

Trinity River Authority of Texas

Tarrant County Water Supply Project

***Water Conservation & Drought Contingency
Plan***

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***Prepared
by
Trinity River Authority of Texas***

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Trinity River Authority of Texas Tarrant County Water Supply Project Water Conservation & Drought Contingency Plan

1. INTRODUCTION

The Trinity River Authority of Texas (Authority) is a governmental agency of the State of Texas created as a conservation and reclamation district under Article XVI, Section 59 of the Constitution pursuant to Chapter 518, Acts of the 54th Legislature of Texas, Regular Session, 1955, as amended. The Authority is empowered to construct, own and operate wholesale water supply, treatment, and distribution facilities and wholesale sewerage gathering, transmission, treatment, and disposal facilities, to charge for such services, and to make contracts in reference thereto with municipalities and others.

The Authority's defined territory includes all of Dallas, Tarrant, Ellis, Navarro, Chambers Counties, and the principal watershed portions of Anderson, Freestone, Henderson, Houston, Kaufman, Leon, Madison, Polk, San Jacinto, Trinity, Walker, and Liberty Counties. The Authority is governed by a Board of 25 directors who are appointed by the Governor with the advice and consent of the Texas Senate. The first directors were appointed for staggered terms, and directors thereafter have served six-year terms. Three of the directors are appointed from the area-at-large; three directors are from Tarrant County; four are from Dallas County; and one director is from each of the other 15 counties.

This Water Conservation Plan and Drought Contingency Plan pertains to the use of water by the Authority's contracting parties of the Tarrant County Water Supply Project (TCWSP) and are intended to meet the requirements of the Texas Commission on Environmental Quality (TCEQ), Texas Water Development Board (TWDB), and the Tarrant Regional Water District.

2. WATER CONSERVATION PLAN

2.1 Introduction

The Authority provides wholesale treated water to five contracting parties of the TCWSP. As the contracting parties retail utility systems are separate from the Authority's treated water system, the Authority does not have the ability to implement most of the water conservation measures discussed in this Program. The contracting parties shall be able to implement these measures as a part of their respective retail water supply operations. The Authority's role in this program will include the administration and promotion of the Water Conservation Plan, public education and information, and investigations into wastewater reuse.

2.2 Planning Area Description

Raw water for the Authority's TCWSP comes from the Tarrant Regional Water District (TRWD) East Texas Water System. Raw water is impounded in the Cedar Creek and Richland-Chambers Lakes in East Texas and moved to the greater Tarrant County area by a TRWD pipeline network. There is a tap in the line that allows water to flow into Village Creek, which is the principal tributary of Lake Arlington.

The Authority pumps raw water from Lake Arlington, treats it and delivers it on a wholesale basis to five cities in northeast Tarrant County. Originally established in 1974 to provide 6 million gallons per day (mgd) of treated water for the cities of Bedford and Euless, this project has been expanded six times, including the last expansion to its current capacity of 87 mgd completed in 2008. In 1980, the plant's service area was expanded to include the City of Colleyville and parts of Grapevine and North Richland Hills. The expansion of the plant's capacity is in response to population growth within the customer cities. The TCWSP system will ultimately deliver 118 mgd to the contracting parties.

For more detailed information on the TCWSP service area such as population and historical water use information, please see Appendix A.

2.3 Conservation Goals

The Authority's water conservation goals are to: (1) provide an adequate supply of high-quality treated water to meet the needs of its wholesale customers; and to (2) encourage its wholesale customers to adopt and implement water conservation plans that will reduce per capita and peak use demands.

The Authority's water conservation program is predicated on the fact that the implementation of conservation measures must occur largely at the local level. The Authority's program is focused on encouraging and supporting initiatives by its wholesale customers.

The Authority will assist its customers in the development of water conservation programs. TRWD has developed a *Model Water Conservation Plan for TRWD Customers* and a *Model Drought Contingency Plan for TRWD Customers*, which the Authority's customers can use to develop their own water conservation and drought contingency plans.

As part of the model water conservation plan, the Authority requires water utility customers to provide annual water conservation reports, modeled after the Utility Profile developed by TCEQ. The Authority will review these reports and compile the information as part of its own annual conservation report, which will be submitted to TRWD's water conservation coordinator.

In order to set a wholesale water supplier goal for municipal water conservation, baseline per capita water use must first be determined. It was determined to use the Year 2016 Water Use Data from the Texas Water Development Board Water User Group Entity Detailed gpcd Report as inputs for a system-wide calculation of municipal gpcd. Using these data, the gpcd is summarized in the following table.

TRA Project	Wholesale Customer	Estimated Population	Total Net Water Use (Gallons)	Total Net Water Use (AF)	GPCD
TCWSP	Bedford	43,915	2,383,125,000	7,314	172
	Colleyville	24,210	2,207,503,000	6,775	
	Euless	54,250	2,320,308,000	7,121	
	Grapevine	47,836	4,664,754,000	14,316	
	NRH	63,939	3,093,107,030	9,492	

Source: Regional Water Planning Water User Group (WUG) Utility – Detailed GPCD Report 2016 (<http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/index.asp>)

In a special report to the 79th Legislature, the TWDB recommends a minimum annual reduction of one percent total gpcd, based upon a five-year rolling average until at such time as an entity achieves a total gpcd of 140 or less. The per capita use does not include the effect of new water conservation measures that may be adopted by the Authority’s customers. Assuming a 1% reduction each year results in an estimated 2019 gpcd of 167. Following are targets for reduction to municipal per capita use due to the implementation of this water conservation and drought contingency plan and the plans to be developed by the Authority’s customers.

- **The target for the five-year (2024) municipal per capita water use for the Authority’s customers is 159 gpcd in an average climatic year.** This represents a five percent reduction of eight gallons per capita per day from 2019 to 2024; and
- **The target for the ten-year (2029) municipal per capita water use for the Authority’s customers is 151 gpcd in an average climatic year.** This represents a decrease of eight gallons per capita per day, or five percent from 2024 to 2029.

Projected total per capita water use figures are based on average climate conditions. Per capita water use in years with less precipitation, especially during the summer, should be more than projected here. The TRWD estimates that more of its water supplies will be derived from indirect reuse.

The long-term goal for conservation is to increase water use efficiency and reduce the waste of water. However, the Authority has limited control of water use because it is a

wholesale provider of those supplies. Achievement of significant water conservation savings can only occur if each retail water user sets and implements its own water conservation programs.

2.4 Metering Water Diverted from the Source of Supply

The Authority meters the amount of raw water pumped from Lake Arlington to the TCWSP water treatment plant. In addition, treated water pumped from the TCWSP water treatment plant to each customer city is metered by the Authority. The contracting parties then meter water delivered to their customers. As a wholesale water supplier, the Authority has instituted a monitoring and record management program to assure that its customers are charged appropriately for their water use.

One of the goals of the Authority's water conservation program is to maintain unaccounted water below five percent in every year.

2.5 Monitoring and Record Management Program

Each year the Authority's records, including water sales, deliveries, and losses are audited by an independent auditor. In addition, flow records and reports are routinely audited by the Authority's internal auditor.

2.6 Metering/Leak Detection and Repair Program

Master metering of the wholesale customers by the Authority will provide an accurate accounting of water use by each retail system.

The contracting parties shall meter all retail water uses and will be encouraged to provide a master meter as well as metering of all utility, city and other public facilities. The contracting parties will manage their ongoing leak detection, location and repair programs. Waterline leaks are detected by utility personnel while reading meters, maintaining their water and wastewater systems, and while performing other routine surveillance programs. Periodic water audits shall be utilized to determine if leaks exist which have gone undetected.

In addition, the Authority will monitor for leaks any water storage, delivery, and distribution system components used to transport treated water prior to delivery to the wholesale customers. Any reported leaks will be repaired in a timely manner.

Starting in March of 2014, TRA began a program to use free-swimming acoustic sensors to locate leaks within the TCWSP distribution system. The sensors are deployed in pipelines and are carried by the water stream to an extraction point. While in the pipeline, sensors record information on location while listening for leaks. Because the sensors have no motors and do

not generate noise, they are capable of detecting pinhole-sized leaks. This technology should greatly increase TRA's ability to detect and repair water leaks, reducing water loss.

2.7 Reservoir Operations Plan

This requirement is not applicable to the TCWSP.

2.8 Water Supply Contracts

Every contract for the wholesale sale of water entered into, renewed, or extended by the Authority after the adoption of this water conservation and drought contingency plan will include a requirement that the wholesale customer and any wholesale customers of that wholesale customer develop and implement a water conservation plan meeting the requirements of Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code. This requirement will extend to each successive wholesale customer in the resale of water. All customers Plans must be reviewed and approved by the Authority before water sales contracts are signed.

2.9 Enforcement Procedure and Official Adoption

Resolution No. R-1162-3 adopts the Water Conservation Plan for the Authority by the Authority's Board of Directors. The General Manager, or his/her designee(s), is authorized and directed to implement the applicable provisions of the Plan. The General Manager, or his/her designee(s), will act as the administrator of the plan, oversee the execution and implementation of the plan, and will be responsible for keeping adequate records for program verification.

2.10 Coordination with Regional Planning Groups

The water service area of the TCWSP is located within Region C, and the Authority will provide a copy of the Plan to Region C planning group.

2.11 Review and Update of Water Conservation Plan

As required by TCEQ rules, the Authority will review and update this Water Conservation Plan by May 1, 2024 and every five years thereafter. The Water Conservation Plan will be updated as appropriate based on new or updated information.

3. DROUGHT CONTINGENCY PLAN

3.1 Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and to 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 Authority adopts the following Drought Contingency Plan.

The purpose of the Plan:

- To conserve the available water supply in times of drought and emergency;
- To maintain supplies for domestic water use, sanitation, and fire protection;
- To protect and preserve public health, welfare, and safety;
- To minimize the adverse impacts of water supply shortages; and
- To minimize the adverse impacts of emergency water supply conditions.

3.2 Public Involvement

The Plan will be adopted under the open meetings requirement of the TCEQ during the April 24, 2019 Board of Directors meeting. The Authority recognizes the need for developing a regional approach to implementing water conservation strategies. The Authority is working closely with the TRWD and other water suppliers to create an educational campaign with unified themes and messages. The campaign will be designed to provide people with information and tools that can be used to save water. The extensive effort will consist of multiple methods to reach and educate the public, which may include:

- Television ads
- Radio ads
- Transit ads
- Billboards
- Yard signs
- Newspaper and magazine ads
- Messages on gasoline pumps (“pump toppers”)
- Movie theater ads
- Mall ads
- Fact sheets
- Web site
- An ongoing print and media relations campaign with print and electronic media.
- Wholesale Other outreach programs, such as a traveling exhibit for community events and meetings with representatives of plumbing, landscape irrigation, nurseries, and other industries with influence on water use.

The specifics of the public outreach and education campaign will vary depending on the circumstances of future droughts, but the foregoing efforts demonstrate the Authority's commitment to an appropriate drought response.

3.3 Water Customer Education

The Authority will provide wholesale customers with information as appropriate 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. A copy of the Plan will be provided to each wholesale water customer.

3.4 Coordination with Regional Water Planning Groups

The water service area of the TCWSP is located within the Region C, and the Authority will provide a copy of the Plan to Region C planning group.

3.5 Criteria for Initiation and Termination of Drought Response Stages

Initiation of Drought Response Stages

The General Manager, or his/her designee(s), may order the implementation of a drought response stage or water emergency when one or more of the trigger conditions for that stage is met. The following actions will be taken when a drought stage is initiated:

- The designated representative(s) of primary customers will be notified by telephone or email with a follow-up letter that provides details of the reasons for initiation of the drought stage;
- The public will be notified through local media following the notification of primary wholesale customers; and
- If any mandatory provisions of the drought contingency plan are activated, the Authority will notify the Executive Director of the TCEQ within five business days.

The General Manager, or his/her designee(s), may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs.

The trigger conditions in the Plan pertaining to TRWD's system volume were established following an intensive study of the North Texas climate and its impact on water supplies by Hydrosphere, an engineering firm based in Boulder, Colorado. The study projected the effects of simulated weather patterns on the combined storage capacity of TRWD reservoirs. Using computer simulations, Hydrosphere compared the water savings that would be achieved at various

trigger points with and without outdoor watering restrictions in place. Under severe drought conditions, the estimated water savings that would be achieved by implementing the Plan would extend water supplies by several months. The Authority also has triggers which relate to the capacity of the Tarrant County Water Supply Project (TCWSP).

Termination of a Drought Stage

The General Manager, or his/her designee(s), will order the termination of a drought response stage or water emergency when the conditions for termination are met at his/her discretion. The following actions will be taken when a drought stage is terminated:

- The designated representative(s) of primary wholesale customers will be notified by telephone with a follow-up letter or email;
- The public will be notified through local media following the notification of primary wholesale customers; and
- When mandatory provisions of the drought contingency plan that have been activated are terminated, the Authority will notify the Executive Director of the TCEQ within five business days.

The General Manager, or his/her designee(s), may decide, under special circumstances, not to order the termination of a drought response stage or water emergency even though conditions for termination of the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought stage.

3.6 Drought Response Stages

Stage 1, Water Watch

Triggering and Terminating Conditions

TRWD has initiated Stage 1 – Water Watch for one or more of the following reasons:

- Total combined raw water supply in TRWD western and eastern division reservoirs drops below 75% (25% depleted) of conservation storage capacity;
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate;
- Water demand is projected to approach the limit of permitted supply;
- Supply source becomes contaminated;
- Water supply system is unable to deliver water due to the failure or damage of major water system components; and
- The General Manager finds that conditions warrant the declaration of a Stage 1 drought.

Subject to paragraphs regarding the Termination of a Drought Response stage, Stage 1, Water Watch will be terminated when the total combined raw water supply in TRWD's western and eastern division reservoirs exceeds 95% of conservation storage or remains above 85% for 90 consecutive days, whichever occurs first.

Goal for Use Reduction

The goal for water use reduction under Stage 1, Water Watch, is to decrease use by five percent. If circumstances warrant, the General Manager can set a goal for greater water use reduction.

Water Use Reduction Actions under Stage 1, Water Watch

The General Manager may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. TRWD must notify TCEQ within five business days if any mandatory measures are implemented.

- Require customers (including indirect customers) to initiate Stage 1 in their drought contingency plans. Indirect customers include any successive wholesale customers of TRWD's primary wholesale customers to the extent provided for in water sales contracts.

All Water Users

- Maximum of twice per week watering for hose-end sprinklers and automatic irrigation systems based on odd/even addresses and day of week schedule.

Stage 1, Water Watch, Outdoor Watering Schedule		
Monday	No Outdoor Watering	Water System Recovery Day
Tuesday and Friday	Non-Residential Sites	Apartments, Parks, Common Areas, HOA's, Businesses
Wednesday and Saturday	Residential Addresses Ending in Even Numbers	0,2,4,6,8
Thursday and Sunday	Residential Addresses Ending in Odd Numbers	1,3,5,7,9

Exceptions:

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time;
- The use of water necessary to protect the health, safety, or welfare of the public;

- Water use necessary for the repair of an irrigation system, plumbing line, fountain, etc. in the presence of person making repair;
- Variances may be available through the water utility department for the following:
 - Establishing new turfgrass and/or landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30 days from the date of approval then maximum of twice per week watering schedule applies;
 - Variances do not apply to the installation of cool season grasses (over seeding);
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the Water Utilities Director, if the Water Utilities Director determines that a property cannot be completely irrigated with an average of three-quarters of an inch of water in a single day, and that the property should be divided into sections to be irrigated on different days. If approved, no station will be watered more than twice per week; and
 - Restrictions do not apply to well water, reclaimed water, or other alternative water sources.
- No watering with hose-end sprinklers and/or automatic spray irrigation systems between 10 a.m. and 6 p.m.;
- Water waste is prohibited - which includes the following:
 - failure to repair a controllable leak, including, broken sprinkler heads, leaking valves, leaking or broken pipes or faucets;
 - knowingly operating an irrigation system with: (a) a broken head; (b) a head that is out of adjustment and spraying into the street, parking area, or sidewalk; or (c) a system that is misting/fogging due to excessive water pressure; or
 - allowing any water to: (a) run off property forming a stream of water for a distance of 50 feet or greater; (b) run into a storm drain; or (c) pond to a depth of ¼ inch or greater; or
 - allowing or causing an irrigation system or other lawn watering device to operate during any form of precipitation or when temperatures are at or below 32 degrees Fahrenheit.

- Discourage hosing of paved areas;
- Discourage hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting or maintenance;
- Washing of any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle shall be limited to the use of a hand-held bucket or a hand-held hose equipped with a positive-pressure shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the premises of a commercial car wash or commercial service station. Companies with an automated on-site vehicle washing facility may wash its vehicles at any time; and
- Discourage the filling, draining, or refilling of swimming pools, wading pools, hot tubs and Jacuzzi type pools except to maintain adequate water levels for structural integrity, proper operation and maintenance, and/or to alleviate an issue that poses a public safety risk.

City and Local Governments

In addition to the action items listed above:

- Review conditions and problems that caused Stage 1. Take corrective action;
- Increase public education efforts on ways to reduce water use;
- Increase enforcement efforts;
- Intensify leak detection and repair efforts;
- Audit all city and local government irrigation systems to ensure proper condition, settings, and operation;
- Identify and encourage voluntary reduction measures by high-volume water users through water use audits; and
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the Water Utilities Director. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems.

Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by five percent;
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by five percent; and

- Public areas that are open to the public at-large and have a high-impact from frequent use may be allowed additional watering, with a variance granted by the Water Utilities Director, if it is deemed to be beneficial to serve and protect the community amenity. Examples may include but are not limited to: outdoor amphitheaters, demonstration gardens, public art exhibits, outdoor learning areas, arboretums, etc.
- Reduce non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency; and
- Notify wholesale customers of actions being taken and request them to implement the same drought stage and measures.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of parks, golf courses and athletic fields is restricted to the twice per week watering schedule; or twice per week per irrigation station if a variance is granted by the water provider. (See exceptions to outdoor watering restrictions in all water users category above for facilities with large multi-station irrigation systems).

Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by five percent; and
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by five percent.
- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions;
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons per request only;
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels;
- Car wash facilities must keep equipment in good working order and inspect equipment regularly to be sure there are no leaks, no broken or misdirected nozzles, and operating efficiently; and

- All commercial and industrial customers are encouraged to audit irrigation systems to ensure proper condition, settings, and operation. If irrigation audit or repair occurs during restricted watering times or days, a sign indicating such work is taking place must be placed in public view until job is completed.

Stage 2, Water Warning

Triggering and Terminating Conditions

TRWD has initiated Stage 2 – Water Warning for one or more of the following reasons:

- Total raw water supply in TRWD western and eastern division reservoirs drops below 60% (40% depleted) of conservation storage capacity;
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate;
- Water demand is projected to approach the limit of permitted supply;
- Supply source becomes contaminated;
- Water supply system is unable to deliver water due to the failure or damage of major water system components; and
- The General Manager finds that conditions warrant the declaration of a Stage 2 drought.

Subject to preceding paragraphs regarding the Termination of a Drought Response stage, Stage 2, Water Warning, will be terminated when the total combined raw water supply in TRWD’s western and eastern division reservoirs exceeds 75% of conservation storage or remains at or above 70% for 30 consecutive days, whichever occurs first.

Goal for Use Reduction

The goal for water use reduction under Stage 2, Water Warning, is to decrease use by 10 percent. If circumstances warrant, the General Manager can set a goal for greater water use reduction.

Water Use Reduction Actions under Stage 2, Water Warning

The General Manager may order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. TRWD must notify TCEQ within five business days if any mandatory measures are implemented.

- Continue or initiate any actions available under Stage 1;
- Require customers (including indirect customers) to initiate Stage 2 in their drought contingency plans. Indirect customers include any wholesale customer of TRWD’s primary wholesale customers to the extent provided for in water sales contracts; and

- Initiate engineering studies to evaluate water supply alternatives should conditions worsen.

All Water Users

- Maximum of once per week watering for hose-end sprinklers and automatic irrigation systems based on odd/even addresses and day of week schedule.
- Once per week watering schedule will be determined at such time as necessary by TRWD and its primary water customers. Due to the variation in water storage and delivery systems of TRWD customers, specific watering days per address may vary across TRWD's service area.

Exceptions:

- Watering with a handheld hose, soaker hose or drip irrigation may occur any day and any time.
- Variances may be available through the water utility department for the following:
 - All users are encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping. Variances granted for establishing new turfgrass or landscaping will be for a maximum of 30 days from the date of approval then maximum of twice-per-week watering schedule applies;
 - Variances do not apply to the installation of cool season grasses (overseeding);
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the Water Utilities Director, if the Water Utilities Director determines that a property cannot be completely irrigated with an average of three-quarters of an inch of water in a single day, and that the property should be divided into sections to be irrigated on different days. If approved, no station will be watered more than once per week; and
 - Restrictions do not apply to well water, reclaimed water, or other alternative water sources.
- Encourage the use of covers for all types of pools, hot tubs, and Jacuzzi type pools when not in use.

City and Local Governments

In addition to the actions listed above:

- Continue or initiate any actions available under Stage 1;
- Review conditions or problems that caused Stage 2. Take corrective action;

- Increase frequency of media releases on water supply conditions;
- Further accelerate public education efforts on ways to reduce water use; and
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if a variance is granted by the water provider. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for facilities with large multi-station irrigation systems).

Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by ten percent;
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. Encouraged to reduce water use by ten percent;
- Eliminate non-essential water use. As used herein, non-essential water uses are those that do not have any health or safety impact and are not needed to meet the core function of the agency; and
- Notify wholesale customers of actions being taken and request them to implement the same drought stage and measures.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of municipal parks, golf courses and athletic fields is restricted to a once-per-week schedule; or once-per-week per irrigation station if a variance is granted by the water provider. (See Stage 1 exceptions to outdoor watering restrictions in all water users category for rules that apply to facilities with large multi-station irrigation systems).

Exceptions:

- Golf courses may water greens and tee boxes as necessary, however, use of spray irrigation may not be done between 10 a.m. and 6 p.m. Encouraged to reduce water use by ten percent.
- Watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or

officials present for athletic events. Encouraged to reduce water use by ten percent.

- Use of water from hydrants for any purpose other than firefighting related activities, or other activities necessary to maintain public health, safety and welfare, requires a variance issued by the Water Utilities Director. Fire hydrant use may be limited to only designated hydrants. Upon declaration of this drought stage, all holders or applicants of a Water Fire Hydrant Meter Agreement are required to apply for a variance as set forth in this plan. If conditions allow, as determined by the Water Utilities Director, the use of water from hydrants may continue until the Water Utilities Director or his/her official designee issues a determination on the petition for variance. If conditions do not allow, the Water Utilities Director may require all fire hydrant meters to be immediately returned from the field, pending determination of each petition for variance.

Stage 3, Water Emergency

Triggering and Terminating Conditions

TRWD has initiated Stage 3 – Water Emergency for one or more of the following reasons:

- Total raw water supply in TRWD western and eastern division reservoirs drops below 45% (55% depleted) of conservation storage capacity;
- Water demand exceeds the amount that can be delivered to customers;
- Water demand for all or part of the TRWD delivery system approaches delivery capacity because delivery capacity is inadequate;
- One or more of TRWD's water supply sources has become limited in availability;
- Water demand is projected to approach the limit of permitted supply;
- Supply source becomes contaminated;
- Water supply system is unable to deliver water due to the failure or damage of major water system components; and
- The General Manager finds that conditions warrant the declaration of a Stage 3 drought.

Subject to preceding paragraphs regarding the Termination of a Drought Response stage, Stage 3, Water Emergency, will be terminated when the total combined raw water supply in TRWD's western and eastern division reservoirs exceeds 60% of conservation storage or remains at or above 55% for 30 consecutive days, whichever occurs first.

Goal for Use Reduction

The goal for water use reduction under Stage 3, Water Emergency, is to decrease use by 20 percent. If circumstances warrant, the General Manager can set a goal for greater water use reduction.

Water Use Reduction Actions under Stage 3, Water Emergency

The General Manager can order the implementation of any of the actions listed below, as deemed necessary. Measures imposing mandatory requirements on customers require notification to TCEQ. TRWD must notify TCEQ within five business days if these measures are implemented.

- Continue actions available under Stages 1 and 2.
- Require customers (including indirect customers) to initiate Stage 3 in their drought contingency plans. Indirect customers include any wholesale customer of TRWD's primary wholesale customers to the extent provided for in water sales contracts.

All Water Users

- Prohibit all outdoor watering.

Exceptions:

- Watering with hand-held hose, soaker hose or drip irrigation system may occur any day and any time. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials).
- Restrictions do not apply to well water, reclaimed water, or other alternative water sources.
- Irrigation of new landscapes and/or turfgrass installations is prohibited by means of automatic irrigation system or hose-end sprinkler. Variances may be granted for those landscape projects started prior to the initiation of stage 3 drought restrictions. However, variances will not be granted for the irrigation of new landscape and/or turfgrass installations after the initiation of Stage 3 drought restrictions.
- Prohibit washing of paved areas by any means except where a variance is granted to alleviate a possible public health and safety risk. Any power washing activities must be performed by a professional power washing service utilizing high efficiency equipment and a vacuum recovery system where possible.
- Prohibit hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting with high-pressure equipment. Must be performed by a professional power washing service utilizing high efficiency equipment and a vacuum recovery system where possible.
- Vehicle washing is restricted to commercial car washes, commercial service stations, or professional washing services only. This includes home and charity car washing. The

washing of garbage trucks and vehicles used to transport food and/or other perishables may take place as necessary for health, sanitation, or public safety reasons.

- Prohibit permitting of private pools. Pools already permitted may be completed and filled. Existing private and public pools may add water to maintain pool levels but may not be drained and refilled.
- Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or water quality.

City and Local Governments

- Continue or initiate any actions available under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Increase frequency of media releases explaining emergency situation and/or water supply conditions.
- Landscape watering at municipal parks, golf courses, and sports fields is prohibited. Variances may be granted by the water provider under special circumstances.

Exceptions:

- Golf course greens and tee boxes may be watered by hand as necessary; however, watering may not be done between 10 a.m. and 6 p.m.
- Variances should be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events may occur as necessary to protect the health and safety of the players, staff, or officials present for athletic events. A water use management plan must be submitted to the Water Utilities Director detailing how each area will comply with stage 3 drought measures.
- Professional and college sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as necessary to maintain league standards.
- If TRWD has imposed a reduction in water available to customers, impose the same percent reduction on wholesale customers.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users. Landscape watering of municipal parks, golf courses and athletic fields is prohibited. Variances may be granted by the water provider under special circumstances.

Exceptions:

- Golf course greens and tee boxes may be watered by hand as necessary; however, watering may not be done between 10 a.m. and 6 p.m.
- Variances should be available for watering of athletic fields (field only, does not include surrounding landscaped areas) used for organized sports practice, competition, or exhibition events to protect the health and safety of the players, staff, or officials present for the athletic event. A water use management plan must be submitted to the Water Utilities Director detailing how each area will comply with stage 3 drought measures.
- Professional and college sports fields (playing fields with a stadium only – not surrounding landscaping) may be watered as necessary to maintain league standards.
- Commercial water users may be required to reduce water use by a set percentage as determined by the Water Utilities Director.

3.7 Procedure for Curtailment of Water Supplies

Any mandatory reduction to deliveries from TRWD to its customers shall be distributed as required by Texas Water Code Section 11.039. In addition, every wholesale water supply contract entered into or renewed after adoption of this plan, including contract extensions, shall include a provision that water will be distributed in accordance with the Texas Water Code Section 11.039 in case of a water shortage resulting from drought.

To the extent not prevented by enforcement of provisions in the Water District's wholesale contracts in effect before November 28, 1999, TRWD will implement pro rata curtailment of water deliveries pursuant to Texas Water Code Section 11.039.

3.8 Procedure for Granting Variances to the Plan

The General Manager, or his/her designee(s), may grant temporary variances for existing water uses otherwise prohibited under this drought contingency plan to a customer if one or more of the following conditions are met:

- Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the person requesting the variance.
- Compliance with this Plan cannot be accomplished due to technical or other limitations.
- Alternative methods that achieve the same level of reduction in water use can be implemented.

- Variances shall be granted or denied at the discretion of the General Manager, or his/her designee(s). All petitions for variances should be in writing and should include the following information:
 - Name and address of petitioner(s);
 - Purpose of water use;
 - Specific provisions from which relief is requested;
 - Detailed statement of the adverse effect of the provision from which relief is requested;
 - Description of the relief requested;
 - Period of time for which the variance is sought;
 - Alternative measures that will be taken to reduce water use; and
 - Other pertinent information.

3.9 Procedure for Enforcing Mandatory Water Restrictions

TRWD customers (direct and indirect) shall provide the Authority with an order, ordinance, or resolution to demonstrate adequate enforcement provisions for the customer's own drought contingency plan.

Mandatory water use restrictions may be imposed in Stage 1, Stage 2, and Stage 3 drought stages. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

- On the first violation, the customer will be given a written warning that they have violated one or more of the mandatory water use restrictions; and
- The Authority may petition the TCEQ to initiate formal enforcement action against customers that repeatedly fail to comply with the mandatory water use restrictions implemented during any stage of this water conservation and drought contingency plan.

3.10 Review and Update of Drought Contingency Plan

As required by TCEQ rules, the Authority will review and update this Plan in May 2019 and every five years thereafter. The Plan will be updated as appropriate based on new or updated information.

3.11 Severability

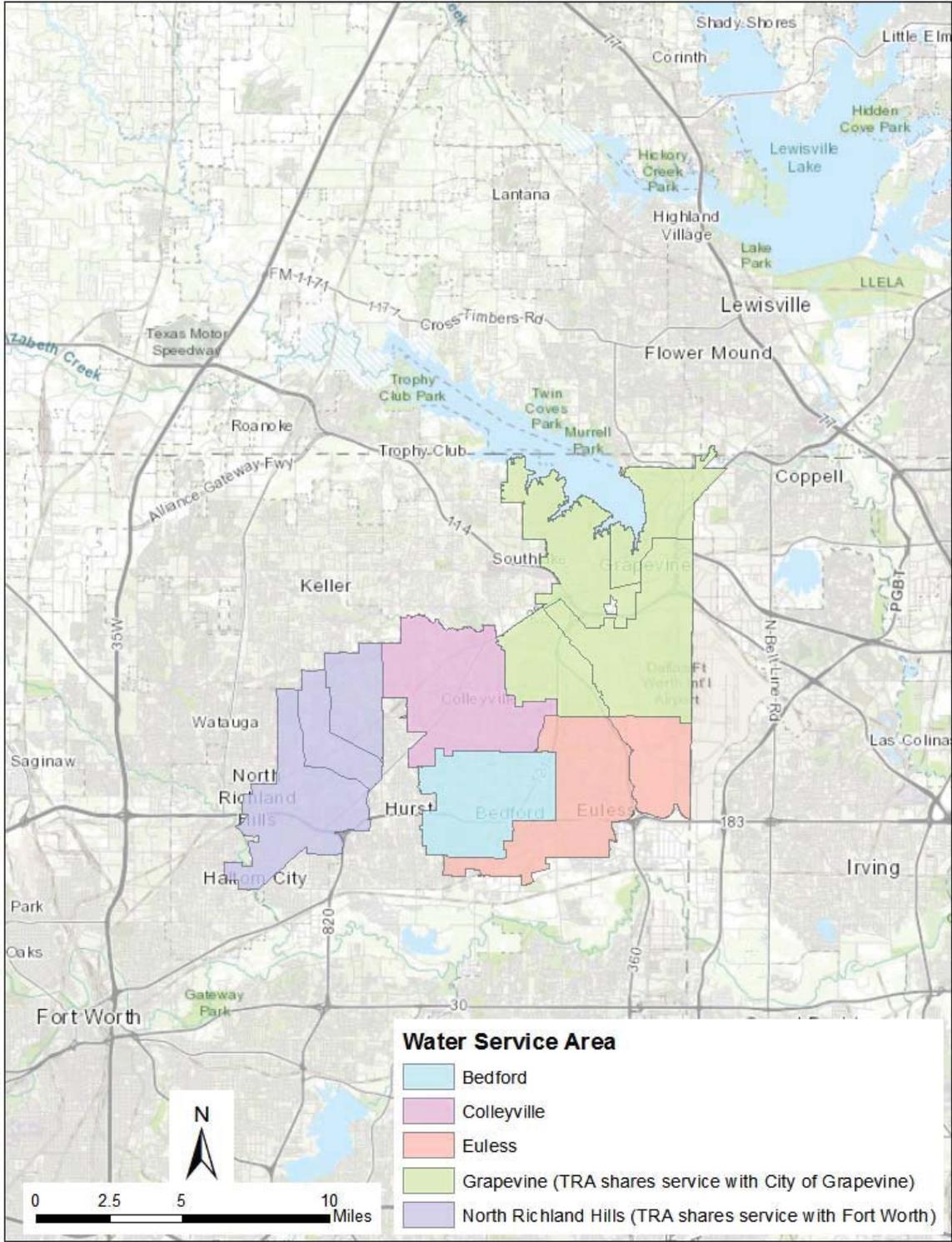
It is hereby declared to be the intention of the Authority that the sections, paragraphs, sentences, clauses, and phrases of the Plan are severable and, if any phrase, clause, sentence, paragraph, or section of the Plan shall be declared unconstitutional by the valid judgment or

decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of the Plan, since the same would not have been enacted by the Authority without the incorporation into the Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

APPENDIX A

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers (Form 20162)

Tarrant County Water Supply Project Service Areas



2021 Regional Water Plan - Water Demand Projections for 2020-2070 (in Acre-Feet)

WUG Name	County	2020	2030	2040	2050	2060	2070
BEDFORD	TARRANT	9,202	9,679	10,191	10,785	10,768	10,768
COLLEYVILLE	TARRANT	9,211	9,693	10,313	10,656	10,648	10,648
EULESS	TARRANT	9,062	9,298	9,116	9,016	8,997	8,996
GRAPEVINE	TARRANT	18,406	18,806	18,665	18,589	18,574	18,573
NORTH RICHLAND HILLS	TARRANT	12,812	13,457	13,254	13,140	13,116	13,115

Source: <http://www.twdb.texas.gov/waterplanning/data/projections/2022/demandproj.asp>

2021 Regional Water Plan – Population Projections for 2020-2070

WUG Name	County	2020	2030	2040	2050	2060	2070
BEDFORD	TARRANT	48,435	52,345	56,255	60,166	60,166	60,166
COLLEYVILLE	TARRANT	23,719	25,201	27,000	28,000	28,000	28,000
EULESS	TARRANT	54,725	57,689	57,689	57,689	57,689	57,689
GRAPEVINE	TARRANT	52,243	54,037	54,037	54,037	54,037	54,037
NORTH RICHLAND HILLS	TARRANT	72,102	77,480	77,480	77,480	77,480	77,480

Source: <http://www.twdb.texas.gov/waterplanning/data/projections/2022/popproj.asp>

Description of Tarrant County Water Supply Project

The Trinity River Authority's Tarrant County Water Supply Project was established in 1974 and provides regional treated water service to five contracting cities. The project is an 87 MGD water treatment plant, located at the boundary between the City of Fort Worth and the City of Euless. Treatment consists of settling, flocculation, filtration with multi-media and ozonation. The plant works consist of nine miles of raw transmission pipelines from Lake Arlington to the treatment plant, raw water intake, pumping stations, booster pump, treated water pump stations, treated water transmission pipelines, three distribution booster pump stations, Murphy Pump Station and Storage, including fifteen metering control stations.



Texas Commission on Environmental Quality

Water Availability Division

MC-160, P.O. Box 13087 Austin, Texas 78711-3087

Telephone (512) 239-4691, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. 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.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name: Trinity River Authority - Tarrant County Water Supply Project

Address: PO Box 60, Arlington TX 76004

Telephone Number: (817)4674343 Fax: (817) 4170367

Water Right No.(s): na

Regional Water Planning Group: Region C

Person responsible for implementing conservation program: Kevin Ward Phone: (817) 4674343

Form Completed By: Glenn Clingenpeel

Title: Planning and Environmentak Services Manager

Signature: [Redacted] Date: 4/29/2019

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

1. Service area size (in square miles):

(Please attach a copy of service-area map)

94.7 (total of reported areas from 5 customers)

2. Current population of service area:

245,550 (total of reported populations from 5 customers in 2018)

3. Current population served for:

- a. Water 242,480 (total of reported populations from 5 customers)

- b. Wastewater NA

4. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	239,220
2015	240,690
2016	242,480
2017	244,310
2018	245,550

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

<i>Year</i>	<i>Population</i>
2020	251,224
2030	266,752
2040	272,461
2050	277,372
2060	277,372

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

Population served from 2014-2018 were reported by TCWSP

Projected populations are the totals of TWDB projected populations of WUGs (Bedford, Colleyville, Grapevine, Hurst, and North Richland Hills) from 2021 Regional Water Plan.

B. Customer Data

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

<i>Wholesale Customer</i>	<i>Contracted Amount (Acre-feet)</i>	<i>Previous Year Amount of Water Delivered (acre-feet)</i>
---------------------------	--	--

Bedford	na	7,021 (reported by TCWSP)
Colleyville	na	7,290
Eules	na	5,041
Grapevine	na	6,522
North Richland Hills	na	4,999

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

<i>Year</i>	<i>Treated Water</i>	<i>Raw Water</i>
2014	34,004 (reported by TCWSP)	34,867
2015	30,128	31,717
2016	30,676	32,063
2017	31,720	33,055
2018	31,904	33,055
Totals	158,432	162,573

B. Water Accounting Data

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

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	TRA	do	not	divert	water
February					
March					
April					
May					
June					
July					

August	_____	_____	_____	_____	_____
September	_____	_____	_____	_____	_____
October	_____	_____	_____	_____	_____
November	_____	_____	_____	_____	_____
December	_____	_____	_____	_____	_____
Totals	_____	_____	_____	_____	_____

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

<i>Year</i>	<i>Total Population Served</i>	<i>Total Annual Water Diverted for Municipal Use</i>
2014	na	na
2015	na	na
2016	na	na
2017	na	na
2018	na	na

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 requirements from such growth.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	TRWD System	Projected usage with an actual settle up
Groundwater	_____	_____
Other	_____	_____

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

1. Design daily capacity of system (MGD):

87 MGD

2. Storage capacity (MGD):

a. Elevated 0

b. Ground 27

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

1 treatment plant 3 clearwells / 4 ground storage

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

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

na

2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

na

B. Wastewater Data for Service Area (if applicable)

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

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

<i>Year</i>	na	na	na	na	na
<i>Month</i>					
January	na	na	na	na	na
February	na	na	na	na	na
March	na	na	na	na	na
April	na	na	na	na	na
May	na	na	na	na	na
June	na	na	na	na	na
July	na	na	na	na	na
August	na	na	na	na	na
September	na	na	na	na	na
October	na	na	na	na	na

November	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>
December	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>
Totals	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>

Water Conservation Plan

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, Chapter 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.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified 5-year and 10-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 water loss, and the basis for the development of these goals. Note that the goals established by a wholesale water supplier under this subparagraph are not enforceable. These goals must be updated during the 5-year review and submittal.

B. Measuring and Accounting for Diversions

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.

C. Record Management Program

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

D. 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.

E. 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 Title 30 TAC Chapter 288. 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 this chapter.

F. 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 plan shall include optimization of water supplies as one of the significant goals of the plan.

G. Enforcement Procedure and 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.

H. 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).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous 5-year and 10-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 no 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.

V. ADDITIONAL CONSERVATION STRATEGIES

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of 30 TAC §288.5(1), if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
3. A program for reuse and/or recycling of wastewater and/or graywater;
4. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

VI. WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

1. support the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan;
2. evaluates conservation as an alternative to the proposed appropriation; and
3. evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.

APPENDIX B

Water Conservation Implementation Report Form and Summary of Updates/Revisions to Water Conservation Plan (Form 20645)



**WATER CONSERVATION IMPLEMENTATION REPORT
FORM AND SUMMARY OF UPDATES/REVISIONS TO
WATER CONSERVATION PLAN**

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

1. **Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
2. **Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years. The most current five-year submittal deadline is **May 1st, 2019**. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: Trinity River Authority
2. Water Right Permit or Certificate Nos. NA

3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

- Municipal Water Use by Public Water Supplier
- Wholesale Public Water Supplier
- Industrial Use
- Mining Use
- Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

- Individually-Operated Irrigation System
- Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes No

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.
- Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC 288.
http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
 - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/consERVE.html

Call **512-239-4691** or email to **wcp@tceq.texas.gov** for assistance with the requirements for your water conservation plan(s) and report(s).

6. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.
Yes No
If the targets were not met, please provide an explanation.

7. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
Yes No

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

Page 5 Section 2.3 Conservation Goals

8. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

1. Calculated GPCD and projected goals for 2024 and 2029 (Section 2.3)
2. Updated Form 20162 (Appendix A)
3. Updated Projected Populations and Water Demands for 2020-2070 (Appendix A)
4. Updated Form 20645 (Appendix B)

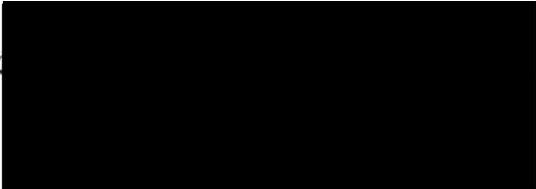
9. Form Completed by (Point of Contact): Glenn Clingenpeel
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Planning and Environmental Services Manager

Contact Address: PO Box 60, Arlington TX 76004

Contact Phone Number: 8174935117 Contact Email Address: ClingenpeelG@trinityra.org

Signature



Date: 4/24/2019

RESOLUTION NO. R-1162-3

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN FOR THE TARRANT COUNTY WATER SUPPLY PROJECT AND RESCINDING RESOLUTION NO. R-1162-2

WHEREAS, the Trinity River Authority (Authority) recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the Authority recognizes that due to natural limitations and drought conditions, the Authority cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Texas Water Code and the regulations of the Texas Commission on Environmental Quality (TCEQ) require that the Authority adopt a drought contingency plan; and

WHEREAS, contractual agreements with the Tarrant Regional Water District (TRWD) require that the Authority adopt a water conservation plan; and

WHEREAS, the Board of Directors of the Authority desires to adopt the revised Water Conservation Plan and Drought Contingency Plan for the Tarrant County Water Supply Project; and

WHEREAS, on April 27, 2005, the Board of Directors of the Authority adopted Resolution No. R-1162 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR THE TARRANT COUNTY WATER SUPPLY PROJECT; and

WHEREAS, on June 24, 2009, the Board of Directors of the Authority adopted Resolution No. R-1162-1 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN FOR THE TARRANT COUNTY WATER SUPPLY PROJECT AND RESCINDING RESOLUTION NO. R-1162; and

WHEREAS, on April 23, 2014, the Board of Directors of the Authority adopted Resolution No. R-1162-2 captioned as follows:

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY OF TEXAS ADOPTING A WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN FOR THE TARRANT COUNTY WATER SUPPLY PROJECT AND RESCINDING RESOLUTION NO. R-1162-1

WHEREAS, it is in the public interest that Resolution No. R-1162-2 be rescinded.

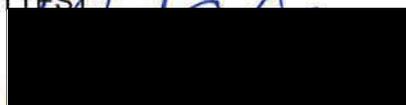
NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE TRINITY RIVER AUTHORITY THAT:

- (1) That Resolution No. R-1162-2 adopted by the Board of Directors of the Authority on April 23, 2014 is hereby rescinded;
- (2) The Board of Directors hereby adopts Resolution No. R-1162-3 approving and adopting the revised Water Conservation and Drought Contingency Plan for the Tarrant County Water Supply Project, in substantially the form presented, and that the Authority commits to implement the requirements and procedures set forth in the adopted Plan;
- (3) That the Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place, and subject of the meeting adopting this Resolution was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Resolution and the subject matter thereof has been discussed, considered and formally acted upon;
- (4) That the General Manager or his designee is hereby directed to file a copy of the Plan and this Resolution with TCEQ and Texas Water Development Board (TWDB) in accordance with Title 30, Chapter 288 of the Texas Administrative Code, and with the Region C Water Planning Group and TRWD; and
- (5) That should any paragraph, sentence, clause, phrase, or word of this Resolution be declared unconstitutional or invalid for any reason, the remainder of this Resolution shall not be affected.

ADOPTED this 24 day of April, 2019.


Kevin Maxwell, Acting President
Board of Directors
Trinity River Authority of Texas

ATTEST:


HOWARD S. SLOBODIN, Secretary

