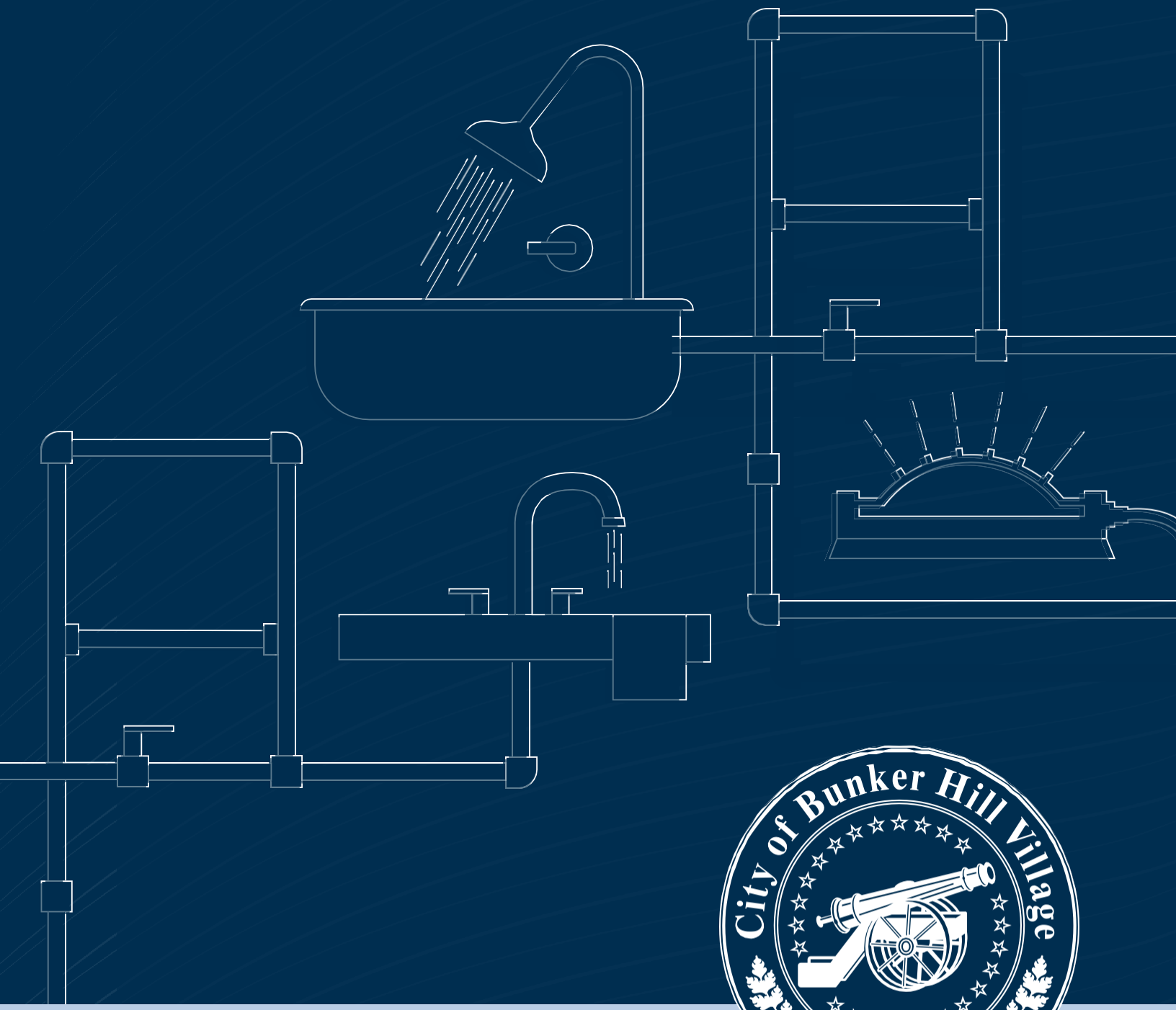
2024
Annual Water Quality Report



City of Bunker Hill Village
Est. 1954

Water System ID #TX1010106

ANNUAL WATER QUALITY REPORT

for the period of **January 1 to December 31, 2024**

The City of Bunker Hill Village is pleased to provide you with this year's Annual Water Quality Report. Our goal is to provide a safe and dependable supply of drinking water. Drinking water information is available on the City's website at www.bunkerhilltx.gov.

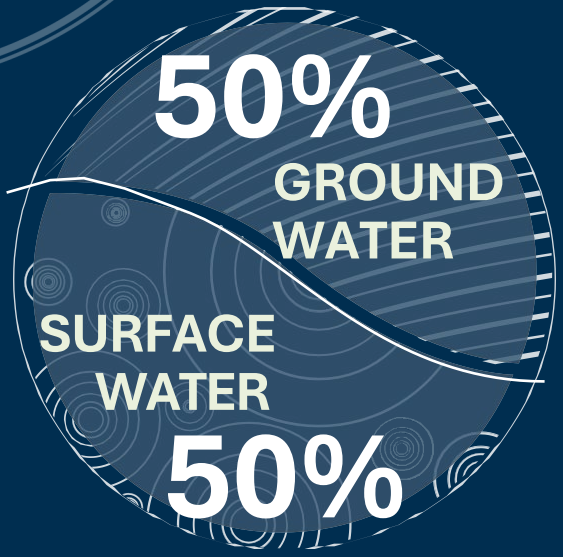
Este reporte incluye información importante sobre el agua potable. Para asistencia en español, favor de llamar al telefono 713-467-9762.

The City of Bunker Hill Village is proud to carry the designation of Superior Public Water System (highest designation possible). The designation is about the overall water system operation and not just the drinking water. This also includes factors related to the treatment, pumping, and storage capacity.

If you have any questions about this report, or concerns about your water quality, please contact Gama Escamilla, Lead Operator at 713-467-9762 or email gescamilla@bunkerhilltx.gov.

SUPERIOR
PUBLIC WATER
SYSTEM
THE STATE OF TEXAS

Where does our drinking water come from?



In 2024, your water was a blend of groundwater and surface water; the City of Bunker Hill Village targets a mixture of 50% from each source. The City is mandated to purchase surface water from the City of Houston to supplement the groundwater supply to mitigate subsidence in the area.

The groundwater comes from four (4) water wells owned and operated by the City of Bunker Hill Village. The wells pump water below the surface from the Gulf Coast Aquifer (Chicot and Evangeline).

The surface water is purchased from the City of Houston's East Water Purification Plant #3. This plant treats surface water drawn from Lake Houston, which is located on the west fork of the San Jacinto River, approximately 15 miles northeast from downtown Houston.

Because the City of Houston draws water from surface sources (lakes or reservoirs), it tests regularly for cryptosporidium, a pathogen that causes a diarrheal illness. No cryptosporidium was found in the City of Houston's drinking water in 2024.

How often is the water tested?

The City of Bunker Hill tests your water daily, weekly, monthly, quarterly, yearly and at greater intervals for as many as 90 contaminants. In 2024, 3,324 individual tests were completed. State and federal regulatory agencies determine minimum testing intervals based on the occurrence of contaminants in the environment and the levels of hazard to human health. The purpose of testing is to ensure that your water quality remains within safe levels as determined by the U.S. Environmental Protection Agency (EPA).

Who tests the water?

Staff who are licensed by the TCEQ collect water samples from wells, storage facilities, points in the distribution system, and residents' homes. Much of this testing is done in the field, as well as samples that are sent to a state-licensed laboratory for analysis.

Additional guidelines on appropriate means to lessen the risk of infection by cryptosporidium can be learned by calling the EPA's Safe Drinking Water Information Hotline at 1 (800) 426-4791.

What is the water tested for?

Our water is tested for the following types of substances:

- **Biological (such as viruses and bacteria)**
- **Inorganic (such as salts and metals)**
- **Organic (such as chemicals from industrial or petroleum use)**
- **Radioactive Substances (naturally occurring)**

These substances can occur naturally or result from oil/gas production, mining activities, and pesticide/herbicide uses. The inorganic ions include nitrate, nitrite, fluoride, phosphate, sulfate, chloride, and bromide. While these substances are safe for human consumption in small quantities, in larger quantities, they can cause unpleasant taste, odor, or even illness.

Information on the possible presence of lead in drinking water, along with testing methods, and steps you can take to minimize exposure is available from the EPA at www.epa.gov/safewater/lead.

How do these substances enter the 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 the land and filters through the ground into aquifers, the water dissolves certain naturally occurring minerals, and breaks down naturally occurring radioactive materials. This water may also pick up dissolved substances resulting from the presence of plants, animals, or human activity.

Who sets water quality regulations?

To ensure that your water is safe to drink, the EPA regulates drinking water on a federal level, while the TCEQ regulates drinking water on a state level in Texas.

Is lead in our drinking water?

Elevated levels of lead in drinking water 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. Bunker Hill Village Public Works Department is responsible for providing high-quality drinking water, but it cannot control the variety of materials used in plumbing components. Lead levels were found to be under regulatory requirements. 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, please contact Bunker Hill Village Public Works Department and request to have your water tested. You can also obtain information on lead in drinking water, along with testing methods and steps you can take to minimize your exposure to lead, by calling the EPA's Safe Drinking Water Information Hotline at 1 (800) 426-4791, or by going to www.epa.gov/safewater/lead.

Contaminants that may be present in source water include:

Microbial	Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic	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	Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
Organic chemical	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	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 systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

2024 DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

THE FOLLOWING TABLES CONTAIN SCIENTIFIC TERMS AND MEASURES, SOME OF WHICH MAY REQUIRE EXPLANATION

Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Average (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 (MCL)	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfectant Level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MDLG)	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)
N/A	Not applicable
NTUs	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 (TT)	A required process intended to reduce the level of a contaminant in drinking water

2024 CITY OF HOUSTON SURFACE WATER ANALYSIS

Sources: Katy Addicks (EP055), East Water Purification Plant #3 (EP101)

MONITORED AT WATER PLANTS

Contaminant	MCL	MCLG	MIN	AVG	MAX
Atrazine (UG/L)	3	3	0.17	0.17	0.17
Barium (MG/L)	2	2	0.0497	0.0497	0.0497
Cyanide (MG/L)	0.2	0.2	0.06	0.06	0.06
Fluoride (MG/L)	4	4	0.22	0.22	0.22
Nitrate (MG/L)	10	10	0.06	0.165	0.27

SECONDARY STANDARDS

Contaminant	SCL	MIN	AVG	MAX
Chloride (MG/L)	250	36	36	36
Fluoride (MG/L)	2	0.22	0.22	0.22
Manganese (MG/L)	0.05	0.002	0.002	0.002
PH (SU)	8.5	8	8	8
Sulfate (MG/L)	250	41	41	41
TDS (MG/L)	500	227	227	227
Texas Copper (MG/L)	1	0.0024	0.0024	0.0024

UNREGULATED CONTAMINANTS

Contaminant	Dates Monitored	MIN	AVG	MAX
Lithium (MG/L)	Feb-Aug 2024	13.7	23.8	33.9

DEFINITIONS

MCL – Maximum Contaminant Level
MCLG – Maximum Contaminant Level Goal
SCL – Secondary Contaminant Level
Regulated Contaminants – Contaminants detected at this entry point that have an enforceable MCL
N/A – Not analyzed this calendar year (on reduced sampling due to historical results)
ND – "Non-Detect" contaminant not detected
EP – Entry Point

2024 INFORMATION ABOUT SOURCE WATER

The City of Bunker Hill Village purchases water from the City of Houston, which is sourced from Lake Houston in Harris County.

Source Water Name	Address	Type of Water	Report Status	Aquifer/Source
Well No. 1	11700 Taylorcrest Rd	Groundwater	Active	Evangeline
Well No. 2	11977 Memorial Dr	Groundwater	Inactive & Plugged	Evangeline
Well No. 3	11900 Memorial Dr.	Groundwater	Active	Evangeline
Well No. 4	11977 Memorial Dr.	Groundwater	Active	Evangeline
Well No. 5	11960 Taylorcrest Rd	Groundwater	Active	Evangeline
*SW intake from City of Houston	Water Plant #1 (Taylorcrest Rd.) & Water Plant #2 (Memorial Dr.)	Surface Water	Active	Lake Houston

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 is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact **Gama Escamilla, Lead Operator at 713-467-9762.**

COLIFORM BACTERIA

MCL Goal	Total Coliform MCL	Highest Number of Positive Samples	Fecal Coliform or E. Coli MCL	Total Number of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	0 positive monthly samples	0	0	0	No	Naturally present in the environment

COPPER & LEAD

Copper & Lead	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/14/2023	1.3	1.3	0.2168	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	06/14/2023	0	15	1.2	2	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

LEAD SERVICE LINE INVENTORY

The City prepared and completed a service line inventory in 2024. No lead service lines were found that required replacement in 2024.

2024 WATER QUALITY TEST RESULTS

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2024	*19	1.4 - 29.7	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	**36	7.6 - 55.7	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	03/29/2023	8.9	8.9 - 8.9	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	03/29/2023	0.197	0.197 - 0.197	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	03/29/2023	0.52	0.52 - 0.52	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2024	1	0.55 - 0.59	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	03/29/2023	5	5 - 5	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year.

**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.

***While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

2024 WATER QUALITY TEST RESULTS

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	01/11/2021	1.5	1.5 - 1.5	0	5	pCi/L	No	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Atrazine	2024	0.14	0 - 0.14	3	3	ppb	No	Runoff from herbicide used on row crops.
Simazine	2024	0.11	0 - 0.11	4	4	ppb	No	Herbicide runoff.
Volatile Organic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Xylenes	2024	0.001	0 - 0.001	10	10	ppm	No	Discharge from petroleum factories; Discharge from chemical factories.

DISINFECTANT RESIDUAL

Quarter of 2024	Chemical	Average Level of Quarterly Data	Lowest Result of a Single Sample	Highest Result of a Single Sample	MRDL	MRDLG	Unit	Source in Drinking Water
1	Chloramines	2.0	0.8	3.1	4	4	ppm	Disinfectant to control microbes.
2	Chloramines	1.7	0.9	3.0	4	4	ppm	Disinfectant to control microbes.
3	Chloramines	1.87	0.9	3.1	4	4	ppm	Disinfectant to control microbes.
4	Chloramines	2.15	0.8	3.2	4	4	ppm	Disinfectant to control microbes.

PUBLIC PARTICIPATION

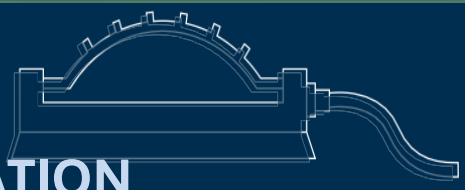
The City Council holds its regular meetings on the third Tuesday of every month at 5:00 p.m. in the Council Chambers at City Hall, 11977 Memorial Drive, Houston, Texas, unless otherwise noted. The meeting schedule is available at www.bunkerhilltx.gov.

Water Accountability

The City of Bunker Hill Village produced a total of 369,772,666 gallons of water for the year 2024. The city billed 337,574,000 gallons of water to the utility customers of the city. That represents a 91.29% water accountability ratio. The State of Texas considers any amount above 85% to be acceptable.

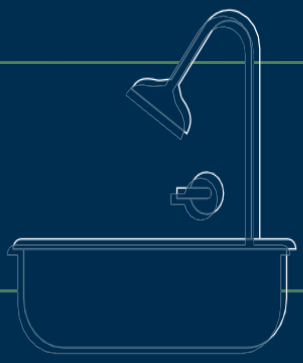
Water Conservation

Severe drought conditions and the necessary water restrictions remind us of just how precious water is and how much we tend to take it for granted. With less than 1% of the earth's fresh water sources available, we need to learn to use water wisely.



IRRIGATION

- Update irrigation schedule to water lawn between 9 p.m. and 4 a.m.
- Adjust irrigation to verify water is going on the lawn
- Check your irrigation system for leaks and ensure system is shutting off properly



BATHROOM

- Check toilets for leaks
- Take shorter showers
- Replace showerhead with water-efficient model
- Turn off water while brushing teeth or shaving

KITCHEN

- Run the dishwater only when full
- Install faucet aerators
- Dry scrape dishes instead of rinsing

ADDITIONAL TIPS

- Do not ignore leaky faucets, they are often easy and inexpensive to repair
- Know where your master water shut-off valve for both your home and irrigation (backflow preventer) is in case a pipe bursts
- Ensure proper maintenance of water-softening systems