

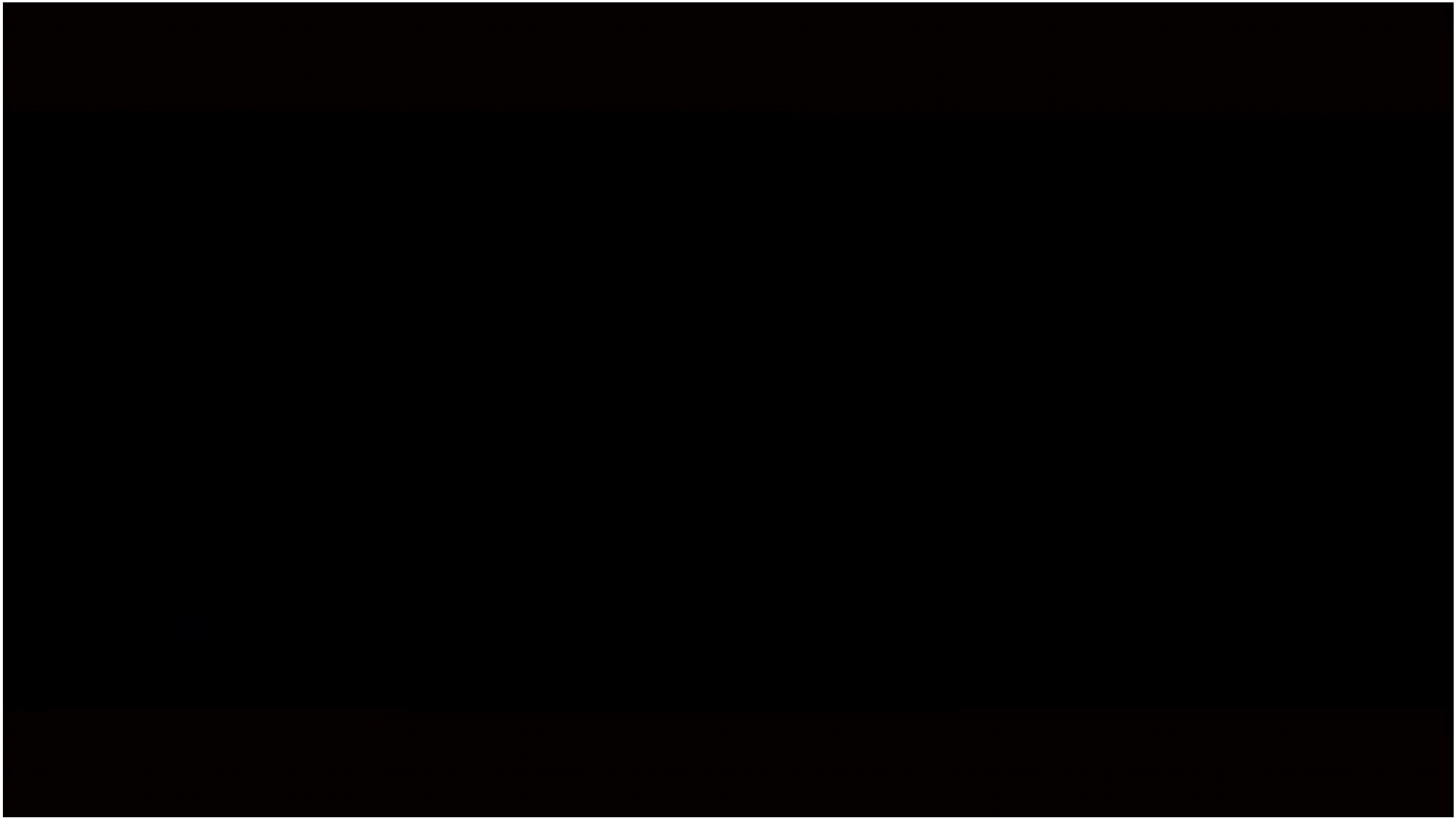
City of Waco Conservation Plan & Drought Contingency Plan



Tuesday, March 19, 2024

Lisa Tyer

Water Utility Services



Water Conservation Plan

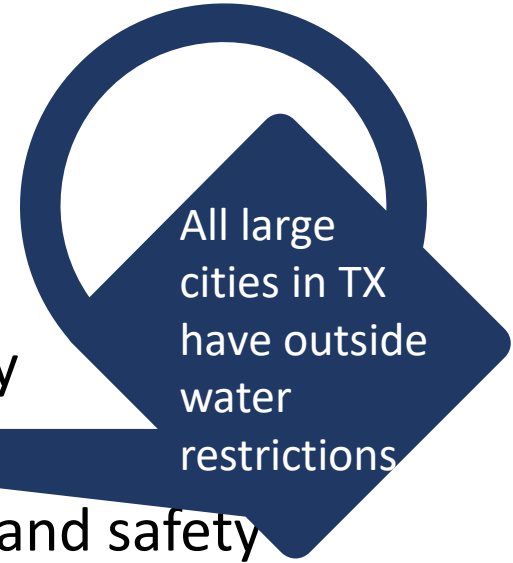
- The purpose of a Water Conservation Plan is to ensure water use efficiency within the City's water operations
- The Water Conservation Plan is
 - a strategy or combination of strategies for reducing the consumption of water
 - reducing the loss or waste of water
 - improving, or maintaining the efficient use of water
 - increasing recycling and reuse of water



Changes to the Conservation Plan

Outdoor Irrigation

- Year-round 2 day a week outdoor water use
- No outdoor water use between 10:00 AM and 7:00 PM
 - Handheld hose with automatic shut off feature will be allowed daily
 - Drip irrigation buried 6 inches or deeper are allowed daily
 - Water use is discouraged on impervious surfaces except for health and safety purposes
 - Such as washing down driveways and sidewalks
 - Run off more than 10 feet from property edge will be considered water waste
- Criminal penalties would apply



OUTDOOR RESTRICTIONS SIMILAR TO
STAGE 2 DROUGHT RESTRICTIONS!

Cities with Year-Round Outdoor Water Conservation Schedules

YEAR-ROUND CONSERVATION - NO DROUGHT STAGE				
	2 day a week	time restrictive	1 day a week	3 days a week
Dallas	X	X		
Fort Worth	X	X		
Georgetown	X	X		
Houston	X	X		
Irving	X	X		
Katy	X	X		
Keller	X	X		
Lubbock	X	X		
Mesquite	X	X		
Murphy	X	X		
North Richland Hills	X	X		
Pflugerville	X	X		
Roanoke	X	X		
Round Rock	X	X		
Saginaw	X	X		
Southlake	X	X		
Trophy Club	X	X		
University Park	X	X		
Weatherford	X	X		
Wichita Falls	X	X		
El Paso		X		X
Frisco		X	X	
Austin		X	X	

Variances

Year-Round Conservation Variance	
New Plants	60 Days
Plants	Variance can only be used for the plants and area listed in the variance
Effective Time Frame	Variance end date is based on the date of plant installation.

Athletic Fields & Golf Courses

- Submit a water plan or adhere to the two day a week water schedule.
 - By June 1, 2024, and March 1 thereafter
 - Requires
 - Location/address
 - Meter numbers
 - Amount of water
 - Name of who is responsible and how to contact
 - If a drought stage is declared must reduce water usage by at least the percentage reduction goal stated in the Drought Plan



Other

Water slide/pool for parties would be allowed for up to two consecutive days

- Water slide/pool for everyday use would be subject to water replenishing on the scheduled water days or via handheld hose with automatic shut off feature

Charity car wash allowed for up to two consecutive days



Drought Contingency Plan



Drought Stages

- 4 Stages
- Based on
 - Decrease in the Lake Waco reservoir level
 - Water system failures/emergencies
 - An inability to recover approximately 90% of water stored in all storage facilities within a defined period
 - Other
- Comprised of Triggers & Response



Drought Stage Triggers

	Lake Level - Reservoir Capacity	Weather Forecast	Other Unforeseen Events	Water Storage Recovery	Reduce Supply 24/12 months	Catastrophic Decrease In Lake Level
Drought Stage 1	X	X	X			
Drought Stage 2	X	X	X	X		
Drought Stage 3	X	X	X	X	X	
Drought Stage 4	X	X	X		X	X

Stage 1 Responses

The City will prepare a water plan to reduce use of water for municipal purposes

The City shall monitor “excessive watering”

Year-round outdoor water conservation measures from the Conservation Plan will remain in effect

Variances will be reduced to 45 days

Golf course and athletic field watering must adhere to their submitted water plan

Criminal penalties would apply in all drought stages



Reduction Goal

1% reduction of previous 3-year average daily use

Stage 2 Responses

The City will prepare a water plan to reduce municipal outdoor water use including reduction in hours for such things as spray parks

Outdoor water use remains two days a week and prohibited hours are from 10:00 am to 7:00 pm

Variances will be reduced to 30 days from planting for newly installed plants

Golf course and athletic field watering must adhere to their submitted water plan

Water Conservation Rates take effect

Conservation Rates

RESIDENTIAL CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-3000 gallons	No change	No change	No change	No change
3,001-8,000 gal	No change	No change	No change	No change
8,001 – 15,000 gal	No change	No change	10% increase	20% increase
15,001 – 25,000 gal	No change	10% increase	20% increase	25% increase
25,001 + gal	No change	20% increase	40% increase	50% increase

Irrigation Conservation Rates

IRRIGATION CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-25,000 gallons	No change	10% increase	20% increase	25% increase
25,001 + gallons	No change	20% increase	40% increase	50% increase



Reduction Goal – Stage 2

November – March 2% of previous 3-year average daily use

April – October – 8% of previous 3-year average daily use

Stage 3 Responses

- The City will prepare a water plan for municipal purposes to meet reduction goals
- 1 day a week outside water usage. No outside water use from 10:00 am to 7:00 pm
- Watering by handheld hose is permitted only on the day and times assigned
- Buried drip irrigation is still permitted if buried 6 inches deep in the soil
- No variance for new plants
- Existing pools, hot tubs, ponds, and fountains may be replenished by handheld hose only to maintain operational purposes

Stage 3 Responses

- Permitting of new swimming pools, hot tubs, spas, ornamental ponds or fountains for construction are prohibited. Those previously permitted and under construction may complete construction
- Excessive water run-off is prohibited
- Washing or hosing down of buildings, sidewalks, driveways, patios, or other impervious surface is prohibited
- Car washes will not be allowed to operate
- Commercial plant nurseries are permitted to operate but are not allowed to washdown impervious surfaces

Stage 3 Responses

- Golf course and athletic field watering must adhere to their submitted water plan or adhere to the once-a-week water schedule in the Drought Contingency Plan
- Use of water from fire hydrants is prohibited except for fire fighting, and health and safety related purposes as determined by the City
- Conservation Rates for Stage 3 are implemented

Conservation Rates

RESIDENTIAL CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-3000 gallons	No change	No change	No change	No change
3,001-8,000 gal	No change	No change	No change	No change
8,001 – 15,000 gal	No change	No change	10% increase	20% increase
15,001 – 25,000 gal	No change	10% increase	20% increase	25% increase
25,001 + gal	No change	20% increase	40% increase	50% increase

Irrigation Conservation Rates

IRRIGATION CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-25,000 gallons	No change	10% increase	20% increase	25% increase
25,001 + gallons	No change	20% increase	40% increase	50% increase



Reduction Goal – Stage 3

November – March 2% of previous 3-year average daily use

April – October – 15% of previous 3-year average daily use

Stage 4 Responses

- Any and all outdoor/landscape water usage is prohibited
- Use of water for municipal purposes will be limited to only those activities necessary to maintain public health, safety, and welfare as determined by the City
- Use of water from fire hydrants is prohibited except for fire fighting, and health and safety related purposes as determined by the City
- Conservation Rates for Stage 4 are implemented

Conservation Rates

RESIDENTIAL CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-3000 gallons	No change	No change	No change	No change
3,001-8,000 gal	No change	No change	No change	No change
8,001 – 15,000 gal	No change	No change	10% increase	20% increase
15,001 – 25,000 gal	No change	10% increase	20% increase	25% increase
25,001 + gal	No change	20% increase	40% increase	50% increase

Irrigation Conservation Rates

IRRIGATION CONSERVATION SURCHARGE RATES

Volumes	Stage 1	Stage 2	Stage 3	Stage 4
0-25,000 gallons	No change	10% increase	20% increase	25% increase
25,001 + gallons	No change	20% increase	40% increase	50% increase



Reduction Goal – Stage 4

November – March 5% of previous 3-year average daily use

April – October – 20% of previous 3-year average daily use

Enforcement

Misdemeanor punishable by fine

Flagrant violators could have water service terminated

City may utilize the Advance Metering Management System to determine day and time of day usage to issue a citation

Key Points

A Conservation & Drought Contingency and Water Emergency Management Plans are required by the State

The 2022 – 2023 drought brought to light the need for year-round conservation

The Plans are a more thoughtful response to conserving water and extending the life of our infrastructure

Many City's have 2 –day a week year-round outdoor water schedules and a few have 1 –day a week year-round outdoor water schedules

