

**DROUGHT CONTINGENCY PLAN  
FOR THE DELIVERY OF WATER TO RETAIL CUSTOMERS  
FOR THE CLEAR LAKE CITY WATER AUTHORITY**

**June 2005**

**Section I: Declaration of Policy, Purpose, and Intent**

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the Clear Lake City Water Authority hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

**Section II: Public Involvement**

Opportunity for the public to provide input into the preparation of the Plan was provided by the Clear Lake City Water Authority by means of a public meeting published in local newspapers.

**Section III: Public Education**

The Clear Lake City Water Authority 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. This information will be provided by means of notification of local news media by press release.

**Section IV: Coordination with Regional Water Planning Groups**

The service area of the Clear Lake City Water Authority is located within the Houston Regional Water Planning Area (Region H) and the Clear Lake City Water Authority has provided a copy of this Plan to the Houston Regional Water Planning Area.

**Section V: Authorization**

The General Manager, 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 General Manager, or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

## **Section VI: Application**

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the Clear Lake City Water Authority. The terms “person” and “customer” as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

## **Section VII: Definitions**

For the purposes of this Plan, the following definitions shall apply:

Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Conservation surcharge: The amount added to the customer’s bill to encourage conservation.

Conservation surcharge factor: A factor equal to the customer’s usage for a billing period divided by the target usage as defined herein. For example if the customer’s usage for the billing period during which a water shortage exists is 12,000 gallons and the target usage is 10,000 gallons, then the surcharge factor would be equal to  $12,000/10,000 = 1.2$  and the customer would be billed for 1.2 times his or her usage.

Customer: any person, company, or organization using water supplied by the Clear Lake City Water Authority.

Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Emergency water shortage target usage: The target usage during emergency water shortage periods determined at the discretion of the General Manager and based on available water supply.

Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

Gross quantity: the total quantity of water delivered to a customer during a month.

Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- (a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
- (b) use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- (c) use of water to wash down buildings or structures for purposes other than immediate fire protection;
- (d) flushing gutters or permitting water to run or accumulate in any gutter or street;
- (e) use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools with the exception of pools operated by industrial, research, or testing facilities;
- (f) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- (g) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

Rationing: a reduction in water allotment by the City of Houston below the contracted quantity.

Surcharge Multiple: a multiple factor (1, 2, 3, 4, 5...etc.) to be multiplied by the Conservation Surcharge Factor

Target Usage: The desired amount of water to be used by each customer during a serious or critical water shortage. During these drought conditions, the target usage will be equal to the average quantity of water billed during the same billing period of the previous three years multiplied by the target percentage.

Target Percentage: The target percentage is equal to the total daily water supply available divided by the average daily water demand when the drought condition is declared times 100.

Usage: the quantity of water delivered to a customer during any billing period.

## **Section VIII: Criteria for Initiation and Termination of Drought Response Stages**

The General Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified “triggers” are reached. Public notification of the initiation or termination of drought response stages shall be by means of publication in the local newspapers or press release to local radio and television stations.

The triggering criteria described below are based on (1) directives from the wholesale water supplier to implement a drought contingency plan and (2) monitoring of 5-day average consumption as a percentage of total available water supply. This includes groundwater sources having a maximum capacity of approximately 7.8 MGD and a maximum of approximately 20 MGD surface water from the City of Houston Southeast Water Purification Plant. The City’s contractual obligation is for 7.5 MGD and, during water shortage periods, the Clear Lake City Water Authority allotment of surface water might be much less than the 20 MGD currently allowed.

There are five water shortage conditions for which the Clear Lake City Water Authority must be prepared for:

- Mild water shortage condition
- Serious water shortage condition
- Critical water shortage condition
- Emergency water shortage condition
- Water Allocation

### **Stage 1 Triggers -- MILD Water Shortage Conditions**

Requirements for initiation – The Clear Lake City Water Authority will recognize that a mild water shortage condition exists when the General Manager finds that either or both of the following conditions exist:

- The City of Houston declares a mild water shortage condition.
- The average 5-day water use for Clear Lake City Water Authority is at 80% of its current total available water supply.

Requirements for termination - Stage 1 of the Plan may be rescinded at the discretion of the General Manager when all of the conditions listed as triggering events have ceased to exist. The Clear Lake City Water Authority will notify its retail customers and the media of the termination of Stage 1 in the same manner as the notification of initiation of Stage 1 of the Plan.

### **Stage 2 Triggers -- SERIOUS Water Shortage Conditions**

Requirements for initiation – The Clear Lake City Water Authority will recognize that a serious water shortage condition for all or part of the system exists when the General Manager finds that either or both of the following conditions exist:

- The City of Houston declares a serious water shortage condition.
- The average 5-day water use for Clear Lake City Water Authority is at 85% of its current total available water supply.

Requirements for termination - Stage 2 of the Plan may be rescinded at the discretion of the General Manager when all of the conditions listed as triggering events have ceased to exist. Upon termination of Stage 2, Stage 1 becomes operative. The Clear Lake City Water Authority will notify its retail customers and the media of the termination of Stage 2 in the same manner as the notification of initiation of Stage 1 of the Plan.

### **Stage 3 Triggers – CRITICAL Water Shortage Conditions**

Requirements for initiation – The Clear Lake City Water Authority will recognize that a critical water shortage condition for all or part of the system exists when the General Manager finds that either or both of the following conditions exist:

- The City of Houston declares a critical water shortage condition.
- The average 5-day water use for Clear Lake City Water Authority is at 90% of its current total available water supply.

Requirements for termination - Stage 3 of the Plan may be rescinded at the discretion of the General Manager when all of the conditions listed as triggering events have ceased to exist. Upon termination of Stage 3, Stage 2 becomes operative. The Clear Lake City Water Authority will notify its retail customers and the media of the termination of Stage 3 in the same manner as the notification of initiation of Stage 2 of the Plan.

### **Stage 4 Triggers -- EMERGENCY Water Shortage Conditions**

Requirements for initiation – The Clear Lake City Water Authority will recognize that an emergency water shortage condition for all or part of the system exists when the General Manager finds that either or both of the following conditions exist:

- The City of Houston initiates rationing as defined in Section VII above.
- A failure occurs in the Clear Lake City Water Authority distribution system such as failure of a major pump or a break in a major water transmission line that significantly curtails available water supply.

Requirements for termination - Stage 4 of the Plan may be rescinded at the discretion of the General Manager when all of the conditions listed as triggering events have ceased to exist. The Clear Lake City Water Authority will notify its retail customers and the media of the termination of Stage 4.

## **Stage 5 Triggers -- WATER ALLOCATION**

### Requirements for initiation

Customers shall be required to comply with the water allocation plan prescribed in Section IX of this Plan and comply with the requirements and restrictions for Stage 4 of this Plan when Emergency conditions described in Stage 4 exceed three consecutive days.

Requirements for termination - Water allocation may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three consecutive days.

## **Section IX: Drought Response Stages**

The General Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of this Plan, shall determine that a mild, serious, critical, emergency water shortage conditions, or water allocation exists and shall implement the following notification procedures:

### **Notification**

#### Notification of the Public:

The General Manager or his/ here designee shall notify the public by means of publication of notice in a newspaper of general circulation or broadcast over local radio or television outlets.

#### Additional Notification:

The General Manager or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

TCEQ (only when mandatory water restrictions are imposed)

## **Stage 1 Response -- MILD Water Shortage Conditions**

**Target: Achieve a voluntary 10 percent reduction in the average daily water demand.**

### Best Management Practices for Supply Management:

Raise public awareness of the situation and request voluntary reductions in non-essential water use. The Clear Lake Water Authority shall increase supply by increasing groundwater production if possible.

Voluntary Water Use Restrictions for Reducing Demand:

- (a) The General Manager shall initiate a public information program to request that the public take the following voluntary conservation measures.
- Check for leaks, dripping faucets, and running toilets and utilize water conservation kits such as displacement bags for toilet tanks and low-flow shower heads.
  - Practice water conservation and minimize or discontinue water use for non-essential purposes as defined in Section VII above.
  - Insulate water pipes rather than running water to keep pipes from freezing.
- (b) The Clear Lake City Water Authority shall continue to practice water use reduction measures including leak detection and repair and use of treated effluent for landscape and golf course watering.
- (c) The General Manager or his/her designee shall contact wholesale customers and ask them to initiate their Stage 1 water shortage response.

**Stage 2 Response – SERIOUS Water Shortage Conditions**

**Target: Achieve a 15 percent reduction in the average daily water demand.**

Best Management Practices for Supply Management:

Initiate mandatory restrictions on certain non-essential water uses and a water rate surcharge for excessive use. The Clear Lake Water Authority shall increase supply by increasing groundwater production if possible.

Water Use Restrictions for Demand Reduction:

Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

- (a) Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9) with the following exceptions: (1) watering of grass or plants planted on the same calendar day on which the discharge occurs; (2) maintaining public gardens or national, regional, or local significance if necessary to preserve specimens.

- (b) Irrigation of common landscaped areas such as esplanades and medians shall be limited to Tuesday and Friday.
- (c) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is allowed only on designated watering days except at a commercial car wash or if necessary to ensure public health and safety such as washing of garage trucks and trucks transporting perishable foods.
- (d) Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the Clear Lake Water Authority.
- (e) Non-essential water uses as defined in Section VII above are prohibited, except as otherwise provided for under the Plan.
- (f) Water wastage by failure to repair leaks within 24 hours of notice; permitting water from landscape irrigation to escape into gutters, ditches, streets or sidewalks; and recreational use of faucets, hoses, and hydrants is prohibited.
- (g) If a billing period includes all or part of a serious water shortage period, a conservation surcharge will be added to the customer's bill if the actual usage exceeds the target usage. This formula for determining the adjusted bill including the conservation surcharge is  $A = F \times B \times C$  where A = the adjusted bill, F = the conservation surcharge factor as defined in Section VII above, B = the customer's water bill prior to addition of the surcharge factor, and C = the Surcharge Multiplier. The General Manager or Board of Directors shall determine the Surcharge Multiplier.

Customers having a gross quantity of 5000 gallons or less in any month of a billing period are exempt from the conservation surcharge for that billing period.

- (h) The General Manager or his/her designee shall contact wholesale customers and ask them to initiate their Stage 2 water shortage response.

### **Stage 3 Response – CRITICAL Water Shortage Conditions**

**Target: Achieve a 20 percent reduction the average daily water demand.**

**Best Management Practices for Supply Management:**

Initiate more stringent restrictions on water uses and a water rate surcharge for excessive use. The Clear Lake Water Authority shall increase supply by increasing groundwater production if possible.

Water Use Restrictions for Demand Reduction:

All requirements of Stage 2 shall remain in effect during Stage 3 except:

- (a) All outdoor water use is banned except that necessary for the health and safety of the public; fire suppression; leak testing; maintaining public gardens of national, state, or regional significance when necessary to preserve specimens; and operation of commercial businesses that use water to maintain their primary business practices.
- (b) Water wastage by failure to repair leaks within 24 hours of notice; permitting water from landscape irrigation to escape into gutters, ditches, streets or sidewalks; and recreational use of faucets, hoses, and hydrants is prohibited.
- (c) If a billing period includes all or part of a critical water shortage period, a conservation surcharge will be added to the customer's bill if the actual usage exceeds the target usage. This formula for determining the adjusted bill including the conservation surcharge is  $A = F \times B \times C$  where A = the adjusted bill, F = the conservation surcharge factor as defined in Section VII above, B = the customer's water bill prior to addition of the surcharge factor, and C = the Surcharge Multiplier. The General Manager or Board of Directors shall determine the Surcharge Multiplier.

Customers having a gross quantity of 5000 gallons or less in any month of a billing period are exempt from the conservation surcharge for that billing period.

- (d) The General Manager or his/her designee shall contact wholesale customers and ask them to initiate their Stage 3 water shortage response.

**Stage 4 Response -- EMERGENCY Water Shortage Conditions**

**Target: Achieve a 50 percent reduction in the average daily water demand.**

Best Management Practices for Supply Management:

Initiate emergency response procedures. The Clear Lake Water Authority shall increase supply by increasing groundwater production if possible.

Water Use Restrictions for Reducing Demand. All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:

- (a) The target usage and conservation surcharge shall be determined at the discretion of the General Manager based on emergency conditions and available water supply.

- (b) The severity of the problem or shortage will be assessed and the actions or conditions needed to restore normal water supply will be identified.
- (c) If appropriate, notify city, county, and/or state emergency response officials for assistance.
- (d) Undertake necessary actions, including repairs and/or clean-up as needed.
- (e) No applications for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.
- (f) Water may be rationed to portions of the distribution system in the following order:
  - 1. Public and private schools, colleges, universities and customers whose use of water is entirely outdoors;
  - 2. Contract customers, industrial customers, commercial customers and residential customers.
  - 3. Public health and safety facilities.
- (g) The General Manager or his/her designee shall contact wholesale customers and ask them to initiate these emergency water shortage response measures.

### **Stage 5 Response -- WATER ALLOCATION**

In the event that water shortage conditions threaten public health, safety, and welfare, the General Manager is hereby authorized to allocate water according to the following water allocation plan:

- (a) A Retailer customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the Clear Lake City Water Authority Board based on the General Manager's assessment of the severity of the water shortage condition and the need to curtail water diversions and/or deliveries and may be adjusted periodically by resolution of the Board as conditions warrant. Once water allocation is in effect, water diversions by or deliveries to each retail customer shall be limited to the allocation established for each month.
- (b) A monthly water usage allocation for an emergency water shortage condition shall be established by the General Manager or his/her designee, for each retail customer. The retail customer's water usage baseline will be computed on the average water usage by month for the previous three-year period as shown in the example given below. If the retail water customer's billing history is less than three years, the monthly average

for the period for which there is a record shall be used for any monthly period for which no billing history exists.

**Example Calculation of Monthly Allocation  
for a Hypothetical Retail Water Customer\***

	2001	2002	2003	Sum	Ave	Allocation Percentage	Monthly Allocation
Jan.	14.6	14.8	15.6	45.0	15.0	75%	11.3
Feb.	13.3	13.3	14.7	41.3	13.8	75%	10.3
March	14.6	14.9	15.9	45.4	15.1	75%	11.4
April	16.8	15.7	18.7	51.2	17.1	75%	12.8
May	17.9	18.3	17.1	53.3	17.8	75%	13.3
June	17.2	20.5	24.9	62.6	20.9	75%	15.7
July	23.2	31.4	24.6	79.2	26.4	75%	19.8
Aug.	20.6	33.7	30.9	85.2	28.4	75%	21.3
Sept.	19.6	22.9	19.8	62.3	20.8	75%	15.6
Oct.	19.7	16.5	18.5	54.7	18.2	75%	13.7
Nov.	14.9	15.3	16.2	46.4	15.5	75%	11.6
Dec.	15.0	15.6	16.5	47.1	15.7	75%	11.8
<b>Total</b>	<b>207.4</b>	<b>232.9</b>	<b>233.4</b>		<b>224.6</b>		

\*Units in thousands of gallons

(c) The General Manager shall provide notice, by radio, TV or other announcement, to retail customers informing them of their monthly water usage allocations and the executive director of the Texas Commission on Environmental Quality upon initiation of pro rata water allocation.

(d) Upon request of the customer or at the initiative of the General Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the retail customer’s normal water usage; (2) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Clear Lake City Water Authority Board of Directors.

**Section X: Enforcement**

(a) No person shall knowingly or intentionally allow the use of water from the Clear Lake Water Authority for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by General Manager, or his/her designee, in accordance with provisions of this Plan.

- (b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine fifty dollars (\$50) for the first offense and two hundred dollars for each offense thereafter (\$200). Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. Failure to pay a fine in a timely manner will result in disconnection of water service. If a person is convicted of three or more distinct violations of this Plan, the General Manager shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge and any other costs incurred by the Clear Lake City Water Authority in discontinuing service. In addition, suitable assurance must be given to the General Manager that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.
- (c) Any person, including a person classified as a water customer of the Clear Lake City Water Authority, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.
- (d) Any employee of the Clear Lake City Water Authority may issue a citation to a person he/she reasonably believes to be in violation of this Plan. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to pay the fine within 10 days of the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 16 years of age who is a member of the violator's immediate family or is a resident of the violator's residence.

## **Section XI: Variances**

The General Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Plan shall file a petition for variance with the Clear Lake City Water Authority within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the General Manager, or his/her designee, and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Purpose of water use.
- (c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
- (d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Plan.
- (e) Description of the relief requested.
- (f) Period of time for which the variance is sought.
- (g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (h) Other pertinent information.

Variances granted by the Clear Lake City Water Authority shall be subject to the following conditions, unless waived or modified by the General Manager or his/her designee:

- (a) Variances granted shall include a timetable for compliance.
- (b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

## **Section XII: Severability**

It is hereby declared to be the intention of the Clear Lake City Water Authority Board 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 Board of Directors without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.