

**RICARDO WATER SUPPLY CORPORATION  
WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN, 2025  
Amended and Adopted April 8, 2025**

**PART I—WATER CONSERVATION PLAN**

**Introduction**

The Ricardo Water Supply Corporation provides service to approximately 3,000 residents located in central Kleberg County. The Corporation was created in 1964. In the last fifty years, the rural system has gone through three (3) expansions. During that time, the distribution system has been extended by approximately 50 miles and the customer base has increased more than three-fold.

The Corporation supplies water for municipal, commercial and industrial use in the rural area south of Kingsville, Texas in the unincorporated community of Ricardo. Treated water is purchased on a wholesale basis from the South Texas Water Authority (STWA). STWA purchases its water from the City of Corpus Christi whose supply is from Lake Corpus Christi, Choke Canyon Reservoir System, Lake Texana and Lower Colorado River. Water from those sources is treated at the O.N. Stevens Water Treatment Plant before entering STWA's Regional Transmission System.

The Corporation recently installed a 12" line extending from the north side of Kingsville which connects to the line previously owned by STWA which begins at the intersection of FM 772 and CR 1030. The Corporation accepted title to this transmission line which delivers a 100% surface water supply to the Corporation's three (3) pump station facilities. The construction of the 12" waterline eliminated the previous "pass through" arrangement with the City of Kingsville. Although, should an emergency arise, the Corporation would be able to receive service from the City of Kingsville.

In addition, in past years the Corporation had maintained and operated a groundwater well, located on County Road 2170, that supplied between 15% and 20% of its needs. However, in 2008 this well was taken out of service for mechanical reasons. That groundwater well has now been plugged at the urging of the Texas Commission on Environmental Quality (TCEQ).

Surface supplies available to the Corporation by virtue of its contract with STWA and its contract with the City of Corpus Christi includes the following: Lake Corpus Christi stores 256,339 acre-feet of water, Choke Canyon Reservoir stores 662,821 acre-feet of water, and the 101-mile-long Mary Rhodes Pipeline delivers water through a 64-inch pipeline from Lake Texana near Edna, Texas. In 1993, the City of Corpus Christi entered into a contract with the Lavaca-Navidad River Authority to purchase 41,840 acre-feet of water per year. The City is currently contracted to divert

31,440 acre-feet after the LNRA recalled 10,400 acre-feet. Approximately 40 to 70 percent (40-70%) of the water used by the City of Corpus Christi is from Lake Texana through the Mary Rhodes Pipeline. In addition, in order to meet the demand of a growing Coastal Bend Region, the City purchased senior water rights to 35,000 acre-feet of water per year from the Garwood Irrigation Company which is part of the Lower Colorado River supply. Construction of Phase 2 of the Mary Rhodes Pipeline to access that water supply is now complete.

According to the City of Corpus Christi's Water Conservation Plan, the City diverts raw water from the Nueces River and Lake Texana into the O.N. Stevens Water Treatment Plant where it passes through screens to remove large floating objects such as leaves, branches, and fish. From there, the water is treated to remove suspended particles and disinfected for human consumption. Approximately 23 billion gallons of water are treated each year. The O.N. Stevens Water Treatment Plant has a rated capacity of 167 million gallons per day, well above the peak summer demand of 100 million gallons per day.

According to the City of Corpus Christi's Water Conservation Plan and annual Consumer Confidence Reports, the City's Water Department operates in full compliance with all state and federal requirements. The City's Water Department also maintains a water laboratory.

The service area of the Ricardo Water Supply Corporation is located within the Region N Planning area and the Corporation has provided a copy of this water conservation plan to the Region N Planning Group. The Corporation stays apprised of water conservation and supply issues through the General Manager's participation in the Coastal Bend Regional Water Planning Group.

### **Demand Profile**

The Ricardo Water Supply Corporation serves retail customers. The Corporation has approximately 1110 service connections. The Corporation's 5-Year average water demand by the Ricardo Water Supply Corporation customers was 114,982,200 gallons. The monthly peak demand between 2019 and 2023 was 14,484,000. The largest percentage of water use is from single-family residential usage. However, in 2023, out of the 1110 customers there were 5 multi-unit customers, 10 institutional customers, 16 commercial customers and 2 industrial customers that accounted for 0.35 MG, 3.3 MG, 1.8 MG and 0.14 MG of water use respectively.

### **Five-year and Ten-year targets**

The Ricardo Water Supply Corporation water conservation plan is focused on maintaining the current per capita per day usage. The current 5-year (2019 – 2023) average per capita per day usage is 99 gallons; however, during the past five years, the highest per capita daily usage was 108 in 2019. The Board believes that the current amount is well below the previously recommended

statewide level of 140 gpcd and the customers (members) of the Corporation are making a concerted effort to use water in an efficient and non-wasteful manner. This is evident from the per capita usage figure in 2023 of 103 gallons. The 5-year and 10-year targets are to decrease total per capita per day usage by one percent each year.

The Corporation monitors unaccounted-for water. Table 1 provides figures on the amounts of water purchased and accounted-for as well as the unaccounted-for gallons for the last five years.

<b>Table 1 – Unaccounted-for Water</b>					
Fiscal Year	Gallons Purchased	Gallons Sold	Gallons Flushed	Unaccounted-for Gallons	Percentage of Loss
2019	118,201,000	78,243,500	14,191,792	25,655,908	21.71%
2020	111,626,000	89,865,460	6,504,837	15,128,703	13.55%
2021	102,522,000	86,049,260	6,123,025	10,322,498	10.07%
2022	117,412,742	90,388,580	9,679,925	17,319,365	14.75%
2023	122,775,000	95,307,780	6,012,990	21,453,081	17.47%
AVG for 2019-2023	114,507,348	87,970,916	8,502,514	17,975,911	15.51%

### **Leak Detection and Repair:**

In addition to the monthly water loss report and daily metering, field personnel periodically “drive-out” the routes of the lines. Major portions of the Corporation’s waterlines are located in rural farmlands; therefore, leaks that are not detected by employees are reported by landowners or tenant farmers. Changes in flow volumes from the daily readings also warn field technicians to a possible leak. Master meters (wholesale) are tested annually by an outside company specializing in testing larger meters. In compliance with AWWA recommendations, for deviations from 100% that are greater than 2% (over or under), the meter is re-calibrated. Meters are also tested and if necessary repaired or replaced prior to the annual test date in the event the meter is exhibiting a malfunction.

### **Reservoir Systems Operations Plan:**

The Ricardo Water Supply Corporation does not own or operate any reservoir systems. The City of Corpus Christi is the responsible entity overseeing those tasks since the Corporation purchases water from STWA and STWA purchases water from the City of Corpus Christi.

### **Conservation Strategies:**

(A) Conservation-Oriented Water Rates—the Corporation utilizes an inclining block rate schedule.

- (B) The Corporation does not sell water to any customers for irrigation purposes; therefore, the Corporation does not have any programs to assist agricultural customers in the development of conservation pollution prevention and abatement plans.
- (C) The Corporation does not provide wastewater service; therefore, it does not have any programs for reuse and/or recycling of wastewater and/or graywater.

#### **Future Contracts:**

The Ricardo Water Supply Corporation recognizes that a requirement in every future water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, stipulates that each successive wholesale customer develop and implement a water conservation plan. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.

#### **Implementation and Enforcement:**

Attached, as Appendix A, is a copy of the resolution adopted by the Ricardo Water Supply Corporation Board of Directors adopting the Water Conservation and Drought Contingency Plan.

#### **Coordination with the Regional Water Planning Group:**

Attached as Appendix B is a copy of the cover letter sent to the Nueces River Authority, administrator of the Coastal Bend Regional Water Planning Group.

#### **Review and Update:**

Beginning May 1, 2009, the Ricardo Water Supply Corporation reviewed and updated its Water Conservation and Drought Contingency Plan. Periodic updates will occur, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. Therefore, the next review is scheduled to occur no later than May 1, 2029, and every five years after that date.

#### **Best Management Practices**

In recent years, the Corporation has reinforced conservation measures by sending conservation brochures and reminders. In addition, student-age children serviced by the Corporation benefit from the Major Rivers program provided by the STWA, the Corporation's wholesale provider and contracted management team. The Corporation has and will continue to utilize Best Management

Practices (BMPs) to insure that water is not wasted. Six (6) BMPs have been implemented as part of the Corporation's ongoing water conservation efforts.

## **1. System Water Audit and Water Loss**

### ***A. Description***

All water is metered as it leaves the Corporation's three (3) pump stations. Water is metered for all retail customers. Wholesale meter readings and flow volumes are recorded by field employees. A water loss report is calculated shortly after the monthly meter reading date on or about the 20<sup>th</sup> of the month. The unaccounted-for water is tracked by comparing wholesale water and entering the distribution system to the retail billing records and accounting for water used for flushing and construction and estimated amounts due to leaks. In 2023, the annual loss was 17.47%. In the past five (5) years, the average water loss was 15.51%.

### ***B. Implementation***

Staff is already performing these tasks in a systematic and periodic process. Each month meter readers and billing staff work together to identify meters that are not working properly or are nearing "rollover". A Service Order is written in triplicate. As time allows, the meters are replaced at which time a Work Order (also in triplicate) is done listing the new meter number and pertinent billing information. These Work Orders are used by STWA (the Corporation's contracted management) to generate the Corporation's monthly Repair Invoice. In addition, a list of these "change-outs" is presented to the Board periodically.

### ***C. Schedule***

The meter retrofit program is already implemented and will continue to be utilized.

### ***D. Documentation***

To track this BMP, the Corporation maintains the following documentation:

1. Each customer's (member) file contains a copy of the service order that initiates the process.
2. Service orders are filed in numerical order.
3. A copy of the Service Order is attached to the Work Order once the meter is "changed out".
4. Work Orders are filed with the Monthly Invoice.
5. Work Order copies are also filed in numerical order.
6. A copy of the Work Order is placed in the customer's (member) file.

### ***E. Determination of Water Savings***

Monthly water loss reports are compared to the number of meters that have been changed out for the month and those service orders yet to be completed.

## **2. Metering of All Connections**

### ***A. Description***

The purpose of this BMP is to ensure that all water is accounted.

### ***B. Implementation***

The Corporation utilizes a 100% meter policy to insure that the maximum amount of consumption is recorded. The Corporation, as stated in the previous section, will continue its meter retrofit program and has for many years enlisted the practice recommended by the AWWA of notifying customers when it appears a leak exists on the customer's side of the meter.

The meter program includes the following:

1. Required metering of all connections.
2. An application for service that requires the customer (member) to provide the necessary information to determine the installation of adequate, proper-sized meters as determined by a customer's current water use patterns.
3. Direct utility metering of multi-unit/non-wholesale accounts.
4. Metering of all governmental facility service connections.
5. Use of construction meters.
6. Implementation of the State requirements in HB 2404, passed by the 77<sup>th</sup> Legislature Regular Session and implemented through Texas Water Code 13.502, which requires all new apartments be either directly metered by the utility or submetered by the owner.
7. Regular replacement of meters.
8. Meter reading in which readings are estimated only in cases of flooded conditions.

### ***C. Schedule***

The Corporation has already implemented this BMP, and will continue to utilize this BMP.

### ***D. Documentation***

The Corporation maintains records of the customer's (member) application and all service requests for construction. Information on all services is summarized in an Annual Report to the Board.

### ***E. Determination of Water Savings***

The Corporation reviews overall water loss and the dollars associated with unaccounted-for water during its annual fiscal audit performed by an outside consultant.

### **3. Water Conservation Pricing**

#### ***A. Description***

The monthly minimum is \$43.00 for zero gallons on the smallest residential size meter ( $\frac{5}{8}$ " x  $\frac{3}{4}$ "). The overall cost of service acts as a conservation incentive. In addition, the Corporation's inclining block schedule is meant to encourage conservation. A copy of the current rate structure is attached as Appendix C. The basic rate structure is designed to recover the cost of providing service and billing for water service. The rates include a consumption charge based upon actual gallons metered so that increasing water consumption results in a larger bill for the customer. Conservation pricing provides incentives to customers to reduce both average and peak use.

#### ***B. Implementation***

The Corporation is of the opinion that current rates are, in fact, cost of service rates. However, periodically, staff conducts a rate study to determine whether the fixed and variable costs are appropriately allocated between the monthly minimum and per thousand gallon charges. The information is presented to the Board of Directors. The Board then considers factors including but not limited to infrastructure needs, current construction projects, projected cost of water from STWA/City of Corpus Christi and current Reserve Fund balance.

#### ***C. Schedule***

The Corporation will perform evaluations as the need warrants.

#### ***D. Documentation***

To track this BMP, the Corporation maintains the following documentation:

1. A copy of its adopted rate tariff that follows the guidelines of this BMP;
2. Billing and customer records that include annual revenues by customer class and revenue derived from minimums and usage by customer class for the reporting period;
3. Monthly customer numbers and water consumption by customer class; and
4. Cost of service analyses done by staff through the years.

#### ***E. Determination of Water Savings***

In the last 30 years of the Corporation's operations, a majority of upgrades and improvements to the original lines have been associated with providing service to residents living in colonias. Therefore, it is probable that there are socio-economic factors as well as more limited types of uses in a rural environment versus that of a large, incorporated city. Staff believes that the majority of rural usage is associated with indoor, basic needs (bathing, washing clothes, cooking, flushing toilets) versus that of outdoor watering.

## **4. Prohibition on Wasting Water**

### ***A. Description***

Enforceable actions by a non-profit water supply corporation against a party that is wasting water is now possible by adoption of penalties as part of the water supply corporation's rate tariff. This authority was recently granted by HB 1152. At this time, the Board of Directors is considering the necessary amendments to its tariff. However the Corporation encourages all its customers and members to avoid:

1. Wasting water during irrigation;
2. Allowing outside faucets to leak;
3. Allowing service lines to leak (on the customer side of the meter);
4. Allowing sprinkler systems to leak; and
5. Installing non-recycling decorative water fountains.

Wasting water during irrigation includes:

1. Water running along the road;
2. Irrigation heads or sprinklers spraying directly on paved surfaces such as driveways, parking lots, and sidewalks in public right-of-ways;
3. Operation of an irrigation system with misting heads caused by water pressure higher than recommended design pressure for the heads, or broken heads;
4. Spray irrigation during summer months between the hours of 10 a.m. and 6 p.m.

### ***B. Implementation***

This BMP is implemented through educational brochures and notices.

### ***C. Schedule***

The Corporation has used notices and brochures in the past and will continue to do so in the future.

### ***D. Documentation***

To track this BMP, the Corporation maintains the following documentation:

1. Copies of water waste prohibition brochures and notices sent to customers/members; and
2. Copies of notices sent as a requirement of drought notices triggered by the City of Corpus Christi.



### ***E. Determination of Water Savings***

It is difficult to quantify and determine the water savings from this BMP due to the sporadic nature of these types of activities. However, pertinent notices and future actions taken by the Corporation will be documented by written correspondence to customers/members and filed for record. Any noticeable changes in consumption will also be of record.

## **5. And 6. Public Information and School Education**

### ***A. Description***

The Corporation uses a limited number of media resources to notify customers on the importance of water conservation. This is due to the size and resources of the Corporation as well as the low gpcd. The Corporation recognizes the importance of public awareness and regional water resources.

### ***B. Implementation***

The Corporation, being a small rural system, is limited in the amount of funds that can be expended in public education and outreach. This factor coupled with the most recent per capita per day gallon usage of 103 which is well below the state recommended goal of 140 gpcd serves to reinforce the modest size of the “media” campaign.

1. Printed Brochures—from time to time the Corporation has utilized printed brochures for topics such as Xeriscape, proper outdoor watering, and inside the home water savings tips.
2. School Education—through its purchase of water from STWA, the Corporation supports the Major Rivers Program which was initiated in 1991 and revised for the 2003-2004 school year. Major Rivers is geared for 4<sup>th</sup> and 5<sup>th</sup> grade curriculum. In addition to general information on water resources in the State of Texas, the program focuses on conservation, supply, treatment, and distribution. The self-contained program offers academic and hands-on activities in math, language arts, science, and social studies, with teacher’s guide geared to the interdisciplinary curriculum, as well as an introductory video and home information leaflets. The program includes pre- and post-test evaluations.

STWA, wholesale supplier of the Corporation and provider of the Major Rivers program, maintains the following documentation:

1. Number of schools provided the information;
2. Copies of program marketing and educational materials; and
3. Annual budget for school education programs related to conservation.

### ***C. Schedule***

The Corporation has used and will continue to use these methods to educate and reach customers regarding the importance of water conservation and wise use of water.

***D. Documentation***

To track the progress of this BMP, the Corporation maintains records and copies of all brochures and educational information sent to customers.

***E. Determination of Water Savings***

Water savings associated public information efforts are difficult to quantify. However, the Corporation believes that education is instrumental in efficient use of water.

## **PART II—DROUGHT CONTINGENCY PLAN**

The following Part II of the Water Conservation and Drought Contingency Plan is Ricardo Water Supply Corporation's Drought Contingency Plan adopted by Board resolution on June 17, 2024.

### **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 and sanitation, 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 Ricardo Water Supply Corporation hereby adopts the following regulations and restrictions on the delivery and consumption of water.

The Ricardo Water Supply Corporation will include a provision in every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions, that in the case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039. In addition, in the event that the triggering criteria specified in the Plan have been met, the General Manager is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

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 Ricardo Water Supply Corporation by means of a public meeting held in compliance with the Open Meetings Act.

### **Section III: Public Education**

The Ricardo Water Supply Corporation 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 utility bill inserts.

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

The service area of the Ricardo Water Supply Corporation is located within the Coastal Bend Regional Water Planning Group (Region N) and Ricardo Water Supply Corporation will provide a copy of this Plan to the Coastal Bend Regional Water Planning Group.

## **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 Board of Directors 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 Ricardo Water Supply Corporation. 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.

Animal Unit (AU): An Animal Unit is equal to one (1) beef cow. The following livestock are equivalent based on the following multiplication factors:

Slaughter and feed cattle	1.0
Mature dairy cattle	1.42
Swine	0.40
Sheep or lambs	0.10
Goats	0.10
Horses	2.0
Turkeys	0.0182
Hens/broilers	0.0154

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.

Customer: any person, company, or organization using water supplied by Ricardo Water Supply Corporation.

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.

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

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

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

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 any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- c. use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- d. use of water to wash down buildings or structures for purposes other than immediate fire protection;
- e. flushing gutters or permitting water to run or accumulate in any gutter or street;
- f. use of water to fill, refill, or add to any indoor or outdoor swimming pools or jacuzzi-type pools;
- g. use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- h. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
- i. 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.

Reservoir Capacity: the combined reservoir storage levels of Choke Canyon Reservoir and Lake Corpus Christi, as measured in percentage of the full combined volume.

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

The Board of Directors shall monitor water supply and/or demand conditions as conditions develop and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by means of direct mail to each customer or other methods as allowed by TCEQ.

### **A. Water Shortage Watch**

The Ricardo Water Supply Corporation will declare and advise its wholesale customers that a water shortage watch exists when combined water stored in the reservoirs is estimated to be below fifty percent (50%) of total combined storage capacity of the Lake Corpus Christi/Choke Canyon Reservoirs.

### **B. Stage 1 – Mild Water Shortage**

Requirements for initiation – Customers shall be requested to voluntarily conserve water and adhere to prescribed restrictions on certain non-essential water uses described in Section X when the combined storage level of Choke Canyon Reservoir and Lake Corpus Christi declines below 40%.

### **C. Stage 2 – Moderate Water Shortage**

Requirements for initiation - The Ricardo Water Supply Corporation will declare and advise its wholesale customers that a severe water shortage exists when the combined storage capacity of the Lake Corpus Christi/Choke Canyon Reservoirs is less than 30%.

### **D. Stage 3 – Critical Water Shortage**

Requirements for initiation – The Ricardo Water Supply Corporation will declare and advise its wholesale customers that a critical water shortage exists when the combined storage capacity of the Lake Corpus Christi/Choke Canyon Reservoirs is less than 20% of total storage capacity.

## **E. Water Emergency Stage – Water Emergency**

- **Level 1 & 2**

- a. Ricardo Water Supply Corporation will declare and advise its wholesale customers that an emergency water shortage condition exists in the event of:
- b. A major water line break or breaks and/or pump station failures, whether owned and operated by Ricardo Water Supply Corporation, or the South Texas Water Authority, or City of Corpus Christi, which cause unprecedented loss of capability to provide water service, or
- c. Water production limitations associated with the South Texas Water Authority or City of Corpus Christi's water treatment facilities, or
- d. A natural or man-made contamination of the water supply source(s).

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

The General Manager, or designee, shall monitor water supply and/or demand conditions on a weekly basis and, in accordance with the triggering criteria set forth in Section VIII of this Chapter, shall determine that a mild, moderate, critical, or emergency water shortage condition exists and shall implement the following notification procedures.

### **Notification of Corporation Customers and Members:**

The General Manager, or designee, shall notify its customers for every change in drought stage status by any or all of the following:

- a. Publication in local periodicals
- b. Notice on the monthly billing
- c. Public Service Announcements
- d. Signs posted in public places
- e. Posting on the Corporation's website, [www.ricardowsc.com](http://www.ricardowsc.com)

### **Additional Notification:**

The General Manager, or designee shall, at a minimum, notify directly, or cause to be notified directly, the following individuals and entities for every change in drought stage status:

- a. The Corporation Board of Directors
- b. Major water users (such as industries)
- c. Critical water users
- d. Texas Commission on Environmental Quality (TCEQ) – note TCEQ executive director MUST be informed within five (5) business days of mandatory water use restrictions being imposed

## **Section X: Drought Best Management Practices Per Stage**

A summary of water use reduction targets for each drought stage response is presented in the following table. Further discussion on best management practices and implementation practices associated with each stage of response is included below. During Stages 2, 3, and Water Emergency Level 1 & 2, requests for exceptions may be presented to the General Manager or designee.

<b>Drought Stage Response</b>	<b>CCR/LCC Combined Reservoir Storage Level</b>	<b>Target Demand Reduction Levels</b>
Water Shortage Watch	<50%	5%
Stage 1– Mild Water Shortage	<40%	5%
Stage 2 – Severe Water Shortage	<30%	10%
Stage 3 – Critical Water Shortage	<20%	15%
Water Emergency -Level 1 -Level 2	Not Applicable	25% 50%

### **A. Stage 1 Response – MILD Water Shortage Conditions**

Target: Achieve a *voluntary* 10% reduction in daily treated water demand relative to treated water demand with the water use restrictions below.

#### Best Management Practices for Supply Management:

Under Stage 1, the Corporation will:

1. Use more repair crews if necessary to allow for a quicker response time for water-line leak repair; and
2. Begin monitoring customers' compliance with Stage 1 restrictions during the course of field personnel's daily rounds.

#### Water Use Restrictions for Demand Reduction:

The following water use restrictions shall apply to all persons during Stage 1:

1. Water customers are requested to voluntarily limit the irrigation of landscaped areas to **once per week**. The General Manager, or designee, will determine the watering schedule.
2. 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 Corporation Board of Directors.

3. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days. However, if the golf course utilizes a water source other than that provided through Corporation infrastructure, the facility shall not be subject to these regulations.
4. Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.
5. The use of water to maintain integrity of building foundations is limited to designated watering days and is only permitted by use of hand-held hose or drip irrigation.

## **B. Stage 2 Response – MODERATE Water Shortage Conditions**

Target: During Stage 2, achieve a 20% reduction in daily treated water demand relative to treated water demand with the water use restrictions below.

### Best Management Practices for Supply Management:

In addition to the best management practices for supply management listed under Stage 1, the Corporation will also do the following during Stage 2:

1. Eliminate the flushing of water mains unless required for decontamination and/or public safety; and
2. Review customers' water usage for compliance based on the previous month's water use and notify violators verbally or in writing as the situation dictates.

### Water Use Restrictions for Demand Reduction:

Under threat of penalty for violation, the following water use restrictions shall apply to all persons during Stage 2:

1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to **once every other week**. The watering schedule will be determined by the General Manager or designee. Customers will be made aware of their designated watering day in accordance with Section IX. However, irrigation of landscaped areas is permitted on any day if it is by means of a hand-held hose (with positive shutoff nozzle), a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system with a positive shutoff device. Exceptions for this restriction may be permitted, upon review and approval by the Corporation Board of Directors, for the following uses: new plantings (for up to 60 days), vegetable gardens, athletic playing fields, and botanical gardens. In addition, this restriction does not apply to customers

- irrigating with well water or an aerobic septic system. Customers irrigating with well water or an aerobic septic system must apply for a permit to be prominently posted on the premises within two (2) feet of the street number located on the premises.
2. Use of water for the irrigation of golf course greens, tees, and fairways is prohibited. The watering of greens and tees is limited to once every other week unless the golf course utilizes a water source other than that provided through Corporation infrastructure or done by means of hand-held hoses, hand-held buckets, or drip irrigation.

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

Target: During Stage 3, achieve a 30% reduction in total daily treated water demand relative to treated water demand with the water use restrictions below.

#### Best Management Practices for Supply Management:

In addition to the best management practices for supply management listed under Stage 2, the Corporation will also do the following during Stage 3:

1. Upon written notice, disconnect the water meters of willful violators if absolutely necessary to prevent the deliberate wasting of water.

#### Additional Water Use Restrictions and Guidelines for Demand Reduction that may be implemented based on City of Corpus Christi implementing stricter restrictions:

1. Irrigation of landscaped areas shall be **prohibited at all times**.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle not occurring on the premises of a commercial car wash stations and not in the immediate interest of public health, safety, and welfare is prohibited. Vehicle washing may be done at any time on the immediate premises of a commercial car wash. Further, such washing may be exempted from these regulations upon review by the General Manager if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables. Washing of boats and/or flushing of boat motors is permitted upon immediate exit of water body.
3. The filling, refilling, or adding of water to swimming pools, wading pools, and jacuzzi-type pools, and water parks (unless non-city, alternative source) is prohibited.
4. The use of water to maintain the integrity of a building foundation is still permitted on the designated Stage 3 watering day and shall be done by hand or drip irrigation method.

5. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life.
6. The following uses of water are defined as non-essential and are prohibited:
  - a. Wash-down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
  - b. Use of water to wash down buildings or structures for purposes other than immediate fire protection without permit granted by the General Manager or designee;
  - c. Use of water for dust control without permit without permit granted by the General Manager or designee;
7. No application 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 approved, and time limits for approval of such applications are hereby suspended for such time as this drought response stage shall be in effect.
8. For residential and multi-unit customers, a drought surcharge of up to and including 100% of the total monthly water bill over the monthly allocation may be added to the customers' bill to deter discretionary water use, as explained in Section XI.

#### **D. Water Emergency Stage Response – EMERGENCY Water Shortage Conditions**

Target: During Water Emergency Stage, achieve a 50% or greater reduction in daily treated water demand relative to treated water demand with the below water use restrictions. Surcharges and reduced allocations are enforceable during Water Emergency Stage water shortage conditions, as described in Section XIII.

During emergency conditions such as system outage or supply source contamination, or supply sources draining empty, alternative water sources and/or alternative delivery mechanisms may be necessary with prior approval of the General Manager or designee. For emergency water shortage conditions associated with contamination of Nueces Basin stored supplies, the Corporation, under the General Manager or designee's direction, may cease receiving its normal supply of water from the South Texas Water Authority and City of Corpus Christi. Temporary or additional supplies of water may be available from Lake Texana on a short-term basis to meet essential water needs. For emergency water shortage conditions associated with contamination of Lake Texana supplies, the Corporation, may also experience large reductions in supplies from the South Texas Water Authority and City of Corpus Christi.

#### Best Management Practices for Supply Management:

In addition, the Corporation will do the following:

1. Call the 10 largest water customers in the area affected by the emergency condition, and if necessary, use runners in key areas to begin spreading the message of a major outage.

Water Use Restrictions for Demand Reduction:

During Water Emergency Stage, all requirements of Stage 1, 2, and 3 shall be in effect except as modified below:

1. Irrigation of landscaped areas is absolutely prohibited.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle is absolutely prohibited.
3. Associated uses of water not related to business process which are discretionary, such as equipment washing, shall be deferred until the Emergency Water Stage has been terminated.

Optional Measure:

During Water Emergency Stage, the following measure is an optional water use restriction that may be implemented by the General Manager, or designee, with Board approval, as conditions warrant:

1. For residential and multi-unit customers, a drought surcharge of up to and including 100% of the total monthly water bill over the monthly allocation may be added to the customers' bill to deter discretionary water use, as explained in Section XI.

**Section XI: Surcharges for Drought Stages Critical and Emergency**

A. General

1. The surcharges established herein are solely intended to regulate and deter the use of water during a period of serious drought in order to achieve necessary water conservation. The Corporation expressly finds that the drought poses a serious and immediate threat to the public and economic health and general welfare of this community, and that the surcharges and other measures adopted herein are essential to protect said public health and welfare.
2. This section, and the surcharges and measures adopted herein are an exercise of the Corporation's regulatory and police power, and the surcharges and connection fees are conservation rates intended to meet fixed costs as a result of lost revenue.
3. With Board approval, the General Manager is authorized to determine trigger points or allocations and surcharges during Stages 3 and 4 Emergency Water Shortage conditions.

4. A customer may appeal an allocation or drought surcharge triggering point established under this Section to the General Manager or designee on grounds of unnecessary hardship, through the process outlined in Section XII.
  5. Drought surcharge funds will first be applied towards annual debt service as reflected in the Corporation's operating budget to offset revenue loss due to drought conditions. Additional funds will be reported to the Board for Board direction.
- B. Residential water customers, who are not billed through a master water meter.
1. A monthly base amount of 4,000 gallons shall be established as a trigger point for each customer. Water consumption up to and including this amount will not include a drought surcharge.
  2. Above the 4,000 gallon consumption trigger point, with Board approval, a drought surcharge shall be added up to and including 100% of the customer's total monthly water bill over the allocation.
- C. Residential customers who are billed from a master water meter.
1. Once Stage 2 condition has been declared, property managers of multi-tenant units shall notify the General Manager of the number of residential units in their facility for determination of allocations. Until so notified, the Corporation shall calculate the allocation based on two residential units per master water meter. A monthly base amount of 4,000 gallons shall be established as a trigger point for each residential unit.
  2. When consumption for the month is less than or equal to 4,000 gallons times the number of residential units, there will be no surcharge.
  3. With Board approval, when consumption is above the 4,000 gallons times the number of units, a drought surcharge shall be added up to and including 100% of the customer's total monthly water bill over the allocation.
  4. The customer is responsible for passing the demand charge onto the tenant.
- D. Commercial or institutional customer
1. A monthly water usage allocation shall be established by the General Manager or designee for each commercial or institutional customer.
  2. Method of establishing allocation:
    - a. When the combined reservoir capacity is less than 20% of total capacity (Stage 3), the commercial or institutional customer's allocation shall be 90 percent of the customer's usage for the corresponding month's billing period during previous 12 months prior to the implementation of Stage 2.
    - b. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists.

- c. Provided, however, a customer, 90 percent of whose monthly usage is less than 6,000 gallons, shall be allocated 6,000 gallons.
- d. The General Manager shall give best effort to see that notice of each commercial or institutional customer's allocation is mailed to such customer.
- e. If, however, the customer does not receive such notice, it shall be the customer's responsibility to contact the Corporation's Office to determine the allocation, and the allocation shall be fully effective notwithstanding lack of receipt of written notice.
- f. Upon request of the customer or at the initiative of the General Manager, the allocation may be reduced or increased,
  - 1. if one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or
  - 2. if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions.

E. Industrial customers, who use water for processing.

- 1. A monthly water usage allocation shall be established by the General Manager or designee for each industrial customer, which uses water for processing (e.g., an industrial customer).
- 2. Method of establishing allocation.
  - a. When the combined reservoir capacity is less than 20% of total capacity (Water Emergency Stage 3), the industrial customer allocation shall be 90 percent of the customer's usage for the corresponding month's billing period during the previous 12 months prior to the implementation of Stage 2
  - b. If the customer's billing history is shorter than 12 months, the monthly allocation shall be 1/12 of 90% of the customer's maximum annual contracted amount until 12 months of billing history are established. However if the industrial customer does not have a water contract and does not have at least 12 months of billing history, then the new industrial customer will provide data regarding expected water use and Corporation will determine allocation based on 90% of expected use to determine initial allocation until 12 months of billing history are established.
  - c. The General Manager shall give his/her best effort to see that notice of each industrial customer's allocation is mailed to such customer.
  - d. If, however, the customer does not receive such notice, it shall be the customer's responsibility to contact the Corporation's Office to determine the allocation, and the allocation shall be fully effective notwithstanding lack of receipt of written notice.
  - e. 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 customer's normal water usage because customer had shut down a major processing unit for overhaul during the period.
2. The customer has added or is in the process of adding significant additional processing capacity.
3. The customer has shut down or significantly reduced the production of a major processing unit.
4. The customer has previously implemented significant permanent water conservation measures.
5. The customer agrees to transfer part of its allocation to another industrial customer.
6. Other objective evidence demonstrates that the designated allocation is inaccurate under present conditions.

F. Commercial, institutional, and industrial customers shall pay the following surcharges:

1. Customers whose allocation is 6,000 gallons through 20,000 gallons per month:
  - a. \$5.00 per 1,000 gallons for the first 1,000 gallons over allocation.
  - b. \$8.00 per 1,000 gallons for the second 1,000 gallons over allocation.
  - c. \$16.00 per 1,000 gallons for the third 1,000 gallons over allocation.
  - d. \$40.00 for each additional 1,000 gallons over allocation.
2. Customers whose allocation is 21,000 gallons per month or more:
  - a. One times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
  - b. Three times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
  - c. Five times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
  - d. Ten times the block rate for each 1,000 gallons more than 15 percent above allocation.
  - e. The surcharges shall be cumulative.
  - f. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

G. Nonresidential customer is billed from a master meter.

1. When a nonresidential customer is billed from a master meter which jointly measures water to multiple residential dwelling units (for example: apartments, mobile homes), the customer may pass along any surcharges assessed under this DCP to the tenants or occupants, provided that:
  - a. The customer notifies each tenant in writing:
    1. That the surcharge will be passed along.
    2. How the surcharge will be apportioned.

3. That the landlord must be notified immediately of any plumbing leaks.
4. Methods to conserve water (which shall be obtained from the Corporation).
- b. The customer diligently maintains the plumbing system to prevent leaks.
- c. The customer installs water saving devices and measures (ideas for which are available from the Corporation) to the extent reasonable and practical under the circumstances.

H. Water service to the retail water customer may be terminated under the following conditions:

1. Monthly residential water usage exceeds allocation by 4,000 gallons or more two or more times for any individual month after the implementation of Stage 3. Also, the two months need not be consecutive months.
2. Monthly water usage on a master meter which jointly measures water usage to multiple residential dwelling units exceeds allocation by 4,000 gallons times the number of dwelling units or more two or more times (which need not be consecutive months).
3. Monthly nonresidential water usage for a customer whose allocation is 6,000 gallons through 20,000 gallons exceeds its allocation by 7,000 gallons or more two or more times (which need not be consecutive months).
4. Monthly nonresidential water usage for a customer whose allocation is 21,000 gallons or more exceeds its allocation by 15 percent or more two or more times (which need not be consecutive months).
5. For residential customers and nonresidential customers whose allocation does not exceed 20,000 gallons, after the first disconnection water service shall be restored upon request for a fee of \$60, Monday through Friday prior to 4 pm. Restoration of service is not available on weekends or observed holidays.
6. For such customers, after the second disconnection, water service shall be restored within 24 hours of the request for a fee of \$500.
7. If water service is disconnected a third time for such customer, water service shall not be restored until the Corporation re-enters a level of water conservation less than Stage 2.
8. For master meter customers, the service restoration fees shall be the same as above times the number of dwelling units.
9. For nonresidential customers whose allocation is 21,000 gallons per month or more:
  - a. After the first disconnection water service shall be restored upon request, Monday through Friday prior to 4 p.m. for a fee in the amount of "X" in the following formula:  $X = \$60 \times \text{Customer's Allocation in gallons} / 20,000 \text{ gallons}$
  - b. After the second disconnection for said customers, water service shall be restored within 24 hours of the request for a fee of 10 times "X".



- c. If water service is disconnected a third time for such customer, water service shall not be restored until the Corporation re-enters a level of water conservation less than Stage 2.
  - d. The General Manager is directed to institute written guidelines for disconnection of water service under this provision, which will satisfy minimum due process requirements, if any.
- I. It shall be a defense to imposition of a surcharge hereunder, or to termination of service, that water used over allocation resulted from loss of water through no fault of the customer (for example, a major water line break) for the following conditions:
  - 1. The customer shall have the burden to prove such defense by objective evidence (for example, a written certification of the circumstances by a plumber).
  - 2. A sworn statement may be required of the customer.
  - 3. This defense shall not apply if the customer failed to take reasonable steps for upkeep of the plumbing system, failed to reasonably inspect the system and discover the leak, failed to take immediate steps to correct the leak after discovered, or was in any other way negligent in causing or permitting the loss of water.
- J. When this section refers to allocation or water usage periods as "month," monthly," "billing period," and the like, such references shall mean the period in the Corporation's ordinary billing cycle which commences with the reading of a meter one month and commences with the next reading of that meter which is usually the next month.
  - 1. The goal for the length of such period is 30 days, but a variance of two days, more or less, will necessarily exist as to particular meters.
  - 2. If the meter reader system is prevented from timely reading a meter by any obstacle which is attributable to the customer, the original allocation shall apply to the longer period without modification.

## **Section XII: Variances**

The Board of Directors, 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 Ricardo Water Supply Corporation within 5 days after the Plan or a particular drought response

stage has been invoked. All petitions for variances shall be reviewed by Board of Directors, 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 Ricardo Water Supply Corporation shall be subject to the following conditions, unless waived or modified by the Board of Directors:

- 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 XIII: Severability**

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