

CITY OF DENTON**Drought Contingency Plan**

April 2014

6.6 Drought and Emergency Response Stages**6.6.1 Stage 1, Mild****6.6.1.1 Triggering And Termination Conditions For Stage 1, Mild***6.6.1.1.1 Type A Water Management Condition*

Total raw water supply in (1) Denton and Dallas connected lakes (east and west); or (2) western connected lakes; or (3) eastern connected lakes drops below 65% of the total conservation storage of the lakes

6.6.1.1.2 Type B Water Management Condition

Water demand reaches or exceeds 85% of delivery capacity for 4 consecutive days

6.6.1.1.3 Type C Water Management Condition

- Water demand approaches a reduced delivery capacity for all or part of the system, as determined by DWU
- A major water line breaks, or a pump or system failure occurs, which cause unprecedented loss of capability to provide treated water service
- Natural or man-made contamination of the water supply

Requirements for Termination:

Stage 1 may be terminated when Stage 1 conditions no longer exist and would be unlikely to recur upon termination.

6.6.1.2 Goal For Use Reductions And Actions Available Under Stage 1, Mild

The goal for water use reduction under Stage 1, Mild, is a 5 percent reduction of the use that would have occurred in the absence of drought contingency measures. The Director of Water Utilities or a designee can order the implementation of any of the actions listed below, or other actions not listed, as deemed necessary:

All Water Users

- (a) Require that all landscape watering be limited to the day-of-week schedule between the hours of 6:00 PM to 10:00AM. Irrigation of landscaped areas with hose-end sprinklers, or automatic irrigation systems should be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8) and for locations without addresses and limited to Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9). Apartments, office building complexes or other property containing multiple addresses may be identified by the lowest address number.
- (b) Encourage reduction in frequency of watering new and first year landscaping.
- (c) Encourage only initial filling of ornamental fountains.
- (d) Encourage reduction in frequency of washing or rinsing of vehicles. Use of bucket/container, hand-held hose with positive shut-off valve or commercial car wash is required.
- (e) Encourage the elimination of draining and refilling of swimming pools.
- (f) Encourage reduction in frequency of recreational water use including use of faucets, hoses or hydrants.
- (g) Foundations may be watered on any day of the week between the hours of 10 PM and 6 AM. Foundations may be watered with a soaker hose or a hand-held hose equipped with a positive shutoff nozzle only.
- (h) Recommend that customers do not hose off paved areas, buildings, windows or other surfaces.

City Government

- (a) Staff will begin review of the problems initiating Stage 1 actions and will identify possible solutions to address the water shortage.
- (b) Initiate public education campaign teaching and encouraging reduced water use practices.
- (c) Intensify normal leak detection and repair activities on water pipes and mains.
- (d) Restrict water use for the irrigation of parks by 25 percent. Park landscape may be irrigated on any day of the week.
- (e) Only flush newly constructed mains and mains that are essential for water quality maintenance.
- (f) Encourage 25 percent reduction in frequency of wet street sweeping and city vehicle washing and rinsing.

Commercial Customers

- (a) Identify and encourage voluntary reduction measures by high-volume water users through water use audits.

- (b) Restrict water use for the irrigation of parks by 25 percent. Park landscape may be irrigated on any day of the week.
- (c) Reduce water use for landscape nursery stock by 25 percent.
- (d) Require reduction of water use through day-of-week landscape watering schedule for golf courses.
- (e) Encourage area restaurants to serve customers water by request only.
- (f) Encourage hotel/motels to request multiple day patrons to reuse linens instead of changing every day.

Interruptible Customers

- (a) Reduce usage for interruptible customers per contract terms.

Wholesale Customer Cities

- (a) Encourage implementation of like procedures by wholesale customers.

Notifications

City of Denton

- Notify major City departments, by telephone and follow-up memo, of Water Awareness Stage #1 and request voluntary water use reduction.
- Stress voluntary elimination of non-essential uses.

External Customers

- Issue press release, radio and video public service announcement to area media describing Water Awareness Stage #1 and the voluntary restrictions that apply.
- Distribute water conservation materials to Denton Independent School District, UNT, TWU and community groups if appropriate.
- Post Water Awareness notices at public buildings including city buildings, county buildings and the federal post office.
- Encourage reduction of water use through the publication of the voluntary landscape watering schedule and request watering only during off-peak hours.

Wholesale Customers

- Advise wholesale customers by telephone and follow-up memo, of Water Awareness Stage #1 and request voluntary water use reduction consistent with actions taken by the City of Denton.

6.6.2 Stage 2, Moderate

6.6.2.1 Triggering Conditions For Stage 2, Moderate

6.6.2.1.1 **Type A** Water Management Condition

Total raw water supply in (1) Denton and Dallas connected lakes (east and west); or (2) western connected lakes; or (3) eastern connected lakes drops below 50% of the total conservation storage

6.6.2.1.2 **Type B** Water Management Condition

Water demand reaches or exceeds 90% of delivery capacity for 3 consecutive days

6.6.2.1.3 **Type C** Water Management Condition

- Water demand equals a reduced delivery capacity for all or part of the system, as determined by DWU
- A major water line breaks, or a pump or system failure occurs, which cause unprecedented loss of capability to provide treated water service
- Natural or man-made contamination of the water supply

Requirements for Termination:

Stage 2 may be terminated when Stage 2 conditions no longer exist and would be unlikely to recur upon termination.

6.6.2.2 Goal For Use Reduction And Actions Available Under Stage 2, Moderate

The goal for water use reduction under Stage 2, Moderate, is a 15 percent reduction of the use that would have occurred in the absence of drought contingency measures. The Director of Water Utilities or a designee can order the implementation of any of the actions listed below, or other actions not listed, as deemed necessary:

All Water Users

- (a) Require that all landscape watering be limited to the day-of-week schedule between the hours of 6:00 PM to 10:00AM. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems should be limited to Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8) and for locations without addresses, and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9). Apartments, office building complexes or other property containing multiple addresses may be identified by the lowest address number.
- (b) Restrict operation of ornamental fountains or ponds to initial only filling except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

- (c) Prohibit recreational water use including use of faucets, hoses or hydrants.
- (d) Restrict washing of any motor vehicle, motorbike, boat, trailer, airplane or other vehicle to the use of a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses on the designated watering day. 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.
- (e) Restrict water use to replacing losses during normal use and replacing evaporation in order to maintain proper water quality and proper operation of the pool equipment. Request that use of water to fill, refill, or add to any indoor or outdoor swimming, wading, or jacuzzi pools be limited to the day-of-week schedule.
- (f) Prohibit hosing off paved areas, buildings, windows or other surfaces.
- (g) Foundations may be watered for a two-hour period only between the hours of 10 PM and 6 AM on the designated watering day with soaker or hand-held hose equipped with a positive shutoff nozzle on the watering schedule.

City Government

- (a) Staff will begin review of the problems initiating Stage 2 actions and will identify possible solutions to address the water shortage.
- (b) Accelerate public education campaign teaching and encouraging reduced water use practices.
- (c) Restrict flushing of new mains not immediately required to provide service.
- (d) Continue intensified leak detection and repair activities on water pipes and mains.
- (e) Restrict water use for the irrigation of parks by 50 percent. Park landscape may be irrigated on any day of the week.
- (f) Increase enforcement efforts.
- (g) Reduce frequency of wet street sweeping and city vehicle washing by 50 percent.
- (h) Use of water from fire hydrants limited to fire fighting, essential distribution system. All other water use from fire hydrants will be by special permit only.

Commercial Customers

- (a) Require day-of-week watering schedule for golf courses.
- (b) Reduce water use for landscape nursery stock by 50 percent.

- (c) Restrict water use for the irrigation of parks by 50 percent. Park landscape may be irrigated on any day of the week.

Interruptible Customers

- (a) Reduce usage for interruptible customers per contract terms.

Wholesale Customers

- (a) Require water demand reductions in accordance with contract obligations for wholesale customers.
- (b) Wholesale water systems asked to abide by City of Denton policy for both internal operations and all retail customers. Reduction in rate of flow controller settings by 10% -20% are optional.

Notifications

City of Denton

- By telephone and attached follow-up memo, notify all major City department water users of Water Watch Stage #2 and the water use restrictions under this stage. Instruct them to implement restrictions on non-essential uses. Use city department contacts in Appendix F.
- Coordinate distribution of water emergency plan details, posters, and handouts to customer service representatives, utility dispatch personnel and Denton public access buildings.

Retail Customers

- TCEQ notified of Stage 2 restrictions.
- Issue press release, radio and video public service announcement to area media describing Water Watch Stage #2 and the water use restrictions under this stage. Keep media updated on the water situation. Use media contacts listed in Appendix F.
- By telephone and follow-up letter, notify major area water users of Water Watch Stage #2 and the restrictions that apply. Use plant manager contacts listed in Appendix F.
- Accelerate public education campaign to promote and encourage efficient water use.
- If applicable, notify the U.S. Corp of Engineers by telephone and follow-up letter of the Water Watch Stage #2 conservation measures.

Wholesale Customers

Advise wholesale customers by telephone and attached letter of the actions taken by the City of Denton in response to Water Watch Stage #2 and require the implementation of like procedures among their customers. Wholesale customer cities shall either impose water use restrictions equivalent to those imposed on Denton's

retail customers OR where applicable, Denton may reduce rate-of-flow controller settings by 10%-20%. Use wholesale customer contacts in Appendix F.

Penalties

- Initiate a 10% rate increase for residential customers for water usage greater than 15,000 gallons per account per 30 days.
- Impose a 10% surcharge penalty for commercial and industrial customers for monthly water use above 80% of prior billing volumes for a 30-day period.
- Initiate code enforcement fines for any violation of the Drought Contingency Plan.

6.6.3 Stage 3, Severe

6.6.3.1 Triggering Conditions For Stage 3, Severe

6.6.3.1.1 **Type A** Water Management Condition

Total raw water supply in (1) Denton and Dallas connected lakes (east and west); or (2) western connected lakes; or (3) eastern connected lakes drops below 30% of the total conservation storage

6.6.3.1.2 **Type B** Water Management Condition

Water demand reaches or exceeds 95% of delivery capacity for 2 consecutive days

6.6.3.1.3 **Type C** Water Management Condition

- Water demand exceeds a reduced delivery capacity for all or part of the system, as determined by DWU
- A major water line breaks, or a pump or system failure occurs, which cause unprecedented loss of capability to provide treated water service
- Natural or man-made contamination of the water supply

Requirements for Termination:

Stage 3 may be terminated when Stage 3 conditions no longer exist and would be unlikely to recur upon termination.

6.6.3.2 Goal For Use Reduction And Actions Available Under Stage 3, Severe

The goal for water use reduction under Stage 3, Severe, is a reduction of 20 percent of the use that would have occurred in the absence of drought contingency measures. If the circumstances warrant, the Director of Water Utilities or a designee can set a goal for greater water use reduction. The Director of Water Utilities or a

designee can order the implementation of any of the actions listed below, or other actions not listed, as deemed necessary:

All Water Users

- (a) Irrigation of landscape is absolutely prohibited unless otherwise indicated within this section.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane 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 PM to 10 AM.
- (c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi type pools is prohibited. Existing pools may add water to replace losses during normal use and to replace evaporation in order to maintain proper water quality and proper operation of the pool equipment.
- (d) Prohibit operation of ornamental fountains or ponds to initial filling except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) Foundations may be watered for a two-hour period only between the hours of 10 PM and 6 AM on the designated watering day from Stage 2 with soaker or hand-held hose equipped with a positive shutoff nozzle on the watering schedule.
- (f) 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.
- (g) Permitting of new swimming pools, hot tubs, spas, ornamental ponds and fountain construction is prohibited.
- (h) Request a 25% reduction of indoor water uses.

City Government

- (a) Wet street sweeping and city vehicle washing or rinsing is prohibited, except when in the immediate interest of public health, safety, and welfare.
- (b) Restrict water use for the irrigation of parks by 75 percent. Park landscape may be irrigated on any day of the week.
- (c) Restrict use of water from fire hydrants to fire fighting, essential distribution system maintenance and related activities. All other water use from fire hydrants will be by special permit only.

Commercial Customers

- (a) Restrict watering of golf course greens and tee boxes restricted to the allowed watering hours and the day-of-week watering schedule from Stage 2; watering of other golf course areas and parks is prohibited unless the golf course utilizes a water source other than that provided by the City of Denton.
- (b) Reduce water use for landscape nursery stock by 75 percent.
- (c) Restrict water use for the irrigation of parks by 75 percent. Park landscape may be irrigated on any day of the week.

Interruptible Customers

- (a) Service to interruptible customers is temporarily suspended.

Wholesale Customers

- (a) Same external restrictions apply to wholesale suppliers.

Notifications

City of Denton

- Coordinate dissemination of water conservation plan details, posters, and handouts to customer service representatives, utility dispatch personnel and public access buildings.
- By telephone and attached follow-up memo, notify all major City department users of Water Warning Stage #3 and of the water use restrictions under this stage. Instruct them to eliminate non-essential uses including street and vehicle washing and operation of ornamental fountains, and to implement restrictions on essential uses. Use same contacts as those listed in Appendix F.

Retail Customers

- TCEQ notified of Stage 3 restrictions.
- Issue press release, radio and video public service announcement to area media describing Water Warning Stage #3 and the water use restrictions under this stage. Keep media updated on the water situation. Use same media contacts as those in Appendix F.
- By telephone and follow-up letter, notify major water users of Water Warning #3 and the mandatory water use reduction. Use contacts listed in Appendix F.
- Post Water Warning notices at public buildings including city buildings, county buildings, and the federal post office.

- If applicable, notify U.S. Corps of Engineers by telephone and attached letter of the Water Warning Stage #3 conservation measures.

Wholesale Customers

- Advise wholesale customers by telephone and attached letter of actions being taken by the City in response to Water Warning Stage #3 and mandatory implementation of similar procedures among their customers. Wholesale customer cities shall impose water use restrictions equivalent to those imposed on Denton’s retail customers or, where applicable, reduce their rate-of-flow controller settings by a percentage determined by the Director of Water Utilities. Appendix F lists wholesale customers that need to be contacted.

Penalties

- Initiate a 20% rate increase for residential customers for water usage greater than 15,000 gallons per account per 30 days.
- Impose a 20% surcharge penalty for commercial and industrial customers for monthly water use above 70% of prior billing volumes for a 30-day period.
- Initiate code enforcement fines for any violation of the Drought Contingency Plan.

Water Allocation

Retail Customers:

During Stages 2 and 3 of the Drought Contingency Plan, DWU may impose a retail water rate increase to discourage water use. All rates for usage in excess of 15,000 gallons per month (per single-family residential account), or any other usage amount above 15,000 gallons per month, as deemed appropriate by the Director, may be increased by an additional 10 percent or any other percentage deemed appropriate by the Director.

Wholesale Customers

In the event that the triggering criteria specified in Section 6 of the Plan for Stage 3 have been met, the Director is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with the latest revision of Texas Water Code Section 11.039. Texas Water Code Section 1.039, Distribution of Water During Shortage, states:

- (a) If a shortage of water in a water supply not covered by a water conservation plan prepared in compliance with Texas Commission on Environmental Quality or Texas Water Development Board rules results from drought, accident, or other cause, the water to be distributed shall be divided among all customers pro rata, according to the amount each may be entitled to, so that preference is given to no one and everyone suffers alike.
- (b) If a shortage of water in a water supply covered by a water conservation plan prepared in compliance with Texas Commission on Environmental Quality or Texas Water Development Board rules results from drought, accident, or other cause, the person, association of person, or corporation owning or controlling the water shall divide the water to be distributed among all customers pro rata, according to:
 - 1. the amount of water to which each customer may be entitled; or
 - 2. the amount of water to which each customer may be entitled, less the amount of water the customer would have saved if the customer had operated its water system in compliance with water conservation plan.
- (c) Nothing in Subsection (a) or (b) precludes the person, association of persons or corporation owning or controlling the water from supplying water to a person who has a prior vested right to the water under the laws of this state.

DWU may curtail water deliveries or reduce diversions in accordance with the terms and conditions of its wholesale water supply contracts. If necessary, or if specific contract provisions are not provided for, DWU may curtail water deliveries or reduce diversions in accordance with Texas Water Code Section 11.039. DWU will have authority to restrict flow to its wholesale water customers through the rate-of-flow controllers.

The Director will establish pro rata water allocations, determined as a percentage reduction of the wholesale customer's water usage, at the time of implementation. The total volume reduction for each wholesale customer will be calculated monthly, based on average water usage for the previous three years. The Director will establish the percentage reduction based on an assessment of the severity of the water shortage condition and the need to curtail water diversions and/or deliveries, and the percentage reduction may be adjusted periodically by the Director. Once pro rata allocation is in effect, water diversions by, or deliveries to, each wholesale customer will be limited to the allocation established for each month.

6.7 Procedures for Enforcement of Mandatory Restrictions

Violations

A person commits an offense if he or she knowingly makes, causes, or permits a use of water contrary to the measures implemented in the Drought Contingency Plan. It is presumed that a person has knowingly made, caused, or permitted use of water contrary to the measures implemented if the mandatory measures have been implemented according to the Plan and any one of the following conditions apply:

- The Drought Contingency Plan prohibits the manner of use.
- The amount of water used exceeds that allowed by the Drought Contingency Plan.
- The manner of use or the amount used violates the terms and conditions of a compliance agreement made following a variance granted by the ACM/Utilities.

Any person 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 their minor children and proof that a violation, committed by a child, occurred on the property within control of the parents 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.

Any Code Enforcement Officer, Police Officer, or other city employee designated by the Assistant City Manager/Utilities, 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 municipal court on the date shown on the citation.

Any person who violates this Plan is guilty of a misdemeanor and, upon conviction, shall be punished by a fine of not less than \$250 and not more than \$2,000. Each day that one or more provisions in this Plan is violated shall constitute a separate offense. Flow restrictors may be placed in lines after two violations have occurred to limit the amount of water passing through the meter in a 24-hour period. The City of Denton Utilities reserves the right to temporarily cancel water service to the customer until the situation can be resolved. Services

discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at an amount not to exceed \$135.00 (or as adjusted by City ordinance), and any other costs incurred by the DWU in discontinuing service. In addition, suitable assurance must be given to the Director that the same action will not be repeated while the Plan is in effect. Compliance with this Plan may also be sought through injunctive relief in the district court.

6.8 Procedures for Granting Variances

Granting a Variance

The ACM/Utilities may grant variances from the Drought Contingency Plan in special cases to persons demonstrating extreme hardship and need. In order to obtain a variance, the applicant must sign a compliance agreement on forms provided by the ACM/Utilities and approved by the City Attorney. The applicant must agree to use the water only in the amount and manner permitted by the variance. A variance must meet the following conditions:

- Granting of a variance must not cause an immediate significant reduction in the City's water supply.
- The applicant must demonstrate that the extreme hardship or need is related to the health, safety, or welfare of the person requesting it.
- The variance will not adversely affect the health, safety, or welfare of other persons.
- No variance is retroactive nor can it justify any violation of this Drought Contingency Plan before its issuance.
- The variance will remain in effect during the stage in which it was issued and will expire when the Plan is no longer in effect or a new stage is activated.

Revoking a Variance

The ACM/Utilities may revoke a variance granted when the Director of Water Utilities determines any one of the following:

- Conditions causing initial issuance of the variance are no longer applicable.
- Violation of the terms of the compliance agreement.
- The health, safety, or welfare of other persons requires revocation.

Wholesale Customer Variances

The ACM/Utilities may grant variances from the Drought Contingency Plan to wholesale water customers in special cases. Wholesale water customers may request reduced variance allocations for the following conditions:

- The designated period does not accurately reflect a wholesale customer's normal water usage.
- The customer agrees to transfer part of its allocation to another wholesale customer.
- Other objective evidence demonstrates that the designated allocation is inaccurate under present conditions.

In order to grant a variance, the applicant must sign a compliance agreement on forms provided by the ACM/Utilities and approved by the City Attorney. No variance shall be retroactive or otherwise justify any violation of this Drought Contingency Plan occurring before the issuance of the variance.

6.9 Coordination with the Regional Water Planning Group

The City of Denton is located within the Region C water planning area. Appendix E includes a copy of a letter sent to the Chair of the Region C Water Planning Group (RCWPG) along with the water conservation and drought contingency plan.

6.10 Review and Update of Drought Contingency Plan

As required by TCEQ rules, the City of Denton will review this drought contingency plan every five years, beginning in 2009. The plan will be updated as appropriate based on new or updated information. As the plan is reviewed and subsequently updated, a copy of the revised Drought Contingency Plan will be submitted to the TCEQ and the RCWPG for their records.

7.0 Severability

The City of Denton Public Utility Board agrees that sections, paragraphs, sentences, clauses, and phrases of this Drought Contingency Plan are severable. If any phrase, clause, sentence, paragraph, or section of this Drought Contingency Plan is 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 Drought Contingency Plan, since the same would not have been enacted by the

City of Denton Public Utility Board without the incorporation into this Drought Contingency Plan of any such unconstitutional phrase clause, sentence paragraph, or section.

APPENDIX A

List of References

1. Texas Commission on Environmental Quality: "Water Conservation Plans for Municipal Uses by Public Water Suppliers," Texas Administrative Code Title 30 Part I Subchapter A §288.2, effective October 7, 2004
2. Texas Commission on Environmental Quality: "Utility Profile & Water Conservation Plan Requirements for Municipal Water Use by Public Water Suppliers," TCEQ publication 10218 Rev 11-04 and "Utility Profile & Water Conservation Plan Requirements for Wholesale Public Water Suppliers," TCEQ publication 20162 Rev 11-04
3. Texas Water Development Board: "Water Conservation Best Management Practices Guide," Report 362, Water Conservation Implementation Task Force, published November 2004