



**Drought Contingency Plan  
For Domestic, Temporary, Landscape Irrigation  
and Recreational Use Contracts**

**Lower Colorado River Authority  
October 2015**

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## **1.0 Declaration of Policy, Purpose, and Intent**

The Lower Colorado River Authority (LCRA) provides contracts to customers for water supply. In cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to other reasons, LCRA may require water customers to institute temporary restrictions to limit non-essential water use. This Drought Contingency Plan (Plan) is designed to prolong the availability of water supply for critical needs during drought periods or other water supply emergencies.

This Drought Contingency Plan applies to the use of raw water supplied by LCRA to domestic and temporary water use contract holders (up to 10 acre-feet per year) and landscape irrigation and recreational use contract holders (up to 20 acre-feet per year). The provisions of this plan do not apply to the use of water from another source such as potable water from a local supplier or rainwater.

Water uses regulated or prohibited under this Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water.

## **2.0 Authorization**

The LCRA General Manager or his or her designee is hereby authorized and directed to implement the applicable provisions of this plan. The LCRA General Manager or his or her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan. (*See Appendix A*).

## **3.0 Public Education**

The LCRA General Manager or his or her designee will periodically provide the customers subject to this Plan with information about this Plan, including the importance of the Plan, information about the conditions under which each stage of the Plan is to be initiated, processes used to reduce water use, and impending or current drought conditions.

## **4.0 Coordination with Regional Planning Groups**

LCRA will provide a copy of this Plan to the Lower Colorado Regional Planning Group (Region K).

## **5.0 Notice Requirements**

In accordance with the requirements of the Texas Commission on Environmental Quality (TCEQ), LCRA will notify the TCEQ executive director and LCRA General Manager in writing within five (5) business days of the implementation of any mandatory provisions of the Drought Contingency Plan, or on such other schedule as TCEQ may require.

## **6.0 Permanent Water Use Restrictions**

The following restrictions apply on a year-round basis.

### **6.1 Irrigation Schedule for Landscaped Areas**

Irrigation of landscaped areas with hose-end sprinklers or in-ground irrigation systems shall be limited to the following schedule:

- Residential addresses ending in odd numbers: Wednesdays and Saturdays
- Residential addresses ending in even numbers: Thursdays and Sundays
- Commercial (including Homeowners and Property Owners Associations): Tuesday and Friday
- Watering times: Midnight to 10 a.m. and 7 p.m. to midnight
- No regular watering is recommended in the months of November through February.

### **6.2 Prohibition of Water Waste**

Water waste is prohibited, including the following:

- Failure to repair a controllable leak, including a broken sprinkler head, a leaking valve, leaking or broken pipes, or a leaking faucet;
- Operating an irrigation system:
  - with a broken head;
  - with a head that is out of adjustment and spraying into a public street or parking area;
  - with a head that is fogging or misting because of excessive water pressure; or
  - between the hours of 10 a.m. to 7 p.m.
- Allowing water:
  - to run off a property and form a stream of water in a street for a distance of 50 feet or greater; or
  - to pool in a street or parking lot to a depth greater than one-quarter of an inch.

## **7.0 Initiation and Termination of Response Stages**

The LCRA General Manager or his or her designee will monitor water supply conditions on a regular basis and will determine when conditions warrant initiation and termination of each stage of this Plan in accordance with LCRA's Water Management Plan. Water supply conditions will be determined by the source of supply and weather conditions.

Public notification of the initiation or termination of drought response stages will be by a variety of means, including: bill inserts, e-mail and automated telephone calls.

### **7.1 Triggering Criteria for Initiation and Termination of Drought Response Stages**

The following triggering criteria apply to all contracts covered by this Plan.

**(1) STAGE 1 - Mild Water Shortage Conditions (Voluntary Measures)**

- A. **Requirements for initiation** - Customers will be asked to implement the Stage 1 Drought Response Measures when the combined storage of Lakes Travis and Buchanan reaches 1.4 million acre-feet in accordance with the LCRA Drought Contingency Plan for Firm Water Customers (DCP).
- B. **Requirements for termination** - Customers may stop implementing Stage 1 measures when LCRA announces that Stage 1 restrictions under this Plan are no longer required.

**(2) STAGE 2 - Moderate Water Shortage Conditions (Mandatory Measures)**

- A. **Requirements for initiation** - Customers will be asked to implement Stage 2 Drought Response Measures when the combined storage of Lakes Travis and Buchanan reaches 900,000 acre-feet in accordance with the LCRA DCP.
- B. **Requirements for termination** - Customers may stop implementing Stage 2 measures when LCRA announces that Stage 2 restrictions under this Plan are no longer required.

*Upon lifting of Stage 2, a less restrictive stage may become operative.*

**(3) STAGE 3 - Severe Water Shortage Conditions (Mandatory Measures)**

- A. **Requirements for initiation** - Customers must implement the Stage 3 Drought Response Measures when:
- Combined storage of Lakes Travis and Buchanan reaches 600,000 acre-feet, in accordance with the LCRA DCP, or
  - The LCRA Board declares a Drought Worse than Drought of Record or other water supply emergency and orders the mandatory curtailment of firm water supplies.
- B. **Requirements for termination** - Customers may stop implementing Stage 3 measures when LCRA announces that Stage 3 restrictions under this Plan are no longer required.

*Upon lifting of Stage 3, a less restrictive stage may become operative.*

**(4) STAGE 4- Critical Water Conditions**

- A. **Requirements for initiation** - Customers must implement the Stage 4 Drought Response Measures when the LCRA Board declares a prolonged drought worse than the Drought of Record or other water supply emergency and orders the mandatory curtailment of firm water supplies at a level more severe than in Stage 3.
- B. **Requirements for termination** - Customers may stop implementing Stage 4

measures when LCRA announces that Stage 4 restrictions under this Plan are no longer required.

*Upon lifting of Stage 4, a less restrictive stage may become operative.*

**(5) STAGE 5- Emergency Water Conditions**

A. **Requirements for initiation** - Customers must implement the Stage 5 Drought Response Measures when any other emergency water supply or demand conditions exist that the LCRA General Manager or the LCRA Board determines constitute a water supply emergency.

B. **Requirements for termination** - Stage 5 of the Plan may be rescinded when LCRA announces that Stage 5 restrictions under this Plan are no longer required.

*Upon lifting of Stage 5, a less restrictive stage may become operative.*

**8.0 Drought Response Measures**

**8.1 Targets for Water-Use Reductions**

**(1) STAGE 1 - Mild Water Shortage Conditions (Voluntary Measures)**

Achieve a 5% reduction in water use.

**(2) STAGE 2 - Moderate Water Shortage Conditions (Mandatory Measures)**

Achieve a 10-20% reduction in water use.

**(3) STAGE 3 - Severe Water Shortage Conditions (Mandatory Measures)**

Achieve a minimum 20% reduction in water use.

**(4) STAGE 4 - Critical Water Shortage Conditions (Mandatory Measures)**

As determined by the LCRA Board.

**(5) STAGE 5 - Emergency Water Shortage Conditions (Mandatory Measures)**

As determined by the LCRA Board.

**8.2 Required Measures**

**(1) STAGE 1 - Mild Water Shortage Conditions**

A. Actively promote drought related issues and the need to conserve.

- B. Continue to follow the permanent landscape watering schedule.

**(2) STAGE 2 - Moderate Water Shortage Conditions**

All requirements of Stages 1 are also in effect during Stage 2, with the following modifications and additions:

- A. LCRA will keep customers informed about issues regarding current and projected water supply and demand conditions.

- B. Irrigation of Landscaped Areas:

- 1. Continue to follow the permanent landscape watering schedule.
- 2. New irrigated landscapes may be installed and re-vegetation seeding may be performed only pursuant to a variance granted by the General Manager or his or her designee for a period of no more than 30 days.

- C. Pools:

- 1. Draining and re-filling of residential swimming pools, hot tubs, and wading pools is recommended only onto pervious surfaces or onto a surface where water will be transmitted directly to a pervious surface, and only if:
  - a. Draining excess water from pool due to rain in order to lower water to maintenance level;
  - b. Repairing, maintaining or replacing pool components that have become hazardous; or
  - c. Repair of a pool leak.

- D. Outside Water Features:

- 1. Operation of an outside water feature is allowed only if the system is recirculating through a closed loop system.
  - a. Operation of outdoor misting systems at a commercial facility is allowed only between the hours of 4 p.m. and midnight,
  - b. Splash pad type fountains are allowed only if recirculating

- E. Restricted activities

- 1. Dust control
  - a. Use of water to control dust is limited to uses necessary to meet requirements of federal, state or local permits related to land development or for public health and safety.
- 2. Washing of structures, impervious surfaces and vehicles
  - a. Use of water to wash any structure, impervious surface, or motor vehicle (such as a motorbike, boat, trailer, or airplane) is prohibited except on designated watering days between the hours of midnight and 10 a.m. and

between 7 p.m. and midnight. Such activity, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle.

**(3) STAGE 3 - Severe Water Shortage Conditions**

All requirements of Stages 1 and 2 are also in effect during Stage 3, with the following modifications and additions:

A. LCRA will increase efforts to keep customers informed about issues regarding current and projected water supply conditions, watering restrictions, and how they can reduce water use. In addition to measures implemented in the preceding stages of the plan, LCRA will explore additional emergency water supply options.

B. Irrigation of Landscaped Areas:

1. Irrigation of landscaped areas with hose-end sprinklers or in-ground irrigation systems shall be further limited to the following schedule:
  - Residential addresses ending in odd numbers: Saturdays
  - Residential addresses ending in even numbers: Sundays
  - Commercial / HOA/ POA addresses: Fridays
  - Outdoor watering hours will be limited to six hours a day between the hours of 4 a.m. and 10 a.m. on designated day.
  - November through February: Turn off your sprinkler system
2. The Stage 3 landscape watering schedule does not apply to irrigation of landscaped areas if it is by means of:
  - a. a hand-held hose with a positive shut-off device; or
  - b. a faucet-filled bucket or watering can of five gallons or less; or
  - c. drip irrigation or soaker hoses used with a working on/off timer to water:
    - (i) vegetable gardens;
    - (ii) around a tree drip line; or
    - (iii) a foundation.
3. New irrigated landscapes representing a re-design of over 50% of the landscaped area may only be installed if:
  - a. a 30 day watering schedule variance has been applied for and accepted; (See section 9.2);
  - b. only drought resistant or native plants or turf are installed;
  - c. no more than 50% of the irrigated landscaped area is turf; and
  - d. irrigation of beds is accomplished by drip irrigation with an automatic timer.

C. Pools:

1. Installation of swimming pools is only allowed when equipped with an automatic pool cover.
2. Public/community swimming pools should only be filled or replenished as necessary to maintain safe levels of water quality for human contact and for maintenance.

D. Outside Water Features:

Operation of outside water features is only allowed when such features are used for aeration necessary to sustain aquatic life.

E. Ponds:

Ponds used for aesthetic, amenity, and/or storm water purposes may maintain water levels only to the extent necessary to preserve the integrity of the liner, for water quality purposes, or for operating an irrigation system.

F. Restricted activities

1. Washing impervious surfaces  
Washing sidewalks, walkways, driveways, parking lots, street, tennis courts, and other impervious surfaces is prohibited except for immediate health and safety;
2. Vehicle Washing  
Use of water to wash any motor vehicle is prohibited except on designated watering days between the hours of 4 a.m. and 10 a.m. Such activity, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle.
3. Construction related revegetation  
Revegetation of disturbed areas due to construction is allowed if required by local, state or federal regulations. A temporary watering variance must be granted by LCRA.

**(4) STAGE 4 – Critical Water Shortage Conditions**

All requirements of Stages 1 through 3 are also in effect during Stage 4, with the following modifications and additions:

A. Irrigation of Landscaped Areas:

1. The use of hose-end sprinklers and in-ground irrigation systems are prohibited except drip irrigation.
2. Irrigation is allowed with hand-held hoses with a working on/off nozzle, bucket, or drip irrigation and only between the hours of 4 a.m. to 10 a.m.

on the designated outdoor water use day listed in Stage 3.

3. New landscapes that include irrigated turf grass are prohibited.
4. Irrigation of athletic fields is allowed if the field is used for organized sports practice, competition, or exhibition events and the irrigation is necessary to protect the health and safety of the players, staff, or official present for the athletic event.

B. Pools:

The filling or replenishing of water to single-family residential swimming pools is only allowed if the pool is covered with a pool cover when not in use.

C. Outside Water Features:

1. Use of water to operate outside water features, ornamental fountains, or ponds are only allowed when such features support aquatic life.
2. Outdoor misting systems and splash pads are prohibited.

D. Washing of structures and vehicles:

Use of water to wash any structure or motor vehicle is prohibited except in instances with a direct public health and safety risk.

**(5) STAGE 5 – Emergency Water Shortage Conditions**

All requirements of Stages 1 through 4 are also in effect during Stage 5, with the following modifications and additions:

- A. Irrigation of landscaped areas by any means is prohibited.
- B. Additional restrictions, as deemed necessary by the General Manager.

## **9.0 Enforcement**

### **9.1 Enforcement Provisions**

The following enforcement provisions shall apply to all customers subject to this Plan:

- (1) No person shall knowingly or intentionally allow the use of water from LCRA 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.
- (2) Any person who violates this Plan shall be subject to the following surcharges and conditions of service:
  - A. Following the first documented violation, the violator shall be given a notice specifying the type of violation and the date and time it was observed. Surcharges and restrictions on service that may result from additional violations;

- B. Following the second documented violation, the violator shall be sent by certified mail a notice of violation and shall be assessed a surcharge of \$200;
  - C. Following the third and any subsequent documented violation, the violator shall be sent by certified mail a notice of violation and shall be assessed a surcharge of \$700;
  - D. For repeat violations, LCRA may terminate the contract, refer the matter to the Texas Commission on Environmental Quality, seek injunctive relief, and/or seek any other remedies available.
- (3) Each day that one or more of the provisions in this Plan is violated shall constitute a separate violation. Watering schedule violations do not carry over from year to year for purposes of deeming a violation a second or subsequent violation. Tracking of multiple violations restarts at the beginning of the calendar year. Any person, including one classified as a water customer of LCRA, in apparent control of the property where a violation occurs or originates, shall have the right to show that he or she did not commit the violation.

## 9.2 Variances

- (1) The General Manager or his or her designee may grant variances:
- A. Temporary watering schedule variances are allowed for new landscapes that use drought resistant landscaping or water conserving natural turf as limited based upon the drought stage. Temporary watering schedule variances are also allowed for revegetation of disturbed areas due to construction, or if required by local, state or federal regulations.

The following guidelines apply to Temporary Watering Schedule Variance for new landscapes:

- A 30 day temporary watering schedule must be applied for and issued before the irrigation may begin.
  - On days 1 thru 10, automatic irrigation or hose end sprinklers are allowed every day, subject to the allowable watering hours for the Stage in effect.
  - On days 11-20, automatic irrigation or hose end sprinklers are allowed every other day subject to the allowable watering hours for the Stage in effect.
  - On days 21-30 automatic irrigation or hose end sprinklers are allowed every third day subject to the allowable watering hours for the Stage in effect.
  - On day 31, the customer must return back to the watering schedule for the Stage in effect.
  - Hand watering is allowed anytime with a hose equipped with a positive shut off nozzle, except as restricted under the watering hours or other restrictions for the Stage in effect
- B. For commercial and large residential properties, where the mandatory outdoor water schedule window is inadequate to cover large landscapes and subject to the

requirements of the applicable stage of this plan, a variance may be granted, providing that the variance does not increase the time allowed for watering each area but rather alters the schedule for watering; and

- C. Allowing the use of alternative water sources (i.e., ground water, reclaimed wastewater) that do not increase demand on LCRA-supplied water for outdoor use.
- (2) The General Manager or his or her designee may grant in writing temporary variances for existing water uses otherwise prohibited under this Plan if it is determined that failure to do so would cause an emergency adversely affecting the public health, sanitation, or fire protection, and if one or more of the following conditions are met:
    - A. Compliance with this plan cannot be accomplished during the duration of the time the Plan is in effect; or
    - B. Alternative methods can be implemented that will achieve the same level of reduction in water use.
  - (3) Persons requesting a variance from the provisions of this Plan shall file a petition for variance any time the Plan or a particular drought response stage is in effect. The petition shall include the following:
    - Name and address of the petitioner
    - Purpose of water use
    - Specific provision of the Plan from which the petitioner is requesting relief.
    - Detailed statement as to how the specific provision of the plan adversely affects the petitioner or what damage or harm the petitioner or others will sustain if petitioner complies with this plan
    - Description of the relief requested
    - Period of time for which the variance is sought
    - 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
    - Other pertinent information
  - (4) Variances shall be subject to the following conditions, unless waived or modified by the General Manager or his or her designee:
    - A. Variances granted shall include a timetable for compliance.
    - B. Variances granted shall expire when the plan, or its requirements, is no longer in effect, unless the petitioner has failed to meet specified requirements.
  - (5) No variance shall be retroactive or otherwise excuse any violation occurring before the variance was issued.

## Appendix A: LCRA Board Authorization of Drought Contingency Plan

CERTIFICATE

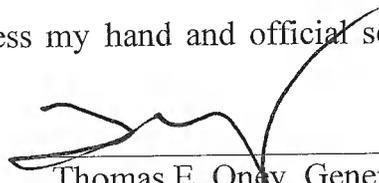
STATE OF TEXAS       §  
                                  §  
COUNTY OF TRAVIS   §

I, Thomas E. Oney, hereby certify that I am the General Counsel and Assistant Secretary of the Board of Directors of the Lower Colorado River Authority (LCRA), a conservation and reclamation district, duly organized and existing under and by virtue of the public laws of the State of Texas.

I further certify that the Board of Directors of LCRA, on Oct. 21, 2015, in a meeting posted properly in accordance with the Texas Open Meetings Act and with a quorum present and voting, unanimously approved the LCRA Drought Contingency Plan for Domestic, Temporary, Landscape Irrigation and Recreation Contracts, and authorized the general manager or designee to submit the amended drought contingency plan to the Texas Commission on Environmental Quality, all as recommended by LCRA staff, described in the attached exhibit marked LCRA Board Agenda Item 13.

I further certify that true and correct copies of LCRA Board Agenda Item 13 and the LCRA Drought Contingency Plan for Domestic, Temporary, Landscape Irrigation and Recreational Use Contracts are attached hereto.

TO CERTIFY WHICH, witness my hand and official seal this the 11<sup>th</sup> day of November 2015.

  
\_\_\_\_\_  
Thomas E. Oney, General Counsel  
and Assistant Secretary of the  
LCRA Board of Directors



## **FOR ACTION**

### **13. LCRA Drought Contingency Plan for Domestic, Temporary, Landscape Irrigation and Recreation Contracts**

#### **Proposed Motion**

Approve the LCRA Drought Contingency Plan for Domestic, Temporary, Landscape Irrigation and Recreation Contracts, and authorize the general manager or designee to submit the amended drought contingency plan to the Texas Commission on Environmental Quality (TCEQ).

#### **Board Consideration**

LCRA Board Policy 102 - Authority and Responsibilities requires approval by the LCRA Board of Directors for all decisions where Board policy or direction has not been clearly established.

#### **Budget Status and Fiscal Impact**

The proposed amendments have no impact on the fiscal year 2016 budget.

#### **Summary**

As part of a streamlined contracting process for a new customer category of landscape irrigation or recreation customers of 20 acre-feet per year or less, LCRA staff proposes expanding the drought contingency plan for domestic use and temporary customers to also cover the new customer category. These customers would follow the proposed plan rather than be required to develop individual plans. As with the current plan, LCRA's general manager would be authorized to implement the plan.

Proposed modifications include:

- Expanding the plan to cover landscape irrigation or recreational contracts of 20 acre-feet per year or less.
- Including additional restrictions beginning in Stage 2 for other outdoor uses such as fountains, pools and vehicle washing.
- Making minor changes and clarifications.

LCRA posted the proposed plan on [www.lcra.org](http://www.lcra.org) and notified customers the plan was available for review and comment.

Staff previously provided the proposed plan to the Board.

#### **Presenter(s)**

Karen Bondy  
Senior Vice President, Water Resources

**Appendix B: Drought Response Enforcement Process under Drought Contingency Plan for Domestic, Temporary, Landscape Irrigation and Recreational Use Contracts**

LCRA will regularly monitor use by customers from water and/or land. LCRA will issue violations for non-compliance with the provisions of this plan as follows:

<b>First documented violation</b>	<b>Notice of violation issued. Customer notified of potential surcharges for subsequent violations</b>
<b>Second documented violation</b>	<b>\$200 surcharge</b>
<b>Third and subsequent documented violation</b>	<b>\$700 surcharge</b>