MODEL DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR NORTH TEXAS MUNICIPAL WATER DISTRICT MEMBER CITIES AND CUSTOMERS

MARCH 2008

Prepared for:
NORTH TEXAS MUNICIPAL WATER DISTRICT

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MARCH 2008

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ACKNOWLEDGEMENTS

This model drought contingency and water emergency response plan was prepared by Freese and Nichols for the North Texas Municipal Water District (NTMWD). It is intended to be used by NTMWD Member Cities and Customers as a guide as they develop their own drought contingency and water emergency response plans. This plan was prepared pursuant to Texas Commission on Environmental Quality rules. Some material is based on the existing drought contingency plans listed in Appendix A. To develop a regional approach, the emergency water management (drought contingency) plans for the City of Fort Worth and the City of Dallas were consulted.

Questions regarding this drought contingency and water emergency response plan should be addressed to the following:

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- Water Supply Corporation Resolution Adopting Drought Contingency and Water Emergency Response Plan
1. INTRODUCTION AND OBJECTIVES

This document has been prepared as a model drought contingency and water emergency response plan, intended to be available for use by North Texas Municipal Water District (NTMWD) Member Cities and Customers as they develop their own plans. This model plan addresses all of the current TCEQ requirements for a drought contingency plan. This model plan replaces the plan dated August 2004 and revised in April 2006.

The measures included in this model drought contingency and water emergency response plan are intended to provide short-term water savings during drought or emergency conditions. Water savings associated with ongoing, long-term strategies are discussed in the Model Water Conservation Plan for North Texas Municipal Water District Member Cities and Customers.

The purpose of this model drought contingency and water emergency response 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.

The NTMWD supplies treated water to its Member Cities and Customers. This model plan was developed by NTMWD in consultation with its Member Cities. In order to adopt this model plan, each NTMWD Member City and Customer will need to adopt ordinance(s) or regulation(s) implementing the plan, including the determination of fines and enforcement procedures. The model plan calls for Member Cities and Customers to adopt drought stages initiated by NTMWD during a drought or water supply emergency. Member Cities and Customers may also adopt more stringent drought or water emergency response stages than NTMWD if conditions warrant.

A drought is defined as an extended period of time when an area receives insufficient amounts of rainfall to replenish the water supply, causing water supply sources, in this

\(^1\) Superscripted numbers match references listed in Appendix A.
case reservoirs, to be depleted. In the absence of drought response measures, water demands tend to increase during a drought due to the need for additional outdoor irrigation. The severity of a drought depends on the degree of depletion of supplies and on the relationship of demand to available supplies. The NTMWD considers a drought to end when all of its supply reservoirs refill to the conservation storage pool.
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, a current copy of which is included in Appendix B. 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.”

Minimum Requirements

TCEQ’s minimum requirements for drought contingency plans are addressed in the following subsections of this report:

- 288.20(a)(1)(A) – Provisions to Inform the Public and Provide Opportunity for Public Input – Section 3.1
- 288.20(a)(1)(B) – Provisions for Continuing Public Education and Information – Section 3.2
- 288.20(a)(1)(C) – Coordination with the Regional Water Planning Group – Section 3.7
- 288.20(a)(1)(D) – Criteria for Initiation and Termination of Drought Stages – Section 3.3
- 288.20(a)(1)(E) – Drought and Emergency Response Stages – Section 3.4
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- 288.20(a)(1)(G) – Water Supply and Demand Management Measures for Each Stage – Section 3.4
- 288.20(a)(1)(H) – Procedures for Initiation and Termination of Drought Stages – Section 3.3
- 288.20(a)(1)(I) - Procedures for Granting Variances – Section 3.5
- 288.20(a)(1)(J) - Procedures for Enforcement of Mandatory Restrictions – Section 3.6
- 288.20(a)(3) – Consultation with Wholesale Supplier – Sections 1, 3.3, and 3.4
- 288.20(b) – Notification of Implementation of Mandatory Measures – Section 3.3
- 288.20(c) – Review and Update of Plan – Section 3.8
3. DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN

3.1 Provisions to Inform the Public and Opportunity for Public Input

Member Cities and Customers will provide opportunity for public input in the development of this drought contingency and water emergency response plan by the following means:

- Providing written notice of the proposed plan and the opportunity to comment on the plan by newspaper, posted notice, and notice on the supplier’s web site (if available).
- Making the draft plan available on the supplier’s web site (if available).
- Providing the draft plan to anyone requesting a copy.
- Holding a public meeting.

3.2 Provisions for Continuing Public Education and Information

Member Cities and Customers will inform and educate the public about the drought contingency and water emergency response 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 supplier’s web site (if available).
- Including information about the drought contingency and water emergency response plan on the supplier’s web site (if available).
- Notifying local organizations, schools, and civic groups that staff are available to make presentations on the drought contingency and water emergency response plan (usually in conjunction with presentations on water conservation programs).

At any time that the drought contingency and water emergency response plan is activated or the drought stage or water emergency response stage changes, Member Cities and Customers will notify local media of the issues, the drought response stage or water emergency response stage (if applicable), and the specific actions required of the public. The information will also be publicized on the supplier’s web site (if available). Billing inserts will also be used as appropriate.

3.3 Initiation and Termination of Drought or Water Emergency Response Stages

Initiation of a Drought or Water Emergency Response Stage

The City Manager, General Manager, Mayor, Chief Executive, or official designee may order the implementation of a drought or water emergency response stage when one or more of the trigger conditions for that stage is met. The following actions will be taken when a drought or water emergency response stage is initiated:
Drought contingency and water emergency response stages imposed by NTMWD action must be initiated by Member Cities and Customers. For other trigger conditions internal to a city or water supply entity, the City Manager, General Manager, Mayor, Chief Executive, 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 or Water Emergency Response Stage

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

- The public will be notified through local media and the supplier’s web site (if available) as described in Section 3.2.
- Wholesale customers (if any) and the NTMWD will be notified by e-mail with a follow-up letter or fax.
- If any mandatory provisions of the drought contingency and water emergency response plan that have been activated are terminated, Member Cities and Customers will notify the Executive Director of the TCEQ and the Executive Director of the NTMWD within 5 business days.

The City Manager, General Manager, Mayor, Chief Executive, or official designee may decide not to order the termination of a drought or water emergency response stage 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.
Drought Contingency and Water Emergency Response Stages and Measures

Stage 1

Initiation and Termination Conditions for Stage 1

- The NTMWD has initiated Stage 1, which may be initiated due to one or more of the following:
  - The NTMWD Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 1.
  - Water demand is projected to approach the limit of the permitted supply.
  - The storage in Lavon Lake is less than 65 percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than 65 percent of NTMWD’s total conservation pool capacity.
  - The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Mild drought.
  - NTMWD has concern that Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source may be limited in availability in the next 6 months.
  - NTMWD water demand exceeds 90 percent of the amount that can be delivered to customers for three consecutive days.
  - Water demand for all or part of NTMWD’s delivery system approaches delivery capacity because delivery capacity is inadequate.
  - NTMWD’s supply source becomes contaminated.
  - NTMWD’s water supply system is unable to deliver water due to the failure or damage of major water system components.
  - Supplier’s water demand exceeds 90 percent of the amount that can be delivered to customers for three consecutive days.
  - Supplier’s water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
  - Supply source becomes contaminated.
  - Supplier’s water supply system is unable to deliver water due to the failure or damage of major water system components.
  - Supplier’s individual plan may be implemented if other criteria dictate.

Stage 1 may terminate when NTMWD terminates its Stage 1 condition or when the circumstances that caused the initiation of Stage 1 no longer prevail.
Model Drought Contingency and NTMWD Member Cities and Customers Water Emergency Response Plan

Goal for Use Reduction and Actions Available under Stage 1

Stage 1 is intended to raise public awareness of potential drought or water emergency problems. The goal for water use reduction under Stage 1 is a two percent reduction in the amount of water produced by NTMWD. The City Manager, General Manager, Mayor, Chief Executive, or official designee may order the implementation of any of the actions listed below, as deemed necessary:

- Request voluntary reductions in water use by the public and by wholesale customers.
- Notify wholesale customers of actions being taken and request implementation of similar procedures.
- Increase public education efforts on ways to reduce water use.
- Review the problems that caused the initiation of Stage 1.
- Intensify efforts on leak detection and repair.
- Reduce non-essential city government water use. (Examples include street cleaning, vehicle washing, operation of ornamental fountains, etc.)
- Notify major water users and work with them to achieve voluntary water use reductions.
- Reduce city government water use for landscape irrigation.
- Ask the public to follow voluntary landscape watering schedules.

Stage 2

Initiation and Termination Conditions for Stage 2

- The NTMWD has initiated Stage 2, which may be initiated due to one or more of the following:
  - The NTMWD Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 2.
  - Water demand is projected to approach the limit of the permitted supply.
  - The storage in Lavon Lake is less than 55 percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than 55 percent of NTMWD’s total conservation pool capacity.
  - The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Mild drought.
  - NTMWD has concern that Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source may be limited in availability in the next 3 months.
NTMWD water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days.

NTMWD water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.

NTMWD’s supply source becomes contaminated.

NTMWD’s water supply system is unable to deliver water due to the failure or damage of major water system components.

- Supplier’s water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days.
- Supplier’s water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Supplier’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- Supplier’s individual plan may be implemented if other criteria dictate.

Stage 2 may terminate when NTMWD terminates its Stage 2 condition or when the circumstances that caused the initiation of Stage 2 no longer prevail.

Goal for Use Reduction and Actions Available under Stage 2

The goal for water use reduction under Stage 2 is a five percent reduction in the amount of water produced by NTMWD. If circumstances warrant or if required by NTMWD, the City Manager, General Manager, Mayor, Chief Executive, or official designee can set a goal for greater water use reduction. The City Manager, General Manager, Mayor, Chief Executive, or official designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as “requires notification to TCEQ” impose mandatory requirements on customers. The supplier must notify TCEQ and NTMWD within five business days if these measures are implemented:

- Continue or initiate any actions available under Stage 1.
- Notify wholesale customers of actions being taken and request them to implement similar procedures.
- Initiate engineering studies to evaluate alternatives should conditions worsen.
- Further accelerate public education efforts on ways to reduce water use.
- Halt non-essential city government water use. (Examples include street cleaning, vehicle washing, operation of ornamental fountains, etc.)
- Encourage the public to wait until the current drought or emergency situation has passed before establishing new landscaping.
- **Requires Notification to TCEQ** – Limit landscape watering with sprinklers or irrigation systems to no more than two days per week. An exception is allowed
for landscape associated with new construction that may be watered as necessary for 30 days from the date of the certificate of occupancy. An exemption is also allowed for registered and properly functioning ET/Smart irrigation systems and drip irrigation systems, which do not have restrictions to the number of days per week of operation.

- **Requires Notification to TCEQ** – Restrict landscape and lawn irrigation from 10 AM to 6 PM beginning April 1 through October 31 of each year.
- **Requires Notification to TCEQ** – Prohibit planting of cool season grasses (such as rye grass or other similar grasses) that intensify cool season water requirements.

### Stage 3

**Initiation and Termination Conditions for Stage 3**

- The NTMWD has initiated Stage 3, which may be initiated due to one or more of the following:
  - The NTMWD Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 3.
  - Water demand is projected to approach or exceed the limit of the permitted supply.
  - The storage in Lavon Lake is less than 45 percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than 45 percent of NTMWD’s total conservation pool capacity.
  - The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Moderate drought. (Measures required by SRA under a Moderate drought designation are similar to those under NTMWD’s Stage 3.)
  - The supply from Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source has become limited in availability.
  - NTMWD water demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days.
  - NTMWD water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
  - NTMWD’s supply source becomes contaminated.
  - NTMWD’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- Supplier’s water demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days.
- Supplier’s water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Supplier’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- Supplier’s individual plan may be implemented if other criteria dictate.

Stage 3 may terminate when NTMWD terminates its Stage 3 condition or when the circumstances that caused the initiation of Stage 3 no longer prevail.

Goals for Use Reduction and Actions Available under Stage 3

The goal for water use reduction under Stage 3 is a reduction of ten percent in the amount of water obtained from NTMWD. If circumstances warrant or if required by NTMWD, the City Manager, General Manager, Mayor, Chief Executive, or official designee can set a goal for a greater water use reduction.

The City Manager, General Manager, Mayor, Chief Executive, or official designee must implement any action(s) required by NTMWD. In addition, the City Manager, General Manager, Mayor, Chief Executive, or official designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as “requires notification to TCEQ” impose mandatory requirements on customers. The supplier must notify TCEQ and NTMWD within five business days if these measures are implemented:

- Continue or initiate any actions available under Stages 1 and 2.
- Notify wholesale customers of actions being taken and request them to implement similar procedures.
- Implement viable alternative water supply strategies.
- **Requires Notification to TCEQ** – Initiate mandatory water use restrictions as follows:
  - Prohibit hosing of paved areas, buildings, or windows. (Pressure washing of impervious surfaces is allowed.)
  - Prohibit operation of all ornamental fountains or other amenity impoundments to the extent they use treated water.
  - Prohibit washing or rinsing of vehicles by hose except with a hose end cutoff nozzle.
  - Prohibit using water in such a manner as to allow runoff or other waste.
- **Requires Notification to TCEQ** – Limit landscape watering with sprinklers or irrigation systems at each service address to once every seven days. Exceptions are as follows:
  - Foundations, new landscaping, new plantings (first year) of shrubs, and trees may be watered for up to 2 hours on any day by a hand-held hose, a soaker hose, or a dedicated zone using a drip irrigation system.
Golf courses may water greens and tee boxes without restrictions.

Public athletic fields used for competition may be watered twice per week.

Locations using other sources of water supply for irrigation may irrigate without restrictions.

Registered and properly functioning ET/Smart irrigation systems and drip irrigation systems may irrigate without restrictions.

**Requires Notification to TCEQ** – Limit landscape watering with sprinklers or irrigation systems between November 1 and March 31 to once every two weeks. An exception is allowed for landscape associated with new construction that may be watered as necessary for 30 days from the date of the certificate of occupancy, temporary certificate of occupancy, or certificate of completion.

**Requires Notification to TCEQ** – Prohibit hydroseeding, hydromulching, and sprigging.

**Requires Notification to TCEQ** – Existing swimming pools may not be drained and refilled (except to replace normal water loss).

**Requires Notification to TCEQ** - Initiate a rate surcharge as requested by NTMWD.

**Requires Notification to TCEQ** - Initiate a rate surcharge for all water use over a certain level.

**Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Member Cities and Customers, impose the same percent reduction on wholesale customers.

**Requires Notification to TCEQ** – Prohibit watering of golf courses using treated water, except as needed to keep greens and tee boxes alive.

### Stage 4

**Initiation and Termination Conditions for Stage 4**

- The NTMWD has initiated Stage 4, which may be initiated due to one or more of the following:
  - The NTMWD Executive Director, with the concurrence of the NTMWD Board of Directors, finds that conditions warrant the declaration of Stage 4.
  - Water demand is projected to approach or exceed the limit of the permitted supply.
  - The storage in Lavon Lake is less than 35 percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than 35 percent of NTMWD’s total conservation pool capacity.
The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Severe drought or Emergency.

- The supply from Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source has become severely limited in availability.
- NTMWD water demand exceeds the amount that can be delivered to customers.
- NTMWD water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
- NTMWD’s supply source becomes contaminated.
- NTMWD’s water supply system is unable to deliver water due to the failure or damage of major water system components.
  - Supplier’s water demand exceeds the amount that can be delivered to customers.
  - Supplier’s water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
  - Supply source becomes contaminated.
  - Supplier’s water supply system is unable to deliver water due to the failure or damage of major water system components.
  - Supplier’s individual plan may be implemented if other criteria dictate.

Stage 4 may terminate when NTMWD terminates its Stage 4 condition or when the circumstances that caused the initiation of Stage 4 no longer prevail.

Goals for Use Reduction and Actions Available under Stage 4

The goal for water use reduction under Stage 4 is a reduction of whatever amount is necessary in the amount of water obtained from NTMWD. If circumstances warrant or if required by NTMWD, the City Manager, General Manager, Mayor, Chief Executive, or official designee can set a goal for a greater water use reduction.

The City Manager, General Manager, Mayor, Chief Executive, or official designee must implement any action(s) required by NTMWD. In addition, the City Manager, General Manager, Mayor, Chief Executive, or official designee may order the implementation of any of the actions listed below, as deemed necessary. Measures described as “requires notification to TCEQ” impose mandatory requirements on member cities and customers. The supplier must notify TCEQ and NTMWD within five business days if these measures are implemented.

- Continue or initiate any actions available under Stages 1, 2, and 3.
- Notify wholesale customers of actions being taken and request them to implement similar procedures.
- Implement viable alternative water supply strategies.
- **Requires Notification to TCEQ** – Prohibit the irrigation of new landscaping using treated water.

- **Requires Notification to TCEQ** – Prohibit washing of vehicles except as necessary for health, sanitation, or safety reasons.

- **Requires Notification to TCEQ** – Prohibit commercial and residential landscape watering, except that foundations and trees may be watered for 2 hours on any day with a hand-held hose, a soaker hose, or a dedicated zone using a drip irrigation system. ET/Smart controllers and drip irrigation systems are not exempt from this requirement.

- **Requires Notification to TCEQ** – Prohibit golf course watering with treated water except for greens and tee boxes.

- **Requires Notification to TCEQ** – Prohibit the permitting of private pools. Pools already permitted may be completed and filled with water. Existing private and public pools may add water to maintain pool levels but may not be drained and refilled.

- **Requires Notification to TCEQ** – Require all commercial water users to reduce water use by a percentage established by the City Manager, General Manager, Mayor, Chief Executive, or official designee.

- **Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Member Cities and Customers, impose the same percent reduction on wholesale customers.

- **Requires Notification to TCEQ** – Initiate a rate surcharge for all water use over normal rates for all water use.

### 3.4 Procedures for Granting Variances to the Plan

The City Manager, General Manager, Mayor, Chief Executive, or official designee may grant temporary variances for existing water uses otherwise prohibited under this drought contingency and water emergency response 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 or entity 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 City Manager, General Manager, Mayor, Chief Executive, or official designee. All petitions for variances should be in writing and should include the following information:

- Name and address of the petitioners
3.4 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.

3.5 Procedures for Enforcing Mandatory Water Use Restrictions
Mandatory water use restrictions may be imposed in Stage 2, Stage 3 and Stage 4 drought contingency and water emergency response stages. The penalties associated with the mandatory water use restrictions will be determined by each entity.

Appendix D contains potential ordinances, resolutions, and orders that may be adopted by the city council, board, or governing body approving the drought contingency plan and water response plan, including enforcement of same.

3.6 Coordination with the Regional Water Planning Group and NTMWD
Appendix C includes a copy of a letter sent to the Chair of the Region C water planning group with this model drought contingency and water emergency response plan.

The suppliers will send a draft of its ordinance(s) or other regulation(s) implementing this plan to NTMWD for their review and comment. The supplier will also send the final ordinance(s) or other regulation(s) to NTMWD.

3.7 Review and Update of Drought Contingency and Water Emergency Response Plan
As required by TCEQ rules, Member Cities and Customers must review the drought contingency and water emergency response plan every five years. The plan will be updated as appropriate based on new or updated information.
APPENDIX A

LIST OF REFERENCES
Appendix A
List of References


The following conservation and drought contingency plans and related documents were reviewed in the development of this plan. References marked with a * were used heavily in the development of this plan.

(3) City of Austin Water Conservation Division: “City of Austin Water Drought Contingency Plan, Developed to Meet Senate Bill 1 Regulatory Requirements,” Austin, August 1999.

(4) City of Austin Water Conservation Division: “City of Austin Water Conservation Plan, Developed to Meet Senate Bill 1 Regulatory Requirements,” Austin, August 1999.


(11) Updates to the City of Fort Worth water conservation plan found at http://ci./fort-worth.tx.us in September 2003.


(17) HDR Engineering, Inc.: “Water Conservation Plan for the City of Corpus Christi,” adopted by the City of Corpus Christi City Council, August 24, 1999.


APPENDIX B

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES
ON DROUGHT CONTINGENCY PLANS
APPENDIX B
Texas Commission on Environmental Quality Rules on Drought Contingency Plans

Texas Administrative Code

TITLE 30  ENVIRONMENTAL QUALITY
PART 1  TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CHAPTER 288  WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
SUBCHAPTER B  DROUGHT CONTINGENCY PLANS
RULE §288.20  Drought Contingency Plans for Municipal Uses by Public Water Suppliers

(a) A drought contingency plan for a retail public water supplier, where applicable, must include the following minimum elements.

(1) Minimum requirements. Drought contingency plans must include the following minimum elements.

(A) Preparation of the plan shall include provisions to actively inform the public and affirmatively provide opportunity for public input. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.

(B) Provisions shall be made for a program of continuing public education and information regarding the drought contingency plan.

(C) The drought contingency plan must document coordination with the regional water planning groups for the service area of the retail public water supplier to ensure consistency with the appropriate approved regional water plans.

(D) The drought contingency plan must include a description of the information to be monitored by the water supplier, and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.

(E) The drought contingency plan must include drought or emergency response stages providing for the implementation of measures in response to at least the following situations:

(i) reduction in available water supply up to a repeat of the drought of record;

(ii) water production or distribution system limitations;

(iii) supply source contamination; or

(iv) system outage due to the failure or damage of major water system components (e.g., pumps).
(F) The drought contingency plan must include the specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this subparagraph are not enforceable.

(G) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:

(i) curtailment of non-essential water uses; and

(ii) utilization of alternative water sources and/or alternative delivery mechanisms with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).

(H) The drought contingency plan must include the procedures to be followed for the initiation or termination of each drought response stage, including procedures for notification of the public.

(I) The drought contingency plan must include procedures for granting variances to the plan.

(J) The drought contingency plan must include procedures for the enforcement of any mandatory water use restrictions, including specification of penalties (e.g., fines, water rate surcharges, discontinuation of service) for violations of such restrictions.

(2) Privately-owned water utilities. Privately-owned water utilities shall prepare a drought contingency plan in accordance with this section and incorporate such plan into their tariff.

(3) Wholesale water customers. Any water supplier that receives all or a portion of its water supply from another water supplier shall consult with that supplier and shall include in the drought contingency plan appropriate provisions for responding to reductions in that water supply.

(b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.

(c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.

Source Note: The provisions of this §288.20 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384.
Region C Water Planning Group  
c/o North Texas Municipal Water District  
P.O. Box 2408  
Wylie, TX 75098

Dear Sir:

Enclosed please find a copy of the updated Model Drought Contingency and Water Emergency Response Plan for Member Cities and Customers of the North Texas Municipal Water District. I am submitting a copy of this plan to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The Board of the North Texas Municipal Water District adopted the updated model plan on __________ __, 2008.

Sincerely,

James M. Parks, Executive Director  
North Texas Municipal Water District
Dear Mr. Thompson:

Enclosed please find a copy of the recently updated Model Drought Contingency and Water Emergency Response Plan for Member Cities and Customers of the North Texas Municipal Water District. I am submitting a copy of this plan to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The Board of the North Texas Municipal Water District adopted the updated model plan on __________ __, 2008.

Sincerely,

James M. Parks, Executive Director
North Texas Municipal Water District
APPENDIX D

ADOPTION OF DROUGHT CONTINGENCY
AND WATER EMERGENCY RESPONSE PLAN
APPENDIX D
Adoption of Drought Contingency and Water Emergency Response Plan

Municipal Ordinance
Adopting Drought Contingency and Water Emergency Response Plan

Ordinance No. __________

AN ORDINANCE ADOPTING A DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE CITY OF _________ TO PROMOTE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN.

WHEREAS, the City of ____, Texas (the “City”), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the City recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the City cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the “Commission”) require that the City adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, the City has determined an urgent need in the best interest of the public to adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, pursuant to Chapter 54 of the Local Government Code, the City is authorized to adopt such Ordinances necessary to preserve and conserve its water resources; and

WHEREAS, the City Council of the City of ____ desires to adopt the North Texas Municipal Water District (the “NTMWD”) Model Drought Contingency and Water Emergency Response Plan as official City policy for the conservation of water.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF _________ THAT:

Section 1. The City Council hereby approves and adopts the NTMWD Model Drought Contingency and Water Emergency Response Plan (the “Plan”), attached hereto as Addendum A, as if recited verbatim herein. The City commits to implement the requirements and procedures set forth in the adopted Plan.
Section 2. Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a fine of up to two thousand dollars ($2,000.00) and/or discontinuance of water service by the City. Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Plan is a separate violation. The City's authority to seek injunctive or other civil relief available under the law is not limited by this section.

Section 3. The City Council does hereby find and declare that sufficient written notice of the date, hour, place and subject of the meeting adopting this Ordinance 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 Ordinance and the subject matter thereof has been discussed, considered and formally acted upon. The City Council further ratifies, approves and confirms such written notice and the posting thereof.

Section 4. Should any paragraph, sentence, clause, phrase or word of this Ordinance be declared unconstitutional or invalid for any reason, the remainder of this Ordinance shall not be affected.

Section 5. The City Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

Section 6. The City Secretary is hereby authorized and directed to cause publication of the descriptive caption of this ordinance as an alternative method of publication provided by law.

Section 7. {If Applicable} Ordinance No. _______, adopted on __________, is hereby repealed.

Passed by the City Council on this ___ day of _____, ____.

_________________________________________________________________________
Mayor

Attest:

_________________________________________________________________________
City Secretary
Municipal Utility District Order
Adopting Drought Contingency and Water Emergency Response Plan

Order No. __________

AN ORDER ADOPTING A DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE __________ MUNICIPAL UTILITY DISTRICT TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN.

WHEREAS, the _______ Municipal Utility District (the “District”), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the District recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the District cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the “Commission”) require that the District adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, the District has determined an urgent need in the best interest of the public to adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, pursuant to Chapter 49 of the Water Code, the District is authorized to adopt such policies necessary to accomplish the purposes for which it was created, including but not limited to the preservation and conservation of water resources; and

WHEREAS, the Board of Directors of the District desires to adopt the North Texas Municipal Water District (the “NTMWD”) Model Drought Contingency and Water Emergency Response Plan as official District policy for the conservation of water.

NOW THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE __________ MUNICIPAL UTILITY DISTRICT THAT:

Section 1. The Board of Directors hereby approves and adopts the NTMWD Model Drought Contingency and Water Emergency Response Plan (the “Plan”), attached hereto as Addendum A, as if recited verbatim herein. The District commits to implement the requirements and procedures set forth in the adopted Plan.

Section 2. Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine as allowed by law, and/or discontinuance of water service by the District. Proof of a culpable mental
state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Plan is a separate violation. The District's authority to seek injunctive or other civil relief available under the law is not limited by this section.

Section 3. 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 Order 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 Order and the subject matter thereof has been discussed, considered and formally acted upon. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

Section 4. The General Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

Section 5. Should any paragraph, sentence, clause, phrase or word of this Order be declared unconstitutional or invalid for any reason, the remainder of this Order shall not be affected.

Section 6. {If Applicable} Order No. ______, adopted on ________, is hereby repealed.

Approved and adopted by the Board of Directors on this ___ day of _____, _____.

____________________________________
President, Board of Directors

Attest:

____________________________________
Secretary
AN ORDER ADOPTING A DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE ________ SPECIAL UTILITY DISTRICT TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN.

WHEREAS, the ________ Special Utility District (the “District”), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the District recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the District cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the “Commission”) require that the District adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, the District has determined an urgent need in the best interest of the public to adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, pursuant to Chapter 65 of the Water Code, the District is authorized to adopt such policies necessary to accomplish the purposes for which it was created, including but not limited to the preservation and conservation of water resources; and

WHEREAS, the Board of Directors of the District desires to adopt the North Texas Municipal Water District (the “NTMWD”) Model Drought Contingency and Water Emergency Response Plan as official District policy for the conservation of water.

NOW THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE ________ SPECIAL UTILITY DISTRICT THAT:

Section 1. The Board of Directors hereby approves and adopts the NTMWD Model Drought Contingency and Water Emergency Response Plan (the “Plan”), attached hereto as Addendum A, as if recited verbatim herein. The District commits to implement the requirements and procedures set forth in the adopted Plan.

Section 2. Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine as allowed by law, and/or discontinuance of water service by the District. Proof of a culpable mental
state is not required for a conviction of an offense under this section. Each day a customer fails to comply with the Plan is a separate violation. The District's authority to seek injunctive or other civil relief available under the law is not limited by this section.

Section 3. 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 Order 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 Order and the subject matter thereof has been discussed, considered and formally acted upon. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

Section 4. The General Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

Section 5. Should any paragraph, sentence, clause, phrase or word of this Order be declared unconstitutional or invalid for any reason, the remainder of this Order shall not be affected.

Section 6. {If Applicable} Order No. _______, adopted on ________, is hereby repealed.

Approved and adopted by the Board of Directors on this ___ day of _____, ____.

____________________________________
President, Board of Directors

Attest:

____________________________________
Secretary
A RESOLUTION ADOPTING A DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE ________ WATER SUPPLY CORPORATION TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN.

WHEREAS, the ________ Water Supply Corporation (the “WSC”), recognizes that the amount of water available to its water customers is limited; and

WHEREAS, the WSC recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the WSC cannot guarantee an uninterrupted water supply for all purposes at all times; and

WHEREAS, the Water Code and the regulations of the Texas Commission on Environmental Quality (the “Commission”) require that the WSC adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, the WSC has determined an urgent need in the best interest of the public to adopt a Drought Contingency and Water Emergency Response Plan; and

WHEREAS, pursuant to Chapter 67 of the Water Code, the WSC is authorized to adopt such policies necessary to preserve and conserve its water resources; and

WHEREAS, the Board of Directors of the WSC desires to adopt the North Texas Municipal Water District (the “NTMWD”) Model Drought Contingency and Water Emergency Response Plan as official WSC policy for the conservation of water.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ________ WATER SUPPLY CORPORATION THAT:

Section 1. The Board of Directors hereby approves and adopts the NTMWD Model Drought Contingency and Water Emergency Response Plan (the “Plan”), attached hereto as Addendum A, as if recited verbatim herein. The WSC commits to implement the requirements and procedures set forth in the adopted Plan.

Section 2. Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine as allowed by law, and/or discontinuance of water service by the WSC. Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day a
customer fails to comply with the Plan is a separate violation. The WSC's authority to seek injunctive or other civil relief available under the law is not limited by this section.

**Section 3.** 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. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

**Section 4.** The General Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code. Further, the Board of Directors hereby authorizes the General Manager or his designee to file an amendment to the WSC’s tariff to incorporate the Plan therein.

**Section 5.** 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.

**Section 6.** {If Applicable} Resolution No. _______, adopted on ________, is hereby repealed.

Approved and adopted by the ___________ on this ___ day of _____, ____.

______________________________________
President, Board of Directors

Attest:

______________________________________
Secretary