Texas Water Development Board

2016 Region M Water Plan
Appendix E: Model Drought Contingency Plans and Water Conservation Plans
2016 Region M Water Plan
Appendix E.1: Drought Contingency Plan for an Irrigation District
Drought Contingency Plan for an Irrigation District
Texas Commission on Environmental Quality

Instructions: The following form is a model of a drought contingency plan for an irrigation district. Not all items may apply to your district’s situation. This form is supplied for your convenience, but you are not required to use this form to submit your plan to the TCEQ. Submit completed plans to: Water Supply Division MC 160, TCEQ, P.O. Box 13087, Austin TX 78711-3087.

_____________________________________
(Irrigation District)
_____________________________________
(Address, City, Zip Code)
_____________________________________
(Date)

Section I: Declaration of Policy, Purpose, and Intent
The Board of Directors of the ___________________ (name of irrigation district) deems it to be in the interest of the District to adopt Rules and Regulations governing the equitable and efficient allocation of limited water supplies during times of shortage. These Rules and Regulations constitute the District’s drought contingency plan required under Section 11.1272, Texas Water Code, Vernon’s Texas Codes Annotated, and associated administrative rules of the Texas Commission on Environmental Quality (Title 30, Texas Administrative Code, Chapter 288).

Section II: User Involvement
Opportunity for users of water from the _________________ (name of irrigation district) was provided by means of ________________ (describe methods used to inform water users about the preparation of the plan and opportunities for input; for example, scheduling and providing notice of a public meeting to accept user input on the plan).

Section III: User Education
The _____________ (name of irrigation district) will periodically provide water users with information about the Plan, including information about the conditions under which water allocation is to be initiated or terminated and the district’s policies and procedures for water allocation. This information will be provided by means of _____________ (e.g. describe methods to be used to provide water users with information about the Plan; for example, by providing copies of the Plan and by posting water allocation rules and regulations on the district’s public bulletin board).
Section IV: Authorization
The __________________ (e.g., general manager) is hereby authorized and directed to implement the applicable provision of the Plan upon determination by the Board that such implementation is necessary to ensure the equitable and efficient allocation of limited water supplies during times of shortage.

Section V: Application
The provisions of the Plan shall apply to all persons utilizing water provided by the ________________ (name of irrigation district). The term “person” as used in the Plan includes individuals, corporations, partnerships, associations, and all other legal entities.

Section VI: Initiation of Water Allocation
The __________ (designated official) shall monitor water supply conditions on a __________ (e.g. weekly, monthly) basis and shall make recommendations to the Board regarding irrigation of water allocation. Upon approval of the Board, water allocation will become effective when ________________ (describe the criteria and the basis for the criteria):

Below are examples of the types of triggering criteria that might be used; singly or in combination, in an irrigation district’s drought contingency plan:

• Example 1: Combined storage in the Amistad-Falcon reservoir system is equal to or less than __________ (acre-feet and/or percentage of storage capacity).
• Example 2: The storage balance in the district’s irrigation water rights account reaches ______ acre-feet.
• Example 3: The storage balance in the district’s irrigation water rights account reaches an amount equivalent to ______ (number) irrigations for each flat rate acre in which all flat rate assessments are paid and current.
• Example 4: The Rio Grande Watermaster notifies the district that water deliveries will be limited to ______ acre-feet per year (i.e. a level below that required for unrestricted irrigation).

Section VII: Termination of Water Allocation
The district’s water allocation policies will remain in effect until the conditions defined in Section IV of the Plan no longer exist and the Board deems that the need to allocate water no longer exists.

Section VIII: Notice
Notice of the initiation of water allocation will be given by notice posted on the District’s public bulletin board and by mail to each __________ (e.g. landowner, holders of active irrigation accounts, etc.).

Section IX: Water Allocation
(a) In identifying specific, quantified targets for water allocation to be achieved during periods of water shortages and drought, each irrigation user shall be allocated _____ irrigations or ________ acre-feet of water each flat rate acre on which all taxes, fees, and charges have been paid. The water allotment in each irrigation account will be expressed in acre-feet of water.
Include explanation of water allocation procedure. For example, in the Lower Rio Grande Valley, an “irrigation” is typically considered to be equivalent to eight (8) inches of water per irrigation acre; consisting of six (6) inches of water per acre applied plus two (2) inches of water lost in transporting the water from the river to the land. Thus, three irrigations would be equal to 24 inches of water per acre or an allocation of 2.0 acre-feet of water measured at the diversion from the river.

(b) As additional water supplies become available to the District in an amount reasonably sufficient for allocation to the District’s irrigation users, the additional water made available to the District will be equally distributed, on a pro rata basis, to those irrigation users having

- Example 1: An account balance of less than _____ irrigations for each flat rate acre (i.e. ____ acre-feet).
- Example 2: An account balance of less than ____ acre-feet of water for each flat rate acre.
- Example 3: An account balance of less than ____ acre-feet of water.

(c) The amount of water charged against a user’s water allocation will be ____ (e.g. eight inches) per irrigation, or one allocation unit, unless water deliveries to the land are metered. Metered water deliveries will be charges based on actual measured use. In order to maintain parity in charging use against a water allocation between non-metered and metered deliveries, a loss factor of ____ percent of the water delivered in a metered situation will be added to the measured use and will be charged against the user’s water allocation. Any metered use, with the loss factor applied, that is less than eight (8) inches per acre shall be credited back to the allocation unit and will be available to the user. It shall be a violation of the Rules and Regulations for a water user to use water in excess of the amount of water contained in the users irrigation account.

(d) Acreage in an irrigation account that has not been irrigated for any reason within the last two (2) consecutive years will be considered inactive and will not be allocated water. Any landowner whose land has not been irrigated within the last two (2) consecutive years, may, upon application to the District expressing intent to irrigate the land, receive future allocations. However, irrigation water allocated shall be applied only upon the acreage to which it was allocated and such water allotment cannot be transferred until there have been two consecutive years of use.

Section X: Transfers of Allotments

(a) A water allocation in an active irrigation account may be transferred within the boundaries of the District from one irrigation account to another. The transfer of water can only be made by the landowner’s agent who is authorized in writing to act on behalf of the landowner in the transfer of all or part of the water allocation from the described land of the landowner covered by the irrigation account.

(b) A water allocation may not be transferred to land owned by a landowner outside the District boundaries.

or

A water allocation may be transferred to land outside the District’s boundaries by paying the current water charge as if the water was actually delivered by the District to the land covered by an irrigation account. The amount of water allowed to be transferred shall be stated in terms of acre-feet and deducted from the landowner’s current allocation balance in the irrigation account.
Transfers of water outside the District shall not affect the allocation of water under Section VII of these Rules and Regulations.

(c) Water from outside the District may not be transferred by a landowner for use within the District.

or

Water from outside the District may be transferred by a landowner for use within the District. The District will divert and deliver the water on the same basis as District water is delivered, except that a ___ percent conveyance loss will be charged against the amount of water transferred for use in the District as the water is delivered.

Section XI: Penalties
Any person who willfully opens, closes, changes or interferes with any headgate or uses water in violation of these Rules and Regulations, shall be considered in violation of Section 11.0083, Texas Water Code, *Vernon’s Texas Codes Annotated*, which provides for punishment by fine of not less than $10.00 nor more than $200.00 or by confinement in the county jail for not more than thirty (30) days, or both, for each violation, and these penalties provided by the laws of the State and may by enforced by complaints filed in the appropriate court jurisdiction in ______ County, all in accordance with Section 11.083; and in addition, the District may pursue a civil remedy in the way of damages and/or injunction against the violation of any of the foregoing Rules and Regulations.

Section XII: Severability
It is hereby declared to be the intention of the Board of Directors of the _____________ (name of irrigation district) that the sections, paragraphs, sentences, clauses, and phrases of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the Board without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

Section XIII: Authority
The foregoing rules and regulations are adopted pursuant to and in accordance with Sections 11.039, 11.083, 11.1272; Section 49.004; and Section 58.127-130 of the Texas Water Code, *Vernon’s Texas Codes Annotated*.

Section XIV: Effective Date of Plan
The effective date of this Rule shall be five (5) days following the date of Publication hereof and ignorance of the Rules and Regulations is not a defense for a prosecution for enforcement of the violation of the Rules and Regulations.
Appendix E.2 - Drought Contingency Plan for a Retail Public Water Supplier

2016 Region M Water Plan
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Texas Commission on Environmental Quality

Instructions: The following form is a model of a drought contingency plan for a retail public water supplier. Not all items may apply to your system’s situation. This form is supplied for your convenience, but you are not required to use this form to submit your plan to the TCEQ. Submit completed plans to: Water Supply Division MC 160, TCEQ, P.O. Box 13087, Austin TX 78711-3087.

(Name of Utility)

(Address, City, Zip Code)

(CCN#)

(PWS #s)

(Date)

Section I: Declaration of Policy, Purpose, and Intent
In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the ___________________ (name of your water supplier) hereby adopts the following regulations and restrictions on the delivery and consumption of water through an ordinance/or resolution (see Appendix C for an example). Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

Section II: Public Involvement
Opportunity for the public to provide input into the preparation of the Plan was provided by the ___________________ (name of your water supplier) by means of ___________________ (describe methods used to inform the public about the preparation of the plan and provide opportunities for input; for example, scheduling and providing public notice of a public meeting to accept input on the Plan).

Section III: Public Education
The ___________________ (name of your water supplier) 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 by means of ___________________ (describe
methods to be used to provide information to the public about the Plan; for example, public events, press releases or utility bill inserts).

Section IV: Coordination with Regional Water Planning Groups
The service area of the _____________ (name of your water supplier) is located within the ____________ (name of regional water planning area or areas) and ____________ (name of your water supplier) has provided a copy of this Plan to the ____________ (name of your regional water planning group or groups).

Section V: Authorization
The ______________________ (designated official; for example, the mayor, city manager, utility director, general manager, etc.), 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 public health, safety, and welfare. The _______________, (designated official) or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VI: Application
The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the __________________ (name of your water supplier). The terms person and customer as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VII: Definitions
For the purposes of this Plan, the following definitions shall apply:
Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.
Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.
Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.
Customer: any person, company, or organization using water supplied by _________________ (name of your water supplier).
Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.
Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.
Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.
Landscape irrigation use: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.
Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
b) use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
c) use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
e) flushing gutters or permitting water to run or accumulate in any gutter or street;
f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
h) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
i) use of water from hydrants for construction purposes or any other purposes other than firefighting.

Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

Section VIII: Criteria for Initiation and Termination of Drought Response Stages

The ________________ (designated official) or his/her designee shall monitor water supply and/or demand conditions on a __________ (example: daily, weekly, monthly) basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified ____________ are reached.

The triggering criteria described below are based on

______________________________________________________________________________

(Provide a brief description of the rationale for the triggering criteria; for example, triggering criteria / trigger levels based on a statistical analysis of the vulnerability of the water source under drought of record conditions, or based on known system capacity limits).

Stage 1 Triggers -- MILD Water Shortage Conditions

Requirements for initiation

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII Definitions, when

(Describe triggering criteria / trigger levels; see examples below).

Following are examples of the types of triggering criteria that might be used in one or more successive stages of a drought contingency plan. One or a combination of such criteria must be defined for each drought response stage, but usually not all will apply. Select those appropriate to your system:

- Example 1: Annually, beginning on May 1 through September 30.
- Example 2: When the useable balance of water rights exceeds planned amount, based on time of year
Appendix E.2 - Drought Contingency Plan for a Retail Public Water Supplier

Example 3: When, pursuant to requirements specified in the ________ (name of your water supplier) wholesale water purchase contract with ___________ (name of your wholesale water supplier), notification is received requesting initiation of Stage 1 of the Drought Contingency Plan.

Example 4: When the water supply available to the ______ (name of your water supplier) is equal to or less than ______ (acre-feet, percentage of storage, etc.).

Example 5: When the static water level in the ________ (name of your water supplier) well(s) is equal to or less than _____ feet above/below mean sea level.

Example 6: When the specific capacity of the ____________ (name of your water supplier) well(s) is equal to or less than _____ percent of the well’s original specific capacity.

Example 7: When total daily water demand equals or exceeds _____ million gallons for ___ consecutive days of ____ million gallons on a single day (example: based on the safe operating capacity of water supply facilities).

The public water supplier may devise other triggering criteria which are tailored to its system.

Requirements for termination
Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (e.g. 3) consecutive days.

Stage 2 Triggers -- MODERATE Water Shortage Conditions
Requirements for initiation
Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section IX of this Plan when ____________ (describe triggering criteria; see examples in Stage 1).

Requirements for termination
Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (example: 3) consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

Stage 3 Triggers - SEVERE Water Shortage Conditions
Requirements for initiation
Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when ____________ (describe triggering criteria; see examples in Stage 1).

Requirements for termination
Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (example: 3) consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

Stage 4 Triggers -- CRITICAL Water Shortage Conditions
Requirements for initiation
Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan when ____________ (describe triggering criteria; see examples in Stage 1).

Requirements for termination
Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (example: 3) consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

**Stage 5 Triggers -- EMERGENCY Water Shortage Conditions**

Requirements for initiation

Customers shall be required to comply with the requirements and restrictions for Stage 5 of this Plan when ____________ (designated official), or his/her designee, determines that a water supply emergency exists based on:

1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
2. Natural or man-made contamination of the water supply source(s).

Requirements for termination

Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (example: 3) consecutive days.

**Stage 6 Triggers -- WATER ALLOCATION**

Requirements for initiation

Customers shall be required to comply with the water allocation plan prescribed in Section IX of this Plan and comply with the requirements and restrictions for Stage 5 of this Plan when ____________ (describe triggering criteria, see examples in Stage 1).

Requirements for termination - Water allocation may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of ___ (example: 3) consecutive days. 

*Note: The inclusion of WATER ALLOCATION as part of a drought contingency plan may not be required in all cases. For example, for a given water supplier, an analysis of water supply availability under drought of record conditions may indicate that there is essentially no risk of water supply shortage. Hence, a drought contingency plan for such a water supplier might only address facility capacity limitations and emergency conditions (example: supply source contamination and system capacity limitations).*

**Section IX: Drought Response Stages**

The ____________ (designated official), or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of this Plan, shall determine that a mild, moderate, severe, critical, emergency or water shortage condition exists and shall implement the following notification procedures:

**Notification**

Notification of the Public:

The ____________ (designated official) or his/ her designee shall notify the public by means of:

*Examples:*

- publication in a newspaper of general circulation,
- direct mail to each customer,
- public service announcements,
- signs posted in public places
- take-home fliers at schools.

**Additional Notification:**
The _________ (designated official) or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

Examples:
Mayor / Chairman and members of the City Council / Utility Board
Fire Chief(s)
City and/or County Emergency Management Coordinator(s)
County Judge & Commissioner(s)
State Disaster District / Department of Public Safety
TCEQ (required when mandatory restrictions are imposed)
Major water users
Critical water users, i.e. hospitals
Parks / street superintendents & public facilities managers

Note: The plan should specify direct notice only as appropriate to respective drought stages.

**Stage 1 Response -- MILD Water Shortage Conditions**
**Target:** Achieve a voluntary ___ percent reduction in __________(example: total water use, daily water demand, etc.).

**Best Management Practices for Supply Management:**
Describe additional measures, if any, to be implemented directly by (name of your water supplier) to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, activation and use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

**Voluntary Water Use Restrictions for Reducing Demand:**
(a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.
(b) All operations of the ____________ (name of your water supplier) shall adhere to water use restrictions prescribed for Stage 2 of the Plan.
(c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

**Stage 2 Response -- MODERATE Water Shortage Conditions**
**Target:** Achieve a ___ percent reduction in __________ (example: total water use, daily water demand, etc.).

**Best Management Practices for Supply Management:**
Describe additional measures, if any, to be implemented directly by ______________ (name of your water supplier) to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

**Water Use Restrictions for Demand Reduction:**
Under threat of penalty for violation, the following water use restrictions shall apply to all persons:
(a) Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

(c) Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight.

(d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(e) Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the ___________________ (name of your water supplier).

(f) Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the ______________ (name of your water supplier), the facility shall not be subject to these regulations.

(g) All restaurants are prohibited from serving water to patrons except upon request of the patron.

(h) The following uses of water are defined as non-essential and are prohibited:
1. wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
2. use of water to wash down buildings or structures for purposes other than immediate fire protection;
3. use of water for dust control;
4. flushing gutters or permitting water to run or accumulate in any gutter or street; and
5. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

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**Stage 3 Response -- SEVERE Water Shortage Conditions**
Appendix E.2 - *Drought Contingency Plan for a Retail Public Water Supplier*

**Target:** Achieve a ___ percent reduction in __________ (example: total water use, daily water demand, etc.).

**Best Management Practices for Supply Management:**
Describe additional measures, if any, to be implemented directly by ____________ (name of your water supplier) to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

**Water Use Restrictions for Demand Reduction:**
All requirements of Stage 2 shall remain in effect during Stage 3 except:
(a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.
(b) The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the ____________ (name of your water supplier).
(c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

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**Stage 4 Response -- CRITICAL Water Shortage Conditions**

**Target:** Achieve a ___ percent reduction in __________ (example: total water use, daily water demand, etc.).

**Best Management Practices for Supply Management:**
Describe additional measures, if any, to be implemented directly by ____________ (name of your water supplier) to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

**Water Use Restrictions for Reducing Demand:** All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:
(a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 6:00 a.m. and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, or drip irrigation only. The use of hose-end sprinklers or permanently installed automatic sprinkler systems are prohibited at all times.
(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10 p.m.
(c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
(d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
Appendix E.2 - Drought Contingency Plan for a Retail Public Water Supplier

2016 Rio Grande Regional Water Plan  E.2 - 9

(e) No application for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be approved, and time limits for approval of such applications are hereby suspended for such time as this drought response stage or a higher-numbered stage shall be in effect.

Stage 5 Response -- EMERGENCY Water Shortage Conditions
Target: Achieve a ___ percent reduction in _________ (example: total water use, daily water demand, etc.).

Best Management Practices for Supply Management:
Describe additional measures, if any, to be implemented directly by ________ (name of your water supplier) to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions for Reducing Demand. All requirements of Stage 2, 3, and 4 shall remain in effect during Stage 5 except:

(a) Irrigation of landscaped areas is absolutely prohibited.
(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

Stage 6 Response -- WATER ALLOCATION
In the event that water shortage conditions threaten public health, safety, and welfare, the ____________ (designated official) is hereby authorized to allocate water according to the following water allocation plan:

Single-Family Residential Customers
The allocation to residential water customers residing in a single-family dwelling shall be as follows:

<table>
<thead>
<tr>
<th>Persons per Household</th>
<th>Gallons per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or 2</td>
<td>6,000</td>
</tr>
<tr>
<td>3 or 4</td>
<td>7,000</td>
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<td>11 or more</td>
<td>12,000</td>
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</tbody>
</table>

Household means the residential premises served by the customer’s meter. Persons per household include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer’s household is comprised of two (2) persons unless the customer notifies the ____________ (name of your water supplier) of a greater number of persons per household on a form prescribed by the ____________ designated official). The ____________ (designated official) shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer’s responsibility to go to the ____________ (name of your water supplier) offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the ____________ (designated official). When the number of persons per household increases so as to place the customer in a different allocation category,
the customer may notify the _________ (name of water supplier) on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the _________ (name of your water supplier) in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the _________ (designated official) shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the _________ (name of your water supplier) of a reduction in the number of person in a household shall be fined not less than $______.

Residential water customers shall pay the following surcharges:
$____ for the first 1,000 gallons over allocation.
$____ for the second 1,000 gallons over allocation.
$____ for the third 1,000 gallons over allocation.
$____ for each additional 1,000 gallons over allocation.
Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers
The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (example: apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer’s meter serves two dwelling units unless the customer notifies the _________ (name of your water supplier) of a greater number on a form prescribed by the _________ (designated official). The _________ (designated official) shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer’s responsibility to go to the _________ (name of your water supplier) offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the _________ (designated official). If the number of dwelling units served by a master meter is reduced, the customer shall notify the _________ (name of your water supplier) in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the _________ (designated official) shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the _________ (name of your water supplier) of a reduction in the number of person in a household shall be fined not less than $______.

Customers billed from a master meter under this provision shall pay the following monthly surcharges:
$____ for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
$____, thereafter, for each additional 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
$____, thereafter, for each additional 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
$____, thereafter for each additional 1,000 gallons over allocation.
Surcharges shall be cumulative.
Commercial Customers
A monthly water allocation shall be established by the __________ (designated official), or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer’s allocation shall be approximately __ (e.g. 75%) percent of the customer’s usage for corresponding month’s billing period for the previous 12 months. If the customer’s billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. Provided, however, a customer, __ percent of whose monthly usage is less than ____ gallons, shall be allocated ____ gallons. The ____________ (designated official) shall give his/her best effort to see that notice of each non-residential customer’s allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer’s responsibility to contact the ____________ (name of your water supplier) to determine the allocation. Upon request of the customer or at the initiative of the ____________ (designated official), the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer’s normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the ____________ (designated official or alternatively, a special water allocation review committee). Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is _____ gallons through ______ gallons per month:
$____ per thousand gallons for the first 1,000 gallons over allocation.
$____ per thousand gallons for the second 1,000 gallons over allocation.
$____ per thousand gallons for the third 1,000 gallons over allocation.
$____ per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is ______ gallons per month or more:
____ times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
____ times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
____ times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
____ times the block rate for each 1,000 gallons more than 15 percent above allocation.
   The surcharges shall be cumulative. As used herein, block rate means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer’s allocation.

Industrial Customers
A monthly water allocation shall be established by the __________ (designated official), or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer’s allocation shall be approximately __ (example: 90%) percent of the customer’s water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers, the industrial customer’s allocation shall be further reduced to __ (example: 85%) percent of the customer’s water usage baseline. The industrial customer’s water use baseline will be computed on the average water use for the _____ month period ending
Appendix E.2 - Drought Contingency Plan for a Retail Public Water Supplier

prior to the date of implementation of Stage 2 of the Plan. If the industrial water customer’s billing history is shorter than ___ months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists. The _________ (designated official) shall give his/her best effort to see that notice of each industrial customer’s allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer’s responsibility to contact the ___________ (name of your water supplier) to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the ___________ (designated official), the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer’s normal water use because the customer had shut down a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shut down or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce water use is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the ___________ (designated official or alternatively, a special water allocation review committee). Industrial customers shall pay the following surcharges:

Customers whose allocation is _____ gallons through _______ gallons per month:
$____ per thousand gallons for the first 1,000 gallons over allocation.
$____ per thousand gallons for the second 1,000 gallons over allocation.
$____ per thousand gallons for the third 1,000 gallons over allocation.
$____ per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is ______ gallons per month or more:
___ times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
___ times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
___ times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
___ times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. As used herein, block rate means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer’s allocation.

Section X: Enforcement
(a) No person shall knowingly or intentionally allow the use of water from the _________________ (name of your water supplier) for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by _________________ (designated official), or his/her designee, in accordance with provisions of this Plan.
(b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than _______ dollars ($__) and not more than _______ dollars.
Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the ___________________ (designated official) shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at $______, and any other costs incurred by the ___________________ (name of your water supplier) in discontinuing service. In addition, suitable assurance must be given to the ___________________ (designated official) that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

(c) Any person, including a person classified as a water customer of the ___________________ (name of your water supplier), in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person’s property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents’ control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

(d) Any employee of the ___________________ (name of your water supplier), police officer, or other ______ employee designated by the ___________________ (designated official), may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the _______________ (example: municipal court) on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator’s immediate family or is a resident of the violator’s residence. The alleged violator shall appear in __________ (example: municipal court) to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in __________ (example: municipal court), a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in __________ (example: municipal court) before all other cases.

Section XI: Variances

The ___________________ (designated official), or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

(a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
(b) Alternative methods can be implemented which will achieve the same level of reduction in water use.
Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the _________________ (name of your water supplier) within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the __________ (designated official), or his/her designee, and shall include the following:

(a) Name and address of the petitioner(s).
(b) Purpose of water use.
(c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
(d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
(e) Description of the relief requested.
(f) Period of time for which the variance is sought.
(g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
(h) Other pertinent information.
2016 Region M Water Plan
Appendix E.3: Drought Contingency Plan for a Water Supply Corporation
Appendix E.3 - Drought Contingency Plan for a Water Supply Corporation

Drought Contingency Plan for a Water Supply Corporation
Texas Commission on Environmental Quality

(Name of Utility)

(Address, City, Zip Code)

(CCN#)

(PWS #s)

(Date)

Section 1 Declaration of Policy, Purpose, and Intent
In cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to equipment failure, temporary restrictions may be instituted to limit nonessential water usage. The purpose of the Drought Contingency Plan (Plan) is to encourage customer conservation in order to maintain supply, storage, or pressure or to comply with the requirements of a court, government agency or other authority. Please note: Water restriction is not a legitimate alternative if a water system does not meet the Texas Commission on Environmental Quality (TCEQ) capacity requirements under normal conditions or if the utility fails to take all immediate and necessary steps to replace or repair malfunctioning equipment.

Section 2 Public Involvement
Opportunity for the public to provide input into the preparation of the Plan was provided by:

(check at least one of the following)

- scheduling and providing public notice of a public meeting to accept input on the Plan

The meeting took place at:

Date: ________________ Time: _____________
Location: __________________________

- mailed survey with summary of results (attach survey and results)

- bill insert inviting comment (attach bill insert)

- other method ___________________________________________________________

Section 3 Public Education
The ______________________________ (name of utility) 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.

Drought plan information will be provided by:
(check at least one of the following)
Appendix E.3 - Drought Contingency Plan for a Water Supply Corporation

Section 4 Coordination with Regional Water Planning Groups
The service area of the ______________________________ (name of your utility) is located within Regional Water Planning Group (RWPG) ____.
____________________________ (name of your utility) has mailed a copy of this Plan to the RWPG.

Section 5 Notice Requirements
Written notice will be provided to each customer prior to implementation or termination of each stage of the water restriction program. Mailed notice must be given to each customer 72 hours prior to the start of water restriction. If notice is hand delivered, the utility cannot enforce the provisions of the plan for 24 hours after notice is provided. The written notice to customers will contain the following information:
1. the date restrictions will begin;
2. the circumstances that triggered the restrictions;
3. the stages of response and explanation of the restrictions to be implemented; and
4. an explanation of the consequences for violations.

The utility must notify the TCEQ by telephone at (512) 239-4691, or electronic mail at watermon@tceq.state.tx.us prior to implementing Stage III and must notify in writing the Public Drinking Water Section at MC - 155, P.O. Box 13087, Austin, Texas 78711-3087 within five (5) working days of implementation including a copy of the utility's restriction notice. The utility must file a status report of its restriction program with the TCEQ at the initiation and termination of mandatory water use restrictions (i.e., Stages III and IV).

Section 6 Violations
1. First violation - The customer will be notified by written notice of their specific violation.
2. Subsequent violations:
   a. After written notice, the utility may install a flow restricting device in the line to limit the amount of water which will pass through the meter in a 24-hour period. The utility may charge the customer for the actual cost of installing and removing the flow restricting device, not to exceed $50.00.
   b. After written notice, the utility may discontinue service at the meter for a period of seven (7) days, or until the end of the calendar month, whichever is LESS. The normal reconnect fee of the utility will apply for restoration of service.

Section 7 Exemptions or Variances
The utility may grant any customer an exemption or variance from the drought contingency plan for good cause upon written request. A customer who is refused an exemption or variance may appeal such action of the utility in writing to the Texas Commission on Environmental Quality. The utility will treat all customers equally concerning exemptions and variances, and shall not discriminate in granting exemptions and variances. No exemption or variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section 8 Response Stages
Unless there is an immediate and extreme reduction in water production, or other absolute necessity to declare an emergency or severe condition, the utility will initially declare Stage I restrictions. If, after a reasonable period of time, demand is not reduced enough to alleviate outages, reduce the risk of outages, or comply with restrictions required by a court, government agency or other authority, Stage II may be implemented with Stage III to follow if necessary.

**STAGE I - CUSTOMER AWARENESS**

Stage I will begin:

Every April 1st, the utility will mail a public announcement to its customers. No notice to TCEQ required.

Stage I will end:

Every September 30th, the utility will mail a public announcement to its customers. No notice to TCEQ required.

**Utility Measures:**

This announcement will be designed to increase customer awareness of water conservation and encourage the most efficient use of water. A copy of the current public announcement on water conservation awareness shall be kept on file available for inspection by the TCEQ.

**Voluntary Water Use Restrictions:**

Water customers are requested to voluntarily limit the use of water for nonessential purposes and to practice water conservation.

**STAGE II - VOLUNTARY WATER CONSERVATION**

**Target:** Achieve a ______ percent reduction in ________ (example: total water use, daily water demand, etc.)

The water utility will implement Stage II when any one of the selected triggers is reached:

**Supply-Based Triggers:** (check at least one and fill in the appropriate value)
- Well level reaches _______ ft. mean sea level (m.s.l.)
- Overnight recovery rate reaches _______ ft.
- Reservoir elevation reaches _______ ft. (m.s.l.)
- Stream flow reaches _______ cfs at USGS gage # _______
- Wholesale supplier's drought Stage II _____________________________________
- Annual water use equals ______ % of well permit/Water Right/purchased water contract amount
- Other __________________________________________

**Demand- or Capacity-Based Triggers:** (check at least one and fill in the appropriate value)
- Drinking water treatment as % of capacity ________ %
- Total daily demand as % of pumping capacity ________ %
- Total daily demand as % of storage capacity ________ %
- Pump hours per day ________ hrs.
- Useable balance of water rights exceeds planned amount, based on time of year
- Other __________________________________________

Upon initiation and termination of Stage II, the utility will mail a public announcement to its customers. No notice to TCEQ required.

**Requirements for Termination:**

Stage II of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage II, Stage I becomes operative.
Utility Measures:
Visually inspect lines and repair leaks on a daily basis. Monthly review of customer use records and follow-up on any that have unusually high usage.

Describe additional measures, if any, to be implemented directly by the utility to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, activation and use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

The second water source for ______________________________ (name of utility) is:
(check one)
- Other well
- Inter-connection with other system
- Purchased water
- Other ____________________________________________

Voluntary Water Use Restrictions:
1. Restricted Hours: Outside watering is allowed daily, but only during periods specifically described in the customer notice; between 10:00 p.m. and 5:00 a.m. for example;

2. Restricted Days/Hours: Water customers are requested to voluntarily limit the irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems. Customers are requested to limit outdoor water use to **Mondays for water customers with a street address ending with the numbers 1, 2, or 3, Wednesdays for water customers with a street address ending with the numbers 4, 5, or 6, and Fridays for water customers with a street address ending with the numbers 7, 8, 9, or 0.** Irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet-filled bucket or watering can of five (5) gallons or less, or drip irrigation system; or

3. Other uses that waste water such as water running down the gutter.

**STAGE III - MANDATORY WATER USE RESTRICTIONS:**
Target: Achieve a _____ percent reduction in ________ (example: total water use, daily water demand, etc.)
The water utility will implement Stage III when any one of the selected triggers is reached:

Supply-Based Triggers: (check at least one and fill in the appropriate value)
- Well level reaches _______ ft. (m.s.l.)
- Overnight recovery rate reaches _______ ft.
- Reservoir elevation reaches _______ ft. (m.s.l.)
- Stream flow reaches _______ cfs at USGS gage # _______
- Wholesale supplier’s drought Stage III
- Annual water use equals ______ % of well permit/Water Right/purchased water contract amount
- Other ________________________________________

Demand- or Capacity-Based Triggers: (check at least one and fill in the appropriate value)
- Drinking water treatment as % of capacity ______ %
- Total daily demand as % of pumping capacity ______ %
- Total daily demand as % of storage capacity ______ %

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*2016 Rio Grande Regional Water Plan*
Pump hours per day __________ hrs.
Production or distribution limitations
Other __________________________________________

Upon initiation and termination of Stage III, the utility will mail a public announcement to its customers. Notice to TCEQ required.

Requirements for Termination:
Stage III of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage III, Stage II becomes operative.

Utility Measures:
Visually inspect lines and repair leaks on a regular basis. Flushing is prohibited except for dead end mains.

Describe additional measures, if any, to be implemented directly by the utility to manage limited water supplies and/or reduce water demand. Examples include: activation and use of an alternative supply source(s); use of reclaimed water for non-potable purposes; offering low-flow fixtures and water restrictors.

Mandatory Water Use Restrictions:
The following water use restrictions shall apply to all customers.

1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Mondays for water customers with a street address ending with the numbers 1, 2, or 3, Wednesdays for water customers with a street address ending with the numbers 4, 5, or 6, and Fridays for water customers with a street address ending with the numbers 7, 8, 9, or 0. Irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet-filled bucket or watering can of five (5) gallons or less, or drip irrigation system.

2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi type pool is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.

4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
5. Use of water from hydrants or flush valves shall be limited to maintaining public health, safety, and welfare.

6. Use of water for the irrigation of golf courses, parks, and green belt area is prohibited except by hand-held hose and only on designated watering days between the hours 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.

7. The following uses of water are defined as nonessential and are prohibited:
   a. wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
   b. use of water to wash down buildings or structures for purposes other than immediate fire protection;
   c. use of water for dust control;
   d. flushing gutters or permitting water to run or accumulate in any gutter or street;
   e. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s);
   and
   f. any waste of water.

**STAGE IV - CRITICAL WATER USE RESTRICTIONS:**

**Target:** Achieve a _____ percent reduction in __________ (example: total water use, daily water demand, etc.)

The water utility will implement Stage IV when any one of the selected triggers is reached:

**Supply-Based Triggers:** (check at least one and fill in the appropriate value)
- Well level reaches __________ ft. (m.s.l.)
- Overnight recovery rate reaches __________ ft.
- Reservoir elevation reaches __________ ft. (m.s.l.)
- Stream flow reaches __________ cfs at USGS gage # __________
- Wholesale supplier drought Stage IV

Annual water use equals _____ % of well permit/Water Right/purchased water contract amount

Supply contamination

Other __________________________________________

**Demand- or Capacity-Based Triggers:** (check at least one and fill in the appropriate value)
- Drinking water treatment as % of capacity __________ %
- Total daily demand as % of pumping capacity __________ %
- Total daily demand as % of storage capacity __________ %
- Pump hours per day __________ hrs.
- Production or distribution limitations
- System outage

Other __________________________________________

Upon initiation and termination of Stage IV, the utility will mail a public announcement to its customers. Notice to TCEQ required.
Requirements for Termination:
Stage IV of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage IV, Stage III becomes operative.

Operational Measures:
The utility shall visually inspect lines and repair leaks on a daily basis. Flushing is prohibited except for dead end mains and only between the hours of 9:00 p.m. and 3:00 a.m. Emergency interconnects or alternative supply arrangements shall be initiated. All meters shall be read as often as necessary to insure compliance with this program for the benefit of all the customers.

Describe additional measures, if any, to be implemented directly to manage limited water supplies and/or reduce water demand.

Mandatory Water Use Restrictions: (all outdoor use of water is prohibited)

1. Irrigation of landscaped areas is absolutely prohibited.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

SYSTEM OUTAGE or SUPPLY CONTAMINATION
Notify TCEQ Regional Office immediately.
2016 Region M Water Plan
Appendix E.4: Water Conservation Plan for a Wholesale Public Water
Texas Commission on Environmental Quality

PROFILE & WATER CONSERVATION PLAN
REQUIREMENTS FOR WHOLESALE PUBLIC WATER SUPPLIERS

This form is provided to assist wholesale public water suppliers in water conservation plan development. Information from this form should be included within a wholesale public water supplier water conservation plan. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Supply Division at (512) 239-4691.

Name of Entity:  

Address & Zip:  

Telephone Number: ( ) Fax: ( )

Form Completed by:  

Title:  

Signature: Date:  

Name and Phone Number of Person/Department responsible for implementing a water conservation program:  

PROFILE

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Service area size in square miles: __________________________ (attach a copy of service-area map)

2. Current population of service area: __________________________

3. Current population served for:
   a. water __________________________
   b. wastewater __________________________

4. Population served for previous five years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>
5. Projected population for service area in the following decades:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td></td>
</tr>
</tbody>
</table>

6. List source or method for the calculation of current and projected population:

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

B. Customers Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of the annual use for each for the previous year:

<table>
<thead>
<tr>
<th>Wholesale Customer</th>
<th>Contracted Amount (AF)</th>
<th>Previous Year Amount of Water Delivered (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
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<td>(5)</td>
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</tbody>
</table>

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicated if the water provided under wholesale contracts is treated or raw water and the annual amount for each for previous year:

Total amount delivered or sold for previous year (acre-feet)

Treated

Raw

B. Water Accounting Data

1. Total amount of water diverted at point of diversion(s) for previous five years (in acre-feet) for all water uses:

<table>
<thead>
<tr>
<th>Year</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>January</td>
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<tr>
<td>February</td>
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</tr>
</tbody>
</table>
2. Wholesale population served and total amount of water diverted for municipal use for previous five years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population Served</th>
<th>Total Annual Water Diverted for Municipal Use (acre feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicated if the water provided under wholesale contracts is treated or raw water and the annual amount for each for previous year:

- Total amount delivered or sold for previous year (acre-feet)
  - Treated: ______________________
  - Raw: ______________________

B. Water Accounting Data

1. Total amount of water diverted at point of diversion(s) for previous five years (in acre-feet) for all water uses:

<table>
<thead>
<tr>
<th>Year</th>
<th></th>
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<tbody>
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</tbody>
</table>

March  | April  | May  | June  | July  | August | September | October | November | December | TOTAL  |
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</tbody>
</table>
Appendix E.4 - Water Conservation Plan for a Wholesale Public Water

2. Wholesale population served and total amount of water diverted for municipal use for previous five years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population Served</th>
<th>Total Annual Water Diverted for Municipal Use (acre feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirement from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

List all current water supply sources and the amounts authorized with each:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount Authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Water</td>
<td>___________________________ acre-feet</td>
</tr>
<tr>
<td>Groundwater</td>
<td>___________________________ acre-feet</td>
</tr>
<tr>
<td>Other</td>
<td>___________________________ acre-feet</td>
</tr>
</tbody>
</table>

B. Treatment and Distribution System (if provide treated water)

1. Design daily capacity of system: _______________ MGD
2. Storage Capacity: Elevated _______ MGD, Ground _______ MGD
3. Please describe the water system and attach. Include the number of treatment plants, wells, and storage tanks. If possible, attach a sketch of the system layout.
Appendix E.4 - Water Conservation Plan for a Wholesale Public Water Supplier

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s): ___________ MGD

2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed of. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and, if wastewater is discharged, the receiving stream. If possible, attach a sketch or map which locates the plant(s) and discharge points or disposal sites.

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: _____%

2. Monthly volume treated for previous three years (in 1,000 gallons):

<table>
<thead>
<tr>
<th>Year</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
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<th>December</th>
<th>TOTAL</th>
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</tr>
</tbody>
</table>

**REQUIREMENTS FOR WATER CONSERVATION PLANS FOR WHOLESALE PUBLIC WATER SUPPLIERS**

In addition to the description of the wholesaler’s service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, §288.5. Note: If the water conservation plan does not provide information for each requirement, an explanation must be included as to why the requirement is not applicable.
Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified five-year and ten-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable unaccounted-for water, and the basis for the development of these goals. Note that the goals established by wholesale water suppliers under this subparagraph are not enforceable.

Metering Devices

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plans shall include optimization of water supplies as one of the significant goals of the plan.

Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of this chapter. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of Title 30 TAC Chapter 288.
Enforcement Procedure & Official Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the _____________ (name of water supplier) is located within the __________ (name of regional water planning area or areas) and __________ (name of water supplier) has provided a copy of this water conservation plan to the ____________ (name of regional water planning group or groups).

Plan Review and Update

Beginning May 1, 2005, the wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous five-year and ten-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

Best Management Practices Guide

On November 2004, the Texas Water Development Board’s (TWDB) Report 362 was completed by the Water Conservation Implementation Task Force. Report 362 is the Water Conservation Best Management Practices (BMP) Guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The BMP Guide is available on the TWDB’s website at the link below or by calling (512) 463-7847.


If you have any questions on how to fill out this form or about the Wholesale Public Water Suppliers program, please contact us at 512/239-4691.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512-239-3282.
Appendix A

Definitions of Commonly Used Terms

**Conservation** These practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.

**Industrial use** The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, commercial fish production, and the development of power by means other than hydroelectric, but does not include agricultural use.

**Irrigation** The agricultural use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

**Municipal per capita water use** The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

**Municipal use** The use of potable water within or outside a municipality and its environs whether supplied by a person, privately owned utility, political subdivision, or other entity as well as the use of sewage effluent for certain purposes, including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

**Municipal use in gallons per capita per day** The total average daily amount of water diverted or pumped for treatment for potable use by a public water supply system. The calculation is made by dividing the water diverted or pumped for treatment for potable use by population served. Indirect reuse volumes shall be credited against total diversion volumes for the purpose of calculating gallons per capita per day for targets and goals.

**Public water supplier** An individual or entity that supplies water to the public for human consumption.

**Regional water planning group** A group established by the Texas Water Development Board to prepare a regional water plan under Texas Water Code, §16.053.

**Retail public water supplier** An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or
entity that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

**Reuse** The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

**Water conservation plan** A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

**Water loss** - The difference between water diverted or treated and water delivered (sold). Water loss can result from:

1. inaccurate or incomplete record keeping;
2. meter error;
3. unmetered uses such as firefighting, line flushing, and water for public buildings and water treatment plants;
4. leaks; and
5. water theft and unauthorized use.

**Wholesale public water supplier** An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others, or an individual or entity that conveys water to another individual or entity, but does not own the right to the water which is conveyed, whether or not for a delivery fee.
2016 Region M Water Plan
Appendix E.5: Water Conservation Plan for a Municipal Public Water Supplier
Texas Commission on Environmental Quality

UTILITY PROFILE & WATER CONSERVATION PLAN REQUIREMENTS FOR MUNICIPAL WATER USE BY PUBLIC WATER SUPPLIERS

This form is provided to assist entities in water conservation plan development for municipal water use by a retail public water supplier. Information from this form should be included within a water conservation plan for municipal use. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Supply Division at (512) 239-4691.

Name of Entity: ______________________

Address & Zip: ______________________

Telephone Number: (                           ) Fax: (                          )

Form Completed By: ______________________

Title: ______________________

Signature ______________________ Date: ______________________

Name and Phone Number of Person/Department responsible for implementing a water conservation program:

UTILITY PROFILE

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Service area size in square miles: ______________________
   (attach a copy of service-area map)

2. Current population of service area: ______________________

3. Current population served for:
   a. water ______________________
   b. wastewater ______________________

4. Population served for previous five years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E.5 - Water Conservation Plan for a Municipal Public Water Supplier

5. Projected population for service area in the following decades:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td></td>
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<tr>
<td>2040</td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td></td>
</tr>
</tbody>
</table>

6. List source or method for the calculation of current and projected population:

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

7. List source/method for the calculation of current and projected population:

______________________________________________________________
______________________________________________________________
______________________________________________________________
______________________________________________________________

B. Active Connections

1. Current number of active connections. Check whether multi-family service is counted as Residential _____ or Commercial _____

<table>
<thead>
<tr>
<th>Treated water users:</th>
<th>Metered</th>
<th>Not-metered</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>_______</td>
<td>_______</td>
<td>_____</td>
</tr>
<tr>
<td>Commercial</td>
<td>_______</td>
<td>_______</td>
<td>_____</td>
</tr>
<tr>
<td>Industrial</td>
<td>_______</td>
<td>_______</td>
<td>_____</td>
</tr>
<tr>
<td>Other</td>
<td>_______</td>
<td>_______</td>
<td>_____</td>
</tr>
</tbody>
</table>

2. List the net number of new connections per year for most recent three years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
C. **High Volume Customers**

List annual water use for the five highest volume customers  
*(indicate if treated or raw water delivery)*

<table>
<thead>
<tr>
<th>Customer</th>
<th>Use (1,000gal./yr.)</th>
<th>Treated/Raw Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2)</td>
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<td>(3)</td>
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<td>(4)</td>
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<tr>
<td>(5)</td>
<td></td>
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</tr>
</tbody>
</table>

II. **WATER USE DATA FOR SERVICE AREA**

A. **Water Accounting Data**

1. Amount of water use for previous five years (in 1,000 gal.):  
   Please indicate: _____ Diverted Water _____ Treated Water

<table>
<thead>
<tr>
<th>Year</th>
<th>Diverted Water</th>
<th>Treated Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td></td>
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<td>March</td>
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<td>December</td>
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<td></td>
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<tr>
<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

Indicate how the above figures were determined (e.g., from a master meter located at the point of a diversion from the source or located at a point where raw water enters the treatment plant, or from water sales).
2. Amount of water (in 1,000 gallons) delivered (sold) as recorded by the following account types for the past five years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Wholesale</th>
<th>Other</th>
<th>Total Sold</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

3. List previous five years records for water loss (the difference between water diverted (or treated) and water delivered (or sold))

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (gal.)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

4. Municipal water use for previous five years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Total Water Diverted or Pumped for Treatment (1,000 gal.)</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

B. Projected Water Demands

If applicable, attach projected water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirement from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources
List all current water supply sources and the amounts authorized with each:

<table>
<thead>
<tr>
<th>Source</th>
<th>Authorized Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Water:</td>
<td>__________________</td>
</tr>
<tr>
<td>Groundwater:</td>
<td>__________________</td>
</tr>
<tr>
<td>Contracts:</td>
<td>__________________</td>
</tr>
<tr>
<td>Other:</td>
<td>__________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Authorized Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>acre-feet</td>
</tr>
<tr>
<td></td>
<td>acre-feet</td>
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<td></td>
<td>acre-feet</td>
</tr>
<tr>
<td></td>
<td>acre-feet</td>
</tr>
</tbody>
</table>
Appendix E.5 - Water Conservation Plan for a Municipal Public Water Supplier

B. Treatment and Distribution System

1. Design daily capacity of system: _____________ MGD
2. Storage Capacity: Elevated _______ MGD, Ground _______ MGD
3. If surface water, do you recycle filter backwash to the head of the plant? Yes ______ No ______. If yes, approximately ________ MGD.
4. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks. If possible, include a sketch of the system layout.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s): _____________ MGD
2. Is treated effluent used for irrigation on-site _____, off-site _____, plant washdown _____, or chlorination/dechlorination ______? If yes, approximately ________ gallons per month.
3. Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed of. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and, if wastewater is discharged, the receiving stream. If possible, attach a sketch or map which locates the plant(s) and discharge points or disposal sites.

B. Wastewater Data for Service Area

1. Percent of water service area served by wastewater system: ______%
2. Monthly volume treated for previous three years (in 1,000 gallons):
   Year ____________________________________________
   January __________________________________________
   February __________________________________________
   March ____________________________________________
   April ____________________________________________
   May _____________________________________________
   June ____________________________________________
   July _____________________________________________
   August __________________________________________
   September _______________________________________ 
   October __________________________________________
   November _______________________________________ 
   December _______________________________________ 
   Total __________________________________________
Appendix E.5 - Water Conservation Plan for a Municipal Public Water Supplier

REQUIREMENTS FOR WATER CONSERVATION PLANS FOR MUNICIPAL WATER USE BY PUBLIC WATER SUPPLIERS

In addition to the utility profile, a water conservation plan for municipal use by a public water supplier must include, at minimum, additional information as required by Title 30, Texas Administrative Code, §288.2. Note: If the water conservation plan does not provide information for each requirement, an explanation must be included as to why the requirement is not applicable.

Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use in gallons per capita per day (see Appendix A). Note that the goals established by a public water supplier under this subparagraph are not enforceable.

Metering Devices

The water conservation plan must include a statement about the water supplier's metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply.

Universal Metering

The water conservation plan must include and a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement.

Unaccounted-For Water Use

The water conservation plan must include measures to determine and control unaccounted-for uses of water (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections; abandoned services; etc.).

Continuing Public Education & Information

The water conservation plan must include a description of the program of continuing public education and information regarding water conservation by the water supplier.

Non-Promotional Water Rate Structure

The water supplier must have a water rate structure which is not "promotional," i.e., a rate structure which is cost-based and which does not encourage the excessive use of water. This rate structure must be listed in the water conservation plan.
Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies.

Enforcement Procedure & Plan Adoption

The water conservation plan must include a means of implementation and enforcement which shall be evidenced by 1) a copy of the ordinance, resolution, or tariff indicating official adoption of the water conservation plan by the water supplier; and 2) a description of the authority by which the water supplier will implement and enforce the conservation plan.

Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning group(s) for the service area of the public water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

*The service area of the _________ (name of water supplier) is located within the ___________ (name of regional water planning area or areas) and ___________ (name of water supplier) has provided a copy of this water conservation plan to the _________ (name of regional water planning group or groups).*

Additional Requirements:

required of suppliers serving population of 5,000 or more or a projected population of 5,000 or more within ten years)

1. Program for Leak Detection, Repair, and Water Loss Accounting

   The plan must include a description of the program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system in order to control unaccounted-for uses of water.

2. Record Management System

   The plan must include a record management system to record water pumped, water deliveries, water sales, and water losses which allows for the desegregation of water sales and uses into the following user classes (residential; commercial; public and institutional; and industrial.

Plan Review and Update

Beginning May 1, 2005, a public water supplier for municipal use shall review and update its water conservation plan, as appropriate, based on an assessment of previous five-year
and ten-year targets and any other new or updated information. The public water supplier for municipal use shall review and update the next revision of its water conservation plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

**Best Management Practices Guide**

On November 2004, the Texas Water Development Board (TWDB) Report 362 was completed by the Water Conservation Implementation Task Force. Report 362 is the Water Conservation Best Management Practices (BMP) Guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The BMP Guide is available on the TWDB's website at the link below or by calling (512) 463-7847.

Appendix A

Definitions of Commonly Used Terms

Conservation ■ Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.

Industrial use ■ The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, commercial fish production, and the development of power by means other than hydroelectric, but does not include agricultural use.

Irrigation ■ The agricultural use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

Municipal per capita water use ■ The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

Municipal use ■ The use of potable water within or outside a municipality and its environs whether supplied by a person, privately owned utility, political subdivision, or other entity as well as the use of sewage effluent for certain purposes, including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

Municipal use in gallons per capita per day ■ The total average daily amount of water diverted or pumped for treatment for potable use by a public water supply system. The calculation is made by dividing the water diverted or pumped for treatment for potable use by population served. Indirect reuse volumes shall be credited against total diversion volumes for the purpose of calculating gallons per capita per day for targets and goals.

Pollution ■ The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Public water supplier ■ An individual or entity that supplies water to the public for human consumption.

Regional water planning group ■ A group established by the Texas Water Development Board to prepare a regional water plan under Texas Water Code, §16.053.
Retail public water supplier ■ An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

Reuse ■ The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

Water conservation plan ■ A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

Water loss ■ The difference between water diverted or treated and water delivered (sold). Water loss can result from:

1. inaccurate or incomplete record keeping;
2. meter error;
3. unmetered uses such as firefighting, line flushing, and water for public buildings and water treatment plants;
4. leaks; and
5. water theft and unauthorized use.

Wholesale public water supplier ■ An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others, or an individual or entity that conveys water to another individual or entity, but does not own the right to the water which is conveyed, whether or not for a delivery fee.

If you have any questions on how to fill out this form or about the ____________________________ program, please contact us at 512/239-_______.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512-239-3282.
2016 Region M Water Plan
Appendix E.6: Water Conservation Plan for Industrial and Mining
Texas Commission on Environmental Quality

INDUSTRIAL/MINING WATER CONSERVATION PLAN

This form is provided to assist entities in conservation plan development for industrial/mining water use. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Supply Division at (512) 239-4691.

Name: 
Address: 
Telephone Number: (       ) Fax: (       ) 
Form Completed by: 
Title: 
Signature: 
Date: 

NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.

I. BACKGROUND DATA

A. Water use

1. Annual diversion appropriated or requested (in acre-feet): ____________

2. Maximum diversion rate (cfs): __________________ _______________

B. Water sources __________________________________

1. Please indicate the maximum or average annual amounts of water currently used and anticipated to be used (in acre-feet) for industrial/mining purposes:

<table>
<thead>
<tr>
<th>Source</th>
<th>Current Use</th>
<th>Anticipated Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>(List water right numbers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. How was the surface water data provided above (B1) obtained?
   Master meter ____; Customer meter ____;
   If both, % raw ____ , % treated ____.
   Supplier(s): __________________________________________________

3. Was purchased water raw ____ or treated ____?
   If both, % raw ____ , % treated ____.
   Supplier(s): __________________________________________________

4. How was the groundwater data provided above (B1) obtained?
   Master meter ____; Customer meter ____; Estimated ____; Other ____
   If other, identify source: _________________________________________

5. What is the rate and cost of purchased water?  Rate _____
   Cost _____

C. Industrial/Mining Information

1. Major product or service produced by applicant:
   ______________________________________________________________
   ______________________________________________________________

2. Major Standard Industrial Classification Code(SIC):
   ____ _____ _____ _____
   North American Industry Classification System (NAICS):
   ____ _____ _____ _____ _____

3. Total number of employees at facility: _______
II. WATER USE AND CONSERVATION PRACTICES

A. Water Use in Industrial or Mining Process:

<table>
<thead>
<tr>
<th>Production Use</th>
<th>% Groundwater</th>
<th>% Surface Water</th>
<th>% Saline Water</th>
<th>% Treated Water</th>
<th>Water Use (In Acre-Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling, condensing, &amp; refrigeration</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Processing, washing, transport</td>
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<td></td>
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<tr>
<td>Boiler feed</td>
<td></td>
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</tr>
<tr>
<td>Incorporated into product</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Facility Use</th>
<th>% Groundwater</th>
<th>% Surface Water</th>
<th>% Saline Water</th>
<th>% Treated Water</th>
<th>Water Use (In Acre-Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling tower(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pond(s)</td>
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<td>Once through</td>
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<tr>
<td>Sanitary &amp; drinking water</td>
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<tr>
<td>Irrigation &amp; dust control</td>
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</tr>
</tbody>
</table>

1. Was fresh water recirculated at this facility? ☐ Yes ☐ No

2. Was electric power generated at this facility (for in-plant use or for sale)?
   ☐ Yes ☐ No

3. Description of the above use(s) of water (e.g., if water is being used for cooling, indicate the cooling system: tower, pond, etc.):

   __________________________________________________________
   __________________________________________________________
4. Describe or illustrate how surface water is diverted and delivered to the point(s) of use, the location of the diversion(s) and points of use, and how diversions are measured:

<table>
<thead>
<tr>
<th>Diversion</th>
<th>Percent of Return Flow</th>
<th>Monthly Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
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<td>February</td>
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<td>December</td>
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<tr>
<td>TOTAL</td>
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</tr>
</tbody>
</table>

5. Monthly water demand for previous year (in acre-feet):

<table>
<thead>
<tr>
<th>Diversion</th>
<th>Return Flow</th>
<th>Percent of Monthly Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td></td>
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<tr>
<td>February</td>
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<td>December</td>
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<tr>
<td>TOTAL</td>
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<td></td>
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</tbody>
</table>

6. Projected monthly water demand for next year (in acre-feet):

<table>
<thead>
<tr>
<th>Diversion</th>
<th>Return Flow</th>
<th>Percent of Monthly Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
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<tr>
<td>February</td>
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<td>November</td>
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<td>December</td>
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<tr>
<td>TOTAL</td>
<td></td>
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</tbody>
</table>
B. Specific and Quantified Conservation Goal

Water conservation goals for the industrial and mining sector are generally established either for (1) the amount of water recycled, (2) the amount of water reused, or (3) the amount of water not lost or consumed, and therefore is available for return flow.

1. Water conservation goal (water use efficiency measure):

Type of goal to be used:
___ Percent of water reused
___ Percent of water not consumed, and therefore returned as flow
___ Other (specify)

2. Provide the specific and quantified five-year and ten-year targets for water savings and the basis for development of such goals for this water use/facility:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

3. Describe the methods and/or device within an accuracy of plus or minus 5% used to measure and account for the amount of water diverted from the source of supply:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

4. Leak-detection, repair, and water-loss accounting measures used:

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

5. Equipment and/or process modifications used to improve water use efficiency:
Appendix E.6 - Water Conservation Plan for an Industrial and Mining

III. WASTEWATER USE CHARACTERISTICS

A. Check the type(s) of wastewater disposal system(s) used at this facility:

- On-site wastewater plant
- Septic tank(s)
- Injection well(s)
- City or regional wastewater system
- Other (Please identify) ________________________________

B. What quantity of fresh water was consumed, and therefore not returned to a wastewater treatment system (public or private), or to a water course (including loss to product, evaporation, injection, etc.)?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

IV. ADDITIONAL COMMENTS/INFORMATION

Please provide any additional information that may indicate the present and future water needs at this facility, and any water problems.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

6. Other conservation techniques used:

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
Best Management Practices Guide

On November 2004, the Texas Water Development Board® (TWDB) Report 362 was completed by the Water Conservation Implementation Task Force. Report 362 is the Water Conservation Best Management Practices (BMP) Guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The BMP Guide is available on the TWDB's website at the link below or by calling (512) 463-7847.


If you have any questions on how to fill out this form or about the Industrial/Mining Water Conservation program, please contact us at 512/239-4691.

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2016 Region M Water Plan
Appendix E.7: Water Conservation Plan for Individually-Operated Irrigation Systems
Texas Commission on Environmental Quality

SYSTEM INVENTORY AND WATER CONSERVATION PLAN
FOR INDIVIDUALLY-OPERATED IRRIGATION SYSTEMS

This form is provided to assist entities in conservation plan development for individually-operated irrigation systems. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Name: Click to add text.
Address: 
Telephone Number: (   )       Fax: (   )
Form Completed by: 
Title: 
Signature: ___________________________ Date: / / 

NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.

I. BACKGROUND DATA
   A. Water Use
      1. Annual diversion appropriated or requested (in acre-feet):

<table>
<thead>
<tr>
<th>Type of crop (include hybrid name e.g., type of coastal Bermuda)</th>
<th>Growing season (months)</th>
<th>Acres irrigated/year</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Total acres: _________________
2. In the table below, list the total amount of water (in acre-feet) on average that is or will be diverted monthly for irrigation during the year.

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>Subtotals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>May</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total All Months</td>
</tr>
</tbody>
</table>

3. Are crops rotated seasonally or annually?  
☐ Yes  ☐ No

If yes, please describe:

4. Describe soil type (including permeability characteristics, if applicable).

B. Irrigation system information

1. Describe the existing irrigation method or system and associated equipment including pumps, flow rates, plans, and/or sketches of system the layout. Include the rate (in gallons per minute or cubic feet per second) that water is diverted from the source of supply.

2. Describe the method(s) and/or device(s) within an accuracy of plus or minus 5% used to measure and account for the amount of water diverted from the source of supply.

3. Describe the specific and quantified five-year and ten-year targets for water savings including, where appropriate, quantitative goals for irrigation water use efficiency.

Quantified five-year and ten-year targets are:

a. 5 year goal _____ % system efficiency or save _____ acre-feet
b. 10 year goal _____ % system efficiency or save _____ acre-feet

(Ex. System efficiencies _____ % sprinkler, _____ % LEPA, _____ % drip)
4. If there is an existing irrigation system, have any system evaluations been performed on the efficiency of the system?

☐ Yes    ☐ No

If yes, please provide the date of the evaluation, evaluator’s name and the results of the evaluation:

C. Conservation practices

1. Describe any water conserving equipment, application system or method in the irrigation system.

2. Describe any methods that will be used for water loss control and leak detection and repair.

3. Describe any water-saving scheduling or practices to be used in the application of water (e.g., irrigation only in early morning, late evening or night hours and/or during lower temperatures and winds) and the utilization of soil-moisture monitoring.

4. Describe any water-saving land improvements or plans to be incorporated into the irrigation practices (e.g., land leveling, conservation tillage, furrow diking, weed control, etc.).

5. Describe any recovery and reuse of tail water runoff.

6. Describe any other water conservation practices, methods, or techniques for preventing waste and achieving conservation.
Best Management Practices

The Texas Water Developmental Board’s (TWDB) Report 362 is the Water Conservation Best Management Practices (BMP) guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The Best Management Practices Guide broken out by sector, including Agriculture, Commercial, and Institutional, Industrial, Municipal and Wholesale along with any new or revised BMP’s can be found at the following link on the Texas Water Developments Board’s website: http://www.twdb.state.tx.us/conservation/bmps/index.asp

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact 512-239-3282.
2016 Region M Water Plan
Appendix E.8: Water Conservation Plan for Agricultural Water Suppliers to Multiple Users
Name: Click to add text
Address: ____________________________________________
Telephone Number: (    ) Fax: (    )
Form Completed by: ______________________________________
Title: __________________________________________________
Signature: ____________________ Date: / / ________________

NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.

I. BACKGROUND DATA
   A. Structural Facilities
      1. Description of service area:

      2. Total miles of main canals and pipelines:

      3. Total miles of lateral canals and pipelines:

      4. Description of canal construction:
         a. Miles of unlined canals ______
         b. Miles of lined canals ______
         c. Miles of enclosed pipelines ______
         d. Other ______

      5. Description of canal conditions and recent or planned improvements:
6. Reservoir capacity, if applicable:

7. Description of pumps and pumping stations:

8. Description of meters and/or measuring devices:

9. Description of customer gates and measuring devices:

10. Description of any other structural facilities not covered above:

B. Management Practices

1. Total water available to district (in acre-feet/year): ______
   a. Maximum water rights allocation to district: ______
   b. Water rights number(s): ______
   c. Other water contracted to be delivered by district: ______

2. Average annual water diverted by district (in acre-feet/year):

3. Average annual water delivered to customers (in acre-feet/year):

4. Delivery efficiency (percentage):
5. **Historical diversion and deliveries for the previous three years (in acre-feet/year):**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Water Diverted Annually</th>
<th>Irrigation Water Delivered Annually</th>
<th>Municipal Water Delivered Annually</th>
<th>Total Water Delivered Annually</th>
<th>Estimated Delivery Efficiency (%)</th>
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</thead>
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<tr>
<td><strong>Average</strong></td>
<td></td>
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</tr>
</tbody>
</table>

6. **Practices and/or devices used to account for water deliveries:**

7. **Water pricing policy:**

8. **Operating rules and policies which encourage water conservation:**

9. Describe **specific and quantified five-year and ten-year targets for water savings** including maximum allowable losses for the storage and distribution system:

10. Describe the practice(s) and/or device(s) which will be utilized to measure and account for the amount of water diverted from the source(s) of supply:

11. Describe the monitoring and record management program for water deliveries, sales, and losses:
12. Describe any methods that will be used for water loss control, leak detection, and repair:

13. Describe any program for customer assistance in the development of on-farm water conservation and pollution prevention measures:

14. Describe any other water conservation practice, method, or technique which the supplier shows to be appropriate for achieving conservation (if applicable):

C. User profile

1. Total number of acres or square miles in service area:

2. Average number of acres irrigated annually:

3. Projected number of acres to be irrigated in 10 years:

4. Number of active irrigation customers:

5. Total irrigation water delivered annually (in acre-feet):

6. Types of crops grown by customers:

7. Types of irrigation systems used by customers:

8. Types of drainage systems used by customers:

9. Further description of irrigation customers:
10. List of municipal customers and number of acre-feet allocated annually:

11. List of industrial and other large customers and number of acre-feet allocated annually:

D. Additional Requirements

1. A requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution, or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in 30 TAC chapter 288; if the customer intends to resell the water, then the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter. Provide a detailed description of how the water will be utilized in the production process including how the water is diverted and transported from the supply source(s).

2. Evidence of official adoption of the water conservation plan and goals, by ordinance, rule, resolution, or tariff, indicating that the plan reflects official policy of the supplier.

3. Documentation of coordination with the Regional Water Planning Groups in order to insure consistency with the appropriate approved regional water plans.

Best Management Practices

The Texas Water Developmental Board’s (TWDB) Report 362 is the Water Conservation Best Management Practices (BMP) guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The Best Management Practices Guide broken out by sector, including Agriculture, Commercial, and Institutional, Industrial, Municipal and Wholesale along with any new or revised BMP’s can be found at the following link on the Texas Water Developments Board’s website: [http://www.twdb.state.tx.us/conservation/bmps/index.asp](http://www.twdb.state.tx.us/conservation/bmps/index.asp)

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact 512-239-3282.
2016 Region M Water Plan
Appendix E.9: Water Conservation Plan for Agricultural (Non-Irrigation)
Texas Commission on Environmental Quality

AGRICULTURAL WATER CONSERVATION PLAN
(NON-IRRIGATION)

This form is provided to assist entities in conservation plan development for agricultural water uses. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Supply Division at (512) 239-4691.

If you have any questions on how to fill out this form or about the ____________________________ program, please contact us at 512/239-______.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512-239-3282.

Name: ____________________________________________
Address: _________________________________________
Telephone Number: (    ) Fax: (    )
Form Completed By: ________________________________
Signature: ________________________________________
Title: ________________________________ Date: _________

NOTE: If the plan does not provide information for each requirement below, include an explanation of why the requirement is not applicable.

I. BACKGROUND DATA

A. Diversion

   1. Annual diversion requested or appropriated (in acre-feet): ____________
   2. Maximum diversion rate (cubic feet per second): ______________________

B. Water Sources

   1. Indicate next to the appropriate source(s) below, the maximum or average annual amounts of water currently used and anticipated to be used (in acre-feet) for agricultural uses (other than for irrigation):
<table>
<thead>
<tr>
<th>Source</th>
<th>Current Use</th>
<th>Anticipated Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groundwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchased</td>
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<tr>
<td>TOTAL</td>
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</tbody>
</table>

2. How was the surface water figure provided in (B1) above obtained?

- Master meter
- Customer meter
- Other

If other, identify source: ________________________________

3. How was the groundwater figure provided in (B1) above obtained?

- Master meter
- Customer meter
- Other

If other, identify source: ________________________________

4. Was purchased water □ raw or □ treated

If both, ___ % raw and ___ % treated

Supplier(s): __________________________________________

C. Agricultural Activity

Indicate below the major agricultural activity.

- cultivating the soil to produce crops for human food, animal feed, or planting seed or for the production of fibers;
- the practice of floriculture, viticulture, silviculture, and horticulture, including the cultivation of plants in containers or non-soil media by a nursery grower;
- raising, feeding, or keeping animals for breeding purposes or for the production of food or fiber, leather, pelts, or other tangible products having a commercial value;
- raising or keeping equine animals;
- wildlife management; or
- planting cover crops, including cover crops cultivated for transplantation, or leaving land idle for the purpose of participating in any governmental program or normal crop or livestock rotation procedure.
II. WATER USE AND CONSERVATION PRACTICES

A. Agricultural Activity Water Use

1. Describe how the water is diverted and transported from the source of supply and how the water is utilized in the agricultural activity.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

2. List the monthly surface water demand or projected demand if requesting a new appropriation (in acre-feet).

<table>
<thead>
<tr>
<th></th>
<th>Return Flow (if applicable)</th>
<th>Percent of Monthly Demand (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversion</td>
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<td>December</td>
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<tr>
<td>TOTAL</td>
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<td></td>
</tr>
</tbody>
</table>
B. Conservation Practices

1. Indicate specific and quantified five-year and ten-year targets for water savings and the basis for developing of such goals.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

2. Describe the device(s) and/or method(s) used to measure and account for the amount of water diverted from the source of supply.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

3. Can the amount of water diverted from the source be measured and accounted for within an accuracy of plus or minus 5%? □ YES □ NO

4. Describe the leak-detection, repair, and water-loss accounting measures to be used.

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
5. Describe the equipment and/or process modifications to be used to improve water use efficiency.

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

6. List any other appropriate practice, method, or technique, not listed above, for achieving water conservation.

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

III. ADDITIONAL COMMENTS/INFORMATION

Please provide any additional information that may indicate present and future water needs for this water use and any water problems that may have.

__________________________________________________________________

__________________________________________________________________

Best Management Practices Guide

On November 2004, the Texas Water Development Board’s (TWDB) Report 362 was completed by the Water Conservation Implementation Task Force. Report 362 is the Water Conservation Best Management Practices (BMP) Guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The BMP Guide is available on the TWDB’s website at the link below or by calling (512) 463-7847.