

DROUGHT CONTINGENCY PLAN FOR GULF COAST WATER AUTHORITY

INTRODUCTION:

Gulf Coast Water Authority is a wholesale surface water supplier serving customers in Fort Bend, Brazoria, and Galveston counties. The Brazos River is the primary surface water source for Gulf Coast Water Authority and its Agricultural, Municipal, and Industrial Customers. The Authority also holds limited surface water rights in certain bayous in Brazoria County and Jones/Oyster Creek in Fort Bend County.

The worsening of the drought conditions on the Brazos River over the past five years has caused the Authority to reevaluate how to implement water restrictions when its water supply availability cause the Authority to believe there is an insufficient quantity of water to meet all customer's needs.

The purpose of this Drought Contingency Plan (hereinafter referred to as the "Plan"), is:

- To conserve the available water supply in times of drought and/or an emergency.
- To maintain supplies for domestic water use, industrial 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.
- To satisfy the requirements set forth by various State agencies.

A drought is defined as an extended period of time when the provider of the source water supplier cannot identify sufficient water supplies to meet the normal demands of its customers. The severity of the drought depends on the degree of depletion of the source water supplies and the relationship to the customer's demands.

TCEQ REQUIREMENTS FOR DROUGHT CONTINGENCY PLANS:

This plan is intended to comply with the TCEQ's requirements for the development of drought contingency plans as they apply to wholesale water suppliers under Title 30, Part 1, Chapter 288, Subchapter B., and Rule 288.22 and to irrigation water suppliers per Rule 288.21.

PUBLIC INVOLVEMENT:

The Authority will make available a draft copy of the Plan to the public through posting on the Authority's web site and electronic distribution to its customers prior to a public hearing on adoption of the provisions contained herein. The public hearing will be held in accordance with

the Open Meetings requirements of the State of Texas. All will be given opportunity to provide input and comments toward the final version of the Plan.

WATER CUSTOMER EDUCATION:

The Authority will take a proactive role in informing its customers on an ongoing basis of the elements of the Plan through its web site, customer meetings, and requests from customers for presentations.

AUTHORIZATION OF DROUGHT RESPONSE

The Authority's General Manager or his designee, is hereby authorized and directed to implement the applicable provisions of this Plan upon his determination that such implementation is necessary to meet the purposes stated above in the INTRODUCTION. The General Manager shall have the authority to initiate or terminate the response measures herein described.

APPLICATION OF DROUGHT RESPONSE MEASURES:

The provisions of the Plan apply to all of the Authority's Customers. Customers are defined as any person, individual, corporation, partnership, association, municipality, political subdivision, or any other entity. Customers will be notified through telephone and other electronic means upon the initiation of any Plan stages. Mandatory provisions of the Plan, when activated, will be transmitted to the Executive Director of the TCEQ as required by rule.

There are many factors to consider before activation of any Stage of the Plan. Therefore, no single factor alone triggers a necessary response. Additional factors beyond those listed below include time of year, current and forecasted weather conditions, or anticipation of changing water demands or water supplies.

The application of the Plan measures only applies to the water supplied by the Authority. A Customer's alternate water supply sources are not controlled by the Authority.

CRITERIA AND ACTIONS REQUIRED FOR DROUGHT OR OTHER EMERGENCY RESPONSE

STAGES:

AGRICULTURAL CUSTOMERS

Agricultural Customers are supplied only from the Authority's run of the river water rights and any Brazos River Authority one-year interruptible stored contract water supply. Agricultural Customers do not participate in any long-term Brazos River Authority stored contract water supplies. Agricultural Customers are not required to, nor do they seek, long-term take or pay contracts from the Authority. Agricultural Customer contracts are generally of one or two crop growing season and of less than one year duration. Agricultural Customer's water charges are generally less than Municipal and Industrial Customers as they are not normally obligated to guarantee any long term capital improvement cost defeasance. The Authority has now installed water metering devices on all Agricultural Customer diversion points and beginning in 2015 will charge all Agricultural customers for actual water use to encourage best water management conservation practices.

STAGE 1 DROUGHT CONDITION AND RESPONSE

A Stage 1 Drought Condition exists when the General Manager finds the current and long range forecasted weather conditions causes a need for increased awareness of drought conditions by the Authority's Customers. The Authority's response is to notify its customers of Stage 1 condition and encourage best water management conservation practices. There are no mandatory actions required by the Authority or its customers; however the Authority reserves the right to immediately suspend water delivery to any Agricultural Customer who fails to properly maintain its water conveyance laterals and fields to prevent water waste.

STAGE 2 DROUGHT CONDITION AND RESPONSE

A Stage 2 Drought Condition exists whenever the Authority determines that any of its water rights are impaired or curtailed or that any available BRA one-year stored water purchased by the Authority for its Agricultural Customers is projected to be insufficient to meet their needs. The Authority's response may include but not limited to actions stated under STAGE 1 plus the following;

- Notice of suspension of 2nd crop watering,
- Notice of suspension of watering to fields through laterals with extraordinary water loss due to length, evaporation, leakage, or waste.

STAGE 3 DROUGHT CONDITION OR EMERGENCY CONDITION AND RESPONSE.

A Stage 3 Drought Condition or Emergency Condition exists whenever the Authority determines that any of its water rights are significantly impaired or curtailed; and, any available BRA one-

year stored water purchased by the Authority for its Agricultural Customers is projected to be unavailable before the end of the current planted crop is ready for harvest. The Authority's response may include but not limited to actions stated under STAGE 1 or 2, plus notice of suspension of all watering.

MUNICIPAL CUSTOMERS

Municipal Customers are defined as those cities and water districts that have entered into long term water supply contracts for raw or treated water. The source water for most of the Authority's Municipal Customers is from the Authority's water rights on the Brazos River and BRA long-term stored water contract supplies. The Authority will notify its Municipal Customers to reduce their daily take of water by a certain percentage of their Contract Quantity. The Contract Quantity is that quantity of water stated in the Agreement between the Authority and the Customer as their Contract or Reserve Quantity. (Does not include any Option Contract Water)

The amount of water that a Municipal Customer may receive in any of the Drought Stages below is their Contract Quantity proportioned to the projected number of days of water supply available based on the quantity of BRA long-term stored water available as indicated in the Drought Stages below. As the number of days of water supply grows shorter, the percent reduction below the Contract Quantity increases.

STAGE 1 DROUGHT CONDITION AND RESPONSE

A Stage 1 Drought Condition exists when the General Manager finds the current and long range forecasted weather conditions causes a need for increased awareness of drought conditions by its customers. The Authority's response is to notify its customers of Stage 1 condition and encourage best water management conservation practices. There are no mandatory actions required by the Authority or its customers; however the Authority reserves the right to immediately suspend water delivery to any Municipal Customer who fails to properly maintain its water distribution system to prevent water waste. Municipal Customers will be penalized for all water delivered above their Contract Quantity. (See Penalty Section below).

STAGE 2 DROUGHT CONDITION AND RESPONSE

A Stage 2 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA and the Authority's projection of available BRA stored water supply is less than 100 days of historical daily average use.

Municipal Customers will be asked to limit their take of water to their Contract Quantity times 0.60. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 3 DROUGHT CONDITION AND RESPONSE

A Stage 3 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA. Stage 3 is triggered when the Authority's projection of available BRA stored water supply is less than 75 days of historical daily average use.

Municipal Customers will be asked to limit their take of water to their Contract Quantity times 0.50. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 4 DROUGHT CONDITION AND RESPONSE

A Stage 4 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA. Stage 4 is triggered when the Authority's projection of available BRA stored water supply is less than 50 days of historical daily average use.

Municipal Customers will be asked to limit their take of water to their Contract Quantity times 0.40. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 5 DROUGHT CONDITION AND RESPONSE

A Stage 5 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA. Stage 5 is triggered when the Authority's projection of available BRA stored water supply is less than 25 days of historical daily average use.

Municipal Customers will be asked to limit their take of water to their Contract Quantity times 0.30. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

INDUSTRIAL CUSTOMERS

Industrial Customers are defined as petrochemical and refineries that have long term take or pay water supply contracts with the Authority. The Authority recognizes the nature of the operations of these facilities do not lend themselves to incremental reductions in water usage. The Authority further recognizes that these facilities are of vital economic importance not only the local region but also to the State and Nation. The State of Texas recognizes the difficulty of

prescribing Drought Contingency Plans for Industrial Customers by the absence of TCEQ rules requiring industries to develop a Drought Contingency Plan. That said, drought conditions cannot be ignored and definitive actions must be taken.

STAGE 1 DROUGHT CONDITION AND RESPONSE

A Stage 1 Drought Condition exists when the General Manager finds the current and long range forecasted weather conditions causes a need for increased awareness of drought conditions by its customers. The Authority's response is to notify its customers of Stage 1 condition and encourage best water management conservation practices. There are no mandatory actions required by the Authority or it's Industrial Customers; however the Authority reserves the right to immediately suspend water delivery to any Industrial Customer who fails to properly maintain its water distribution system to prevent water waste. Industrial Customers will be penalized for any water delivered above their contract amount. (See Penalty Section below)

STAGE 2 DROUGHT CONDITION AND RESPONSE

A Stage 2 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA and the Authority's projection of available BRA stored water supply is less than 100 days of historical daily average use.

Industrial Customers will be asked to limit their take of water to their Contract Quantity times 0.60. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 3 DROUGHT CONDITION AND RESPONSE

A Stage 3 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA and the Authority's projection of available BRA stored water supply is at or less than 75 days of historical daily average use.

Industrial Customers will be asked to limit their take of water to their Contract Quantity times 0.50. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 4 DROUGHT CONDITION AND RESPONSE

A Stage 4 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA and the Authority's projection of available BRA stored water supply is less than 50 days of historical daily average use.

Industrial Customers will be asked to limit their take of water to their Contract Quantity times 0.40. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

STAGE 5 DROUGHT CONDITION AND RESPONSE

A Stage 5 Drought Condition exists when the Authority's run-of-the-river water rights are impaired to the point that the Authority is required to release stored water purchased from the BRA and the Authority's projection of available BRA stored water supply is less than 25 days of historical daily average use.

Industrial Customers will be asked to limit their take of water to their Contract Quantity times 0.30. Any amounts in excess of this amount will be subject to the Penalty provisions stated below.

SPOT AND INTERRUPTIBLE WATER CUSTOMERS

The Authority contracts with certain customers for 'Spot' or Interruptible water. These customers are golf courses, concrete plants, amenity ponds, etc., none of which contribute directly to the health, safety, and welfare of the public. Each spot and interruptible contract clearly state water delivery is subject to termination by the Authority without notice or warranty. As such, the Authority will terminate delivery of water upon enactment of any Stage 2 Drought Condition.

EMERGENCY WATER SHORTAGE

Any major system failure that causes an immediate disruption to the Authority's ability to deliver water constitutes an emergency. The General Manager is authorized to take any and all action necessary to restore water service. In addition, the Authority will immediately initiate its emergency customer contact protocols to inform all customers of the situation. Customers will be directed to take whatever emergency action is necessary to limit the impact of said shortage. The General Manager will notify the TCEQ executive director within five days of initiation and termination.

PENALTIES

In addition to any other actions the Authority may take, the Authority will charge all Municipal and Industrial Customers a penalty of \$1.00 per thousand gallons for exceeding what is allowed under the various Stages contained herein.

INCENTIVES

Any Municipal or Industrial Customer whose take of water is below the allowed quantity for each drought stage, will receive a pro-rata distribution of all funds the Authority collects from penalty payments.

ENFORCEMENT

All mandatory reduction in delivery of water contained herein is authorized by the Texas Water Code, 11.039.

VARIANCES

The General Manager may grant temporary variances from the requirements contained herein if:

- Failure to grant such a variance would cause an emergency condition adversely affecting the health, sanitation, or fire safety of the public.
- Compliance with this Plan cannot be accomplished due to technical or other limitations.

Variance request shall be placed in writing with all pertinent information. Financial hardship will not warrant a variance. Variances shall be granted or denied at the sole discretion of the General Manager.

SEVERABILITY

It is hereby declared to be the intention of the Authority that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable; and if declared unconstitutional by a court of proper jurisdiction, said unconstitutionally shall not affect the remainder of the Plan.

IMPLEMENTATION

This Plan was adopted by the Board of Directors of the Authority on _____, 2014 and recorded in the official minutes therein.

COORDINATION WITH REGION H WATER PLANNING GROUP

The Service Area of the Authority is located within Region H Water Planning Area and a copy of this Plan will be forwarded to Region H upon approval of the Authority's Board of Directors.

PLAN UPDATES

As required by TCEQ rules, the Authority will review and update this as appropriate based on an assessment of any new information related to significant changes in water supplies, climatic conditions, or water demands. In any case, the Plan will be reviewed, updated, and submitted to the TCEQ in not more than 5 year intervals.