

RESOLUTION NO. R2019-18

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BURNET, TEXAS, ADOPTING THE WATER CONSERVATION PLAN; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS RESOLUTION WAS PASSED WAS OPEN TO THE PUBLIC AS REQUIRED BY LAW.

WHEREAS, under the Texas Administrative Code 31, the Texas Water Development Board (Board) requires the adoption of a Water Conservation Plan of all entities that have current financial obligations to the Board ; and

WHEREAS, the City of Burnet currently has financial obligations to the Board; and

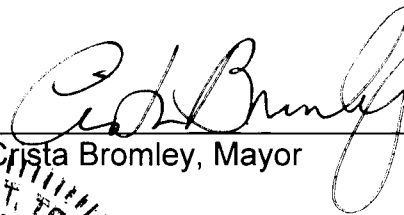
WHEREAS, the City of Burnet has previously adopted the Drought Contingency and Water Emergency Ordinance 2019-10, dated April 16th, 2019

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BURNET, TEXAS, THAT:


The Water Conservation Plan dated August 13, 2019 as attached hereto, is hereby adopted.

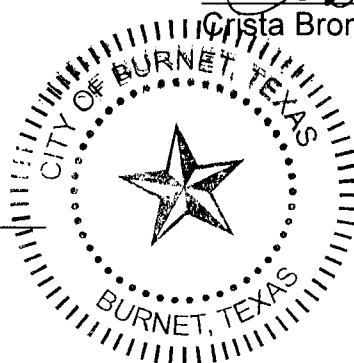
PASSED, ADOPTED AND APPROVED by the City Council of the City of Burnet this the 27th day of August 2019.

CITY OF BURNET


Crista Bromley, Mayor

ATTEST:


Kelly Dix, City Secretary





CITY OF BURNET WATER CONSERVATION PLAN

August 13, 2019

For Texas Water Development Board

A. Water Conservation Utility Profile See attached Exhibit "A".

B. Targets

	Historic 5 Year Average	Baseline	5-Year Goal For year 2024	10-Year Goal For year 2029
Total GPCD	125	120	115	115
Residential GPCD	65	55	55	55
Water Loss (GPCD)	12	9	6	6
Water Loss Percentage	10%	7.5%	5%	5%

C. Schedule for implementing targets and goals

The City of Burnet Drought Contingency and Water Emergency Ordinance (DCP) as adopted, and included as part of this plan as Exhibit "B", enables the City Manager to initiate action that will effectively implement the plan. The City of Burnet shall use the drought contingency measures of the Lower Colorado River Authority (LCRA) trigger levels as a guide for consideration of implementation of drought contingency measures as applicable for the City of Burnet. The following stages are recommended.

Stage I: Voluntary Conservation

Customers of or persons who use the water utility of the City of Burnet will voluntarily limit the amount of water used from May 1 through September 30 of each year to that amount absolutely necessary for health, business and outdoor water use. The City of Burnet shall use a 5% water use reduction target for

this stage. Stage I voluntary conservation shall be in effect May 1 through September 30 and will initiate the following listed actions:

- a. All customers or persons who use the water utility of the City of Burnet will be asked to participate in the 5-Day Watering Schedule (Section 8 this document) for outdoor uses and only on designated water use days. Outdoor uses include watering lawns, shrubs, and other types of outdoor vegetation, washing vehicles, boats and trailers, the use of landscape sprinkler systems and irrigation, recreational use of sprinklers and outdoor showers..
- b. All outdoor uses are discouraged between the hours of 11:00 am and 7:00 pm, except with a hand-held hose equipped with a positive shut-off nozzle, hand-held bucket or drip irrigation system. This includes the washing of automobiles, trucks, trailers and other types of mobile equipment. This does not apply when conducted on the immediate premises of a commercial car wash or a commercial service station
- c. The following uses of water are defined as "water waste" and are strongly discouraged:
 - 1) allowing water to run off into a gutter, ditch, drain, or right of way
 - 2) failing to repair a controllable leak
 - 3) washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas, except to alleviate immediate health or fire hazards.

Stage 2: Mandatory Compliance- Water Warning

Stage 2 curtailment shall be automatically initiated upon existence of moderate drought conditions (i.e. Total daily water demand equals or exceeds 90% of the system's safe operating capacity for three consecutive days or equals or exceeds 95% of system capacity on a single day) and will automatically initiate the following listed mandatory action. Listed action is compulsory on all users and is intended to prohibit non-essential water use. The City of Burnet shall use a 10-20% water use reduction target for this stage.

- a. Non-essential water use is defined as washing house windows, sidings, eaves and roof with a hose, and without the use of a bucket; washing driveways, streets, curbs, and gutters and washing vehicles without a positive cut-off valve and bucket.
- b. The following uses of water are defined as "water waste" and are prohibited:
 - 1) allowing water to run off into a gutter, ditch, drain, or right of way
 - 2) failing to repair a controllable leak
 - 3) washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas, except to alleviate immediate health or fire hazards.

- c. All customers or persons who use the water utility of the City of Burnet will be required to participate in the 5-Day Watering Schedule for outdoor uses and only on designated water use days. Outdoor use will be prohibited between the hours of 11:00 am and 7:00 pm. Outdoor uses include watering lawns, shrubs, and other types of outdoor vegetation, washing vehicles, boats and trailers, the use of landscape sprinkler systems and irrigation, recreational use of sprinklers and outdoor showers. The above restrictions do not apply to the irrigation of commercial nurseries; however, these establishments will curtail all non-essential water use and voluntarily follow the restrictions set out above.
- d. All outdoor uses are prohibited between the hours of 11:00 am and 7:00 pm, except with a hand-held hose equipped with a positive shut-off nozzle, hand-held bucket, a drip irrigation system. This includes the washing of automobiles, trucks, trailers and other types of mobile equipment. This does not apply when conducted on the immediate premises of a commercial car wash or commercial service station.
- e. The refilling or adding of water to swimming and/or wading pools is prohibited except on designated outdoor use days between the hours of 7:00 pm and 11:00 am. This does not apply to public swimming and/or wading pools not equipped with filtration and recirculation equipment which must be drained and filled daily pursuant to health regulations.
- f. The use of any ornamental fountain or other structure making similar use of water is prohibited.
- g. Water from fire hydrants shall be limited to fire-fighting related activities, and/or other activities necessary to maintain the health, safety, and welfare of the citizens of the City of Burnet. This restriction does not apply to businesses which require the use of water for land development and/or building construction processes. Pursuant to written approval by the Director of Public Works or the City Manager, said businesses shall be allowed to purchase and draw water from fire hydrants.

Water use reduction target shall be reduction of water consumption to 70% or less of production/distribution capacity.

Stage 3: Mandatory Compliance - Water Emergency

Stage 3 curtailment shall be initiated by the City Manager upon his/her identifying severe drought conditions or a severe water emergency (i.e. Total daily water demand equals or exceeds 95% of the system's safe operating capacity for three consecutive days or exceeds 100% of capacity on a single day, system failure). The City of Burnet shall use a minimum 20% water use reduction target for this stage. All elements of stage 2 shall remain in effect in stage 3 with the addition of:

- a. All nonessential uses of water shall be strictly prohibited. Non-essential water use is defined as washing house windows, sidings, eaves, and roof; washing driveways, sheets, curbs, and gutters and washing vehicles.

- b. All outdoor irrigation using individual sprinklers or sprinkler systems is prohibited. All outdoor irrigation of vegetation must be done by hand-held hose equipped with a positive shut-off nozzle, drip irrigation, or a hand-held bucket on designated outdoor water use days as outlined in the S-Day Watering Schedule. Such irrigation is not permitted between the hours of 10:00 am and 10:00 pm.
- c. The washing of automobiles, trucks, boats, and other types of mobile equipment not occurring on the immediate premises of a commercial car wash or a commercial service station and not in the immediate interest of the public health, safety and/or welfare shall be prohibited.
- d. The filling, refilling, or adding of water to swimming and/or wading pools is prohibited.
- e. The operation of any ornamental fountain or similar structure is prohibited.
- f. All restaurants are prohibited from serving water to customers except when specifically requested by the customer.
- g. No permits shall be issued for the use of water necessary for the establishment of landscaping in new, residential and commercial property.
- h. The priority system for indoor water service shall be as follows:
 - 1) Hospitals
 - 2) Residential
 - 3) Schools
 - 4) Industrial
 - 5) Commercial

6) Recreational

Water use reduction target shall be reduction of water consumption to 80% or less of production/distribution capacity.

D. Tracking

The City tracks water usage on a daily, weekly and monthly basis. Water plant personnel track the amount of water generated. The Utility Department software tracks water consumption of billed customers.

E. Master Meter

The City has a master meter to measure and account for the amount of water diverted from the source of supply.

F. Metering

In 2012, the City installed a city-wide Advanced Metering Infrastructure (AMI) system. Water Treatment and Wastewater Treatment Plant meters are calibrated annually. All other meters are checked monthly for accuracy and repaired as needed.

G. Water Loss Control

Staff routinely inspects transmission lines, responds to visual anomalies. Staff records water usage and water loss to determine errors in the system.

H. Leak Repair

The AMI system generates a report of meters that indicate higher than normal volumes, allowing staff to respond in a timely manner. Staff monitors water loss through inspections and daily recording and comparison of data.

I. Public Education

The City Manager will periodically provide its employees, City Council, and the general public with information about this plan, including the importance of the plan, information about the conditions under which each stage of the plan is to be initiated, processes used to reduce water use, and impending or current drought conditions. All new customers receive information regarding the current status of drought conditions and references for additional information. This information is also included on the backs of the utility bills and continuously on the City's website at www.cityofburnet.com.

J. Rate Structure

The City's rate structure (see attached Exhibit "C") provides for a conservation rate. The more water used, the higher the volumetric rate.

K. Resolution

See the attached Resolution (Exhibit "D")

L. Section Lis not applicable to the City of Burnet.

M. Coordination with Regional Planning Groups

The City has provided a copy of the DCP to the regional water planning groups for the service area of the City of Burnet to ensure consistency and coordination of drought contingency planning.

N. Drought Contingency Plan

See the attached Exhibit "B".

O. Adoption

See attached resolution Exhibit "E".

P. Reporting

The person responsible for preparing the annual report on the utility profile form TWDB-1965 shall be the Superintendent of Water/Wastewater or the Director of Administrative Services.

Water/Wastewater Operations Mgr. Alan Burdell

City of Burnet

P.O. Box 1369

Burnet, TX 78611 aburdell@cityofburnet.com (512) 756-2402

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: City of Burnet

Public Water Supply Identification Number (PWS ID): TX0270001

Certificate of Convenience and Necessity (CCN) Number: 10438

Surface Water Right ID Number: 1505-B, 5327

Wastewater ID Number: 20158

Contact: First Name: Alan Last Name: Burdell

Title: W/WW Operations Manager

Address: P.O. Box 1369 City: Burnet State: TX

Zip Code: 78611 Zip+4: _____ Email: aburdell@cityofburnet.com

Telephone Number: 5127562402 Date: 2/21/2019

Is this person the designated Conservation Coordinator? Yes No

Regional Water Planning Group: K

Groundwater Conservation District: _____

Our records indicate that you:

- Received financial assistance of \$500,000 or more from TWDB
- Have 3,300 or more retail connections
- Have a surface water right with TCEQ

A. Population and Service Area Data

1. Current service area size in square miles: 10

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. Historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Water Service
2018	7,500	0	6,781
2017	7,300	0	6,654
2016	7,000	0	6,505
2015	7,056	0	6,389
2014	6,936	0	6,335

3. Projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Water Service
2020	7,520	0	6,790
2030	8,648	0	7,682
2040	9,776	0	8,574
2050	10,904	0	9,466
2060	12,032	0	10,358

4. Described source(s)/method(s) for estimating current and projected populations.

Using the population growth from 2014 to 2018 = 5 year growth pattern, multiplying by 2 for 10 year growth pattern and adding that number to each decade forward.

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. System Input

System input data for the previous five years.
 Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2018	296,266,327	0	0	296,266,327	108
2017	315,645,918	0	0	315,645,918	118
2016	301,105,051	0	0	301,105,051	118
2015	388,761,062	0	0	388,761,062	151
2014	323,007,292	0	0	323,007,292	128
Historic Average	324,957,130	0	0	324,957,130	125

C. Water Supply System

1. Designed daily capacity of system in gallons 288,000,000
2. Storage Capacity
 - 2a. Elevated storage in gallons: 1,800,000
 - 2b. Ground storage in gallons: 400,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

1. The estimated water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demand (gallons)
2020	7,520	2,256,000
2021	7,632	2,289,600
2022	7,744	2,323,200
2023	7,856	2,356,800
2024	7,968	2,390,400
2025	8,080	2,424,000
2026	8,192	2,457,600
2027	8,304	2,491,200
2028	8,416	2,524,800
2029	8,528	2,558,400

2. Description of source data and how projected water demands were determined.

Using the population projections of 2030 subtracting population projections 2020 and averaging the population for average annual growth.
Water demand was projected by multiplying population times 300 gpcd.

E. High Volume Customers

1. The annual water use for the five highest volume **RETAIL** customers.

Customer	Water Use Category	Annual Water Use	Treated or Raw
Burnet County Correctional Institute	Institutional	18,401,980	Treated
Entegris	Industrial	14,944,000	Treated
TDCJ-Utilities Energy Dep	Institutional	14,204,110	Treated
Burnet I Enterprises, LLC	Commercial	2,844,800	Treated
33rd Judicial Dist. ISF	Institutional	1,380,800	Treated

2. The annual water use for the five highest volume **WHOLESALE** customers.

Customer	Water Use Category	Annual Water Use	Treated or Raw
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UTILITY PROFILE FOR RETAIL WATER SUPPLIER

F. Utility Data Comment Section

Additional comments about utility data.

Water consumption information pulled from Incode billing system for year 2018

Section II: System Data

A. Retail Water Supplier Connections

1. List of active retail connections by major water use category.

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	2,031	91.12 %
Residential - Multi-Family	14	0.63 %
Industrial	1	0.04 %
Commercial	183	8.21 %
Institutional	0	0.00 %
Agricultural	0	0.00 %
Total	2,229	100.00 %

2. Net number of new retail connections by water use category for the previous five years.

Year	Net Number of New Retail Connections						Total
	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	
2018	48	6	0	0	0	0	54
2017	50	3	0	0	0	0	53
2016	43	0	0	0	0	0	43
2015	25	0	0	0	0	0	25
2014	20	0	0	0	0	0	20

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. Accounting Data

The previous five years' gallons of RETAIL water provided in each major water use category.

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2018	154,658,217	5,935,800	14,944,000	101,826,920	0	0	277,364,937
2017	134,683,024	5,395,714	20,290,900	131,423,496	0	0	291,793,134
2016	134,871,000	5,900,000	20,264,000	92,463,000	12,725,000	0	266,223,000
2015	137,244,000	6,591,000	21,420,000	96,367,000	46,012,000	0	307,634,000
2014	164,813,000	6,446,000	18,300,000	99,132,000	20,198,000	0	308,889,000

C. Residential Water Use

The previous five years residential GPCD for single family and multi-family units.

Year	Total Residential GPCD
2018	59
2017	55
2016	55
2015	72
2014	86
Historic Average	65

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Annual and Seasonal Water Use

1. The previous five years' gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	23,067,000	21,511,000	21,055,000	24,076,000	20,254,000
February	18,164,000	21,349,000	21,676,000	20,662,000	19,087,000
March	24,384,000	23,166,000	22,730,000	23,391,000	23,351,000
April	28,266,000	23,732,000	18,719,000	23,480,000	27,496,000
May	29,208,000	28,556,000	20,482,000	25,775,000	26,933,000
June	31,763,000	29,036,000	26,885,000	25,190,000	25,700,000
July	40,814,000	37,757,000	39,985,000	37,548,000	31,573,000
August	38,680,000	31,239,000	29,688,000	49,015,000	33,966,000
September	22,617,000	32,131,000	26,612,000	43,087,000	27,863,000
October	21,516,000	27,949,000	28,449,000	35,572,000	28,624,000
November	21,283,000	25,342,000	21,698,000	22,443,000	22,780,000
December	19,579,000	22,465,000	20,145,000	21,202,000	22,460,000
Total	319,341,000	324,233,000	298,094,000	351,441,000	310,087,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. The previous five years' gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Water				
	2018	2017	2016	2015	2014
January	12,088,000	8,148,000	6,363,000	10,724,000	7,954,000
February	8,846,000	9,100,000	6,838,000	8,559,000	7,149,000
March	10,804,000	9,095,400	6,694,000	9,881,000	8,544,000
April	12,755,000	10,297,000	6,984,000	10,830,000	11,750,000
May	13,454,000	12,113,000	6,648,000	13,173,000	11,163,000
June	14,422,000	12,220,000	9,171,000	13,218,000	10,273,000
July	17,867,000	16,637,000	15,367,000	19,340,000	13,942,000
August	18,067,000	14,943,000	12,543,000	30,588,000	14,833,000
September	10,945,000	15,054,000	9,745,000	26,550,000	11,550,000
October	10,930,000	12,839,000	9,830,000	19,429,000	12,405,000
November	9,855,000	11,910,000	7,284,000	10,968,000	9,687,000
December	8,950,000	11,134,000	6,137,000	7,711,000	10,486,000
Total	148,983,000	143,490,400	103,604,000	180,971,000	129,736,000

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	161,613,000	468,324,000
2017	141,832,000	467,723,400
2016	133,609,000	401,698,000
2015	174,899,000	532,412,000
2014	130,287,000	439,823,000
Average in Gallons	148,448,000.00	461,996,080.00

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2018	15,198,060	6	5.13 %
2017	19,907,210	7	6.31 %
2016	31,118,237	12	10.33 %
2015	76,267,549	30	19.62 %
2014	10,080,701	4	3.12 %
Average	30,514,351	12	8.90 %

F. Peak Day Use

Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2018	1,283,079	1756663	1.3691
2017	1,281,433	1541652	1.2031
2016	1,100,542	1452271	1.3196
2015	1,458,663	1901076	1.3033
2014	1,204,994	1416163	1.1752

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	145,253,848	91.12 %	50.02 %
Residential - Multi-Family	6,053,702	0.63 %	2.08 %
Industrial	19,043,780	0.04 %	6.56 %
Commercial	104,242,483	8.21 %	35.90 %
Institutional	15,787,000	0.00 %	5.44 %
Agricultural	0	0.00 %	0.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Information retrieved from Incode

Section III: Wastewater System Data

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) in gallons per day: 1,700,000

2. List of active wastewater connections by major water use category.

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	9,974,053	0	9,974,053	14.39 %
Industrial	14,944,000	0	14,944,000	21.56 %
Commercial	44,390,365	0	44,390,365	64.05 %
Institutional			0	0.00 %
Agricultural			0	0.00 %
Total	69,308,418	0	69,308,418	100.00 %

3. Percentage of water serviced by the wastewater system: 98.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

4. Number of gallons of wastewater that was treated by the utility for the previous five years.

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	16,378,000	21,400,000	16,954,000	16,896,000	17,721,000
February	14,842,000	20,323,000	15,477,000	14,495,000	15,529,000
March	15,984,000	21,315,000	21,100,000	15,019,000	16,492,000
April	15,186,000	17,153,000	21,664,000	15,714,000	17,686,000
May	17,790,000	17,344,000	23,540,000	20,761,000	17,496,000
June	17,245,000	16,505,000	22,119,000	14,854,000	16,115,000
July	15,740,000	16,053,000	16,195,000	13,723,000	16,090,000
August	15,823,000	17,994,000	22,090,000	13,920,000	16,267,000
September	17,210,000	16,407,000	18,043,000	14,495,000	16,812,000
October	26,220,000	17,547,000	16,875,000	17,675,000	16,623,000
November	20,130,000	17,030,000	21,580,000	18,041,000	16,901,000
December	20,825,000	17,584,000	19,239,000	19,574,000	15,892,000
Total	213,373,000	216,655,000	234,876,000	195,167,000	199,624,000

5. Could treated wastewater be substituted for potable water?

- Yes No

B. Reuse Data

1. Data by type of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	1,000,000
Plant wash down	3,000,000
Chlorination/de-chlorination	12,000,000
Industrial	
Landscape Irrigation (park, golf courses)	0
Agricultural	139,000,000
Discharge to surface water	0
Evaporation Pond	0
Other	
Total	155,000,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

Additional comments and files to support or explain wastewater system data listed below.

Records from influent and reuse metering
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