

# **DROUGHT CONTINGENCY PLAN**

*July 30, 2008*

## **1. INTRODUCTION AND OBJECTIVES**

The purpose of this drought contingency 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**

The TCEQ rules governing development of drought contingency plans for public water towns are contained in Title 30, Part 1, Chapter 288, Subchapter B, Rule 288.20 of the Texas Administrative Code, 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.”

## **3. DROUGHT CONTINGENCY & WATER EMERGENCY RESPONSE PLAN**

### **3.1 Provisions to Inform the Public and Opportunity for Public Input**

Citizens and customers will be given the opportunity for public input into the development of this drought contingency plan by the following means:

- Providing written notice of the proposed plan and the opportunity to comment on the plan by posted notice, use of the town’s website, and inclusion in the town’s newsletter.
- Making the draft plan available on the town’s website.
- Providing the draft plan to any customer requesting a copy.
- Holding a public meeting.

### **3.2 Provisions for Continuing Public Education and Information**

The town will inform and educate the public about the drought contingency & water emergency response plan by the following means:

- Preparing a bulletin describing the plan and making it available at town hall and other appropriate locations.

- Making the plan available to the public through the town’s website.
- Including information about the drought contingency & water emergency response plan on the town’s website.

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

### **3.3 Initiation and Termination of Drought Response Stages**

#### Initiation of a Drought Response Stage

The town manager or mayor may order the implementation of a drought response stage or water emergency response stage when one or more of the trigger conditions for that stage are met. The following actions will be taken when a drought stage is initiated:

- The public will be notified through local media and the town’s website 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 & water emergency response plan are activated, the town will notify the Executive Director of the TCEQ and the Executive Director of the NTMWD within five business days.

Drought contingency & water emergency response stages imposed by NTMWD action must be initiated by member cities and customers. For other trigger conditions, the town manager or mayor 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 that 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 town manager or mayor may order the termination of a drought or water emergency 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 or emergency response stage is terminated:

- The public will be notified through local media and the town’s website 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 & water emergency response plan that have been activated are terminated, the town will notify the Executive Director of the TCEQ and the Executive Director of the NTMWD within five business days.

The town manager or mayor may decide not to order the termination of a drought or water emergency response stage or water emergency even though the conditions for termination of the stage are met. Factors that 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 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.
  - The storage in Lake Lavon is less than sixty-five percent of the total conservation pool capacity.
  - NTMWD's storage in Jim Chapman Lake is less than sixty-five 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 six months.
  - NTMWD demand exceeds 90% of the amount that can be delivered to customers for seven 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.
  - Water use is projected to approach the limit of the permitted supply.
- Town's demand exceeds 90% of the amount that can be delivered to customers for three consecutive days.
- Town's water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.

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

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 is a 2% reduction in the amount of water produced by NTMWD. The town manager or mayor 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.
- Increase public education efforts on ways to reduce water use.
- Review the problems that caused the initiation of Stage 1.
- Notify major water users and work with them to achieve voluntary water use reductions.
- Intensify efforts on leak detection and repair.
- Reduce non-essential town government water use, such as landscape irrigation and vehicle washing.
- Ask the public to follow voluntary landscape watering schedules.
- Notify wholesale customers (if any) of actions being taken and request implementation of similar procedures.

**Stage 2**

Initiation and Termination Conditions for Stage 2

- The NTMWD has initiated Stage 2 which may be initiated by 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.
  - The storage in Lake Lavon is less than fifty-five percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than fifty-five 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 six months.
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- NTMWD demand exceeds 95% of the amount that can be delivered to customers for three consecutive days.
- NTMWD 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.
- Water use is projected to approach the limit of the permitted supply.
- Town's demand exceeds 95% of the amount that can be delivered to customers for three consecutive days.
- Town's demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Town's water supply system is unable to deliver water due to the failure or damage of major water system components.
- Town'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. The town manager or mayor 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 town must notify TCEQ and NTMWD within five business days if these measures are implemented:

- Continue or initiate any actions available under Stage 1.
- Initiate engineering studies to evaluate alternatives should conditions worsen.
- Further accelerate public education efforts on ways to reduce water use.
- Halt non-essential town government water use.
- Encourage the public to wait until the current drought or emergency situation has passed before establishing any new landscaping.
- Notify wholesale customers (if any) of actions being taken and request them to implement similar procedures.
- **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 up to thirty 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 10:00 a.m. to 6:00 p.m. April 1 through October 31.
- **Requires Notification to TCEQ** – Prohibit planting of cool season grasses (such as rye or similar) that intensify cool season water requirements.

### Stage 3

#### Initiation and Termination Conditions for Stage 3

- The NTMWD has initiated Stage 3, Severe, which may also be initiated by 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.
  - The storage in Lake Lavon is less than forty-five percent of the total conservation pool capacity.
  - NTMWD's storage in Jim Chapman Lake is less than forty-five 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.
  - The water supply from Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source has become limited in availability.
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  - NTMWD demand exceeds 98% of the amount that can be delivered to customers for three consecutive days.
  - NTMWD 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.
  - Water demand is projected to approach or exceed the limit of the permitted supply.
- Town's demand exceeds 98% of the amount that can be delivered to customers for three consecutive days.
- Town's demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate.
- Supply source becomes contaminated.
- Town's water supply system is unable to deliver water due to the failure or damage of major water system components.

- Town’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 town manager or mayor may set a goal for a greater water use reduction.

The town manager or mayor must implement any action(s) required by North Texas Municipal Water District. In addition, the manager or mayor 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 town 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.
- 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 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: Foundations, azaleas, new plantings (first year) of trees and shrubs may be watered for up to 2 hours on any day by a hand-held hose, a dedicated zone using a drip irrigation system, or a soaker hose. 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 restriction.)
- **Requires Notification to TCEQ** – Prohibit draining and filling of existing pools. (Pools may add water to replace losses during normal use.)
- **Requires Notification to TCEQ** – Prohibit hydroseeding, hydromulching, and sprigging.
- **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, which may be watered as necessary for thirty days from the date of the certificate of occupancy.
- **Requires Notification to TCEQ** – Initiate a rate surcharge as requested by NTMWD.
- **Requires Notification to TCEQ** – Initiate an additional rate surcharge(s) for all water use over a certain level.

- **Requires Notification to TCEQ** – Prohibit watering of golf courses using treated water, except as needed to keep greens and tee boxes alive.
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- **Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Town, impose the same percent reduction on wholesale customers (if any) .

#### **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.
  - The storage in Lake Lavon is less than thirty-five percent of the total conservation pool capacity.
  - NTMWD’s storage in Jim Chapman Lake is less than thirty-five 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 water supply from Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source has become severely limited in availability.
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  - NTMWD demand exceeds the amount that can be delivered to customers.
  - NTMWD 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.
  - Water demand is projected to approach or exceed the limit of the permitted supply.
- Town’s demand exceeds the amount that can be delivered to customers.
- Town’s demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate.
- Supply source becomes contaminated.
- Town’s water supply system is unable to deliver water due to the failure or damage of major water system components.
- Town’s individual plan may be implemented if other criteria dictate.

Stage 4 can 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 are required by NTMWD, the town manager or mayor may set a goal for a greater water use reduction.

The town manager or mayor must implement any action(s) required by North Texas Municipal Water District. In addition, the manager or mayor 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 town 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.
- Implement viable alternative water supply strategies.
- **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 may be watered for 2 hours each 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 except for greens and tee boxes.
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- **Requires Notification to TCEQ** – Require all commercial water users to reduce water use by a percentage established by the town manager or his/her designee.
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- **Requires Notification to TCEQ** – Prohibit the irrigation of new landscaping using treated water.
- **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** – Initiate an additional rate surcharge(s) for all water use over a certain level.**Requires Notification to TCEQ** – If NTMWD has imposed a reduction in water available to Town, impose the same percent reduction on wholesale customers (if any).

### **3.5 Procedures for Granting Variances to the Plan**

The town manager or mayor may grant temporary variances for existing water uses otherwise prohibited under this drought contingency and water emergency 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 and are implemented.

Variations shall be granted or denied at the discretion of the town manager or mayor. All petitions for variations must be in writing and shall 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 Stage 2, 3, and 4 drought contingency and water emergency response 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, the town 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 town may cut off water service to the customer.

### **3.7 Coordination with the Regional Water Planning Group and NTMWD**

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

### **3.8 Review and Update of Drought Contingency Plan**

As required by TCEQ rules, the town will review this drought contingency plan every five years. The plan will be updated as appropriate based on new or updated information.