunset Valley prior to final delivery. Under Texas Commission on Environmental Quality (TCEQ) rules the City of Sunset Valley is required to provide to you copies of water quality data for both the City of Austin and the City of Sunset Valley. This information is provided in tables at the end of this report.

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 the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

The Colorado River watershed reaches many miles upstream, passing through agricultural and urban areas. Contaminants that may be in the 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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

All drinking water may contain contaminants. When drinking water meets federal standards, there may not be any health based benefits to purchasing bottled water or home treatment devices. 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.

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 systems. 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. For more information on taste, odor, or color of drinking water, please contact the Sunset Valley Public Works Department (512-891-9103).

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).

Chloramine Notification

The City of Sunset Valley purchases water from the City of Austin. Austin uses chloramines for disinfection at their surface water plant. Chloramine is intended to benefit our customers by reducing the levels of disinfection byproducts in the system, while still providing protection from waterborne disease. However, chloramines can cause problems for customer's dependent on dialysis machines. A condition known as hemolytic anemia can occur if the disinfectant is not completely removed from the water that is used for the dialysate. Consequently, the pretreatment scheme used for the dialysis units must include some means, such as a charcoal filter, for removing the chloramine. Medical facilities should also determine if additional precautions are required for other medical equipment. In addition, water disinfected with chloramines may be toxic to fish. If you have a fish tank, please make sure that the chemicals or filters that you are using are designed for use in water that has been treated with chloramines. You may also need to change the type of filter that you use for the fish tank.

Additional Information for 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. 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 Assessment

The TCEQ completed an assessment of your source water and results indicate that our 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: Carolyn Meredith, Public Works Director.

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://dww2.tceq.texas.gov/DWW/

Source Water & ID Number	Type of Water	Location
City of Austin TX2270001	Surface Water (SW)	Colorado River

Definitions and Abbreviations

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

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

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.

Maximum Contaminant Level or 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 or 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 or 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 or 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.

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

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

na: not applicable.

NTU: nephelometric turbidity units (a measure of turbidity)

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

ppb: Micrograms per liter or parts per billion

ppm: Milligrams per liter or parts per million

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

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

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

2022 DRINKING WATER QUALITY REPORT

The table below lists all of the drinking water contaminates we detected that are applicable for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done during the report period. Some contaminants are not required by EPA or the State to be tested every year.

Residual Disinfectant Level							
Disinfectant	Year	Average Level	Range of Levels Detected	MRDLG	MRDL	Violation (Y/N)	Likely Source of Contamination
Chloramine (mg/L)	2022	2.04	1.24-2.57	4	4	N	Water additive used to control microbes

Disinfectant Byproducts							
Contaminant	Year	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Total Trihalomethanes (ppb)	2022	31	24.4-34.7	No goal for the total	80	N	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	2022	11	8.8-12.4	No goal for the total	60	N	Byproduct of drinking water disinfection

Inorganic Contaminants							
Contaminant	Sample Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Violation (Y/N)	Likely Source of Contamination
Nitrate (ppm)	2022	0.22	0.22-0.22	10	10	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

2022 DRINKING WATER QUALITY REPORT

Unregulated Contaminant Monitoring Regulations Reporting (UCMR and UCMR3) – In the Distribution System

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. Any unregulated contaminants detected are reported in the following table.

Substance	Sample Date	MCLG	Low	High	Ave	Likely Source of Contamination
Chloroform (ppb)	2022	70	5.7	9.8	7.3	Byproduct of drinking water disinfection
Bromodichloromethane (ppb)	2022	60	8.1	12.5	9.7	Byproduct of drinking water disinfection
Dibromochloromethane (ppb)	2022	0	8.5	10.4	9.4	Byproduct of drinking water disinfection
Bromoform (ppb)	2022	0	1.9	2.5	2.1	Byproduct of drinking water disinfection
Dichloroacetic acid (ppb)	2022	0	5.1	6.7	5.5	Byproduct of drinking water disinfection
Trichloroacetic acid (ppb)	2022	20	1.3	3.0	2.0	Byproduct of drinking water disinfection
Dibromoacetic acid (ppb)	2022	No MCLG	2.5	3.2	2.8	Byproduct of drinking water disinfection

Lead and Copper

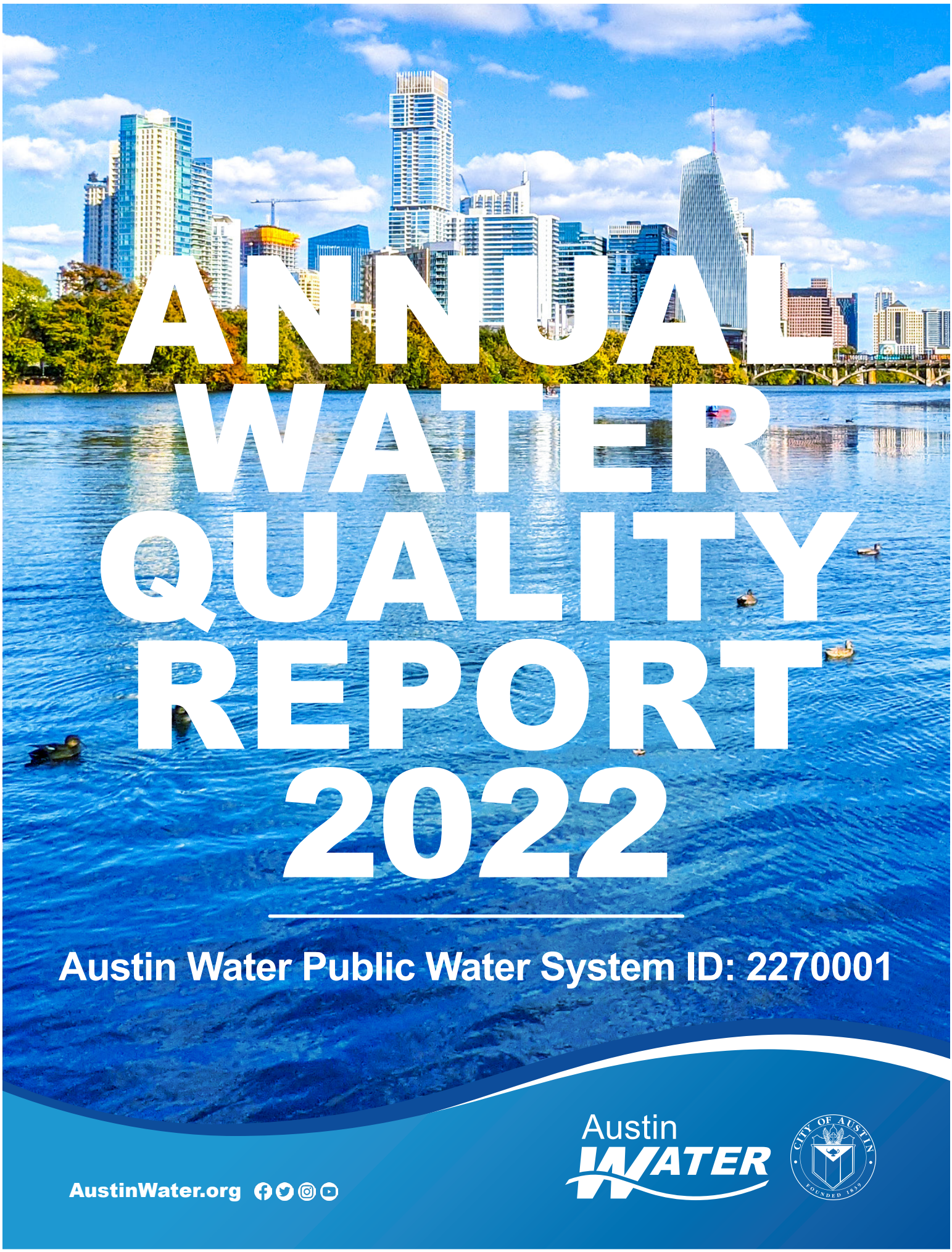
Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Yes or No)	Likely Source of Contamination
Copper	2022	1.3	90% of samples < 0.0144 No samples above the action level of 1.3 ppm.	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	2022	15	90% of samples were <.00412 ppm. No samples exceeded 15 ppb.	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Violation: Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Explanation
Lead Consumer Notice (LCR)	12/30/2022	10/07/2022	We failed to provide notice to TCEQ that we had sent the Lead Consumer notices to customers. Customers were provided notices on 10/07/22.



ANNUAL WATER QUALITY REPORT 2022

Austin Water Public Water System ID: 2270001

AustinWater.org

Austin WATER

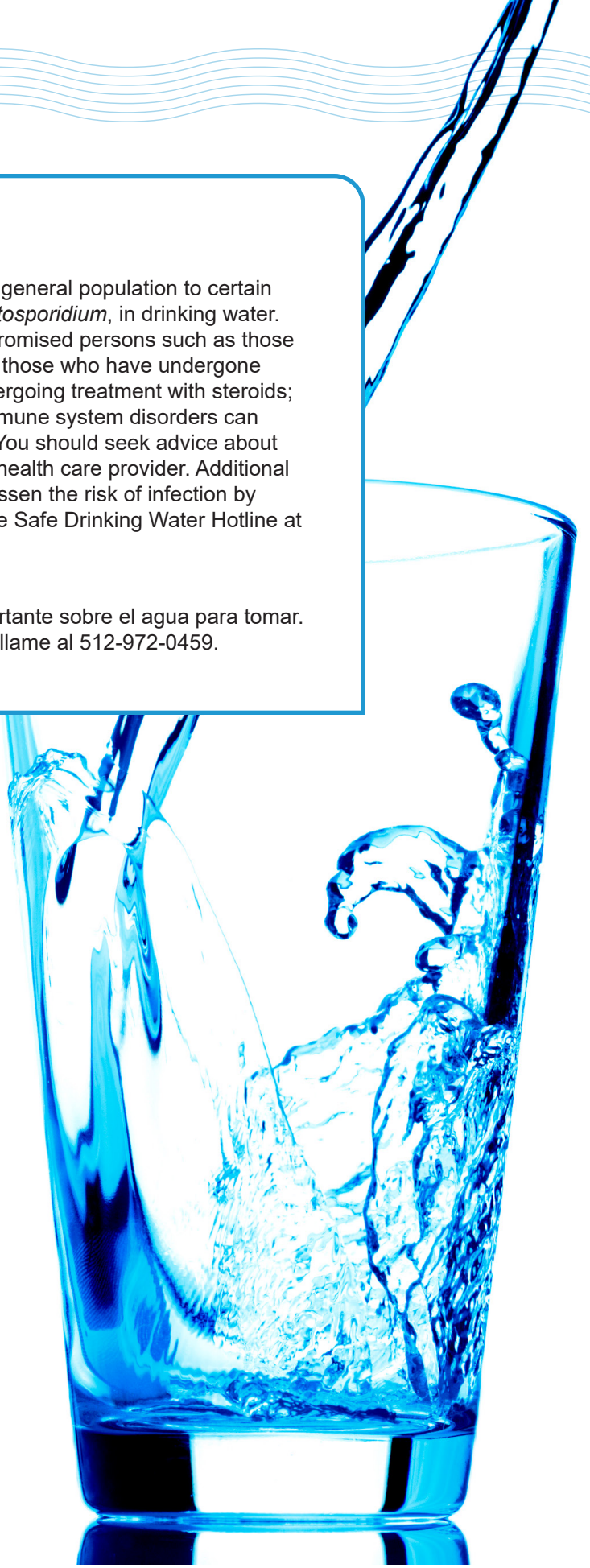
CITY OF AUSTIN FOUNDED 1839

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; 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 Safe Drinking Water Hotline at 800-426-4791.

En español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, por favor llame al 512-972-0459.



MESSAGE FROM THE DIRECTOR

Austin Water has been an industry-leader serving customers for more than 100 years. We remain strongly committed to the values central to Austin Water's 100+ year history: safety, integrity and trust, excellence, sustainability and resilience, equity and customer service.

In February of last year, procedural errors by water treatment personnel caused a temporary rise in turbidity levels affecting water clarity and requiring a boil water event. This was a difficult period for everyone in our community. Following this event, the City Council commissioned an external review by the University of Texas Center for Water and the Environment. This included a full review of last year's event as well a comprehensive study of our communications, processes and procedures over the last five years.

This review determined that:

- Water treatment plant infrastructure and processes are sound.
- Water quality under normal circumstances consistently meets or exceeds state and federal requirements.
- Investments in infrastructure and planned maintenance have enhanced treatment resilience.
- Improvements have been completed and corrective measures taken based on the lessons learned over the last five years.

The review also identified 53 recommendations to improve hiring and compensation, organizational structure, operations and staff training, culture and internal communications and emergency management. Overall, 69 percent of the recommendations have been implemented or are underway. All recommendations will be implemented by the end of 2023, through specific actions, process improvements or programmed capital projects.

Our 1,200 employees continue to work with tremendous dedication to deliver drinking water of the highest quality, with exceptional value and reliability and we recognize the critical role we play in protecting public health.

In this report, we explain the results of water sampling that we have performed, and what we are doing to protect you and your family. Included, you'll also find a snapshot of our quality controls added to strengthen our water treatment processes and so that you receive the best – every time you turn on the tap.

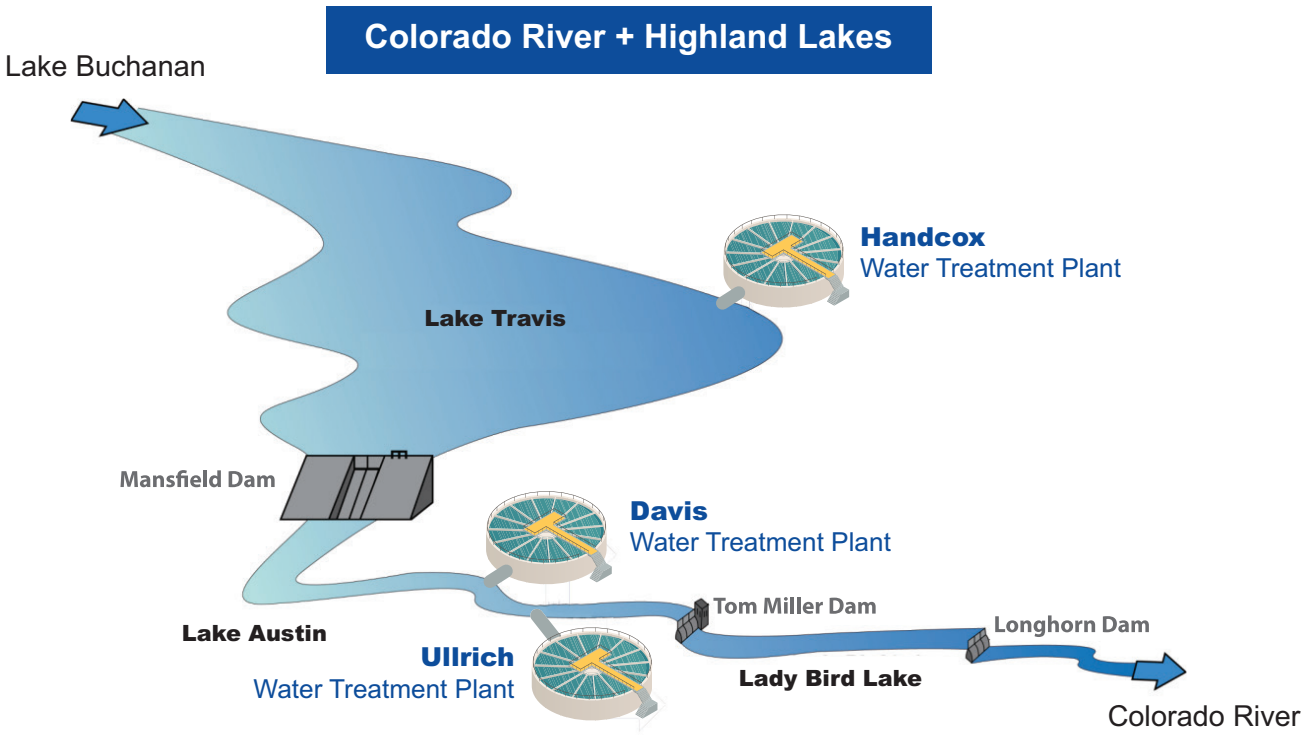
Sincerely,

Shay Ralls Roalson, P.E.
Director of Austin Water

ABOUT YOUR WATER

Where Your Drinking Water Comes From

Austin Water customers receive their drinking water from three water treatment plants that pump surface water from the Lower Colorado River as it flows through Lakes Travis and Austin. Raw water from those Highland Lakes is treated according to federal and state standards to remove possible harmful contaminants.



We Protect the Source

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for the water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts of our system, contact Austin Water's Water Quality Manager at 512-972-0012.

What Is in Your Drinking Water

The sources of drinking water nationwide (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can be polluted by animals or human activity.

Contaminants that may be present in the 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, storm water runoff and residential uses.
- Organic chemicals, including synthetic and volatile organic chemicals, which are byproducts 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit amounts of certain contaminants in water provided by public water systems. The Food and Drug Administration 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 a cause for health concerns. For concerns with taste, odor or color of drinking water, contact Austin Water at 512-972-0012.

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 the 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.

Continuous Sampling and Testing

Austin Water collects and tests samples at our treatment plants and across our water system multiple times a day, every day, for bacteria and chemicals that could pose a risk to our customers. Our highest priority is to be sure that our water continues to be safe to drink.

We have taken steps to protect drinking water safety and quality that include:

Protecting Vital Infrastructure

- A copper sulfate feed system was installed in 2020 to protect raw water piping against zebra mussels that can damage equipment and affect taste and odor in drinking water.
- Following the devastating impacts of Winter Storm Uri in 2021, Austin Water's infrastructure was repaired and winterized to be more resilient during future extreme freezing weather events.

Treatment Reliability

- Austin Water sets treatment goals and quality standards that are beyond the minimum state and federal regulatory requirements to provide our customers superior water. Texas Commission on Environmental Quality requirements call for 0.3 NTU or less in water clarity (turbidity), but Austin Water's goal is 0.1 NTU or lower – and we consistently achieve this standard on average month after month, year after year.
- Implementation of a polymer feed system began in 2020, starting with Austin's largest water treatment plant, to strengthen flood resiliency and improve filter performance, especially during flooding events when high turbidity can occur in raw source water from the lakes. Polymer systems are now fully operational across all three water treatment plants.
- Powdered activated carbon is added as part of the treatment process to minimize taste and odor issues so that drinking water tastes fresh.
- In addition to using on-line equipment that continuously monitors treatment performance in real-time, licensed plant operators conduct water testing at least every two hours during multiple phases of the treatment process every day. This testing includes checks on the levels of chlorine/chloramine residual, turbidity, pH, alkalinity and hardness removal.

Quality Control in Storage, Pressure and Pipes

- Water storage tanks are tested monthly for bacteriological contaminants to ensure water is within established parameters and remains at the same high quality as the moment it left the treatment plant.
- Water quality instruments, monitoring in real-time, are installed at every major pressure zone to ensure healthy levels of total chlorine residuals are maintained. Chlorine residuals indicate that disinfection measures remain in treated water.
- Proactive water line replacement is underway, strengthening water distribution networks in 60 subdivisions and consisting of more than 6,000 water lines. This work will reduce line breaks and minimize the risk of contaminant infiltration.

Finished Drinking Water Testing

- Annual maintenance is conducted on every fire hydrant in the city as well as other service points to flush and cycle water throughout the system so that water remains fresh at all points in our service area.
- In 2022, Austin Water increased the frequency of testing above what is required by regulatory agencies to confirm water quality and safety. In addition to daily testing at each water treatment plant, a minimum of 300 tests are taken every month to check for bacteriological contaminants, total chlorine residual levels and other important parameters throughout the water distribution system.

Our highest priority is to be sure that our water continues to be safe to drink.

MONITORING FOR HEALTH RISKS

Cryptosporidium

Cryptosporidium is a parasite that can create an infection called gastroenteritis. Infection from *Cryptosporidium* organisms can occur in humans and animals and is spread by contact with soil, water, food or surfaces that have been contaminated. Austin Water monitors our lakes for *Cryptosporidium* because surface water sources are known to be susceptible to this contaminant.

During the 2022 monitoring for *Cryptosporidium*, eight samples reported no detection, two samples reported a detection of one oocyst and one sample reported a detection of three oocysts. The treatment processes employed at Austin Water's treatment plants are effective for removal of *Cryptosporidium*.

Harmful Algal Blooms

Cyanobacteria, also called blue-green algae, are microscopic organisms found naturally in surface waters. These organisms use sunlight to make their own food. In warm, nutrient-rich waters, cyanobacteria can multiply quickly, creating algal blooms that spread across the water's surface.

Some algae can be harmful to humans and animals, and Austin Water has regularly monitored raw source water, as well as treated drinking water for the presence of cyanobacteria since 1992 and cyanotoxins since 2015. Austin Water conducts routine testing for the presence of cyanotoxins in both raw lake water taken from Lake Austin and Lake Travis, as well as in water that has finished the treatment process at the Handcox, Davis and Ullrich Treatment Plants. Testing for the presence of cyanobacteria and other microscopic algae in raw lake water is conducted at least weekly, and cyanotoxin testing is performed on a routine basis. Sampling frequency is adjusted based on changing conditions.

In addition, Austin Water has invested in leading-edge technology to shorten the time between sampling and test results to protect public health and safety. We are able to use digital imaging particle analysis to detect harmful algae, as well as same day testing instruments in our own lab. We also meet regularly with our counterparts at the City of Austin's Watershed Protection Department and the Lower Colorado River Authority to review and report on our respective testing and mitigation approaches.

Austin Water uses several processes in our treatment plants that are effective in removing cyanobacteria and cyanotoxins. The harmful cells containing the toxins can be physically removed through the coagulation, flocculation, sedimentation and filtration process. Chlorine, which is part of the plant's disinfection process, is destructive to cyanotoxins. Finally, the powdered activated carbon that is used to remove taste and odor causing compounds also removes cyanotoxins.

MONITORING FOR HEALTH RISKS

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS are chemicals that are manufactured to enhance everyday products. These chemicals are slow to break down and are now present everywhere - in food, water and soil, as well as clothing, cookware, cosmetics and other common household items. Unfortunately, long term exposure to PFAS can lead to illnesses such as cancer and thyroid disease. The EPA is currently evaluating exposure to PFAS in drinking water to provide guidance on which chemicals pose the greatest risks and at what level.

Austin Water has been following EPA advisories on PFAS closely to determine the most appropriate testing protocols and treatment options for our region. It is important to note that the risk of PFAS exposure is not uniform across the country and is dependent on locations of source water and potential industrial or discharge sites that could impact source water quality. Austin is fortunate to draw from the Highland Lakes for our drinking water, which has had many decades-long environmental protections in place, including a ban prohibiting the discharge of pollutants. The risk of exposure to PFAS in drinking water here is much lower than other more industrialized jurisdictions.

Past sampling conducted by Austin Water for six PFAS chemicals showed no detections. Austin Water will collect quarterly samples of treated water from our treatment plants to test for 29 different PFAS chemicals in 2023. This testing will be conducted in accordance with EPA guidelines.

WATER QUALITY & REGULATORY PARAMETERS

Austin Water's three water treatment plants were in compliance with turbidity standards in 2022, with the exception of one event. Ullrich Water Treatment Plant received a treatment technique violation for combined filter effluent turbidity above 1 NTU between February 5 and 6, 2022. Austin Water issued a boil water notice covering this period as a precaution to protect public health.

Turbidity is a measure of the presence of particles, or cloudiness, in the water. Turbidity has no health effects, but particles can shield microorganisms from disinfection. Turbidity is therefore regulated because it may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Austin Water has taken action to address the operational issues that caused last year's turbidity event in order to prevent a recurrence. Actions taken include:

- Improvements in remote monitoring
- Installation of timer-based controls
- Enhanced plant staff shift turnover communications

Austin Water has taken action to address the operational issues that caused last year's turbidity event in order to prevent a recurrence.

Austin Water continues to make strategic investments in infrastructure improvements and upgrades to strengthen operational resiliency at all three drinking water treatment plants.

The annual Consumer Confidence Report below describes the overall quality of water from its raw collection and storage to the treated purity at your tap.

Fluoride and Infants

In 1945, municipalities began adding fluoride to drinking water to fight tooth decay. Follow up studies in these communities over 13-15 years showed a 50-70% reduction in cavities. Because of the potential public health benefits to residents, the City of Austin held a public vote on fluoridation in the early 1970s. The referendum passed with the support of the community, and Austin Water began adding fluoride to the water on February 2, 1973.

Water fluoridated at a level optimal for oral health (as is used in Austin) poses no known health risks for infants. However, some children may develop enamel fluorosis, a cosmetic condition where faint white markings or streaks may appear on the teeth. If you're concerned about fluorosis, you can minimize your baby's exposure by breast feeding or using ready-to-feed formula. You can also alternate tap water and non-fluoridated water for formula preparation or mix powered or liquid infant formula concentrate with low-fluoride water most or all of the time. If you use only non-fluoridated water, such as purified, deionized or distilled water to prepare your baby's formula, your doctor may recommend fluoride supplements.

Substance (Sampled in 2022 unless noted differently)	Highest Level Allowed (EPA's MCL)	City of Austin Drinking Water			Ideal Goals (EPA's MCLG)	Possible Sources
Regulated at the Treatment Plant						
		Low	**High**	**Average**		
Barium (ppm)	2	0.01	0.01	0.01	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/photon emitters (pCi/L*) (2021)	50	4.3	4.3	4.3	0	Decay of natural and man-made deposits
Diquat (ppb)	20	0.6	0.6	0.6	20	Runoff from herbicide use
Cyanide (ppb)	200	30	170	107	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	4	0.5	0.8	0.6	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	10	<0.05	0.21	0.11	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon (TOC) Removal Ratio**	TT - Annual average ≥ 1	1.24	2.69	1.89	not applicable	Naturally present in the environment
Turbidity (NTU)	TT - 95% of monthly samples must be ≤ 0.3 NTU & no sample can be > 1 NTU	0.01	9.0***	0.04	not applicable	Soil runoff; Austin Water measures turbidity (cloudiness of water) as an indicator of the effectiveness of the filtration system
		95% was the lowest monthly percentage of samples ≤ 0.3				

*EPA considers 50 pCi/L to be the level of concern for beta particles.
**The TOC removal ratio is calculated on a monthly basis and is the percent of TOC removed through the treatment process divided by the percent of TOC required by TCEQ to be removed.
***The three water treatment plants were in compliance with turbidity standards in 2022, with the exception of an event at one plant in February 2022. During a period between February 5-6, 2022, one water treatment plant did not continuously meet turbidity standards. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea cramps, diarrhea and associated headaches.

Regulated in the Distribution System						
Chloramines (ppm)	4 (MRDL)	0.39	3.2	2.45	≤ 4 (MRDLG)	Disinfectant used to control microbes
Haloacetic Acids (HAA5) (ppb)	Yearly Average (LRAA) 60	5.9	14.7	10.1	not applicable	Byproduct of drinking water disinfection
		Highest LRAA = 12.8				
Total Trihalomethanes (TTHM) (ppb)	Yearly Average (LRAA) 80	23.6	40.6	30.0	not applicable	Byproduct of drinking water disinfection
		Highest LRAA = 35.2				

In addition to other routine monitoring, Austin Water tests locations across our distribution system over 300 times per month for the presence of *E. coli* bacteria. None of these samples tested positive for the presence of *E. coli* bacteria in 2022. Austin Water was not required to conduct a Level 1 or Level 2 Assessment under EPA or State regulations.

Lead and Copper Rule - Testing is done at customer taps. Testing is done every 3 years.						
Copper (ppm) (2021)	AL = 1.3	90% of all samples tested were <0.004 ppm. None exceeded 1.3			1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (2021)	AL = 15	90% of all samples tested were <1.0 ppb. One sample exceeded 15			0	Corrosion of household plumbing systems; erosion of natural deposits

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. Any unregulated contaminants detected are reported in the following table. For additional information and data visit epa.gov or call the Safe Drinking Water Hotline (800-426-4791).

Substance	Highest Level Allowed (EPA's MCL)	Low	High	Average	Ideal Goals (EPA's MCLG)	Possible Sources
Bromodichloromethane (ppb)	Not Regulated Individually	7.6	12.0	9.7	0	Byproduct of drinking water disinfection
Dibromochloromethane (ppb)	Not Regulated Individually	7.2	12.2	9.8	60	
Chloroform (ppb)	Not Regulated Individually	4.5	14.6	8.0	70	
Bromoform (ppb)	Not Regulated Individually	1.4	4.6	2.4	0	
Dichloroacetic Acid (ppb)	Not Regulated Individually	3.2	10.1	5.9	0	
Trichloroacetic Acid (ppb)	Not Regulated Individually	<1.0	2.6	1.6	20	
Dibromoacetic Acid (ppb)	Not Regulated Individually	1.8	4.3	2.7	No MCLG	
Bromochloroacetic Acid (ppb)	Not Regulated	2.3	5.8	3.9	No MCLG	

Table Key

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

Level 1 Assessment = A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria were found.

Level 2 Assessment = A very detailed study of the water system to identify potential problems and determine (if possible) why an *Escherichia coli (E. coli)* MCL violation has occurred and/or why total coliform bacteria were found on multiple occasions.

LRAA = Locational Running Annual Average The average of sample results taken at a specific monitoring location during the previous four calendar quarters.

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 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.

NTU = Nephelometric Turbidity Units (a measure of turbidity)

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.

STAY INFORMED ABOUT YOUR WATER

Monthly Commission Meetings

There are many opportunities for public input and participation on issues and topics related to water quality. Attend an Austin City Council or Water & Wastewater Commission meeting to learn more. Meeting agendas, dates and times can be found by visiting **austintexas.gov/department/city-council/councilmeetings** and **austintexas.gov/content/water-and-wastewater-commission**.

Social Media

Follow Austin Water on **Facebook**, **Twitter** and **Instagram** for information about water quality, updates about infrastructure improvements we're making to be more resilient, fun lessons for students or opportunities to get involved with water planning in our community. We also share helpful tips on conservation, landscaping and how to protect your pipes during extreme weather events.

Infrastructure Investments

Austin Water continues to make strategic investments in infrastructure improvements to strengthen the water distribution system, proactively replace water lines and reduce the number of line breaks and the risk of infiltrating contaminants.

Water Loss

The American Water Works Association and Texas Water Development Board establish industry standards for water loss, known as the Infrastructure Leak Index or ILI. Water loss is a function of leakage from the mains and fixtures and a utility's ILI is scaled to take into account the number of connections and the miles of mains in the system. ILI is not affected by water use or population, which varies from city to city.

For a utility the size of Austin Water, an ILI of between 3 and 5 is considered appropriate. Austin Water's ILI for 2022 was 4.09.

Contact us at 512-972-1000 or visit **austinwater.org** to learn more.

GET THE LEAD OUT

Austin Water has been evaluating and inspecting our system's service lines and will complete our inventory of all lines by October of 2024. To date, Austin Water has:

- Found no lead in active service lines.
- Researched service lines to all schools we serve – none contain lead.
- Researched service lines to all licensed daycares we serve – none contain lead.
- Expanded testing beyond what the EPA requires.
- Will provide customers with support if a lead service line is suspected (free filter pitcher, flushing instructions and free water testing).

Check Your Home or Business' Plumbing for Lead

If present, lead sources may be found on the property owner's side of the meter. Even if a property owner may have lead piping, it does not mean they have been exposed to lead. Lime softening is part of Austin Water's treatment process and this helps prevent pipe corrosion and reduces the risk of lead exposure. However, a good strategy to protect against lead is to identify and replace potential sources of lead on private property. A plumber can advise on the type of pipes in your home or business.

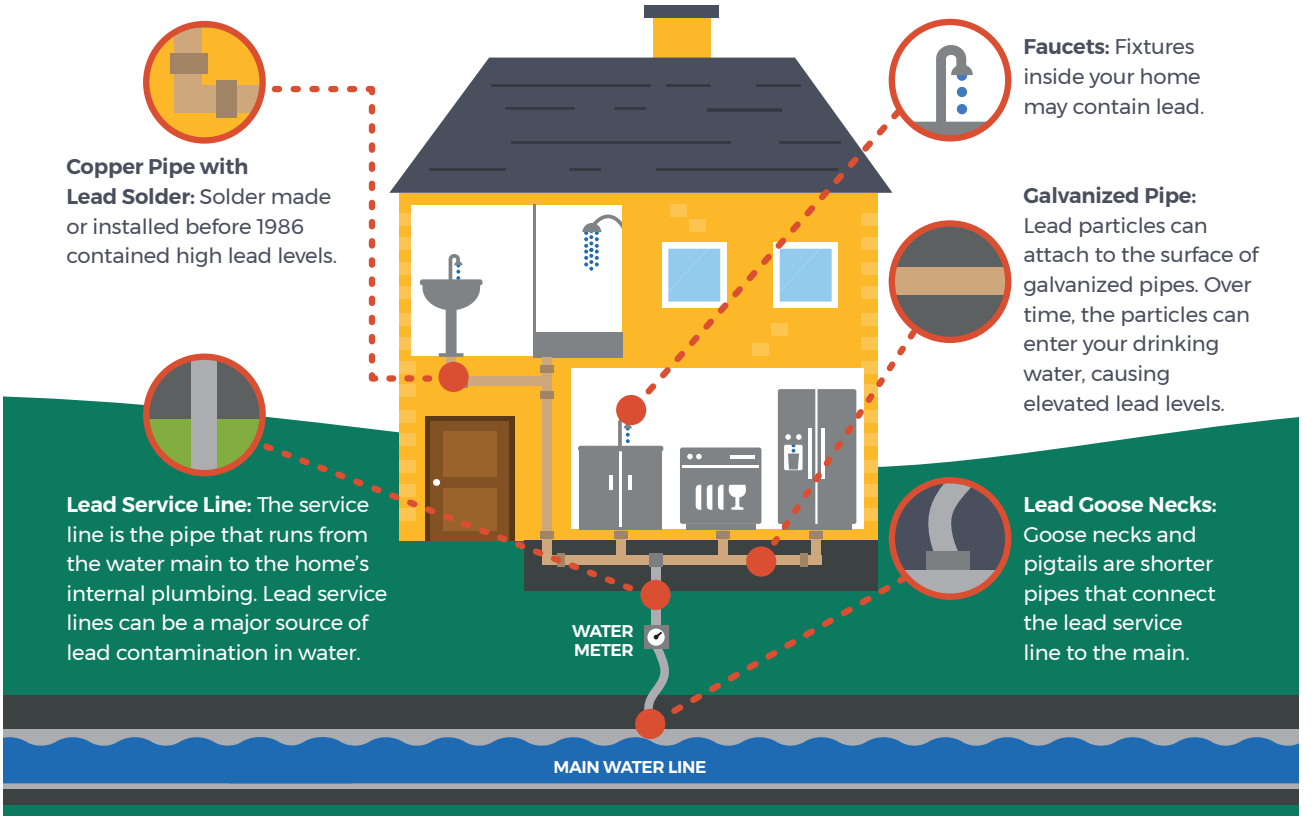
Some common sources of lead can include: pipes, solder, brass plumbing fixtures, faucets and pipe fittings. These lead sources are more likely to be found in homes and buildings built before 1986. Due to the City of Austin's early adoption of lead prevention and updated land development criteria, these lead sources are less common than many other major cities across the United States.

Lime softening is part of Austin Water's treatment process and this helps prevent pipe corrosion and reduces the risk of lead exposure.

EPA

CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

Sources of **LEAD** in Drinking Water



If present, lead can cause serious health problems, especially for pregnant women and young children. In Austin, lead occurs in drinking water primarily from materials and components associated with home plumbing systems. Austin Water is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. To minimize the potential for lead exposure, flush your tap for 30 seconds to 2 minutes before using it for drinking or cooking - especially if water has been sitting in pipes without running for several hours.

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 800-426-4791 or www.epa.gov/safewater/lead. Find information about how Austin Water is keeping lead out of our customer's water at www.austintexas.gov/lead.