Drought Contingency Plan for Gulf Coast Water Authority

Section I: Introduction

The purpose of this drought contingency plan (the Plan) for the Gulf Coast Water Authority (GCWA) is as follows:

- To conserve the available water supply in times of drought and 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; and
- To satisfy the requirements set forth by the Texas Commission on Environmental Quality (TCEQ) and other agencies.

A drought is generally defined as an extended period of time when an area receives insufficient amounts of rainfall to maintain or replenish the water supply, thereby causing temporary water supply shortages. In the absence of drought response measures, water demands tend to increase during a drought due to the need for additional outdoor irrigation and cooling water. The severity of a drought depends on the degree of depletion of supplies and on the relationship of demand to available supplies.

This Plan addresses periods of time when: (i) the quantity of water in the Brazos River available to GCWA under its water rights, and its alternative sources of water (including contracts for stored water from the Brazos River Authority [BRA]) is insufficient to meet the demands of GCWA's water supply customers; or (ii) the capacity of GCWA's pump stations, canals or water treatment plants is insufficient to meet the demands of any water supply customers dependent on such facilities, or both.

Section II: TCEO Requirements for Drought Contingency Plans

This Plan is consistent with TCEQ guidelines and requirements for the development of drought contingency plans by wholesale water suppliers, contained in Title 30, Part 1, Chapter 288, Subchapter B, Rules 288.20-288.22 of the Texas Administrative Code. These rules are included in *Appendix A*. As required by TCEQ rules, GCWA will review and update this Plan, as appropriate based on an assessment of any other new or updated information. GCWA will review and update the Plan no less than every five years to satisfy TCEQ requirements, or as deemed necessary by GCWA.

Section III: Public Involvement

Opportunity for the public and GCWA's water customers to provide input into the preparation of the Plan was provided by GCWA through the following measures:

• Providing written notice of the proposed plan and the opportunity to comment on the plan by newspaper, posted notice, and notice on GCWA's website;

- Making the draft plan available on GCWA's website;
- Providing the draft plan to anyone requesting a copy; and
- Holding eight (8) stakeholder and/or public meetings on plan development from January 2017 through August, 2018.

Section IV: Water Customer Education

After the Plan is adopted, GCWA will continue to inform and educate the public and GCWA's customers about the Plan through the following measures:

- Preparing a bulletin describing the Plan and making it available at appropriate locations;
- Making the Plan and actions taken by GCWA related to implementation of the Plan available to the public through the GCWA website and other social media outlets;
- Notifying local organizations, schools, and civic groups that GCWA staff are available to make
 presentations on the Plan (usually in conjunction with presentations on water conservation
 programs); and
- Notifying GCWA's customers about the Plan, upon Plan adoption and if any Plan amendments are made.

Section V: Coordination with Regional Water Planning Groups

The water service area of the GCWA is located within the Region H water planning area as defined by the Texas Water Development Board. GCWA has provided a copy of this Plan to Region H, along with the letter shown in *Appendix B*.

Section VI: Authorization

The GCWA General Manager (the GM), or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The GM shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VII: Application of Drought Response Measures

The provisions of this Plan shall apply to all of GCWA's customers. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, municipalities, political subdivisions, and all other legal entities.

With the exception of Section VIII.5, this Plan applies only to GCWA Water Supplies, including both Runof-River Supplies and GCWA Alternate Water Supplies. Customer Purchased Backup Water is subject to Section VIII.5 because delivery of Customer Purchased Backup Water is subject to GCWA's physical ability to transport water via GCWA's canal and pipe systems.

The following actions will be taken when a drought stage is initiated:

- GCWA's customers who are potentially affected by a drought or emergency (the Affected Customers) will be notified by e-mail or via GCWA's designated emergency communications network and will be provided details of the reasons for initiation of the drought contingency stage; and
- If GCWA declares a Stage 5 Water Emergency Response (Section VIII.5) requiring mandatory water restrictions, GCWA will notify the Executive Director of the TCEQ within

5 business days. Notifications will be made via e-mail to wcp@tceq.texas.gov.

The GM may decide not to order the implementation of a drought contingency response stage even though one or more of the trigger criteria for the stage are met. Factors which could influence such a decision include, but are not limited to, the time of year, existing or potential weather conditions, the anticipation of replenished water supplies, the availability of **GCWA Alternate Water Supplies**, or the anticipation that additional facilities will become available to meet needs.

Section VIII: Definitions, and Criteria and Actions Required for Drought or Emergency Response Stages for Affected Customers.

This section defines terms used in the Plan. This section also describes the criteria for and actions required for drought response stages. Defined terms are listed below, and are shown in **Bold** whenever used throughout this Plan.

- Affected Customers: Customers that are impacted by a particular shortage of GCWA Water Supplies or the delivery capacity of GCWA facilities, when compared to the water demand for such supplies or facilities. Affected Customers include the customers that have delivery points downstream of the circumstances that are triggering a Stage Response. For instance, GCWA's canal customers may be affected by events impacting diversion rate, river pump stations or canal conveyance to the point of delivery by GCWA to the customer. Similarly, GCWA's treated water customers may be impacted by events concerning the river pump stations and canal conveyances, but also storage in GCWA reservoir(s) and operation of the Thomas S. Mackey Water Treatment Plant and distribution infrastructure. The concept of Affected Customers is intended to limit the scope of drought and emergency response to only those customers directly impacted by a significant event, whether it be related to river conditions, pump station capacity, or conveyance and other infrastructure.
- Base Water Use: The computed monthly average usage for each individual GCWA Firm Customer based on that customer's actual usage during the same month during the three previous calendar years, excluding any reductions in usage as a result of implementing a Stage Response measure pursuant to this Plan.
- Conserved Water Quantity: The volume of water conserved by an individual GCWA customer during the implemented Stage Response, defined as the difference between the customer's Base Water Usage or Interruptible Water Usage, and actual customer usage.
- **Contributing Watershed**: The portion of the Brazos River watershed upstream of GCWA's Shannon Pump Station that is administered by the Brazos River Watermaster.
- Customer Purchased Backup Water: Any water supply that is secured by the customer and is assigned and managed by GCWA, or secured by GCWA for that customer pursuant to an agreement with GCWA.
- **Deliverable Capacity:** The capacity to convey water at a given point in the GCWA water delivery system, as limited by diversion/pumping capacity, conveyance capacity, treatment capacity, or other factors
- Excess Water Usage: The volume of water used by an individual customer in excess of the customer's Base Water Use or Interruptible Water Use, during the implemented Stage Response.
- **Firm Customers**: Customers to which GCWA is contractually obligated to provide water for a period longer than one year. **Firm Customers** may receive **Run-of-River Supplies** and **GCWA Alternate Water Supplies**. **Interruptible Customers** are not **Firm Customers**.
- GCWA Alternate Water Supplies: Any water provided by GCWA other than under its Run-of-River supplies. GCWA Alternate Water Supplies include stored water contracts with BRA, and other water sources obtained or owned by GCWA.

- GCWA Water Supplies. Water supplies owned or contracted by GCWA, including Run-of-River Supplies and GCWA Alternate Water Supplies.
- Interruptible Customers with Backup: Customers to which GCWA may provide water only when sufficient Run-of-River Supplies are available, or when GCWA is delivering GCWA Alternate Water Supplies which the customer has purchased through GCWA.
- Interruptible Customers without Backup: Customers to which GCWA may provide water only when sufficient Run-of-River Supplies are available; these customers do not have access to GCWA Alternate Water Supplies.
- Interruptible Water Use Water usage by Interruptible Customers with Backup, and by Interruptible Customers without Backup.
- Lower Basin User's Group a group of water users in the lower Brazos basin that collaboratively manages water operations to ensure efficient utilization of available water. This group will be organized by GCWA. During the summer of 2018, such a group effectively and efficiently assessed Run-of-River Flows, available Alternate Water Supplies, and customer demands to maximize water availability for all group participants.
- Monthly Flow Target: As determined by the GM, the flow value for each month in cubic feet per second (cfs or ft³/s) that is needed to meet the total demand for **Base Water Use** and **Interruptible Water Use** for that month, plus the estimated water diversions for that month by NRG Energy (NRG) and Dow Chemical Company at Freeport (Dow).
- Raw Water Rate: The raw water rate for Fund 08 Canal Division as adopted annually by the GCWA Board of Directors.
- Run-of-River Supplies: Water available to GCWA under its water rights 12-5168, 13-5169, 12-5171, 12-5322, or 13-5357. This water is water available from the Brazos River, Mustang Bayou, Halls Bayou, Chocolate Bayou, or Jones & Oyster Creek, and is diverted according to the State of Texas prior-appropriation system.
- Run-of-River Flow at Hempstead: Water within the Brazos River as measured at the US Geological Survey (USGS) gaging station #8111500 (Brazos River near Hempstead, TX). The Run-of-River Flow at Hempstead includes only water authorized for diversion under the State of Texas prior appropriation system, and excludes releases of stored water by BRA, Customer Purchased Backup Water, or other sources of flow in the river not authorized for diversion under the State of Texas prior-appropriation system.
- Stage Response: Any of the responses to drought or water shortage listed in Section VIII.
- **System Demand:** Demand on the GCWA system, defined as the sum of GCWA customer demands located at or downstream of a given location on the GCWA water distribution system (canals, reservoirs, water treatment plant, pump stations, and other water distribution infrastructure).

Table 1 provides a summary of pertinent drought stage response conditions, water use reduction goals, water rate surcharges and water rate credits. Items in Table 1 are explicitly described below throughout the Plan.

Table 1: Summary of Drought and Emergency Response Stages

Tuoto 1. Summary of Brough	Stage 1 Response	Stage 2 Response	Stage 3 Response	Stage 4 Response	Stage 5 Water Emergency Response
Minimum percentage of Contributing Watershed in "Moderate Drought" or higher per the US Drought Monitor to declare Stage Response	50%	NA	NA	NA	NA
System Demand Exceeds [A]% of Deliverable Capacity to declare Stage Response:	85%	90%	95%	98%	NA
Run-of-River Supplies plus GCWA Alternate Water Supplies are less than [A]% of the Monthly Flow Target through August 31 to declare Stage Response	NA	95%	90%	85%	NA
Water Use Reduction Goal	95%	90%	85%	80%	GM discretion
Potential Surcharge	NA	2.5x	2.5x	5.0x	10.0x
Potential Credit	NA	1.0x	1.0x	1.0x	1.0x

[&]quot;NA" signifies "Not Applicable". [A] references percentage values listed in Table rows.

Section VIII.1: Stage 1 Response (Mild Water Shortage; TCEQ "Watch" Level)

A Stage 1 Response for **Affected Customers** may be triggered when the GM finds that the Response Conditions warrant the declaration of a Stage 1 Response. The GM will consider declaring a Stage 1 Response when at least one of the following Response Conditions is satisfied:

Response Conditions:

- 1) **System Demand** exceeds 85% of **Deliverable Capacity** within the GCWA system for three consecutive days (applicable to any portion thereof).
- 2) Greater than 50% (by area) of the **Contributing Watershed** is classified as being under a D1 ("Moderate Drought") condition, or greater, as identified on the most recent United States Drought Monitor website. (Currently accessible at: http://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?TX)

A Stage 1 Response may be terminated by the GM when the Response Conditions that triggered the initiation of a Stage 1 Response no longer prevail.

Response Measures:

The goal for water use under Stage 1 is 95% of the total **Base Water Use** and **Interruptible Water Use** for all **Affected Customers**. The GM may implement of any of the following actions deemed necessary, and may implement other appropriate actions not listed below:

- Notify all **Affected Customers** that a Stage 1 Response condition exists;
- Request all **Affected Customers** to initiate Stage 1 or other appropriate stage in their drought contingency plans;
- Request voluntary reductions in water use by all **Affected Customers**;
- Initiate or continue usage of GCWA Alternate Water Supplies to augment Run-of-River Supplies
- Increase public awareness of drought or system conditions and measures to reduce demand; and
- Notify the Brazos Watermaster, NRG, and Dow that a Stage 1 Response Condition exists.

Section VIII.2: Stage 2 Response (Moderate Water Shortage; TCEQ "Concern" Level)

A Stage 2 Response for **Affected Customers** may be triggered when the GM finds that the Response Conditions warrant the declaration of a Stage 2 Response. The GM will consider declaring a Stage 2 Response when at least one of the following Response Conditions is satisfied:

Response Conditions:

- 1) **System Demand** exceeds 90% of **Deliverable Capacity** within GCWA's conveyance system for three consecutive days (applicable to any portion thereof).
- 2) The Lower Basin User's Group recommends further water conservation based on its collective experience managing river operations.
- 3) Water available from **Run-of-River Supplies** and **GCWA Alternate Water Supplies** is determined to be insufficient to satisfy 95% of GCWA's **Monthly Flow Target** through August 31 of the current year (if date is on or after January 1) or through August 31 of the next year (if date is on or after September 1 of the current year).

A Stage 2 Response may be terminated by the GM when the Response Conditions that triggered the initiation of a Stage 2 Response no longer prevail.

Response Measures:

The goal for water use under Stage 2 is 90% of the total **Base Water Use** and **Interruptible Water Use** for all **Affected Customers**. If the circumstances warrant, the GM may set an alternative water use reduction goal.

The GM may implement any of the following actions deemed necessary:

- Continue or initiate any actions available under Stage 1;
- Notify all **Affected Customers** that a Stage 2 Response condition exists;
- Initiate or continue usage of GCWA Alternate Water Supplies to augment Run-of-River Supplies;
- Request all **Affected Customers** to initiate Stage 2 or other appropriate stage in their drought contingency plans;
- Request voluntary reductions in water use by **Affected Customers**;
- Meet with Affected Customers to determine water use on a as needed basis, identify **Affected Customers** exceeding 95% of their **Base Water Use** or **Interruptible Water Use** and encourage them to reduce their usage;

- Cease issuance of new short-term or **Interruptible Customer** contracts with the exception of contracts needed under emergency conditions;
- Terminate water deliveries to existing Interruptible Customers without Backup;
- Increase public awareness of drought condition and measures to reduce demand; and
- Notify the Brazos Watermaster, NRG, and Dow that a Stage 2 Response Condition exists.

If water deliveries to **Interruptible Customers without Backup** are terminated, GCWA will recalculate the **Monthly Flow Target** by excluding from the calculations the water demand of those customers.

Section VIII.3: Stage 3 Response (Severe Water Shortage; TCEQ "Priority" Level)

A Stage 3 Response for Affected Customers may be triggered when the GM finds that the Response Conditions warrant the declaration of a Stage 3 Response. The GM will consider declaring a Stage 3 Response when at least one of the following Response Conditions is satisfied:

Response Conditions:

- 1) **System Demand** exceeds 95% of **Deliverable Capacity** within GCWA's conveyance system for three consecutive days (applicable to any portion thereof).
- 2) The Lower Basin User's Group recommends further water conservation based on its collective experience managing river operations.
- 3) Water available from **Run-of-River Supplies** and **GCWA Alternate Water Supplies** is determined to be insufficient to satisfy 90% of GCWA's Monthly Flow Target through August 31 of the current year (if date is on or after January 1) or through August 31 of the next year (if date is on or after September 1 of the current year).

A Stage 3 Response may be terminated by the GM when the Response Conditions that triggered the initiation of a Stage 3 Response no longer prevail.

Response Measures:

The goal for water use under Stage 3 is 85% of the total **Base Water Use** and **Interruptible Water Use** for all **Affected Customers**. If the circumstances warrant, the GM may set an alternative water use reduction goal.

The GM may implement any of the following actions deemed necessary:

- Initiate or continue any actions available under Stage 1 and Stage 2;
- Notify all **Affected Customers** that a Stage 3 Response condition exists;
- Continue usage of GCWA Alternate Water Supplies to augment Run-of-River Supplies;
- Continue to coordinate with **Affected Customers** to determine water use on as needed basis, identify **Affected Customers** exceeding 90% of their **Base Water Use** or **Interruptible Water Use**, and encourage them to reduce their usage;
- Request all **Affected Customers** to initiate Stage 3 or other appropriate stage in their drought contingency plans;
- Encourage **Affected Customers** to initiate or continue use of any alternate water supplies available to them
- Terminate Run-of-River Supplies for Interruptible Customers with Backup, thereby limiting such customers to only obtaining water from GCWA Alternate Water Supplies, if any;

- Increase public awareness of drought condition and measures to reduce demand; and
- Notify the Brazos Watermaster, NRG, and Dow that a Stage 3 Response Condition exists.

If the water deliveries of **Run-of-River Supplies** to **Interruptible Customers with Backup** are terminated, GCWA will recalculate the **Monthly Flow Target** by excluding from the calculations the water demand of those customers.

Section VIII.4: Stage 4 Response (Extreme Water Shortage; TCEQ "Emergency" Level)

A Stage 4 Response for Affected Customers may be triggered when the GM finds that the Response Conditions warrant the declaration of a Stage 4 Response. The GM will consider declaring a Stage 4 Response when at least one of the following Response Conditions is satisfied:

Response Conditions:

- 1 **System Demand** exceeds 98% of **Deliverable Capacity** within GCWA's conveyance system for three consecutive days (applicable to any portion thereof).
- 2 The Lower Basin User's Group recommends further water conservation based on its collective experience managing river operations.
- 3 Water available from **Run-of-River Supplies** and **GCWA Alternate Water Supplies** is determined to be insufficient to satisfy 85% of GCWA's Monthly Flow Target through August 31 of the current year (if date is on or after January 1) or through August 31 of the next year (if date is on or after September 1 of the current year).

A Stage 4 Response may be terminated by the GM when the Response Conditions that triggered the initiation of a Stage 4 Response no longer prevail.

Response Measures:

The goal for water use under Stage 4 is 80% of the total **Base Water Use** for all **Affected Customers**. If the circumstances warrant, the GM may set an alternative water use reduction goal.

The GM may implement any of the following actions deemed necessary:

- Initiate or continue any actions available under Stages 1, 2 and 3;
- Notify all **Affected Customers** that a Stage 4 Response condition exists;
- Continue usage of GCWA Alternate Water Supplies to augment Run-of-River Supplies;
- Continue to coordinate with **Affected Customers** to determine water use, identify **Affected Customers** exceeding 85% of their **Base Water Use** and encourage them to reduce their usage;
- Request all **Affected Customers** to initiate Stage 4 or other appropriate stage in their drought contingency plans;
- Encourage **Affected Customers** to initiate or continue use of any alternate water supplies available to them
- Terminate all water delivery to **Interruptible Customers with Backup**.
- Request relief from the Brazos Watermaster, and if necessary, make a priority call to enforce GCWA's senior water rights.
- Increase public awareness of drought conditions and measures to reduce demand; and
- Notify the Brazos Watermaster, NRG, and Dow that a Stage 4 Response Condition exists.

When the water deliveries to **Interruptible Customers with Backup** are terminated, GCWA will recalculate the **Monthly Flow Target** by excluding from the calculations the water demand of those customers.

Section VIII.5: Stage 5 - Water Emergency Response (Emergency Water Shortage; TCEQ "Emergency" Level)

A Stage 5 Water Emergency Response for **Affected Customers** may be triggered when the GM finds that conditions warrant the declaration of a water emergency response due to:

- 1) A major GCWA system failure leading to loss of water service,
- 2) The water supply becoming contaminated and unusable, or

A Stage 5 response may be terminated by the GM when the circumstances that triggered the initiation of Stage 5 no longer prevail.

The goal for water use reduction under a water emergency response is subject to the scope of the emergency. The GM may order the implementation of any of the actions listed below as deemed necessary. The water emergency response measures are as follows:

- Continue or initiate any actions available under Stage 1, 2, 3, and 4
- Notify all **Affected Customers** that an emergency condition exists and meet with **Affected Customers** as appropriate to inform them of the specific nature of the emergency condition
- Require **Affected Customers** to initiate the emergency or other appropriate stage in their drought contingency plan
- Initiate pro-rata distribution of available water under TWC §11.039
- Notify the Brazos Watermaster, if applicable

Under Stage 5, GCWA will notify TCEQ of its emergency conditions and the imposition of mandatory reductions in water use by **Affected Customers**. GCWA will notify TCEQ within five (5) days of initiation and termination of Stage 5 conditions. Notifications will be submitted to the TCEQ Public Drinking Water Section Drought Team, and will be submitted via the TCEQ-required online form, currently available at: https://www.tceq.texas.gov/drinkingwater/homeland_security/security_pws/pws-drought-contingency-plan-reporting-form. Assistance in making notifications may be obtained via e-mail to wcp@tceq.texas.gov or via phone at 512-239-4691.

Section IX: Pro Rata Water Distribution

In the event one or more Stage 5 Response Conditions specified herein have been met, the GM is hereby authorized to initiate distribution of water supplies on a pro-rata basis among all **Affected Customers.** The distribution will be in accordance with Texas Water Code, §11.039.

Section X: Enforcement

Section X.1 Surcharge

Under Stage 2 or Stage 3 Response Conditions, **Affected Customers** shall pay the following surcharge on their monthly **Excess Water Usage**, calculated as follows:

Excess Water Usage multiplied by 2.5 times the individual customer's Raw Water Rate.

Under Stage 4 Response Conditions, **Affected Customers** shall pay the following surcharge on their monthly **Excess Water Usage**, calculated as follows:

Excess Water Usage multiplied by 5.0 times the individual customer's Raw Water Rate.

Under Stage 5 Response Conditions, **Affected Customers** shall pay the following surcharge on their monthly **Excess Water Usage**, calculated as follows:

Excess Water Usage multiplied by 10.0 times the individual customer's Raw Water Rate.

Overage payments made by any customers under the terms of the customer's contract(s) with GCWA shall be credited against any surcharge for **Excess Water Use** assessed under this Plan.

Revenues obtained by GCWA from the Surcharges will be deposited or credited to Fund 08 Canal Division.

Section X.2 Credits

Under Stage 2, Stage 3, or Stage 4 Response conditions, **Affected Customers** which achieve the applicable water use reduction goal shall receive a conservation incentive payment based on their **Conserved Water Quantity**, calculated as follows:

Conserved Water Quantity multiplied by 1.0 times the individual customer's Raw Water Rate.

Section XI: Variances

The GM may, in writing, grant a variance to a GCWA customer for a specified period of time for water uses otherwise prohibited or managed under this 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 GCWA customer,
- A customer's calculated **Base Water Use or Interruptible Water Use** is incorrectly or inappropriately computed,
- A customer's recent or pending increase or decrease in contract water volume for example through obtaining additional GCWA contracts, contract amendments, exercising of contract options, or by other mechanisms) renders historical usage no longer reflective of current water demands,
- Compliance with this Plan cannot be accomplished due to technical, legal, or other limitations, or
- Alternative methods that achieve the same level of reduction in water use may be implemented.

Variance requests regarding **Base Water Use** or **Interruptible Water Use** must provide a description of why the original GCWA-calculated **Base Water Use** or **Interruptible Water Use** either under or over-estimates reasonably expected customer usage. The extenuating circumstances justifying a variance may include, but are not limited to, meter malfunction, planned or emergency shut-downs of industrial facilities, damage or required maintenance to conveyance facilities, and anticipated growth in demand beyond the historic three-year period.

All petitions for variances will be in writing and should include the following information:

- Name and address of the petitioner(s),
- Purpose of water use,
- Specific changes or provisions from which relief is requested,

- Detailed statement of any adverse effect of the provisions for which a variance is requested,
- Description of the change or relief requested, including providing a detailed justification of the change or relief,
- Period of time for which the variance is sought,
- Alternative measures that will be taken to reduce water use (if applicable), and
- Other pertinent information.

Variances may be granted or denied at the discretion of the GM. However, if a variance request is denied, the GM shall provide in writing to the petitioner a reasoned justification for the denial of the variance. If the GM does not grant or deny a variance within 10 days from receipt of the variance request, the request is automatically denied and the petitioner may appeal the denial directly to the GCWA Board of Directors.

Section XII: Appeals

- (a) *Generally*. The Board of Directors shall hear and decide applications for appeals of interpretations and of variances from: (i) the requirements of this Plan or other orders of GCWA, and (ii) actions of GCWA's officers relating to permits, licenses, variances or other special permissions.
- (b) Who may apply; when to file. Any person aggrieved by an applicable regulation or action may apply for an appeal. Applications must be filed, in writing, within 20 calendar days following the time the person knows of the requirement or action in question. The Board, for good cause shown, may extend the time for filing. Grievances not made in writing and filed within the time prescribed are waived.
- (c) Special requirements for appeal of variance decisions by GM. Variances shall only be issued to the minimum extent necessary to afford relief, and variances shall only be issued upon:
 - (1) Showing a good and sufficient cause;
 - (2) A determination that failure to grant the variance would result in unusual hardship to the applicant; and
 - (3) A determination that the granting of a variance will not result in additional threats to public safety, extraordinary public expense, nuisances, fraud on or victimization of the public, or a conflict with existing laws or orders.
- (d) *Conditions*. Upon consideration of the factors noted above, the Board of Directors may attach such conditions to variances as it deems necessary to further the purpose and objectives of this Plan or other applicable orders of the Board or regulations of the State.
- (e) *Finality*. Board of Director's decisions on appeals, interpretations and variances control over decisions by any other officer or body of GCWA. No decision of the GCWA is final until: (i) it is officially made by an officer or body authorized to do so, and (ii) all applicable administrative remedies, as allowed by this section, are exhausted."

Section XII: Severability

It is hereby declared to be the intention of the GCWA that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections

of this Plan, since the same would not have been enacted by the GCWA without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

Section XIII: Implementation

This Plan was adopted by the Gulf Coast Water Authority via a resolution passed by the Board of Directors on December 5, 2018. A copy of this resolution may be found in *Appendix C* of this document.

As part of the implementation process, GCWA will initiate and maintain an ad-hoc Drought Contingency Advisory Committee. The Committee will be administered by GCWA. The Committee will be comprised of representatives from each of the industrial customers, major municipal treated water customers and agriculture. The Brazos River Watermaster will be an ad-hoc member. The Committee will meet with GCWA twice each year to:

- Review information on river flow and BRA reservoir levels, and drought conditions in the Brazos River Basin.
- Monitor the running computation of Base Water Use and Interruptible Water Use for each customer.
- Receive information on water use, conservation and drought contingency planning by GCWA, NRG, and Dow.
- Provide feedback to GCWA on the implementation of the Plan.
- Receive information from GCWA on its acquisition of Alternate Water Supplies.