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## **1. INTRODUCTION AND OBJECTIVES**

The purpose of this Drought Contingency and Emergency Water Management Plan (subsequently referred to as the Plan) is as follows:

- 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
- To minimize the adverse impacts of emergency water supply conditions.

## **2. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES**

TCEQ rule Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.1 (4) defines a drought contingency plan 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.”

TCEQ rules governing development of and minimum requirements for drought contingency plans for municipal water suppliers and wholesale water suppliers are contained in Texas Administrative Code Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 and Rule 288.22, respectively.

## **3. WATER SYSTEM PROFILE**

The City purchases water from the Tarrant Regional Water District (TRWD). The supply sources are:

- West Fork of Trinity River: Lake Worth, Eagle Mountain Lake, and Lake Bridgeport; (A pipeline connecting Eagle Mountain Lake to the East Texas supply is under construction.)
- East Texas: Cedar Creek Reservoir, located approximately 75 miles southeast of Fort Worth; and Richland Chambers Reservoir, located approximately 75 miles southeast of Fort Worth; and
- Clear Fork of the Trinity River via Lake Benbrook. (A pipeline connects Lake Benbrook to the East Texas Supply.)

System capacity with regards to the defined triggers in Section 4.4 is the total reliable pumping capacity is found in Appendix A. Therefore, the system capacity baseline for triggers is the reliable delivery capacity of 460 million gallons per day (MGD). See Appendix A for more details of the yields of each of the treatment plants. This trigger number will be evaluated each year to take into consideration improvements that may have been added to the system.

Fort Worth has about 217, 000 retail service connections and 29 wholesale water customers. Wholesale customers are Benbrook Water & Sewer Authority, Bethesda Water Supply Corp., Burleson, Crowley, Dallas/Fort Worth International Airport, Dalworthington Gardens, Edgecliff Village, Everman, Forest Hill, Grand Prairie, Haltom City, Haslet, Hurst, Keller, Lake Worth, Northlake, North Richland Hills, Richland Hills, River Oaks, Roanoke, Saginaw, Sansom Park, Southlake, Trinity River Authority - Mosier Valley, Trophy Club Municipal Utility District, Westlake, Westover Hills, Westworth Village and White Settlement. Some of these customers have emergency contracts only and do not take from the Fort Worth system on a regular basis.

In accordance with Section 2.3 of the wholesale water contract, wholesale customers are required to institute and apply the same rationing, conservation measures or restrictions to the use of water by their customers for so long as any part of their total water supply is being furnished by Fort Worth.

Fort Worth maintains about 3,200 miles of distribution pipelines.

The water supply triggers defined in Section 4.4 were provided to Fort Worth by its water supplier, Tarrant Regional Water District. TRWD selected its triggers after hiring an outside consultant to evaluate where the triggers levels should be for the drought plan to achieve meaningful water savings.

## **4. DROUGHT CONTINGENCY/EMERGENCY WATER MANAGEMENT PLAN**

### **4.1 Public Involvement**

The public had several opportunities to provide input into the plan.

- A public meeting soliciting comments was held on Dec. 10, 2007. The meeting was advertised on the city Web site, on City Page in the Fort Worth Star-Telegram, through news releases to the news media and neighborhood associations, and in handouts at public events.
- The Fort Worth Water Department's Water Conservation Advisory Committee discussed the draft plan's provisions and provided feedback during its June 21, 2007 meeting and was provided a copy for review and comments prior to the public meeting on Dec. 10, 2007.
- The draft plan was posted on the City of Fort Worth Web site ([www.fortworthgov.org/water](http://www.fortworthgov.org/water)) for four months prior to City Council adoption.
- Copies were available to anyone upon request.

## **4.2 Public Education**

Fort Worth will inform and educate the public about the Drought Contingency/Emergency Water Management Plan by the following means:

- Preparing fact sheets describing the plan and making these available online and at various city sites, and at events where the water department may have a booth.
- Posting a copy of the Plan on the city's Web site.
- Notifying local organizations, schools, and civic groups that staff are available to make presentations on the plan.

At any time that the Drought Contingency/Emergency Water Management Plan is activated or the stage changes, customers will notify local media of the issues, the current response stage, and the specific actions required of the public. The information will also be publicized on the city's Web site. Bill inserts will also be used as appropriate.

## **4.3 Initiation & Termination of Drought & Emergency Response Stages**

The provisions of this Plan shall apply to all persons, customers, and property utilizing potable water provided by the City of Fort Worth. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities. The Plan does not apply to locations using treated wastewater effluent, private wells or possessing their own water rights in the Trinity River.

The Plan may be applied to the entire city or geographic portions of the city as necessary. If the Plan is applied only to a limited sector, the boundaries will be defined in terms of roadways, creeks and other easily distinguishable features, such as city limits.

### **Initiation of a Drought/ Emergency Water Management Stage**

The City Manager or his/her official designee may order the implementation of a drought response or water emergency stage when one or more of the trigger conditions for that stage is met. The following actions will occur when a stage is initiated.

- The public will be notified through local media and the City of Fort Worth Web site, as described in Section 4.2.
- Fort Worth's wholesale customers and Tarrant Regional Water District will be notified by telephone and with a follow-up letter, e-mail, or fax that provides details of the reasons for initiation of the drought or water emergency stage.
- The Fort Worth Water Department will notify the Executive Director of the TCEQ within 5 business days when mandatory provisions of the Plan are activated.

Stages imposed by TRWD action must be initiated by the City of Fort Worth.

For other trigger conditions, the City Manager or his/her official designee may decide not to order the implementation of a drought response or water emergency stage 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 his/her official designee may order the termination of a drought response or water emergency stage 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 of Fort Worth Web site as described in Section 4.2.
- Wholesale customers and TRWD will be notified by telephone with a follow-up letter, e-mail, or fax.
- If any mandatory provisions of the drought contingency/emergency water management plan that have been activated are terminated, customers will notify the Executive Director of the TCEQ within 5 business days.

The City Manager or his/her 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.

## **4.4 Drought and Emergency Response Stages**

### **Stage 1 – Water Watch**

#### **Triggering Conditions**

- Water demand reaches or exceeds 90% of reliable delivery capacity for three consecutive days. The delivery capacity could be citywide or in a specified portion of the system.
- Fort Worth’s water treatment or distribution system becomes contaminated.
- Fort Worth’s water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Fort Worth’s water supply system is unable to deliver water due to the failure or damage of major water system components.



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

**Terminating Conditions for Stage 1**

Stage 1 may terminate when TRWD terminates its Stage 1 condition or when the circumstances that caused the initiation of Stage 1 no longer prevail.

**Goal for Use Reduction for Stage 1**

The goal for water use reduction under Stage 1, Water Watch, is 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 for Stage 1**

The City Manager or his/her official designee may order the implementation of any of the actions listed below, as deemed necessary. The City Manager or his/her official designee must implement any action(s) required by the Tarrant Regional Water District.

**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 an immediate health or safety 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:
    - failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;









































































