

1. INTRODUCTION AND OBJECTIVES

This plan addresses all of the current TCEQ requirements for a drought contingency plan.

The purpose of this drought contingency plan is as follows:

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

2. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

The TCEQ rules governing development of drought contingency plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code. For the purpose of these rules, a drought contingency plan is defined as “a strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies.”

3. DROUGHT CONTINGENCY PLAN

3.1 Provisions to Inform the Public and Opportunity for Public Input

The City of Mansfield will provide opportunity for public input in the development of this drought contingency plan by the following means:

- Public Hearing

3.2 Provisions for Continuing Public Education and Information

The City of Mansfield will inform and educate the public about the drought contingency plan by the following means:

- Preparing a bulletin describing the plan and making it available at city hall and other appropriate locations.
- Making the plan available to the public through the city’s Web site (if available).

- Including information about the drought contingency plan on the city's Web site (if available).
- Notifying local organizations, schools, and civic groups that staff are available to make presentations on the drought contingency plan (usually in conjunction with presentations on water conservation programs).

At any time that the drought contingency plan is activated or the drought stage changes, the City of Mansfield will notify local media of the issues, the drought response stage, and the specific actions required of the public. The information will also be publicized on the city's Web site. News letters and/or notices on bills will also be used as appropriate.

3.3 Initiation and Termination of Drought and Emergency Response Stages

Initiation of a Drought and Emergency Response Stage

The City Manager or official designee 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 public will be notified through local media and the city's Web site (if available) as described in Section 3.2.
- Wholesale customers (if any) and TRWD will be notified by telephone with a follow-up letter, e-mail, or fax that provides details of the reasons for initiation of the drought stage.
- If any mandatory provisions of the drought contingency plan are activated, the City of Mansfield will notify the Executive Director of the TCEQ within 5 business days.

Drought stages imposed by TRWD action must be initiated by customers (including indirect customers).

For other trigger conditions, the City Manager or official designee 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 the year, weather conditions, the anticipation of replenished water supplies, or the anticipation that additional facilities will become available to meet needs. The reason for this decision should be documented.

Termination of a Drought Stage

The City Manager or official designee may order the termination of a drought response stage or water emergency when the conditions for termination are met or at their discretion. The following actions will be taken when a drought stage is terminated:

- The public will be notified through local media and the city's Web site (if available) as described in Section 3.2.
- Wholesale customers (if any) and TRWD will be notified by telephone with a follow-up letter, e-mail, or fax.

- If any mandatory provisions of the drought contingency plan that have been activated are terminated, the City of Mansfield will notify the Executive Director of the TCEQ within 5 business days.

The City Manager or official designee may decide not to order the termination of a drought response stage or water emergency even though the conditions for termination of the stage are met. Factors which could influence such a decision include, but are not limited to, the time of the year, weather conditions, or the anticipation of potential changed conditions that warrant the continuation of the drought stage. The reason for this decision should be documented.

3.4 Drought and Emergency Response Stages

Stage 1, Water Watch

Triggering and Terminating Conditions

TRWD has initiated Stage 1, Water Watch, which may be initiated by one or more of the following:

- Total raw water supply in TRWD western and eastern division reservoirs drops below 75% (25% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach the limit of TRWD's permitted supply.
- TRWD's supply source becomes contaminated.
- TRWD's water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of a Stage 1 drought.
- The City of Mansfield's demand exceeds the amount that can be delivered to customers.
- City's water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- City's water treatment or distribution system becomes contaminated.
- City's water supply system is unable to deliver water due to the failure or damage of major water system components.
- City's plan may be implemented if other criteria dictate.

Stage 1 may terminate when TRWD terminates its Stage 1 condition, when the circumstances that caused the initiation of Stage 1 no longer prevail, or at the discretion of the City Manager or official designee.

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 or if required by TRWD, the City Manager or his/her official designee can set a goal for greater water use reduction.

Actions Available under Stage 1, Water Watch

The City Manager or official designee must implement any action(s) required by the Tarrant Regional Water District. In addition, the City Manager or official designee may order the implementation of any of the other actions listed below, as deemed necessary. The City of Mansfield must notify TCEQ within five business days if any mandatory measures are implemented.

All Water Users

- Initiate mandatory restrictions to prohibit non-essential water use as follows:
 - Prohibit hosing of paved areas, such as sidewalks, driveways, parking lots, tennis courts, patios, or other impervious surfaces, except to alleviate immediate health hazard.
 - Prohibit hosing of buildings or other structures for purposes other than fire protection or surface preparation prior to painting.
 - Prohibit using water in such a manner as to allow runoff or other waste, including:
 - (1) failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;
 - (2) operating a permanently installed irrigation system with: (a) a broken head; (b) a head that is out of adjustment and the arc of the spray head is over a street or parking lot; or (c) a head that is misting because of high water pressure; or
 - (3) during irrigation, allowing water to (a) to run off a property and form a stream of water in a street for a distance of 50 feet or greater; or (b) to pond in a street or parking lot to a depth greater than one-quarter of an inch.
- Outdoor watering with sprinklers or irrigation systems is prohibited between 10 a.m. and 6 p.m. year-round, in all stages.
- Limit landscape watering with sprinklers or irrigation systems at each service address to a twice per week schedule as determined by the director of utilities.

Exceptions:

- Foundations may be watered up to two hours on any day by handheld hose; or using a soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.

- New plantings, (first year) of shrubs, and trees may be watered up to two hours on any day by handheld hose, drip irrigation, or a soaker hose. Tree watering is limited to an area not to exceed the drip line of a tree.
 - Twice per week landscape watering restrictions do not apply to locations using well water or treated wastewater effluent for irrigation.
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the director of utilities, if the director determines that a property can not 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.
- Establishing new turf is discouraged. If new hydromulch, grass sod, or grass seed is installed, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply.
 - 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 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. Further, such washing may be exempt from these requirements if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
 - Encourage reduction in frequency of draining and refilling swimming pools.
 - Encourage use of Texas native and drought tolerant plants in landscaping.

City and Local Governments

In addition to actions listed above, the City Manager or official designee may also:

- Review conditions and problems that caused Stage 1. Take corrective action.
- Increase public education efforts on ways to reduce water use.
- 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.
- Increase enforcement efforts.
- Landscape watering of municipal parks, golf courses, and sports fields is restricted to twice per week watering schedule, per irrigation station.

Exceptions:

- Golf courses may water greens and tee boxes without restrictions, however watering must be done before 10 a.m. and after 6 p.m.

- Skinned areas of sports fields may be watered as needed for dust control.
- See all water users category above for rules that apply to facilities with large multi-station irrigation systems.
- 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.
- Notify wholesale customers of actions being taken and request them to implement similar procedures.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering of parks, golf courses, and sports fields is restricted to twice per week watering schedule, per irrigation station.

Exceptions:

- Golf courses may water greens and tee boxes without restrictions, however watering must be done before 10 a.m. and after 6 p.m.
- Skinned areas of sports fields may be watered as needed for dust control.
- Playing fields with a stadium only (not surrounding landscaping) may be watered as needed to maintain league standards.
- See all water users category above for rules that apply to facilities with large multi-station irrigation systems.
- Stock at commercial plant nurseries is exempt from Stage 1 watering restrictions.
- Hotels, restaurants, and bars are encouraged to serve drinking water to patrons on an “on demand” basis.
- Hotels are encouraged to implement laundry conservation measures by encouraging patrons to reuse linens and towels.

Stage 2, Water Warning

Triggering and Terminating Conditions

The TRWD has initiated Stage 2, Water Warning, which may be initiated by one or more of the following:

- Total raw water supply in TRWD western and eastern division reservoirs drops below 60% (40% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach the limit of TRWD’s permitted supply.
- TRWD’s supply source becomes contaminated.

- TRWD’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of a Stage 2 drought.
- The City of Mansfield’s demand exceeds production capacity of the amount that can be delivered to customers for 1 day.
- City’s demand for all or part of the delivery system equals or exceeds delivery capacity because delivery capacity is inadequate.
- City’s water treatment or distribution system becomes contaminated.
- City’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- City’s plan may be implemented if other criteria dictate.

Stage 2 may terminate when TRWD terminates its Stage 2 condition, when the circumstances that caused the initiation of Stage 2 no longer prevail, or at the discretion of the City Manager or official designee.

Goal for Use Reduction

The goal for water use reduction under Stage 2, Water Warning, is to decrease use by ten percent. If circumstances warrant or if required by TRWD, the City Manager or official designee can set a goal for greater water use reduction.

Actions Available under Stage 2, Water Warning

The City Manager or official designee must implement any action(s) required by the Tarrant Regional Water District. In addition, the City Manager or official designee may order the implementation of any of the other actions listed below, as deemed necessary. The City of Mansfield must notify TCEQ within five business days if any mandatory measures are implemented:

All Water Users

- Landscape watering with sprinklers or irrigation systems at each service address is limited to once every seven days. Outdoor watering schedule to be determined by director of utilities.

Exceptions:

- Foundations may be watered up to two hours on any day by handheld hose; or using a soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- New plantings, (first year) of shrubs, and trees may be watered up to two hours on any day by handheld hose, drip irrigation, or a soaker hose. Tree watering is limited to an area not to exceed the drip line of a tree.

- Once per week outdoor watering restrictions do not apply to locations using well water or treated wastewater effluent for irrigation.
 - Outdoor watering at service addresses with large multi-station irrigation systems may take place in accordance with a variance granted by the director of utilities, if the director determines that a property can not 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.
- Public is encouraged to wait until the current drought or emergency situation has passed before establishing new landscaping. If new hydromulch, grass sod, or grass seed is installed, there are no watering restrictions for the first 30 days while it is being established. After that, the watering restrictions set forth in this stage apply.
 - Prohibit use of water for dust control, except as required to protect public health.
 - Prohibit the operation of ornamental fountains or ponds that use potable water except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
 - Prohibit filling of swimming pools with automatic valves.

City and Local Governments

In addition to 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.
- Landscape watering at municipal parks, golf courses, and sports fields is limited to once every seven days, per irrigation station.

Exceptions:

- Golf courses may water greens and tee boxes as needed to keep them alive, however watering must be done before 10 a.m. and after 6 p.m.
 - Watering for dust control on skinned areas of sport fields is not allowed.
 - See all water users category above for rules that apply to facilities with large multi-station irrigation systems.
- Halt 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.
 - Prohibit wet street sweeping.
 - Notify wholesale customers of actions being taken and request them to implement similar procedures.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering at parks, golf courses, and sports fields is limited to once every seven days, per irrigation station.

Exceptions:

- Golf courses may water greens and tee boxes as needed to keep them alive, however watering must be done before 10 a.m. and after 6 p.m.
- Watering for dust control on skinned areas of sport fields is not allowed.
- See all water users category above for rules that apply to facilities with large multi-station irrigation systems.

Stage 3, Water Emergency

Triggering and Terminating Conditions

The TRWD has initiated Stage 3, Water Emergency, which may be initiated by one or more of the following:

- Total raw water supply in TRWD western and eastern division reservoirs drops below 45% (55% depleted) of conservation storage.
- Water demand for all or part of the TRWD delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Water demand is projected to approach or exceed the limit of TRWD's permitted supply.
- TRWD's supply source becomes contaminated.
- TRWD's water supply system is unable to deliver water due to the failure or damage of major water system components.
- The TRWD General Manager, with the concurrence of the TRWD Board of Directors, finds that conditions warrant the declaration of a Stage 3 drought.
- The City of Mansfield's demand exceeds production capacity of the amount that can be delivered to customers for 2 consecutive days.
- City's demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Natural or man-made contamination of the water supplier's treatment or distribution system.
- City's water supply system is unable to deliver water due to the failure or damage of major water system components.
- City's plan may be implemented if other criteria dictate.

Stage 3 may terminate when TRWD terminates its Stage 3 condition, when the circumstances that caused the initiation of Stage 3 no longer prevail, or at the discretion of the City Manager or official designee.

Goals for Use Reduction

The goal for water use reduction under Stage 3, Emergency Water Use, is to decrease use by 20 percent. If circumstances warrant or if required by TRWD, the City Manager or official designee can set a goal for a greater water use reduction.

Actions Available under Stage 3, Water Emergency

The City Manager or official designee must implement any action(s) required by the Tarrant Regional Water District. In addition, the City Manager or official designee may order the implementation of any of the other actions listed below, as deemed necessary. The City of Mansfield must notify TCEQ within five business days if any mandatory measures are implemented:

All Water Users

- Prohibit landscape watering.

Exceptions:

- Foundations may be watered up to two hours on any day by handheld hose; or using a soaker hose or drip irrigation system placed within 24-inches of the foundation that does not produce a spray of water above the ground.
- Trees may be watered up to two hours on any day by handheld hose, drip irrigation, or a soaker hose. Tree watering is limited to an area not to exceed the drip line of a tree.
- Prohibit establishment of new landscaping.
- Vehicle washing restricted to commercial car wash or commercial service station and can only be done as necessary for health, sanitation, or safety reasons, including but not limited to the washing of garbage trucks and vehicles used to transport food and other perishables. All other vehicle washing is prohibited.
- Prohibit the draining, filling, or refilling of swimming pools, wading pools and Jacuzzi type pools. Existing private and public pools may add water to maintain pool levels; however they may not be refilled using automatic fill valves.

City and Local Governments

In addition to actions listed above:

- Continue or initiate any actions available under Stages 1 and 2.
- Review conditions or problems that caused Stage 3. Take corrective action.
- Implement viable alternative water supply strategies.

- Increase frequency of media releases explaining emergency situation.
- Reduce city and local government water use to maximum extent possible.
- Prohibit the permitting of new swimming pools, Jacuzzi type pools, spas, ornamental ponds and fountain construction. Pools already permitted and under construction may be completely filled with water.
- Landscape watering at municipal parks, golf courses, and sports fields is prohibited.

Exceptions:

- Golf course greens may be watered by hand as needed to keep them alive, however watering must be done before 10 a.m. and after 6p.m.
- Institute a mandated reduction in deliveries to all customers. Such a reduction will be distributed as required by Texas Water Code §11.039.
- If TRWD has imposed a reduction in water available to customers, impose the same percent reduction on wholesale customers.
- Notify wholesale customers of actions being taken and request them to implement similar procedures.

Commercial or Industrial

- All actions listed above for all water users apply to commercial and industrial users.
- Landscape watering at parks, golf courses, and sports fields is prohibited.

Exceptions:

- Golf course greens may be watered by hand as needed to keep them alive, however watering must be done before 10 a.m. and after 6 p.m.
- Playing fields with a stadium only (not surrounding landscaping) may be watered as needed to maintain league standards.
- Hotels, restaurants, and bars required to serve drinking water to patrons on an “on demand” basis.
- Hotels required to implement laundry conservation measures by encouraging patrons to reuse linens and towels.
- Stock at commercial plant nursery may be watered only with a hand-held hose, hand-held watering can, or drip irrigation system.
- Commercial and industrial water users required to reduce water use by a set percentage (20 percent is the goal for stage 3).

3.5 Procedures for Granting Variances to the Plan

The City Manager or official designee may grant temporary variances for existing water uses otherwise prohibited under this drought contingency plan 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.

Variations shall be granted or denied at the discretion of the City Manager or official designee. All petitions for variations should be in writing and should include the following information:

- Name and address of the 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
- Other pertinent information.

3.6 Procedures for Enforcing Mandatory Water Use Restrictions

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

- On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.
- On the second and subsequent violations, citations may be issued to customers, with minimum and maximum fines established by ordinance.
- After two violations have occurred, utility may install a flow restrictor in the line to limit the amount of water that may pass through the meter in a 24-hour period.
- After three violations have occurred, the utility may cut off water service to the customer.

3.7 Review and Update of Drought Contingency Plan

As required by TCEQ rules, customers will review this drought contingency plan in 2009 and at least every five years thereafter. The plan will be updated as appropriate based on new or updated information.