

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 24, CODE OF ORDINANCES, CITY OF BUDA, TEXAS BY REPEALING AND REPLACING 24.06, ESTABLISHING REGULATIONS FOR WATER RESOURCE MANAGEMENT AND CONSERVATION; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR PUBLICATION; PROVIDING FOR A PENALTY; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE WAS PASSED WAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE TEXAS OPEN MEETINGS ACT; PROVIDING AN EFFECTIVE DATE; AND REPEALING CONFLICTING ORDINANCES AND RESOLUTIONS

WHEREAS, the City has reviewed its Code of Ordinances and conducted public hearings regarding the need and desirability of amendments, revisions, deletions, and modifications; and

WHEREAS, the City desires to establish regulations for water conservation in a manner consistent with its User Drought Contingency Plan in order to provide for the health, safety and general welfare of the citizens of the City and surrounding areas, and to comply with requirements of Section 11.1272 of the Texas Water Code and Chapter 288 of the Texas Administrative Code; and

WHEREAS, this ordinance was passed and approved at a meeting of the City Council of the City of Buda held in compliance with the Texas Open Meetings Act at which a quorum of the City Council Members were present and voting.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BUDA, TEXAS, THAT:

Section 1: That the City of Buda hereby adopts the revised Water Resources Management and Drought Response plan as attached as Exhibit "A".

Section 2: That Chapter 24, Code of Ordinances, City of Buda, Texas, is hereby amended by repealing Article 24.06 and replacing it with the following as attached as Exhibit "A".

Section 3: *Repeal.* This ordinance shall be cumulative of all other ordinances of the City of Buda, and this ordinance shall not operate to repeal or affect any other ordinances of the City of Buda except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this ordinance, in which event such conflicting provisions, if any, are hereby repealed.

Section 4: *Severability.* If any clause or provision of this Ordinance shall be deemed to be unenforceable for any reason, such unenforceable clause or provision shall be severed from the remaining portion of the Ordinance, which shall continue to have full force and effect.

Section 5: *Passage.* Pursuant to Section 3.12(A) of the City Charter, the Council determined that the first reading of this ordinance is sufficient for adequate consideration by an affirmative vote of five or more members of the City Council during the first reading and the Ordinance was passed by the

affirmative vote of four or more members of the City council; therefore, this Ordinance is adopted and enacted without further readings. In the event a second reading is necessary, this Ordinance is adopted and enacted upon the affirmative vote of four or more members of the City Council upon second reading.

Section 6: *Effective Date.* This Ordinance shall take effect immediately from and after its final passage and any publication in accordance with the requirements of the City of Buda and the laws of the State of Texas.

PASSED and APPROVED on first reading by an affirmative vote of the City Council of the City of Buda, this _____ day of _____, 2019.

PASSED, APPROVED, AND ADOPTED on second reading by an affirmative vote of the City Council of the City of Buda, this _____ day of _____, 2019.

THE CITY OF BUDA, TEXAS

ATTEST:

George Haehn, Mayor

Alicia Ramirez, City Secretary

APPROVED AS TO FORM:

City Attorney

EXHIBIT A

ARTICLE 24.06 WATER RESOURCE MANAGEMENT AND DROUGHT RESPONSE

DIVISION 1. DROUGHT CONTINGENCY PLAN

Sec. 24.06.001 Purpose and intent

The purpose of this article is to provide for the health, safety, and general welfare of the citizens of city, as well as protect the environment and limited regional water sources through the effective management and conservation of the public water supply. This article establishes methods to conserve and manage the public water supply year-round and in times of drought.

Sec. 24.06.002 Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by the City of Buda by means of a providing a public notice of a public meeting to accept input on the plan.

Sec. 24.06.003 Public Education

The City of Buda will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided at a minimum by means of a notice published on the City of Buda’s website and a press release.

Sec. 24.06.004 Coordination with Regional Water Partners

The service area of the City of Buda is located within the Region K and Region L water planning areas. The City of Buda has provided a copy of this plan to the Region K, Region L, Barton Springs Edwards Aquifer Conservation District, Alliance Regional Water Authority, and Guadalupe-Blanco River Authority.

Sec 24.06.005 Authorization

The City Manager or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect the public health, safety, and welfare. The City Manager or his/her designee shall have the authority to initiate or terminate drought of other water supply emergency response measures as described in this Plan.

Sec. 24.06.006 Applicability

The provision of this Plan shall apply to all Persons, customers, and property utilizing water provided by the City of Buda. The terms “Person” and “customer” as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities. The requirements do not apply to alternative water sources such as rainwater, graywater, reclaimed water, and private wells. Owners of private wells and customers of other water utilities are encouraged to contact their respective utility provider and/or regulatory agency for applicable requirements.

Sec. 24.06.007 Definitions

The following words and phrases, when used in this article, shall have the meanings respectively ascribed to them in this definitions section, except when the context otherwise requires. Whenever any words and phrases used herein are not defined herein but are defined in the federal and state laws regulating public water supplies and drought management, any such definition therein shall be deemed to apply to such words and phrases used herein, except when the context otherwise requires.

Aesthetic Water Feature. A fountain, waterfall, landscape lake or pond, or another decorative feature where the use is entirely ornamental and serves no other functional purpose.

Aquifer. The Edwards Aquifer.

Automatic Sprinkler Irrigation System. A system of fixed pipes and sprinkler heads that apply water to landscape plants or turf.

BSEACD. The Barton Springs Edwards Aquifer Conservation District.

Cfs. Cubic feet per second.

Charity Carwash. Any special event involving the washing of vehicles for a requested or suggested donation.

City Manager. The City Manager of the city, or a Person designated by the City Manager to act in his or her behalf.

Commercial, Mixed Use or Multifamily Customer. For the purposes of this article, a water customer being charged using the commercial rate structure. This includes irrigation meters not associated with a companion residential water account (i.e. landscape lots maintained by homeowners associations).

Commercial Carwash. Any permanently located or mobile carwash that washes automobiles, trucks, trailers, boats and other mobile equipment for a fee.

Drip Irrigation. A system of fixed pipes or hoses with emitters designed to apply water to plants slowly and under pressurized conditions at or below the soil surface.

Existing Landscape. Landscaping plants and/or turf on which installation was completed more than 21 days from the current date.

Foundation Watering. Use of a soaker hose or similar device placed within 24 inches of a building foundation for the purpose of providing moisture to the foundation soils in an effort to prevent cracking or shifting.

GBRA. The Guadalupe Blanco River Authority.

Graywater. Defined as wastewater from showers, bathtubs, handwashing lavatories, sinks not used for the disposal of hazardous or toxic ingredients, sinks not used for food preparation or disposal. Graywater does not include wastewater from the washing of material, including diapers, soiled with human excrement or wastewater that has come into contact with toilet waste. Graywater does not include municipally treated reclaimed water.

Handheld Bucket. A container holding five gallons or less.

Handheld Hose. A hose equipped with a positive shutoff device.

Health and Safety Use. Use of water for any purpose that is necessary to protect human health and safety.

Hose-end Sprinkler. Any lawn irrigation device that attaches to the end of a water hose and is not equipped with an integrated positive shutoff device.

Impervious Surface. A type of surface that prevents water from penetrating directly into the ground. Impervious surfaces include but are not limited to, sidewalks, driveways, paved streets, and pavers or stones set with mortar.

Irrigation System. See *Automatic Sprinkler Irrigation System*.

Landscape Watering. The application of water to grow landscaping plants.

Landscaping Plant. Any plant, including any tree, shrub, vine, herb, flower, vegetable, fruit, succulent, ground cover or grass species that is used for landscaping purposes or for the support of intensive recreational areas including playgrounds and playing fields.

Makeup. Partial refilling of a swimming pool or hot tub or an aesthetic water feature to replace water lost through evaporation or backwashing.

Mobile Carwash. A commercial carwash equipped with a vehicle or trailer-mounted self-contained washing system with any of the following: water or detergent solution, storage tank, high pressure/low-flow pumping equipment, hoses, spray wand and related apparatuses.

New Landscape. Landscaping plants and/or turf on which installation was completed within the last 21 days.

Noncommercial Vehicle Washing. The washing of automobiles, trucks, trailers, boats, and other mobile equipment at a private residence.

Nonessential Water Use. Any usage of water that is not required for:

- (1) A health and safety use;
- (2) Personal needs such as drinking, bathing, cooling, heating, cooking, food preparation, cleaning or sanitation;
- (3) Medical or industrial processes; or
- (4) Watering of livestock.

Not In Use. As it relates to swimming pools, hot tubs and similar facilities, a facility which is not used during any 24-hour period.

Outdoor Splash Pad. A permanent recreational water feature that sprays, pours, and/or dumps water onto individuals.

Person. With respect to this article, any individual, corporation, partnership, or other legal entity within the corporate limits of the city, or any individual, corporation, partnership, or other legal entity outside the corporate limits of the city who is a city water customer.

Patio Mister. A device which sprays fine water particles for outdoor cooling.

Positive Shutoff Device. A device which permits water to flow through it only when a continuous pressure is applied to a handle, trigger, or similar portion of the device.

Protected Tree. A tree greater than eight (8) caliper inches.

Rainwater Harvesting System. Systems used to collect and store rainwater for consumption, irrigation, or other purposes.

Reclaimed Water. Municipally treated wastewater that is recycled or reused after it has been used for another purpose.

Residential Customer. For the purposes of this article, a water customer being charged using the residential rate structure. This includes irrigation meters associated with a companion residential water account (i.e. a separate irrigation meter at a residence supplying an automated sprinkler system for the residence).

Soaker Hose. A portable hose with small openings that applies water slowly to plants at the soil surface with no vertical spray.

Swimming Pool. Any structure, basin, chamber, or tank including hot tubs that contains an artificial body of water for swimming, diving, or recreational bathing, and having a depth of two (2) feet or more at any point.

Tree Watering Bag. A watering device that holds water and is attached to a tree to slowly drain providing irrigation for a tree.

Vegetable Garden. A defined area cultivated primarily to grow vegetables, herbs and other plants useful for human consumption. A defined area in which such plants are grown together with aesthetic plants (also known as a ‘potager’) shall be treated as a “Vegetable Garden” for the purposes of the article if at least 60 percent of the plants are vegetables, herbs and other plants useful for human consumption.

Water Waste. Any activity which causes or results in excessive water usage, including but not limited to the following:

- (1) Failing to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;
- (2) Operation of a permanently installed irrigation system with a broken head, a head that is out of adjustment and the arc of the spray head is over a street or parking lot, or a head that is misting because of high water pressure;

- (3) Operation of a permanently installed irrigation system, or use of a hose-end sprinkler, hand-held hose, handheld bucket, or soaker hose outside of the permitted days and times established by City ordinance; or
- (4) Any irrigation that allows water to:
 - (A) Run off a property and form a stream of water in a street, gutter, ditch, drain, creek or any other natural or manmade water course for a distance of 50 feet or greater;
 - (B) Pond in a street or parking lot exceeding 50 square feet in size and to a depth greater than one-quarter of an inch; or
 - (C) Run off from a property onto adjacent properties.

Sec. 24.06.008 Implementation and termination of drought response stages

The City Manager shall monitor water supply conditions on a daily basis. The City Manager shall issue notices to implement or terminate drought response stages as follows:

- (1) Stage 1.
 - (A) Stage 1 may be implemented by the City Manager when any one of the following conditions occur and shall be implemented if two or more conditions are present unless otherwise noted:
 - (i) BSEACD declares an alarm stage in accordance with its drought contingency plan;
 - (ii) GBRA declares a stage 1 drought in accordance with their drought contingency plan;
 - (iii) Daily demand reaches 75 percent of available supply, based on the city's current water supply resulting from any curtailments implemented by water suppliers, for five consecutive days; or
 - (iv) A water quality, supply, distribution system or other emergency exists as determined by the City Manager.
 - (B) Stage 1 shall be terminated when the conditions which prompted initiation of stage 1 no longer exist.
- (2) Stage 2.
 - (A) Stage 2 may be implemented by the City Manager when any one of the following conditions occur and shall be implemented if two or more conditions are present unless otherwise noted:
 - (i) BSEACD declares a critical stage in accordance with its drought contingency plan;

(ii) GBRA declares stage 2 drought in accordance with their drought contingency plan;

(iii) Daily demand reaches 80 percent of available supply, based on the city's current water supply resulting from any curtailments implemented by water suppliers, for five consecutive days; or

(iv) A water quality, supply, distribution system or other emergency exists as determined by the City Manager.

(v) A stage 2 drought is declared if BSEACD declares an alarm stage and GBRA declares stage 2 or BSEACD declares a critical stage and GBRA declares stage 1 in accordance with their respective drought contingency plans.

(B) Stage 2 shall be terminated when the conditions which prompted initiation of stage 2 no longer exist.

(3) Stage 3.

(A) Stage 3 may be implemented when any one of the following conditions occur and shall be implemented if two or more conditions are present unless otherwise noted:

(i) BSEACD declares an exceptional stage in accordance with its drought contingency plan;

(ii) GBRA declares stage 3 drought in accordance with their drought contingency plan;

(iii) Daily demand reaches 85 percent of available supply, based on the city's current water supply resulting from any curtailments implemented by water suppliers, for five consecutive days; or

(iv) A water quality, supply, distribution system or other emergency exists as determined by the City Manager.

(v) A stage 3 drought is declared if BSEACD declares a critical stage and GBRA declares stage 3 or BSEACD declares an exceptional stage and GBRA declares stage 2 in accordance with their respective drought contingency plans.

(B) Stage 3 shall be terminated when the conditions which prompted initiation of stage 3 no longer exist.

(4) Stage 4.

(A) A stage 4 drought may be declared by the City Manager when any one of the following conditions occur and shall be declared if two or more of the below conditions:

(i) BSEACD declares an emergency response stage in accordance with its drought contingency plan;

(ii) GBRA declares stage 4 drought in accordance with their drought contingency plan;

(iii) Daily demand reaches 90 percent of available supply, based on the city’s current water supply resulting from any curtailments implemented by water suppliers, for five consecutive days; or

(iv) A water quality, supply, distribution system or other emergency exists as determined by the City Manager.

(v) A stage 4 drought is declared if BSEACD declares an exceptional stage and GBRA declares stage 4 or BSEACD declares an emergency responses stage and GBRA declares stage 3 in accordance with their respective drought contingency plans.

(B) Stage 4 shall be terminated when the conditions which prompted initiation of stage 4 no longer exist.

(5) Notice of implementation and termination of stages. The City will make reasonable efforts to provide customers with notices of implementation and termination of drought stages. At a minimum, the City shall post notices on the City’s website and in the official newspaper of record of the City.

Sec. 24.06.009 Targeted amount of water use reduction

The City of Buda obtains water from several sources, including BSEACD and GBRA. Each of these entities has their own Drought Contingency Plan with different reduction requests for each stage. Table 1 below provides a list of the percent reductions called for by each water provider as well as the target percent reduction in water use proposed by the City of Buda.

Table 1. Percent Reduction in Water Use

Stage	BSEACD	GBRA	City of Buda
Year-round	10%	0%	5%
I	20%	5%	10%
II	30%	10%	20%
III	40%	15%	30%
IV	50%	pro rata basis	40%

Sec. 24.06.010 Year-round water use allowances and restrictions

Targeted reduction: 5% of total water use

The following allowances and restrictions are in effect always; however, the allowances and restrictions may be superseded by more stringent restrictions upon implementation of a drought response stage.

(1) Waste of water is prohibited at all times.

(2) Irrigation.

(A) Irrigation with hose-end sprinklers and automatic sprinkler systems is prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(B) Customers are encouraged to abide by the year-round voluntary irrigation schedule:

(i) Outdoor watering twice-per-week schedule:

(a) Odd-numbered residential: Wednesday and Saturday.

(b) Even-numbered residential: Thursday and Sunday.

(c) Commercial, mixed use and multifamily: Tuesday and Friday.

(C) Irrigation with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed on any day and at any time.

(D) Irrigation of vegetable gardens with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed on any day and at any time.

(E) Date and time restrictions for irrigation do not apply during repair or testing of a new or existing irrigation system if the Person performing the testing is present. The irrigation system shall only be operated as long as is necessary to diagnose and complete repairs.

(F) No golf courses shall be allowed to irrigate the greens, tees, roughs or fairways with potable water. Use of potable water for landscape irrigation in and around the clubhouse is permitted if conducted in conformance with all other requirements for landscape irrigation.

(G) Outdoor watering using potable water at athletic fields and city facilities shall follow the same watering schedule as commercial accounts.

(3) Vehicle washing.

(A) Charity car washes are allowed but must be done using a handheld bucket or a handheld hose equipped with a positive shutoff device. Charity car washes shall not create water waste as defined herein.

(B) Noncommercial vehicle washing is allowed on any day and at any time but must be done using a handheld bucket or a handheld hose equipped with a positive shutoff device.

(C) Commercial vehicle washing is allowed on any day and at any time.

(D) New commercial car washes built after January 1, 2019 shall reuse at least 50 percent of rinse water and reuse all reverse osmosis concentrate.

(4) Swimming pools are allowed to operate and be filled as normal. It is recommended that

swimming pools be covered while not in use to minimize evaporative losses.

(5) Operation of non-recirculating outdoor splash pads shall be prohibited at all times.

(5) Operation of non-recirculating aesthetic water features is prohibited at all times.

(6) Washing of impervious surfaces is allowed but should be limited unless required for health and safety use.

(7) Foundation watering is allowed on any day and at any time. However, foundation watering shall not result in saturation to the point it causes pooling in the yard or runoff onto impervious surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.

(8) Other nonessential water uses are allowed but all reasonable measures shall be taken to limit the use.

Sec. 24.06.011 Stage 1 water use allowances and restrictions

Targeted reduction: 10% of total water use.

The following measures are in effect for any period when stage 1 of the drought response plan has been implemented:

(1) Waste of water is prohibited.

(2) Outdoor irrigation shall be restricted as follows:

(A) Irrigation with hose-end sprinklers and automatic sprinkler systems is prohibited between the hours of 10:00 a.m. and 7:00 p.m. and shall follow the outdoor watering twice-per-week schedule:

(i) Odd-numbered residential: Wednesday and/or Saturday.

(ii) Even-numbered residential: Thursday and/or Sunday.

(iii) Commercial, mixed use and multifamily: Tuesday and/or Friday.

(iv) Outdoor watering must start and stop within the 24-hour period of the designated water day as determined by address.

(v) It is recommended that outdoor watering be limited to one of the permitted watering days each week in order to promote conservation.

(B) Outdoor watering with a handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation are permitted at any time on any day.

(C) Irrigation of vegetable gardens with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed on any day and at any time.

(D) Irrigation of protected trees by a soaker hose, automatic bubbler, tree watering bag, or similar device placed within the tree's dripline is allowed on any day and at any time.

(E) Commercial nurseries are subject to the time restrictions when using automated irrigation systems but may operate on any day. Use of a handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation are permitted at any time on any day.

(F) Date and time restrictions for irrigation do not apply during repair or testing of a new or existing irrigation system if the person performing the testing is present. The irrigation system shall only be operated as long as is necessary to diagnose and complete repairs.

(3) Vehicle Washing.

(A) Charity car washes are allowed but must be done using a handheld bucket or a handheld hose equipped with a positive shutoff device. Charity car washes shall not create water waste as defined herein.

(B) Noncommercial vehicle washing is allowed on any day and at any time but must be done using a handheld bucket or a handheld hose equipped with a positive shutoff device.

(C) Commercial vehicle washing is allowed on any day and at any time.

(4) Swimming Pools are allowed to operate and be filled as normal. It is recommended that swimming pools be covered while not in use to minimize evaporative losses.

(5) Operation of non-recirculating aesthetic water features is prohibited at all times.

(6) Washing of impervious surfaces is prohibited unless required for health and safety use.

(7) Foundation watering is allowed on any day and at any time. However, foundation watering shall not result in saturation to the point it causes pooling in the yard or runoff onto impervious surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.

(8) Other nonessential water uses are allowed but all reasonable measures shall be taken to limit the use.

Sec. 24.06.012 Stage 2 water use allowances and restrictions

Targeted reduction: 20% of total water use.

The following measures are in effect for any period when stage 2 of the drought response plan has been implemented:

(1) Waste of water is prohibited.

(2) Outdoor irrigation shall be restricted as follows:

(A) Irrigation with hose-end sprinklers and automatic sprinkler systems is prohibited between the hours of 12:00 a.m. and 7:00 p.m., and shall follow the outdoor watering twice-per-week schedule:

(i) Odd-numbered residential: Wednesday and/or Saturday.

(ii) Even-numbered residential: Thursday and/or Sunday.

(iii) Commercial, mixed use and multifamily: Tuesday and/or Friday.

(iv) Outdoor watering must start and stop within the 24-hour period of the designated water day as determined by address.

(v) It is recommended that outdoor watering be limited to one of the permitted watering days each week in order to promote conservation.

(B) Outdoor watering with a handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation is restricted to the outdoor watering twice-per-week schedule and shall be prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(C) Irrigation of vegetable gardens with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed any day but is prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(D) Irrigation of protected trees by a soaker hose, automatic bubbler, tree watering bag, or similar device placed within the tree's dripline is allowed any day but prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(E) Commercial nurseries are subject to the time restrictions when using automated irrigation systems but may operate on any day. Use of a handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation are permitted at any time on any day.

(F) Date and time restrictions for irrigation does not apply during repair or testing of a new or existing irrigation system if the person performing the testing is present. The irrigation system shall only be operated for the minimum amount of time that is reasonably necessary to diagnose, complete any repairs and test the system.

(3) Vehicle Washing.

(A) Charity car washes are prohibited unless held at and using a commercial car wash facility to wash vehicles.

(B) Noncommercial vehicle washing is allowed but must comply with the twice-per-week outdoor watering schedule and must be done using a handheld bucket or a handheld hose equipped with a positive shutoff device.

- (C) Commercial vehicle washing is allowed on any day and at any time.
- (4) Filling of new and existing swimming pools using the municipal water supply is prohibited. Make up water of existing swimming pools is allowed. Swimming pool surfaces shall be covered at least 50 percent when not in use.
- (5) Operation of non-recirculating aesthetic water features are prohibited at all times.
- (6) Washing of impervious surfaces is prohibited unless required for health and safety use.
- (7) Foundation watering is allowed on any day and at any time. However, foundation watering shall not result in saturation to the point it causes pooling in the yard or runoff onto impervious surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.
- (8) Other nonessential water uses are allowed but all reasonable measures shall be taken to limit the use.
- (9) Construction water used for non-potable needs, such as dust suppression, shall utilize alternative sources of water such as rainwater, graywater and reclaimed water to the maximum extent available. The City Manager may cap withdrawals from construction meters connected to the city water system.

Sec. 24.06.013 Stage 3 water use allowances and restrictions

Targeted reduction: 30% of total water use.

The following measures are in effect for any period when stage 3 of the drought response plan has been implemented:

- (1) Waste of water is prohibited.
- (2) Outdoor irrigation shall be restricted as follows:
 - (A) Irrigation with hose-end sprinklers and automatic sprinkler systems is prohibited between the hours of 12:00 a.m. and 7:00 p.m., and shall follow the outdoor watering once-per-week schedule:
 - (i) Odd-numbered residential: Wednesday.
 - (ii) Even-numbered residential: Thursday.
 - (iii) Commercial, mixed use and multifamily: Tuesday.
 - (iv) Outdoor watering must start and stop within the 24-hour period of the designated water day as determined by address.
 - (B) Outdoor watering with handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation is restricted to the outdoor watering once-per-

week schedule and shall be prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(C) Irrigation of vegetable gardens with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed on any day but is prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(D) Irrigation of protected trees by a soaker hose, automatic bubbler, tree watering bag, or similar device placed within the tree's dripline is restricted to the outdoor watering once-per-week schedule and shall be prohibited between the hours of 10:00 a.m. and 7:00 p.m.

(E) Commercial nurseries are subject to the time restrictions when using automated irrigation systems but may operate on any day. Use of handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation are permitted at any time on any day.

(F) Date and time restrictions for irrigation do not apply during repair or testing of a new or existing irrigation system if the person performing the testing is present. The irrigation system shall only be operated as long as is necessary to diagnose and complete repairs.

(3) Vehicle Washing.

(A) Charity car washes are prohibited.

(B) Noncommercial vehicle washing is allowed but must comply with the once-per-week outdoor watering schedule and use a handheld bucket or a handheld hose equipped with a positive shutoff device.

(C) Commercial vehicle washing is allowed on any day and at any time.

(4) Filling of new and existing swimming pools is prohibited. Makeup of existing swimming pools is allowed. Swimming pool surfaces shall be covered at least 50 percent when not in use. Outdoor splash pads may be operated no more than three days per week. Operation of government-owned swimming pools and outdoor splash pads are exempted.

(5) Operation of non-recirculating aesthetic water features are prohibited at all times.

(6) Washing of impervious surfaces is prohibited unless required for health and safety use.

(7) Foundation watering is allowed on any day and at any time. However, foundation watering shall not result in saturation to the point it causes pooling in the yard or runoff onto impervious surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.

(8) Other nonessential water uses are allowed but all reasonable measures shall be taken to limit the use.

(9) Construction water used for non-potable needs, such as dust suppression, shall utilize

alternative sources of water such as rainwater, graywater and reclaimed water to the maximum extent available. The City Manager may cap withdrawals from construction meters connected to the city water system.

Sec. 24.06.014 Stage 4 water use allowances and restrictions

Targeted reduction: 40% of total water use.

The following measures are in effect for any period when stage 4 of the drought response plan has been implemented:

- (1) Waste of water is prohibited.
- (2) Outdoor irrigation shall be restricted as follows:
 - (A) Irrigation with hose-end sprinklers and automatic sprinkler systems is prohibited between the hours of 12:00 a.m. and 7:00 p.m., and shall follow the outdoor watering once-per-every-other-week schedule:
 - (i) Odd-numbered residential: Wednesday, on the week of recycling pick up for that address.
 - (ii) Even-numbered residential: Thursday, on the week of recycling pick up for that address.
 - (iii) Commercial, mixed use and multifamily: Tuesday, on the week of recycling pick up for that address.
 - (iv) Outdoor watering must start and stop within the 24-hour period of the designated water day as determined by address.
 - (B) Outdoor watering with handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation is restricted to the outdoor watering once-per-every-other-week schedule and shall be prohibited between the hours of 10:00 a.m. and 7:00 p.m.
 - (C) Irrigation of vegetable gardens with a handheld bucket, handheld hose, soaker hose or drip irrigation is allowed on any day, but is prohibited between the hours of 10:00 a.m. and 7:00 p.m.
 - (D) Irrigation of protected trees by a soaker hose, automatic bubbler, tree watering bag, or similar device placed within the tree's dripline is restricted to the outdoor watering once-per-week schedule and shall be prohibited between the hours of 10:00 a.m. and 7:00 p.m.
 - (E) Commercial nurseries are restricted to the once-per-week schedule for automated irrigation systems before 10:00 a.m. and after 7:00 p.m. Use of handheld bucket, handheld hose with a positive shutoff device, soaker hose and/or drip irrigation are permitted any day before 10:00 a.m. and after 7:00 p.m.

(F) Date and time restrictions for irrigation does not apply during repair or testing of a new or existing irrigation system if the person performing the testing is present. The irrigation system shall only be operated as long as is necessary to diagnose and complete repairs.

(G) The City Council may take action following enactment of stage 4 to prohibit all outdoor irrigation if it determines there is a direct threat to health, safety and the general welfare.

(3) Vehicle Washing.

(A) Charity car washes are prohibited.

(B) Noncommercial vehicle washing is prohibited except at a commercial car wash.

(C) Commercial vehicle washing is allowed on any day and at any time.

(4) Filling and makeup water of all swimming pools is prohibited. Swimming pool surfaces shall be fully covered when not in use. Operation of outdoor splash pads are prohibited. Operation of government-owned swimming pools and outdoor splash pads are exempted.

(5) Operation of non-recirculating aesthetic water features is prohibited at all times.

(6) Washing of impervious surfaces is prohibited unless required for health and safety use.

(7) Foundation watering is allowed on any day and at any time. However, foundation watering shall not result in saturation to the point it causes pooling in the yard or runoff onto impervious surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.

(8) The use of patio misters for outdoor cooling is prohibited.

(9) Other nonessential water uses are prohibited as established by the City Council.

(10) Construction water used for non-potable needs, such as dust suppression, shall utilize alternative sources of water such as rainwater, graywater and reclaimed water to the maximum extent available. The City Manager may cap withdrawals from construction meters connected to the city water system.

Sec. 24.06.015 Exceptions and alternative compliance

(a) The City Manager may grant an exception from the requirements of this article if it is determined that special circumstances exist and that:

(1) Compliance with this article adversely affects the health, sanitation, fire protection, or safety of the public;

(2) Compliance with this article cannot be technically accomplished;

- (3) Alternative methods can be implemented that will achieve the same or greater reduction in water use;
- (4) Substantially threatens the applicant's primary source of income; or
- (5) Adversely affects pesticide or fertilizer application.

(b) The City Manager may grant an exception pertaining to the time of day allowed and/or permitted watering day calendar for outdoor water use if the City Manager determines that a property cannot be completely watered with an average of three-quarters of an inch of water per week and that the property should be divided into sections to be watered on different days.

(c) A Person may seek an exception by filing an application with the City Manager. The City Manager may require the applicant to provide information to the City Manager if necessary, to evaluate the exception request. At a minimum, the applicant must provide the following:

- (1) Name and address of the applicant;
- (2) Purpose and location of water use;
- (3) Specific provisions of this article for which the applicant is requesting an exception;
- (4) Detailed explanation of how the specific provisions will adversely affect the applicant;
- (5) Time period for which the exception is sought;
- (6) Alternative measures the applicant proposes to implement in order to meet the intent of this article; and
- (7) Any other pertinent information as required by the City Manager.

(d) If the City Manager approves an exception, the applicant shall keep a copy of the approval letter in a location on the affected property that is accessible and visible to the public.

(e) An approved exception or approved form of alternative compliance shall expire on its own terms, or when any of the following occur:

- (1) A more intensive drought stage takes effect; or
- (2) When a citation is issued alleging the applicant violated this article.

Any Person holding an exception or approved form of alternative compliance may make a request for reinstatement to the City Manager within 72 hours of the issuance of a citation. All requests for reinstatement are denied unless they are approved within three (3) business days of receipt by the City Manager's Office. The City Manager may delegate the responsibility of approving reinstatements to an appropriate Department Head or Assistant City Manager if he/she deems appropriate to do so under the circumstances.

Sec. 24.06.016 New Landscape installation program

(a) Noticed New Landscape authorization. Expressed approval from the city is not required. Rather, an applicant will submit a New Landscape installation authorization form. Upon receipt of the completed form, the city will confirm its receipt with the applicant. The submission will reflect compliance with New Landscape installation irrigation requirements as described below. Irrigation of the New Landscaping may then commence in accordance with the dates as indicated by the applicant on the New Landscape installation authorization. Any modification will require submittal of a new and completed New Landscape installation authorization.

(b) Outdoor watering schedule during year-round conservation. New Landscape installation irrigation shall comply with the following schedule when drought stages are not in effect:

- (1) Days 1–21: Irrigation permitted any day before 10:00 am or after 7:00 pm.
- (2) After 21 days, the irrigation schedule shall be adjusted to follow the current schedule as dictated by current drought stage.

(c) Outdoor watering schedule during drought stages. New Landscape installation irrigation shall comply with the following schedule when drought stages are in effect:

- (1) Stage 1 through Stage 3:
 - (A) Days 1–21: Irrigation permitted any day before 10:00 am or after 7:00 pm.
 - (B) After 21 days, the irrigation schedule shall be adjusted to follow the current schedule as dictated by current drought stage.
- (2) Stage 4:
 - (A) Days 1–14: Irrigation permitted any day before 8:00 am or after 8:00pm.
 - (B) After 14 days, the irrigation schedule shall be adjusted to follow the current schedule as dictated by current drought stage.

(d) The applicant shall post a copy of the notice in a location on the affected property that is accessible and visible to the public.

(e) All other aspects of this article shall remain in full effect, including prohibitions on Waste of water.

(f) Watering shall not result in saturation to the point it causes pooling in the yard or runoff onto Impervious Surfaces, adjacent property, drainage facilities (natural or manmade), sidewalks or streets.

Sec. 24.06.017 Violations

(a) Any Person who violates any of the provisions of this Article shall be guilty of a misdemeanor and, upon conviction, shall be fined not less than One-hundred Dollars (\$100.00) nor more than Five Hundred Dollars (\$ 500.00).

(b) If upon the trial, the State proves that the offense relates to public health or sanitation or there is a finding made that the offense was committed with criminal intent, whether it be criminal negligence, recklessness, knowingly or intentionally, the minimum fine is \$1,000 and the maximum fine is \$2,000.00 per offense.

(c) Each hour or portion thereof after the first hour of each day that a violation continues to exist shall constitute a separate offense.

(d) The City Manager or their designee is authorized shall commence any action, in law or in equity, including the filing of criminal charges, deemed necessary to enforce this article. Civil penalties and any other legal or equitable relief available under common law, chapter 54 of the Texas Local Government Code or any other applicable city, state or federal code or statute are authorized, in addition to any criminal penalties. Under Local Government Code, chapter 54, the city may presently pursue civil enforcement for injunctive relief and the imposition of up to \$1,000.00 per day civil penalties appropriately imposed by the court. This statutory remedy is in addition to the city's common law right to bring civil actions for injunctive relief to stop harmful acts, independent of authority found in the Texas Local Government Code. A civil penalty assessed against a utility customer for violation of this article may be collected through the utility billing system as part of the consolidated billing system.

(e) It is not a defense to prosecution under any provision of the article that the violation charged is no longer occurring or no longer exists. A judge of the municipal court may not dismiss a complaint or enter a finding of not guilty on the grounds that the violation is no longer occurring or no longer exists.

(f) Surcharges. Any Person who violates the watering restriction provisions of this article will be held strictly liable and the punishment for such violation may include the imposition of punitive surcharges. The city is authorized to assess one or more surcharges on the water bill of any Person presumed to have been the one who violated this article. In the event the city determines a violation has occurred, the Person assessed the punitive surcharge by the city is prima facie presumed to have violated this article for the purpose of assessment of surcharges. Punitive surcharges may be assessed as follows:

- (1) 1st offense in a 12-month period: Warning.
- (2) 2nd offense in a 12-month period: \$25.00.
- (3) 3rd offense in a 12-month period: \$100.00.
- (4) 4th offense in a 12-month period: \$300.00.

(g) Enforcement Personnel may issue verbal and/or written warnings prior to issuance of a citation.

Sec. 24.06.018 Enforcement Personnel

In addition to all peace officers, code enforcement officers, and other Persons authorized to enforce city ordinances, the City Manager is authorized to enforce this article by issuing citations to violators, filing complaints in the municipal court, and by directing the City Attorney to file and pursue civil enforcement actions.

Citizens that witness a violation of this ordinance are encouraged to notify the City's Code Enforcement Officer.

Sec. 24.06.019 Registered water user presumed

For the purposes of this article, in any case where water has been used on property in violation of this article, it shall be presumed that the Person in whose name a water meter connection is registered with the city for the property committed the violation. Proof that the particular premises had a water meter connection registered in the name of the defendant cited in a criminal or civil complaint filed under this article shall constitute prima facie evidence that the defendant committed the violation.

Sec. 24.06.020 Additional enforcement remedies

When a Person is charged with more than three criminal violations of this article within a 12-month period, or a Person fails to timely pay assessed penalties, the City Manager or his designee may direct the installation of a flow control device on the customer's water line, the partial or complete termination of the customer's water service, or both, as appropriate. Partial termination of the customer's water service (discontinued outdoor use) may be attempted as an intermediate step prior to complete termination, if it reasonably appears that it will ensure compliance with this Article. However, complete termination of all water service is authorized. In the event of termination of the customer's water service and water service is subsequently authorized, the customer shall pay any and all fees, including a reconnection fee.

Sec. 24.06.021 Liability of corporate officers for penalty

Whenever a corporation or association violates any provision of this article or in a drought response order issued under this article, the president, vice-president, secretary, treasurer, manager or any agent or employee of the corporation or association who is responsible for the violation shall be subject to the penalty prescribed for the violation.

DIVISION 2. WATER CONSERVATION PLAN

SECTION 24.06.030 INTRODUCTION

In accordance with the guidelines of the Texas Water Development Board (TWDB), and in order to meet requirements of the Texas Commission on Environmental Quality (TCEQ), the City of Buda (the City) has updated its water conservation plan for adoption as a City resolution. The resolution of the City Council adopting the Water Conservation Plan shall authorize the City to implement, enforce, and administer the program.

SECTION 24.06.031 UTILITY PROFILE

Population and customer data

The City of Buda Public Works Department manages a water distribution service area covering 6 square miles with an estimated water service population of 11,530 residents as of 2018. This population amount does not include approximately 5,000 residents within the city limits that are served by other water utility companies. The City provides drinking water to its customers through a network of over 48 miles of transmission and distribution mains that provide service to 4,583 water connections as of 2018. The City is within the boundaries of the Barton Springs Edwards Aquifer Conservation District (BSEACD) and is located within both Region K and Region L water planning groups administered by TWDB. The population within the City's water service area is anticipated to reach 20,000 by 2030 and over 30,000 by 2050. The corresponding projected total water demands are 3,254 acre-feet per year (AF/yr) and 5,722 AF/yr respectively.

Water Production and Delivery System

The City utilizes both groundwater and surface water for its public water supply. The City has five wells that withdraw groundwater from the Barton Springs segment of the Edwards Aquifer. The City has an annual historical permit from BSEACD to pump 275 million gallons. The City also receives up to 1.5 million gallons per day of surface water provided by the Guadalupe Blanco River Authority (GBRA) from Canyon Lake. Water is released from Canyon Lake and diverted via pipeline at Lake Dunlap south of New Braunfels to a surface water treatment facility in San Marcos. After the water is treated, it is then pumped via pipeline to the City of Buda. An interim agreement with the City of Kyle and the City of San Marcos through the Alliance Regional Water Authority (ARWA) is in place to provide up to 1 million gallons per day until 2023. At this point, Buda's share of ARWA water from the Carrizo-Wilcox Aquifer will be delivered via pipeline from eastern Caldwell County and the interim water will be allocated back to the City of Kyle and the City of San Marcos. The City's water distribution system includes four ground storage tanks, and five elevated storage tanks, providing a total storage capacity of 3.1 million gallons.

Wastewater Collection and Treatment System

Raw wastewater in Buda travels through a network of over 70 miles of wastewater collection lines to the City's wastewater treatment plant. This wastewater treatment plant with help from 14 lift stations serve an estimated population of 16,674 people. The average daily discharge from the plant is around 1.1 million gallons per day (MGD), with a maximum daily wastewater treatment capacity of 1.5 MGD. Over the next several years, the plant will be expanded to 3.5 MGD to keep pace with the growing demand. The wastewater treatment plant produces treated effluent that meets Type I reclaimed water quality standards for beneficial reuse. Currently the City uses reclaimed water for landscape irrigation along roadway medians, parks, and for the landscaping needs of several commercial entities. A bulk reclaimed water station is also available for customers with non-potable water needs.

Water use data

Table 1 below summarizes key water use statistics for 2014 – 2018. Average per person usage is given in gallons per capita per day (gpcd). Average and peak daily water demand are given in million gallons per day (MGD). The peak day to average day ratio varies between 1.24 and 1.90. The peak day demand over the past 5 years occurred in 2017 when 2.391 MGD was consumed in a single day.

Table 1. Municipal Water Demand 2014-2018

Year	2014	2015	2016	2017	2018
Peak GPCD	175	132	149	215	202
Total GPCD	138	106	98	112	108
Peak Day (MGD)	1.64	1.32	1.63	2.39	2.33
Average Day (MGD)	1.29	1.06	1.07	1.25	1.25
Peaking Factor	1.28	1.24	1.52	1.90	1.86

Please see Appendix “A” for more detailed information on the City’s Utility Profile.

SECTION 24.06.032 WATER CONSERVATION GOALS

The purpose of this water conservation plan is to reduce long-term demand on limited water resources by encouraging more efficient water use practices in Buda. Its primary goals are to reduce peak seasonal water demand and reduce the total gpcd on the water production and delivery system. The City’s annual average water use over the past five years is 112 gpcd. The City’s annual average water loss over the past five years is 6.53%.

Quantified Five (5) and Ten (10) Year Water Conservation Targets and Goals

Goal 1: Reduce peak seasonal daily water demand, total gpcd, and residential gpcd

TCEQ rules require the City to build capacity to meet escalating peak daily demands, which during the summer months can be twice the amount consumed during the winter months. Reducing those peak demands will enable the City to defer new capital expenditures for production facilities and allow for more efficient use of available water resources. The City will implement recommended best management practices that help reduce peak per capita demand, and programs aimed at reducing the overall total and residential gpcd. Table 2 outlines the targeted goal amounts over the next 5 to 10-year period. More detailed information relating to best management practices for reducing peak demand and overall consumption can be found in Table 3.

Goal 2: Maintain Water Loss at or Below 5% of Produced Water

The goal of the City’s water loss control program is to maintain non-revenue water (defined as unbilled authorized plus unbilled unauthorized usage) water at or below 6% of water produced, on an annual basis. In order to meet this goal, the City has several programs in place, including routine water audits, a program of leak detection and repair, a meter testing and replacement program, and will also implement advanced metering infrastructure (AMI) in 2019. Periodic leak detection surveys of the distribution system will be performed. Table 2 outlines the targeted goal amounts over the next 5 to 10-year period. More detailed information relating to best management practices for maintain water loss can be found in Table 3.

Table 2. Water Conservation Goals

	Historic 5-yr Average	5-yr Goal (2023)	10-yr Goal (2028)
Peak GPCD	174	210	200
Total GPCD	112	140	135
Total Residential GPCD	73	73	72
Water Loss (GPCD)	16	8	6
Water Loss (Percentage)	6.53	6	5

Time frame for achieving conservation goals

The goals outlined above are designed to be achieved within five to ten years of the date of adoption of this Plan. The City will annually evaluate the plan in accordance with State and Federal regulations to determine the extent, if any, that the plan needs modification. Water use and water loss data is tracked and monitored on a monthly basis. Annual reports are submitted to TWDB summarizing these results and allow the City to evaluate the effectiveness of the various programs that have been implemented.

SECTION 24.06.033 BEST MANAGEMENT PRACTICES

During the 80th Texas Legislative Session, Senate Bill 3, House Bill 3, and House Bill 4 were all passed and involved state water planning and conservation. TCEQ and TWDB jointly adopted these rules requiring the submission of a water conservation plan from public utilities that provide service to more than 3,300 connections. These utilities must also provide annual progress reports to the TWDB, describing how they are implementing their conservation plan. Several resource documents have been provided by TWDB relating to best management practices (BMPs) related to water conservation. The best management practices that the City currently utilizes and plans to implement to meet their water conservation goals are as follows:

Table 3. Best Management Practices

BMP Category	BMP	City Program Description
Conservation Analysis and Planning	Conservation Coordinator	The City has a designated employee (Water Resource Coordinator) to oversee and coordinate conservation efforts within the City’s water service area.
Financial	Water Conservation Pricing	The City uses an inclining rate structure outlined in Section 24.06.058
	Plumbing Assistance Programs for Economically Disadvantaged Customers	The City currently works with customers through a bill payment plan to help in certain circumstances. The City is researching additional options for this BMP through a plumbing assistance program and a volunteer bill rounding program where customers round their bill to the nearest dollar and the funds go to help economically disadvantaged customers.
System Operations	System Water Audit and Water Loss Control	The City tracks water data on a monthly basis. More details are presented in other sections of this Plan.
	Advance Metering Infrastructure	All meters transmit hourly readings. Through a partnership with WaterSmart Software, customers and City staff can detect leaks faster and reduce water loss.

Landscaping	Park Conservation	City staff from multiple departments work together to coordinate proper watering schedules to ensure the most efficient use of water. Irrigation improvements will occur at several fields over the next couple of years. Tracking of water use will help keep consumption in check. Park staff regularly attend trainings on turf management and irrigation.
	Landscape Irrigation Conservation and Incentives	The City has partnered with LCRA through the Texas AgriLife WaterMyYard.org program which provides weekly irrigation recommendations based on evapotranspiration data. The City plans to further investigate irrigation system design and maintenance guidelines.
	Residential Landscape Irrigation Evaluations	The City is investigating whether to provide this service in house or to partner with a third-party to perform these evaluations and/or workshops.
Education and Public Awareness	Public Information	The City has a robust social media presence and utilizes these outlets for water conservation education and information. Print material is also available to customers. The City has a dedicated webpage for water conservation: https://www.ci.buda.tx.us/232/Water-Conservation
	School Education	The City has given presentations to schools and will continue to look at ways of increasing the amount of presentations given to kids. The City is also considering participating with TWDB for conservation program material for 4 th and 5 th grade schoolteachers within the water service area of the City.
	Small Utility Outreach and Education	The City has partnered with WaterSmart Software to implement a customer portal so that customers can track their hourly water usage and receive helpful conservation tips based on their consumption patterns.
Rebate, Retrofit, and Incentive Programs	Conservation Programs for Industrial, Commercial, and Institutional Accounts	The City is investigating partnering with local hotels and restaurant to ensure they have the most water efficient equipment available.
	Showerhead, Aerator, and Toilet Flapper Retrofit Program	The City has purchased aerators for distribution to customers upon request, and as promotional items at certain events.
	Water Wise Landscape Design and Conversion	The City's 2017 Unified Development Code prohibits turf grass along roadway buffers

	Programs	and internal parking lot landscapes. Soil improvement rebates are currently being written for implementation.
Conservation Technology	Rainwater Harvesting and Condensate Reuse	The City has held multiple rain barrel rebate distribution events and will continue to provide this service to customers.
	Water Reuse	The City delivers over 5 million gallons per year for landscape irrigation of multiple City and commercial properties, along with providing a bulk water station for non-potable water use needs. The City is currently looking into expansion of the reuse system to serve more irrigation demands.
Regulatory Enforcement	Prohibition on Wasting Water	The prevention of water waste is referenced in the City's Code of Ordinances, Chapter 24 Section 06.

SECTION 24.06.034 UNIVERSAL METERING, METER TESTING, AND REPLACEMENT

The ability to meter all water distribution and consumption uses allows the City to closely monitor actual water use, water losses, and to prevent unauthorized use. A master meter is installed on all City wells to account for groundwater production. A master meter is also provided for the City's surface water supply provided from GBRA. All service connections in the City are metered.

Master meters at water production wells are calibrated and tested annually in accordance with American Water Works Association (AWWA) standards to provide a minimum accuracy of plus or minus two percent (2%).

The City will continue to provide a preventive maintenance program for its water meters, wherein regular scheduled testing, repairs, and replacement are performed in accordance with American Water Works Association (AWWA) standards. In 2019, the City is replacing all mechanical water meters with digital water meters that have no moving parts, a long-term warranty, and the capability to be retrofitted to Automated Metering Infrastructure (AMI). This will result in more accurate meter readings and the ability to provide customers with detailed water usage data. As part of this meter replacement agreement, the City has a contract to determine the annual weighted average accuracy of all meters replaced following current best practices, in accordance with International Performance Measurement and Verification Protocol and as proscribed by Federal Energy Management Program Guidelines for a period of 15 years.

SECTION 24.06.035 WATER LOSS CONTROL MEASURES

The City performs monthly water system audits to track unaccounted for water using the following monthly data: billing data (gallons sold), treated water data (gallons pumped), number of repaired leaks (and estimated gallons lost through leakage), and estimated gallons used for line flushing and fire hydrant testing. The City also completes a detailed water system audit following Texas Water Development Board (TWDB) guidelines at least once each year. In 2019, the City will have a leak detection survey completed on an older portion of the water distribution system.

SECTION 24.06.036 LEAK DETECTION AND REPAIR

The City investigates all reported leaks, performs periodic visual inspections, and schedules leak detection surveys of the water distribution lines. Reports are prepared and incorporated into the annual system audits. Work orders are generated and prioritized by this program. The City’s implementation of AMI will allow for customer notification of potential leaks within hours of a leak being detected by the meter. Notification through WaterSmart’s customer portal will be sent via email or text depending on customer preference.

SECTION 24.06.037 NON-PROMOTIONAL WATER RATE STRUCTURE

The City utilizes an inclining water rate structure to encourage customers to reduce both peak and overall water usage, while allocating cost of service to each customer class. Under an inclining rate structure, the rate per thousand gallons increases as the amount of water used increases. The rate structure in place as of the date of this Conservation Plan charges monthly service charges based on meter size, plus a uniform rate per thousand (1000) gallons up to 6,000 gallons for customers inside and outside the city limits. After 6,000 gallons, the rate per thousand increases slightly per thousand gallons for each separate usage block up to 12,000 gallons and continues to increase per block in price up to 40,000 gallons as detailed in Table 4.

Table 4. FY 2018-19 Water Rates

Residential & Commercial		
	Inside City Limits	Outside City Limits
Meter Size	Minimum Charge	Minimum Charge
5/8 x 3/4 inch	\$12.18	\$15.24
1 inch	\$18.35	\$22.85
1.5 inch	\$30.44	\$38.07
2 inch	\$60.89	\$76.10
3 inch	\$114.78	\$143.46
4 inch	\$194.84	\$243.56
6 inch	\$304.45	\$380.54
8 inch or larger	\$608.86	\$761.09
Plus the following consumption charge per 1,000 gallons:		
1 to 6,000 gallons	\$3.33	\$4.68
6,001 to 12,000 gallons	\$5.24	\$6.84
12,001 to 18,000 gallons	\$7.83	\$9.79
18,001 to 24,000 gallons	\$9.23	\$11.36
24,001 to 30,000 gallons	\$11.19	\$13.55
30,001 to 40,000 gallons	\$14.64	\$17.52
Over 40,001 gallons	\$15.59	\$18.71

SECTION 24.06.038 PUBLIC INFORMATION AND EDUCATION

The City’s public education program makes thousands of direct and indirect contacts every year through presentations to various groups, community events, utility bill inserts, newspaper articles, social media posts, and via the City’s website. Water conservation material is provided to new customers, and existing customers upon request. The City has offered a discount program for rain barrels and plans to expand the rebate program to include other indoor and outdoor residential aspects. The City has partnered with the Lower Colorado River Authority (LCRA) to upgrade existing weather instrumentation located in Buda to provide area residents with a weekly recommendation on outdoor irrigation amounts based on actual scientific instrumentation via the website WaterMyYard.org. Customers will also receive conservation

tips and education via the WaterSmart customer portal. The City has entered into an agreement with WaterSmart to allow customers to view their hourly water consumption data, and receive customized educational tips and recommendations based on their water use habits.

SECTION 24.06.039 WHOLESALE WATER SUPPLY CONTRACTS

The City will, as part of contracts for sale of water to any other entity re-selling water, require that entity to adopt applicable provisions of the City's water conservation and drought contingency plan or have a plan in effect previously adopted and meeting the basic requirements of 30 TAC §288. These provisions will be through a contractual agreement prior to the sale of any water to the water re-seller.

SECTION 24.06.040 ADDITIONAL WATER CONSERVATION STRATEGIES

This section provides information on recommended Best Management Practices developed by the Water Conservation Advisory Council and adopted by the City as a means of achieving specified water conservation goals.

Conservation Coordinator

This function is fulfilled through the Water Resource Coordinator position. A Conservation Coordinator is an individual designated to be responsible for preparation and implementation of the utility's water conservation and drought contingency plans, preparation and submittal of annual conservation status reports, promotion of water conservation programs, and other duties necessary to carry out implementation of the utility's conservation program.

Landscape Irrigation Conservation and Incentives

The City provides information to residential and non-residential customers regarding the methods and benefits of water conserving landscaping practices and devices, through public education to homeowners, business owners, landscape architects and designers, and irrigation professionals. The use of Xeriscape and "Water Wise" landscaping techniques, including drought tolerant plants and grasses is encouraged for landscaping new homes and commercial areas. The City's 2017 Unified Development Code prohibits the use of turf grass for both perimeter and internal landscaping of parking lot areas, and multi-family residential. A landscape plan prepared by a Landscape architect is required for all applicable developments. An automatic irrigation system with a rain and freeze sensors is required for all landscaping. The City is also partnering with the LCRA and Texas A&M Agri-Life to implement innovative methods to promote landscape water conservation. Customers will be able to access specific weather information from a website (WaterMyYard.org) that will provide specific landscape watering recommendations based on weather conditions for the City. The system sends weekly subscription-based email or text updates for watering recommendations to customers who sign up for the service. Weather-based landscape watering recommendations have shown great success with water conservation in other parts of the state and it is believed this new and innovative program will result in significant savings for the City as well.

Plumbing Code

The City has adopted the 2015 International Plumbing Code, which requires water saving, Ultra Low Flow (ULF) fixtures to be installed in new construction and in the replacement of plumbing in existing structures. The City educates residents, plumbers, and contractors on the benefits of retrofitting existing facilities with water saving devices through its public education program.

Rainwater Harvesting

Rainwater harvesting is an effective method of reducing potable water usage while maintaining healthy landscapes and avoiding problems due to excessive run-off. Rainwater harvesting is the practice

collecting and storing rainwater close to its source and using it for nearby needs. This can be done through a rain barrel, cistern (larger container), or a rain garden.

In 2016 the City began providing customers with education on the proper installation and use of rainwater harvesting systems, along with a modest rebate for rainwater collection barrels. To date rebates have been issued for over 100 barrels.

Water Reuse

The City has received authorization from the TCEQ to reuse its treated wastewater effluent as Type I reuse water, the highest quality of reuse water. The goal for the City's water reuse program is to reduce peak demand on the potable (drinking) water system by switching non-potable uses of water, such as irrigation, to reuse water. The City provides over 5 million gallons annually to irrigate multiple city, commercial, and multi-family landscapes. In 2019, The City will implement a Reclaimed Water Master Plan in order to allow for expansion of the existing system to cover additional municipal and commercial landscape irrigation interests near existing lines.

Prohibition on Wasting Water

The City's Drought Contingency Plan (Appendix B) was approved in 2018 and will be amended in 2019 to adjust outdoor watering schedules to better promote water reduction targets. This includes the following prohibitions on water waste, which apply year-round:

- Operating automatic in-ground or hose-end sprinkler systems between the hours of 10:00 a.m. and 7:00 P.M.
- Allowing water to run off a property or allowing water to pond in the street or parking lot.
- Operating an irrigation system with sprinkler heads that are broken or out of adjustment.
- Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).
- Operating fountains or ponds without a recirculation device

SECTION 24.06.041 TRACKING EFFECTIVENESS OF WATER CONSERVATION PLAN

In order to track the effectiveness of the Water Conservation Plan, the City compiles and submits an annual report on its Water Conservation Plan to TWDB, which includes the following performance metrics:

- Summary of public information issued in the previous year
- Report on meter testing program
- Summary of water loss control program
- Peak water demand and overall water consumption
- Per capita water usage for the previous calendar year.
- Evaluation of the plan and progress toward meeting stated goals

SECTION 24.06.042 IMPLEMENTATION, ENFORCEMENT, AND ADOPTION

The City Manager or his/her designee will act as Administrator of this Water Conservation Plan. The Administrator shall oversee execution and implementation of all elements of this Plan and is responsible for overseeing adequate record-keeping for program documentation. As a means of implementing and enforcing this Plan, all Plan elements discussed in this document were adopted by City Council Resolution (see Appendix C).

SECTION 24.06.043 COORDINATION AND REPORTING REQUIREMENTS

This Water Conservation Plan shall work in accordance with the related City of Buda Ordinance, Drought Contingency and Water Emergency Plan, last revised in March 2018 and as it may be revised or amended from time to time. The City of Buda will provide a copy of this Water Conservation Plan to the Lower Colorado River (Region K) Water Planning Group, and also the South-Central Texas (Region L) Water Planning Group, as designated by the TWDB (see Appendix D). The City of Buda will also provide a copy of this Plan to the Barton Springs Edwards Aquifer Conservation District (see Appendix E).