



# **Drought Contingency Plan for the City of Houston**

September 2014



# **DROUGHT CONTINGENCY PLAN FOR**

**City of Houston  
900 Bagby Street  
Houston TX 77002**

**CCN# 99144  
PWS# 1010013**

**Effective September 2014 through May 2019**

## **Section 1 Declaration of Policy, Purpose, and Intent**

The purpose of the Drought Contingency Plan is to establish policies and procedures for the City of Houston to follow in case of a water shortage emergency. A water shortage emergency caused by drought or other uncontrollable circumstances which hinder the City of Houston's ability to meet water demand, can range from mild to critical and can disrupt the normal availability of water supplies. Therefore, it is important that the City of Houston establish this procedure so that guidelines exist in the event that a water shortage emergency occurs. The City of Houston Code Chapter 47, Article VII contains the policy regarding the actions the City of Houston will take in the event of a water shortage or emergency. Definitions of terms used throughout the following plan can be found in Section 47-249 of Article VII.

## **Section 2 Public Involvement**

Opportunity for the public to provide input into the preparation of the Plan was provided by:  
(check at least one of the following)

- ☐ Scheduling and providing public notice of a public meeting to accept input on the Plan  
The meeting took place at: Date:      Time:      Location:
- ☐ Mailed survey with summary of results (attach survey and results)
- ☐ bill insert inviting comment (attach bill insert)
- ☒ **other method:**
  - **Posted on-line to receive comments and input 6/5/12 and ended public comment period on 8/17/12.**
  - **Presented to the Oversight Committee and the Transportation, Technology and Infrastructure Committee 9/12/12. Public comments were received at this meeting and subsequent council meetings.**
  - **Water Conservation Task Force established by Mayor's Office to continue review of water shortage and emergency options and opportunities for their application and implementation in Houston.**

### Section 3 Public Education

The City of Houston will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage.

Drought plan information will be provided by:  
(check at least one of the following)

- ✓ **public meeting** – The public is able to address City Council weekly
- ✓ **press releases**
- ✓ **utility bill inserts**
- other \_\_\_\_\_

### Section 4 Coordination with Regional Water Planning Groups

The service area of the City of Houston is located within Regional Water Planning Group (RWPG)  
H. The City of Houston has mailed a copy of this Plan to the RWPG.

### Section 5 Notice Requirements

Written notice will be provided to each customer **prior to implementation or termination of each stage of the water restriction program**. Mailed notice will be given to each customer 72 hours prior to the start of water restriction. If notice is hand delivered, the City of Houston understands it cannot enforce the provisions of the plan for 24 hours after notice is provided. The written notice to customers will contain the following information:

1. the date restrictions will begin;
2. the circumstances that triggered the restrictions;
3. the stages of response and explanation of the restrictions to be implemented; and
4. an explanation of the consequences for violations.

**City of Houston will notify the TCEQ by telephone at (512) 239 - 4691, or electronic mail at [watermon@tceq.state.tx.us](mailto:watermon@tceq.state.tx.us) prior to implementing Stage II and will notify in writing the Public Drinking Water Section at MC - 155, P.O. Box 13087, Austin, Texas 78711-3087 within five (5) working days of implementation including a copy of the City's restriction notice. The City of Houston will file a status report of its restriction program with the TCEQ at the initiation and termination of mandatory water use restrictions (i.e., Stages II through IV).**

## Section 6    Violations

With the exception of customers with water service contracts, in accordance with section 54.001 of the Texas Local Government Code, any person who violates any provision of this article shall be guilty of an offense and upon conviction thereof, shall be punished by a fine of not less than \$100.00 nor more than \$2,000.00 for each violation. Each act of city water use in violation of this article shall constitute and be punishable as a separate offense. Each day that any violation continues shall constitute and be punishable as a separate offense. Unless another penalty is specifically provided by this Code or by state law, the penalty for violation of any provision of this article shall be as follows:

(1) **For violations of stage two water shortage**, the department may issue a written warning to a customer for a first-time violation. Any subsequent violations are subject to a fine of \$100.00 to \$2,000.00.

(2) **For violations of stage three water shortage**, the department may issue a written warning to a customer for a first-time violation. Any subsequent violations are subject to a fine of \$500.00 to \$2,000.00. Additionally, the director may monitor the water account of any customer who has been convicted of a violation of [section 47-253](#). Daily monitoring may continue through the end of the existing water shortage period. The director may turn off city water if a customer has violated the authorized water use during a stage three water shortage on three separate instances within a 30-day period. Water service may be reinstated to a customer after a termination only upon a) payment of all applicable fines and any outstanding water service charges; and b) agreeing to the maximum rate in existence, regardless of the customer's billing rate class, for all future water service provided during the 12 months immediately following the termination and filing such agreement in writing with the department.

(3) **Violations of stage four water shortage** are subject to fines of \$1,000.00 to \$2,000.00. Additionally, all customers exceeding the allowed water usage during a stage four water shortage by ten percent or more shall pay a 20 percent surcharge for the current and two subsequent billing periods. The director may also turn off city water if a customer has exceeded the authorized water use during a stage four water shortage on three separate instances within a 30-day period. Water service may be reinstated to a customer after termination only upon a) payment of all applicable fines and any outstanding water service charges; and b) agreeing to the maximum rate in existence, regardless of the customer's billing rate class, for all future water service provided during the 12 months immediately following the termination and filing such agreement in writing with the department.

In the event that a customer with a water service contract engages in the unauthorized use of city water, the city shall have the right to pursue any and all rights and remedies allowed under existing contracts with customers, and any and all remedies allowed under Texas law.

## **Section 7 Exemptions or Variances**

The utility official may grant in writing a temporary variance for an otherwise prohibited water use if the utility official determines that:

- (1) Failure to grant the variance would cause an emergency condition immediately threatening the life, safety, welfare, or fire protection of the public, the person requesting the variance, or the environment; or
- (2) The applicant cannot comply with the prohibition for technical reasons; or
- (3) The applicant agrees to implement alternative methods that will achieve the same or a greater level of reduction in water use.

An application for a variance shall be made in writing with the utility official and shall include the following:

- (1) Name and address of the applicant;
- (2) Purpose of water use;
- (3) Specific provision(s) of this article from which the applicant is requesting relief;
- (4) A detailed statement as to how the specific provision(s) of this article adversely affects the applicant or what damage or harm will occur to the applicant or others if the applicant complies with this article;
- (5) Description of the relief requested;
- (6) Period of time for which the variance is sought;
- (7) Alternative water use restrictions or other measures the applicant is taking or proposes to take to conform to the provisions of this article and the compliance date; and
- (8) Other pertinent information reasonably required by the utility official to determine whether the criteria of subsection (a) have been met.

No variance shall be retroactive or otherwise justify any violation of the prohibitions hereunder occurring prior to the issuance of the variance. A variance is valid for only the declared water shortage period in existence at the time of issuance and shall expire at the conclusion of the existing water shortage period. If the conclusion of the existing water shortage period is immediately followed by a newly declared water shortage period, consisting of either more or less threatening conditions, a new application for a variance must be filed in accordance with subsection (b) of this section. Notwithstanding the foregoing, a variance may be applied retroactively if issued to a residential customer who is a member of a family consisting of five or more persons living in a single residential unit served by a single water meter.

## **Section 8    Response Stages**

### **STAGE I – ABNORMAL CONDITIONS (VOLUNTARY):**

**Target:**    Achieve a FIVE percent reduction in OVERALL water use.

**Stage I will begin:**

When the director finds that the city's water supply system is under stress because of lower than average annual rainfall, temperatures that are higher or lower than normal, or other circumstances.

**Stage I will end:**

When the director finds that the abnormal conditions leading to the declaration either no longer exist, have been mitigated, or have been escalated, and the director files a written declaration to that effect with the city secretary.

**Utility Measures:**

The director's declaration, which may cover all or a portion of the city's water supply system, shall be in writing and filed with the city secretary. City departments' water use reduction plans shall be implemented immediately upon the declaration of a stage one water shortage period and shall remain in effect until the conclusion of the water shortage period.

**Voluntary Water Use Restrictions:**

Unless otherwise stated in the declaration, all customers are requested to take the following voluntary water use restriction measures:

- (1) Check for and repair all leaks, dripping faucets, and running toilets;
- (2) Check for and correct excessive irrigation or uncorrected leaks that result in city water leaving the customer's property by drainage onto adjacent properties or public or private roadways or streets or gutters; and
- (3) Irrigate between 7:00 p.m. and 5:00 a.m. of the following day on no more than two days per week in conformity with the following schedule:
  - a. Sundays and Thursdays for single-family residential customers with even-numbered street addresses; and
  - b. Saturdays and Wednesdays for single-family residential customers with odd-numbered street addresses; and
  - c. Tuesdays and Fridays for all other customers.

## **STAGE II - SEVERE CONDITIONS (MANDATORY):**

**Target:** Achieve a TEN percent reduction in OVERALL water use.

The City of Houston will implement Stage II when, upon the recommendation of the director of the Public Works and Engineering Department, the mayor declares a stage two water shortage upon finding that one or more of the following conditions exist that may impact all or a portion of the city's water supply system:

### **Triggers:**

- (1) Combined total storage of surface water supply is less than 24 months based on a calculated projection of monthly production of city water that includes historic production and information provided by customers;
- (2) Combined total storage of surface water supply is less than 16 months, based on a calculated projection of current water production for the most recent 24-hour period;
- (3) Current water production is 80 percent of the available treatment capacity;
- (4) Loss of approximately 20 percent of available treatment capacity; or
- (5) Water pressure readings of 45 pounds per square inch or less throughout all or material portions of the city's treated water distribution system.

**Upon initiation and termination of Stage II, the City of Houston will mail a public announcement to its customers. Notice to TCEQ required.**

### **Requirements for Termination:**

A stage two water shortage ends when the mayor declares, based on the recommendation from the director that the severe conditions leading to the declaration either no longer exist, have been mitigated, or have been escalated, and the director files a written declaration to that effect with the city secretary.

### **Utility Measures:**

City departments' water use reduction plans shall be implemented immediately upon the declaration of a stage four water shortage period and shall remain in effect until the conclusion of the water shortage period.

The second water source for City of Houston is: (check one)

- ✓ **Other well**
- Inter-connection with other system
  - Purchased water
- Other \_\_\_\_\_

### **Mandatory Water Use Restrictions:**

During a stage two water shortage, unless otherwise stated in the declaration, all classes of customers are subject to mandatory restrictions of outdoor use. During a stage two water shortage, outdoor use shall be unlawful with the exception of the following time periods as specified in the declaration:

- (1) Between 7:00 p.m. and 5:00 a.m. of the following day on no more than two days per week in conformity with the following schedule:
  - a. Sundays and Thursdays for single-family residential customers with even-numbered street addresses; and
  - b. Saturdays and Wednesdays for single-family residential customers with odd-numbered street addresses; and
  - c. Tuesdays and Fridays for all other customers; or
- (2) Between 7:00 p.m. and 5:00 a.m. of the following day on no more than one day per week in conformity with the following schedule:
  - a. Saturdays for single-family residential customers with odd-numbered addresses;
  - b. Sundays for single-family residential customers with even-numbered addresses; and
  - c. Tuesdays for all other customers.

Any outdoor water use that results in city water leaving the customer's property by drainage onto adjacent properties or public or private roadways or streets or gutters shall be unlawful.



### **STAGE III – EXTREME CONDITIONS (MANDATORY):**

**Target:** Achieve a TWENTY percent reduction in OVERALL water use.

#### **Triggers:**

The water utility will implement Stage III when any one of the selected triggers is reached that may impact all or a portion of the city's water supply system:

- (1) Combined total storage of surface water supply is less than 18 months based on a calculated projection of monthly production of city water that includes historic production and information provided by customers;
- (2) Combined total storage of surface water supply is less than 12 months, based on a calculated projection of current water production for the most recent 24-hour period;
- (3) Current water production is 85 percent of the available treatment capacity;
- (4) Loss of approximately 25 percent of available treatment capacity; or
- (5) Water pressure readings of 40 pounds per square inch or less throughout all or material portions of the city's treated water distribution system.

**Upon initiation and termination of Stage III, the City of Houston will mail a public announcement to its customers. Notice to TCEQ required.**

#### **Requirements for Termination:**

A stage three water shortage ends when, upon the recommendations of the director and the mayor, the city council finds that the extreme conditions leading to the declaration either no longer exist, have been mitigated, or have been escalated, and the city council files a written declaration to that effect with the city secretary.

#### **Utility Measures:**

City departments' water use reduction plans shall be implemented immediately upon the declaration of a stage four water shortage period and shall remain in effect until the conclusion of the water shortage period. The Director shall apply any necessary curtailments consistently between classes of customers in accordance with Section 11.039 of the Texas Water Code.

#### **Mandatory Water Use Restrictions:**

During a stage three water shortage, all outdoor use shall be unlawful except that customers may use city water to continue production and protect inventory of their primary business products.

## **STAGE IV – EXCEPTIONAL CONDITIONS (MANDATORY):**

**Target:** Achieve a THIRTY FIVE percent reduction in OVERALL water use.

### **Triggers:**

The water utility will implement Stage IV when any one of the selected triggers is reached that may impact all or a portion of the city's water supply system:

- (1) Combined total storage of surface water supply is less than 12 months, based on a calculated projection of monthly production of city water that includes historic production and information provided by customers;
- (2) Combined total storage of surface water supply is less than six months, based on a calculated projection of current water production for the most recent 24-hour period;
- (3) Current water production is 90 percent of the available treatment capacity; or
- (4) Water pressure readings of 35 pounds per square inch or less throughout all or material portions of the city's treated water distribution system.

**Upon initiation and termination of Stage IV, the City of Houston will mail a public announcement to its customers. Notice to TCEQ required.**

### **Requirements for Termination:**

A stage four water shortage ends when, upon the recommendations of the director and the mayor, the city council finds that the exceptional conditions leading to the declaration either no longer exist or have been mitigated, and the city council files a written declaration to that effect with the city secretary.

### **Operational Measures:**

City departments' water use reduction plans shall be implemented immediately upon the declaration of a stage four water shortage period and shall remain in effect until the conclusion of the water shortage period. The Director shall apply any necessary curtailments consistently between classes of customers in accordance with Section 11.039 of the Texas Water Code.

### **Mandatory Water Use Restrictions:**

During a stage four water shortage, the following acts or omissions shall be unlawful:

- (1) All outdoor use;
- (2) Use of more than 4,000 gallons of city water per month by single-family residential customers;

- (3) Use of more than 4,000 gallons of city water per month (used per unit, as provided in [section 47-71](#) of City of Houston Code of Ordinance) by multifamily residential customers; and
- (4) For all customers other than residential customers, failure to reduce use of city water by 15 percent of baseline usage, or any other percentage if recommended by the director and adopted by city council in the stage four water shortage declaration.

During a stage four water shortage, the director may authorize a ten percent rate reduction for water usage to customers for reductions of city water use by 20 percent or more than those restrictions set forth in subsection (d), except that the ten percent rate reduction shall not be available to customers whose average monthly usage during the preceding 12-month period was less than 4,000 gallons. The rate reduction for water usage shall be effective for the duration of the existing water shortage period.

Immediately upon the declaration of a stage four water shortage, the city may claim force majeure to all of its existing water service contracts consistent with the terms of such water service contracts and in accordance with applicable state law.

#### **SYSTEM OUTAGE or SUPPLY CONTAMINATION**

The City of Houston will notify the TCEQ Regional Office as soon as communication can be established.