



2023

CONSUMER CONFIDENCE REPORT

Annual Water Quality Report for the period
of January 1 to December 31, 2023.

This report is intended to provide you with
important information about your drinking
water and the efforts made by McAllen
Public Utility to provide safe drinking
water.





I am pleased at the opportunity to briefly communicate our passion here at McAllen Public Utility for providing safe, affordable, high quality drinking water to all our McAllen residents and rate payers alike. We stand by our product, our people and our water and wastewater infrastructure. My hope is that all may enjoy the benefits of our staff's outstanding commitment to servicing customers, our system's impeccable reliability that residents have grown accustomed to and our product that is vital to a vibrant, growing community. Quality of life is comprised of several amenities, none of which are as important as affordable, safe, quality drinking water. May we never take it for granted.

Sincerely,

Marco A. Vega, P.E.
General Manager

The McAllen Public Utility (MPU) is governed by the McAllen Public Utility Board (MPUB), which is an elected board. The Board of Trustees of the McAllen Public Utility was created February 2, 1945 to oversee all aspects of water and wastewater for the City of McAllen. The Board consists of four members elected at large by place, in a citywide election for four-year terms and one ex-officio member appointed by the Mayor.

The McAllen Public Utility Board meets publicly on the 2nd and 4th Tuesday of each month at 4 p.m. at City Hall, 1300 Houston Ave., McAllen, Texas. These meetings are also broadcast live and recorded for viewing on MCN, which is also available for viewing at www.mcallenpublicutility.com.

MPU BOARD OF TRUSTEES



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GODINEZ-
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Mission Statement

McAllen Public Utility is dedicated to providing clean, safe drinking water. We are committed to consistently providing quality services and quality of life to all who live, work and visit the city of McAllen. We are working hard to educate the public on the issues surrounding water use and conservation.



Our Departments

- Administration
- Utility Engineering
- Treasury Management
- Customer Relations
- Billing
- Meter Readers
- Meter Technicians
- Water Laboratory
- Water Treatment Systems
- Wastewater Treatment Systems
- Wastewater Collections
- PreTreatment

Superior Public Water System

McAllen Public Utility has been designated by the Texas Commission on Environmental Quality (TCEQ) a Superior Public Water System in view of the high standards of water service made available to the residents of McAllen. For over 25 years we have been recognized as a Superior Public Water Supply System, which achieves and maintains recognition for those systems who exceed the minimum acceptable standards of the TCEQ.

In 2023 and with a population of 178,406 people, the two McAllen Water Treatment Plants must now meet a minimum daily production capacity of 48.3 million gallons of water. Our current system capacities are 61.70 million gallons of treated water per day and growing.

South Water Treatment Plant: 49.0 MGD

North Water Treatment Plant: 11.2 MGD

Ground Water Well: 1.5 MGD



Our Drinking Water is Regulated

This report is a summary of the quality of the water we provide to our customers. The analysis was made using the data from the most recent Texas Commission on Environmental Quality (TCEQ) and U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about your drinking water supply.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point-of-use devices (such as a faucet filtration system). 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800)-426-4791. The TCEQ completed an assessment of your source water and results indicate that some of 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 Confidence Report.

Secondary Constituents

Many constituents such as calcium, sodium, or iron, which are often found in drinking water, can cause taste, color, or odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas. These constituents are not causes for health concern; therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Required Additional Health 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. This water supply is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your 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>.

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.



Where do we get our drinking water?

The source of drinking water used by McAllen Public Utility is Surface Water from the Rio Grande River. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW>. For more information on source water assessments and protection efforts at our system, please contact us. MPU receives water from the Falcon and Amistad Dams, located in Zapata and Val Verde Counties, respectively.

Disinfection

Disinfection is the first step in the water treatment process. In this step we will combine chlorine and sodium chlorite to generate chlorine dioxide. It is then injected into our raw water line where it will kill harmful bacteria.

Secondary Disinfection

A second disinfection process occurs by utilizing chlorine and ammonia to form chloramines. This secondary disinfection process ensures that disinfection is carried out to the distribution systems.

Flocculation

Coagulant is introduced to raw water and mixed rapidly to create a floc. Water will flow through decreasingly slower mixers allowing floc to conglomerate.

Sedimentation

After the flocculation process, water flows into a sedimentation basin. This basin allows the flocculated water to settle. A detention time of at least 6 hours is required to allow the floc to settle. The settled floc called sludge is then collected with a rake system to the center of the basin. The sludge is then disposed of to the lagoons then dewatered and hauled to sanitary landfills.

Filtration

Filtration is the final step in removing suspended matter and chlorine resistant microorganisms such as Giardia and Cryptosporidium. These filters consist of anthracite coal, and two types of sand which are coarse and fine and various sizes of gravel, which are layered on top of an under drain system.

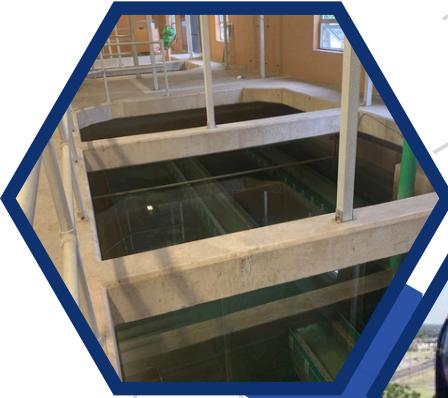
Pumping and Storage

After the treatment process, the water is sent to storage domes which can hold up to 2 million gallons each. From there, we have high service pumps that push up to 30 million gallons in the system, including the water towers. These water towers store up to 6.75 million gallons of water.

Water Treatment Process

Our water is transferred from the Rio Grande River by the Irrigation districts into our reservoirs. A reservoir is an artificial lake used to store water. Here in the City of McAllen we have three reservoirs.

- Boeye Reservoir was established in 1958. This reservoir can hold up to 180 million gallons.
- The North Water Plant Reservoir was established in 2004 and can hold 200 million gallons.
- The new Boeye Reservoir was established in 2011 and can hold up to 300 million gallons.



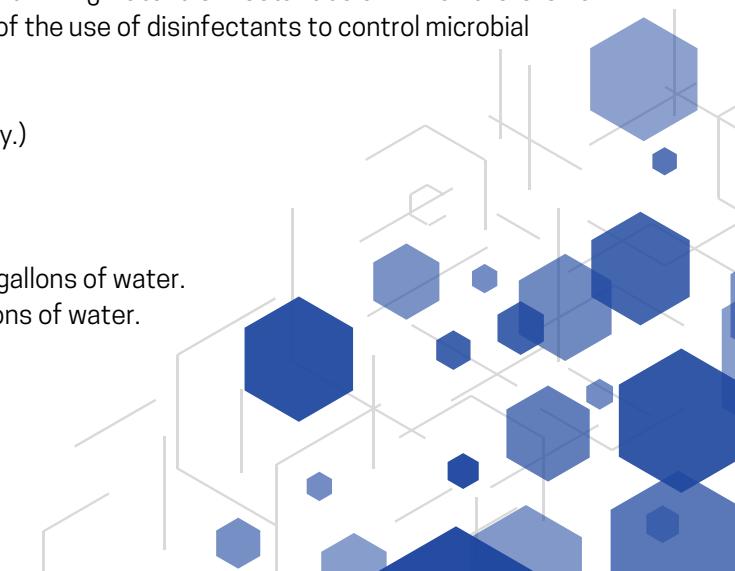
How to read your water quality report:

CONTAMINANTS								
Disinfectants and Disinfection byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination.
Constituent	4/25/2022	4.0	<1.0 - 4.0	N/A	50	ppb	No	Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits.
	The date in which the tests were conducted.		The amount from lowest to highest of a contaminant detected in the drinking water.		The highest amount of a contaminant TCEQ or EPA allows in drinking water.		Whether or not there was a violation by TCEQ or EPA standards.	

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.
- **Action Level Goal (ALG):** The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
- **Avg:** Regulatory compliance with some MCLs are based on running annual average 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 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-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.
- **ppq:** Parts per quadrillion, or picograms per liter (pg/L).
- **ppt:** Parts per trillion, or nanograms per liter (ng/L).





WATER QUALITY TEST RESULTS:

Coliform Bacteria

Maximum Contaminant Level Goal	Total coliform Maximum Containment Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total no. of positive Fecal Coliform or E. Coli samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive.	1	.0688705 %	1	No	Present in soil, water, human, and animal digestive tract.

Lead and copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL) (MCL)	90th Percentile	Range of Individual	Range of Units	Violation	Likely Source of Contamination
Copper	08/02/2023-12/15/2023	1.3	1.30	0.0976	0.0068- 0.125	ppm	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	08/02/2023-12/15/2023	0	15	0	0.40- 495	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

WATER QUALITY TEST RESULTS: REGULATED CONTAMINANTS

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

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2023	0.557	0.138- 0.557	0.8	1.0	ppm	No	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2023	27.7	8.8 - 27.7	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	44.7	18.2 - 44.7	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2023	2.1	2.1	0.0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2023	0.0856	0.06454 - 0.0856	2.0	2.0	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	100	80-100	200	200	ppb	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2023	0.60	0.54 - 0.60	4.0	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2023	0.18	0.06 - 0.18	10.0	10.0	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	04/25/2023	6.8	6.8- 6.8	0	50.0	pCi/L	No	Decay of natural and man-made deposits.
Uranium	04/25/2023	1.9	1.9-1.9	0	30.0	ug/L	No	Erosion of natural deposits.
Unregulated Contaminant	Collection Date	Average Level ($\mu\text{g}/\text{L}$)	Range of Levels Detected ($\mu\text{g}/\text{L}$)	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Lithium	2023	43.03	37.8-51.8					
Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Chloramines	2023	3.13	2.75-3.50	4.00	4.00	ppm	No	Water additive used to control microbes.
Turbidity	Year	Highest Single Measurement	Average Level	Range of Levels Detected	Limit (Treatment Technique)	Unit of Measure	Violation	Likely Source of Contamination
Measurements	2023	0.20	0.13	0.08-0.22	0.30	NTU	N	TDS: Total Dissolved Solids
Lowest monthly % meeting limit	2023	100%						

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all the TOC removal requirements set, unless a TOC violation is noted in the violations section.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2023, our system water loss was an estimated 7.73%. If you have any questions about the water loss audit please call 956-681-1600.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.



CÓMO LEER SU INFORME DE CALIDAD DEL AGUA

Lista de compuestos regulados, monitoreados, inorgánicos, radioactivos, semivolátiles, volátiles y orgánicos.

La concentración del contaminante detectado

La cantidad más baja de un contaminante TCEQ o EPA lo permite en el agua potable.

Medición estándar de un contaminante.

Cómo termina un contaminante en el agua potable.

CONTAMINANTES								
Desinfectantes y subproductos de desinfección	Fecha de colección	Nivel más alto detectado	Rango de niveles detectados	MCLG	MCL	Unidades	Violación	Probable fuente de contaminación.
Constitucion	4/25/2023	4.0	<1.0 - 4.0	N/A	50	ppb	No	Descarga de desechos de perforación; descarga de refinerías de metales; erosión de depósitos naturales
	La fecha en que se realizaron las pruebas.		La cantidad de un contaminante detectado en el agua potable de menor a mayor.		La cantidad más alta de un contaminante TCEQ o EPA lo permite en el agua potable.		Si existe o no una violación según las normas de TCEQ o EPA.	

Definiciones y Abreviaturas

Las siguientes tablas contienen términos y medidas científicas, algunas de las cuales pueden requerir una explicación.

- **AL:** Nivel de acción. Grado de concentración de un contaminante que, al ser excedido, se debe llevar a cabo un tratamiento u otros requisitos a los cuales se debe tener un sistema de abastecimiento de agua.
- **Objetivo del nivel de acción (ALG):** El nivel de un contaminante en el agua potable por debajo del cual no existe un riesgo conocido o esperado para la salud. Las ALG permiten un margen de seguridad.
- **Promedio (Avg):** El cumplimiento normativo con algunos MCL se basa en el promedio anual de muestras mensuales.
- **Evaluación de grado 1:** Una evaluación de grado 1 es un estudio del acueducto para identificar posibles problemas, y de ser factible, determinar la causa de la presencia de coliformes totales.
- **Evaluación de grado 2:** Una evaluación de grado 2 es un estudio detallado del acueducto para identificar posibles problemas, y de ser factible, determinar por qué se excedió el grado de contaminación máximo (MCL por sus siglas en inglés) de Escherichia coli (E. coli) y/o porqué se detectaron coliformes totales en múltiples ocasiones.
- **MCL:** Grado máximo de contaminantes es el grado más alto de un contaminante que se permite en el agua potable. Los MCL se establecen lo más cerca posible a los MCLG mediante el uso de la tecnología disponible más avanzada de saneamiento.
- **MCLG:** Meta máxima en el nivel de contaminantes es el grado de concentración de un contaminante en el agua potable por debajo del cuál no existe o no se espera que haya un riesgo conocido para la salud. Los MCLG ofrecen un margen de seguridad.
- **MRDL** (por sus siglas en inglés): Nivel máximo residual de desinfectante es el nivel más alto de desinfectante permitido en el agua potable. Hay evidencia convincente que es necesaria la adición de un desinfectante para controlar los contaminantes microbianos.
- **MRDLG** (por sus siglas en inglés): Objetivo de nivel máximo residual de desinfectante es el nivel de desinfectante en el agua potable bajo el cuál no se conocen o se espera causar riesgo a la salud. Los MRDLG no reflejan los beneficios del uso de desinfectantes para controlar los contaminantes microbianos.
- **MFL:** millones de fibras por litro (una medida de amianto)
- **mrem/año:** Milirems por año (unidades de radiación absorbidas por el cuerpo).
- **na:** no aplica
- **NTU:** Unidades nefelométricas de turbidez. Unidades que miden la turbidez del agua.
- **pCi/L:** Picocurries por litro (una medida de la radiactividad).
- **ppb:** Partes por mil millones o microgramos por litro.
- **ppm:** Partes por millón, o miligramos por litro
- **ppq:** Partes por quadrillón, o picogramas
- **ppt:** Partes por trillón o nanogramos por litro



RESULTADOS DE LA PRUEBA DE CALIDAD DEL AGUA
Bacterias Coliformes

Meta del Nivel Máximo de Contaminante	Nivel máximo de contención de coliformes totales	El más alto número de positivos	Nivel máximo de coliformes fecales o E. coli	Total no. de coliformes fecales positivos o Muestras de E. Coli	Violación	Procedencia del contaminante
0	5% de las muestras mensuales son positivas.	0	0%	0	No	Presente en el tracto digestivo del suelo, agua, humanos y animales

Plomo y Cobre

Plomo y Cobre	Fecha de muestra	MCLG	Action Level (AL) (MCL)	90 ° percentil	Rango de Individual	Unidades	Violación	Procedencia del contaminante
Cobre	08/02/2023-12/15/2023	0	1.30	0.0593	0.0068-0.125	ppm	No	Corrosión de la tubería doméstica, erosión de depósitos naturales.
Plomo	08/02/2023-12/15/2023	0	15	0	0.40-495	ppb	No	Corrosión de la tubería doméstica, erosión de depósitos naturales.

CONTAMINANTES

Técnica de tratamiento o TT: un proceso requerido para reducir el nivel de un contaminante en el agua potable.

Productos derivados de la desinfección	Fecha de muestra	Nivel más alto detectado	Rango de muestras individuales	MCLG	MCL	Unidades	Violación	Procedencia del contaminante
Clorito	2023	0.557	0.138-0.557	0.8	1.0	ppm	No	Subproducto de la desinfección del agua potable.
Ácidos Haloacéticos (HAA5)	2023	27.7	8.8-27.7	Sin objetivo para el total	60	ppb	No	Subproducto de la desinfección del agua potable.
Trihalometanos totales (TTHM)	2023	44.7	18.2-44.7	Sin objetivo para el total	80	ppb	No	Subproducto de la desinfección del agua potable.
Contaminantes Inorgánicos	Fecha de muestra	Nivel más alto detectado	Rango de muestras individuales	MCLG	MCL	Unidades	Violación	Procedencia del contaminante
Arsenico	2023	2.1	2.1	0.0	10	ppb	No	Erosión de depósitos naturales; Aguas contaminadas por desechos provenientes de huertas y la producción de vidrio y la electrónica.
Bario	2023	0.0856	0.0645-0.0856	2.0	2.0	ppm	No	Efluentes de desechos de perforación o de refinerías de metales, erosión de depósitos naturales.
Cianuro	2023	100	80-100	200	200	ppb	No	Efluentes de las fábricas de acero y metales; efluentes de fábricas de plásticos y fertilizantes
Fluoruro	2023	0.60	0.54-0.60	4.0	4.0	ppm	No	Erosión de depósitos naturales; aditivo para fomentar la salud dental; efluentes de fábricas de fertilizantes y de aluminio
Nitrato (como N)	2023	0.18	0.06-0.18	10.0	10.0	ppm	No	Aguas contaminadas por el uso de fertilizantes; lixiviación de tanques sépticos y redes de alcantarillados, erosión de depósitos naturales
Radioactivo	Fecha de muestra	Nivel más alto detectado	Rango de muestras individuales	MCLG	MCL	Unidades	Violación	Procedencia del contaminante
Emisores de Beta /fotones	04/25/2023	6.8	6.8-6.8	0	50.0	pCi/L	No	Desintegración radiactiva de depósitos naturales y artificiales.
Uranio	04/25/2023	1.9	1.9-1.9	0	30.0	ug/l	No	Erosión de depósitos naturales
Contaminante no regulado	Fecha de muestra	Nivel más alto detectado	Rango de muestras individuales	MRDL	MRDLG	Unidades	Violación	Fuente en el agua potable
Lithium	2023	43.03	37.8-51.8					
Disinfectant Residual	Año	Nivel promedio	Rango de niveles detectados	MRDL	MRDLG	Unidades	Violación	Fuente en el agua potable
Cloraminas	2023	3.13	2.75-3.50	4.00	4.00	ppm	No	Aditivo de agua utilizado para controlar los microbios.
Turbidez	Año	Nivel más alto detectado	Nivel promedio	Rango de niveles detectados	Límite (técnica de tratamiento)	Unidades	Violación	Procedencia del contaminante
Medida única más alta	2023	0.20	0.13	0.08-0.22	0.30	NTU	N	TDS: Sólidos disueltos totales
El menor % mensual cumple con el límite	2023	100%						
Carbono Orgánico Total								
El porcentaje de eliminación de carbono orgánico total (TOC) se midió cada mes y el sistema cumplió con todos los requisitos de eliminación de TOC establecidos, a menos que se observe una violación de TOC en la sección de violaciones.								
Perdida de agua								
En la auditoría de pérdida de agua presentada a la Junta de Desarrollo del Agua de Texas para el período de enero a diciembre de 2023, nuestro sistema perdió un estimado de 7.73% de agua. Si tiene alguna pregunta sobre la auditoría de pérdida de agua, llame al 956-681-1600.								

Declaración de información: la turbidez es una medida de la nubosidad del agua causada por partículas en suspensión. Lo monitoreamos porque es un buen indicador de la calidad del agua y la efectividad de nuestra filtración.



HAVE QUESTIONS REGARDING YOUR WATER AT YOUR HOME, SCHOOL, OR BUSINESS?

Directory

Customer Service:	956-681-1600
Utility Administration:	956-681-1630
Water Plant:	956-681-1700
Wastewater Plant:	956-681-1750
Pretreatment:	956-681-1760
After Hours:	956-681-1717

Hours

Lobby: Monday- Friday
8:00AM to 5:00PM

Drive-Thru: Monday- Friday
7:30AM to 5:30PM



Address

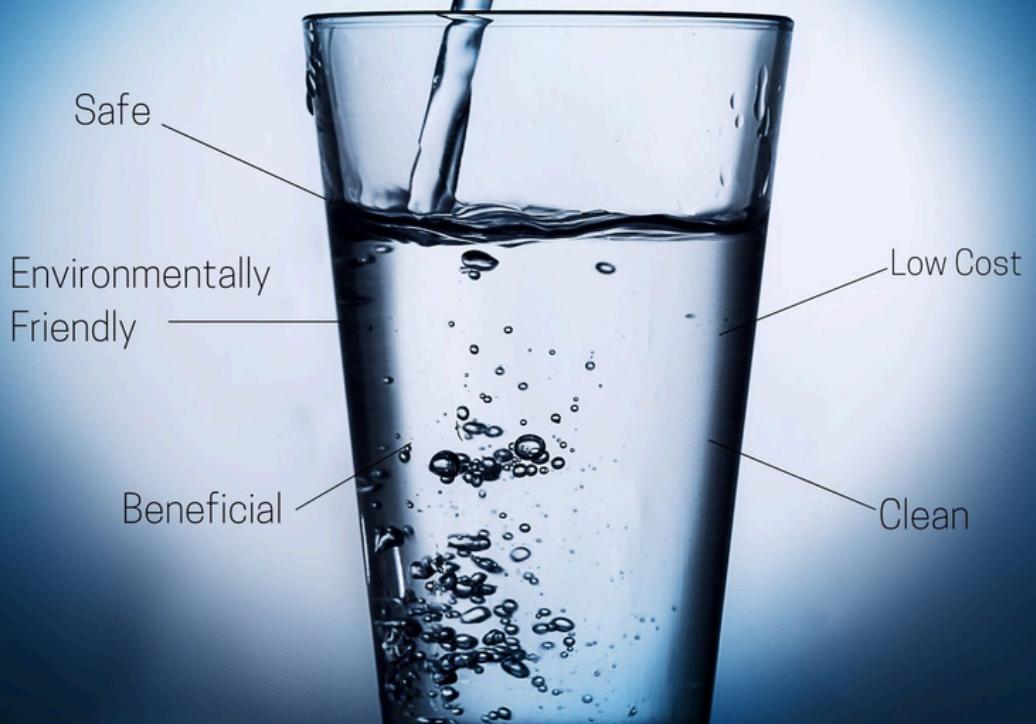
1300 W Houston Ave
McAllen, TX 78501



find us online

McAllenPublicUtility.com





Trust In Every Drop

A look back at 2023



