

**Drought Contingency Plan
Of the
Upper Colorado River Authority**

Upper Colorado River Authority
512 Orient St., San Angelo, TX 76903
(Address, City, Zip Code)

(CCN#)

(PWS #s)

April 10, 2015

Prepared by:

Scott McWilliams – Technical Services Coordinator

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and/or to 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 Upper Colorado River Authority (UCRA) adopts the following Drought Contingency Plan (the Plan).

Section II: Public Involvement

Opportunity for the public and wholesale water customers to provide input into the preparation of the Plan was provided by UCRA by means of its website and cooperatively through the activities of the City of San Angelo. These include a multi-tiered media campaign, leaflets, school education, and a water conservation hotline.

Section III: Wholesale Water Customer Education

The UCRA will periodically provide wholesale water customers 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 email notifications, telephone correspondence, providing a copy of the Plan and/or periodically including information about the Plan with invoices for water sales.

Section IV: Coordination with Regional Water Planning Groups

The water service area of the UCRA is located within the Region F regional water planning area and the UCRA has provided a copy of the Plan to the Region F regional water planning group.

Section V: Authorization

The UCRA Director of Operations, 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 UCRA Director of Operations, 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 may be applicable to all customers utilizing water provided by the UCRA. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VII: Criteria for Initiation and Termination of Drought Response Stages

The UCRA Director of Operations, or his/her designee, shall monitor water supply and/or demand

conditions through regular contact with the City of San Angelo's Water Utilities Director and observation of actions taken by the San Angelo City Council and shall determine when conditions warrant initiation or termination of each stage of the Plan. Customer notification of the initiation or termination of drought response stages will be made by mail or telephone to UCRA's water customers and posted on the UCRA's website.

The triggering criteria described below are based on:

As required through the UCRA's contractual obligations to the City of San Angelo, the triggering criteria are based on the City of San Angelo's ordinance language, which is based on the total amount of water available to the City from its developed sources. UCRA's contract with the City of San Angelo requires the adoption of applicable provisions of the City of San Angelo's Water Conservation and Drought Contingency Plan and the acceptance of shortages in supply should natural or unforeseen circumstances that prevent the City from delivering water.

Drought Level I Triggers -- MILD Water Shortage Conditions

Requirements for initiation – The UCRA will recognize that a mild water shortage condition (Drought Level I) exists when, as determined by the City of San Angelo's water utilities director, the total amount of water available, to the City of San Angelo from its developed water sources is less than a 24-month supply.

Requirements for termination – Drought Level I of the Plan may be rescinded by the UCRA's Director of Operations after passage of a resolution of the City Council when all of the conditions listed as triggering events have ceased to exist. The UCRA will notify its customers of the termination of Drought Level I.

Drought Level II Triggers -- MODERATE Water Shortage Conditions

Requirements for initiation – The UCRA will recognize that a moderate water shortage condition (Drought Level II) exists when, as determined by the City of San Angelo's water utilities director, the total amount of water available to the City of San Angelo from its developed water sources is less than an 18-month supply.

Requirements for termination - Drought Level II of the Plan may be rescinded by the UCRA's Director of Operations after passage of a resolution of the City Council when all of the conditions listed as triggering events have ceased to exist. The UCRA will notify its customers of the termination of Drought Level II.

Drought Level III Triggers -- SEVERE Water Shortage Conditions

Requirements for initiation – The UCRA will recognize that a severe water shortage condition (Drought Level III) exists when, as determined by the City of San Angelo's water utilities director, the total amount of water available to the City of San Angelo from its developed water sources is less than a 12-month supply.

Requirements for termination – Drought Level III of the Plan may be rescinded by the UCRA's Director of Operations after passage of a resolution of the City Council when all of the conditions listed as triggering events have ceased to exist. The UCRA will notify its customers of the termination of Drought Level III.

Emergency Level Triggers -- CRITICAL Water Shortage Conditions

Requirements for initiation – The UCRA will recognize that an emergency water shortage condition when either of the following occurs.

Water Demand Emergency – A water demand emergency exists if the quantity of water usage from the City of San Angelo’s water distribution system reaches a level that exceeds the amount which may be treated or safely delivered through the system, and the San Angelo City Council passes a resolution restricting water use.

A Water Supply Emergency – A water supply emergency exists if a water system failure or emergency (i.e. pressure zone deficiencies, chemical spills, broken water mains, power outages, failures of storage tanks or other equipment, treatment plant breakdown and/or water contamination) which limits the amount of water that may be treated or safely delivered through the City of San Angelo’s system, and the San Angelo City Council passes a resolution restricting water use.

Requirements for termination – An emergency condition may be rescinded when all of the conditions listed as triggering events have ceased to exist and the San Angelo City Council lifts its resolution. The UCRA will notify its wholesale customers of the termination.

Section VIII: Drought Response Stages

The UCRA’s Director of Operations, or his/her designee, shall monitor water supply and/or demand conditions and, in accordance with the triggering criteria set forth in Section VII, shall determine that mild, moderate, or severe water shortage conditions exist or that an emergency condition exists and shall implement the following actions:

Drought Level I Response -- MILD Water Shortage Conditions

Target:

Achieve a voluntary 10 percent reduction in daily water demand.

Best Management Practices for Supply Management:

The UCRA does not operate water supply reservoirs or other water supply source. It receives all water that it provides to its customers from the City of San Angelo. Because of UCRA’s lack of any water supply infrastructure, the UCRA implements public information and School education BMPs. It implements these in cooperation with the City of San Angelo.

Water Use Restrictions for Reducing Demand:

Under Drought Level I conditions, the following watering restrictions are in effect from April 1 through October 31.

Prohibited hours of watering: Noon to 6 p.m.

Allowable watering days: Once every seven days up to 1 inch per week. Landscape or foundation watering with a drip irrigation system such as a soaker hose, deep root watering system, drip pipe or tape, or bubbler shall be permitted on any day and at any time of day provided that the total amount of water applied shall not exceed 1 inch per week.

Hand watering of lawns, gardens, landscape areas, trees, shrubs or other plants being grown outdoors or foundations may be done on any day, except during the prohibited watering hours of noon to 6 p.m., provided the allowable application rate of 1 inch per week is not exceeded.

Golf course greens may be watered daily except during the prohibited watering hours of noon to 6 p.m.

From November 1 through March 31 watering restrictions are the same as above except that watering may only occur once every 14 days with no prohibited hours of watering.

The UCRA's Director of Operations, or his/her designee(s), will contact UCRA's water customers to discuss water supply and/or demand conditions and will communicate the watering restriction requirements.

Drought Level II Response -- MODERATE Water Shortage Conditions

Target:

Achieve a 15 percent reduction in daily water demand.

Best Management Practices for Supply Management:

The UCRA does not operate water supply reservoirs or other water supply source. It receives all water that it provides to its customers from the City of San Angelo. Because of UCRA's lack of any water supply infrastructure, the UCRA implements public information and School education BMPs. It implements these in cooperation with the City of San Angelo.

Water Use Restrictions for Reducing Demand:

Under Drought Level II conditions, the following watering restrictions are in effect from April 1 through October 31.

Prohibited hours of watering: Noon to 6 p.m.

Allowable watering days: Once every seven days up to 1 inch per week.

There are no exceptions for new landscapes, even if an exception was granted during Drought Level 1.

Landscape or foundation watering with a drip irrigation system such as a soaker hose, deep root watering system, drip pipe or tape, or bubbler shall be permitted on any day and at any time of day provided that the total amount of water applied shall not exceed 1 inch per week.

Hand watering of lawns, gardens, landscape areas, trees, shrubs or other plants being grown outdoors or foundations may be done on any day, provided the allowable application rate of 1 inch per week is not exceeded.

Golf course greens may be watered daily.

(c) The UCRA's Director of Operations, or his/her designee(s), will further prepare for the implementation of pro rata curtailment of water diversions and/or deliveries by preparing a monthly water usage allocation baseline for each wholesale customer.

(d) The UCRA's Director of Operations, or his/her designee(s), will provide a weekly report to news media with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

Drought Level 3 Response -- SEVERE Water Shortage Conditions

Target:

Achieve a 20 percent reduction in daily water demand.

Best Management Practices for Supply Management:

The UCRA does not operate water supply reservoirs or other water supply source. It receives all water that it provides to its customers from the City of San Angelo. Because of the absence of any water supply infrastructure, the UCRA implements public information and School education BMPs. It implements these in cooperation with the City of San Angelo.

Water Use Restrictions for Reducing Demand:

Outdoor watering is prohibited. Hand-watering or drip irrigation of trees and foundations may be done on days and at times as established by the San Angelo Council.

Filling, refilling or maintaining the level of any fountain or swimming pool is prohibited. Washing automobiles, trucks, trailers, boats or other types of vehicles is prohibited unless the health, safety and welfare of the public is contingent upon vehicle cleaning, as determined by the City of San Angelo's director of city health services.

The UCRA may allow exceptions to any of these provisions and may place conditions on any exception.

The UCRA Director of Operations, or his/her designee(s), will contact UCRA water customers to discuss water supply and/or demand conditions and any exceptions to the provisions, and will communicate the additional mandatory watering restrictions.

If the City of San Angelo curtails its water delivery to UCRA, the UCRA will initiate pro rata curtailment of water diversions and/or deliveries for each wholesale customer.

(c) The UCRA Director of Operations, or his/her designee(s), will post a report on its website with information regarding current water supply and/or demand conditions, projected water supply and demand conditions if drought conditions persist, and consumer information on water conservation measures and practices.

EMERGENCY Water Shortage Conditions Response

Whenever emergency water shortage conditions exist as defined in Section VII of the Plan, the Director of Operations, or his/her designee(s), shall assess the severity of the problem and communicate with the City of San Angelo's water utilities director regarding any water use restriction resolution(s) passed by the San Angelo City Council. He/she shall communicate those to UCRA's customers by telephone or in person and discuss actions needed and estimated time required to alleviate the problem.

Section IX: Pro Rata Water Allocation

In the event that the triggering criteria specified in Section VII of the Plan for Stage 3 – Severe Water Shortage Conditions have been met, UCRA's Director of Operations is hereby authorized to initiate allocation of water supplies on a pro rata basis in accordance with Texas Water Code, §11.039.

Section X: Contract Provisions

UCRA's Director of Operations will include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in 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.

Section XI: Enforcement

The following per billing period excessive usage fees may be assessed.

Under Drought Level 1 Conditions:

For single-family residential accounts:

\$2 per 1,000 gallons for 25,000-34,000 gallons
\$3.50 per 1,000 gallons for 35,000-44,000 gallons
\$6 for per 1,000 gallons for 44,000 gallons or more

For landscape meters that are NOT single-family residences, schools, colleges, parks, cemeteries, golf courses or athletic facilities:

\$2 per 1,000 gallons for 75,000-94,000 gallons
\$3.50 per 1,000 gallons for 95,000-114,000 gallons
\$6 per 1,000 gallons for all usage more than 114,000 gallons

Under Drought Level II Conditions:

For single-family residential accounts:

\$3.50 per 1,000 gallons for 10,000-19,000 gallons
\$5 per 1,000 gallons for 20,000-29,000 gallons
\$8 for per 1,000 gallons for more than 29,000 gallons

For landscape meters except those at single-family residences:

\$3.50 per 1,000 gallons for 60,000-79,000 gallons
\$5 per 1,000 gallons for 80,000-99,000 gallons
\$8 per 1,000 gallons for more than 99,000 gallons

Under Drought Level III Conditions

For single-family residential accounts:

\$6 per 1,000 gallons for usages more than 10,000 gallons

For apartment unit accounts:

\$5 per 1,000 gallons for all usage over an amount equal to the number of units in the apartment times 3,000 gallons

For all other water users:

\$2.50 per 1,000 gallons for all usage

Enforcement Fines and/or discontinuation of service:

(a) Violations of any provisions of the water conservation and drought contingency plan may be enforced as follows:

(1) First violation. Any person or entity as defined under this chapter may be given a

verbal or written warning.

(2) Second and subsequent violations.

(A) Violation of any provision of the water conservation and drought contingency plan constitutes a Class C misdemeanor offense for which a citation may be issued.

(B) Second and subsequent violations may be punishable by a maximum fine of up to two thousand dollars (\$2,000.00) per day per violation as provided by Section 1.106 of the Code of Ordinances of the City of San Angelo.

(C) Proof of a culpable mental state is not required for a conviction of an offense under this section. Each day any person or entity fails to comply with the water conservation and drought contingency plan is a separate violation.

(3) Third and subsequent violations. For third and subsequent violations of the water conservation and drought contingency plan, upon due notice to the customer, the UCRA is authorized to require its customers to discontinue water service to the premises where such violations occur. Services discontinued or disconnected under such circumstances may be restored only upon payment of a reconnect fee and any other costs incurred by the customer in discontinuing service.

(b) Compliance with any provision of the water conservation and drought contingency plan may be enforced by civil court action as provided by state and federal law.

Section XII: Variances

The UCRA Director of Operations, or his/her designee, may, in writing, grant a temporary variance to the pro rata water allocation policies provided by this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety. The UCRA Director of Operations will monitor actions pertaining to variances granted by the San Angelo City Council and as closely as possible will attempt to duplicate their actions with UCRA's customers.

Section XIII: Severability

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

Water Conservation Plan
of the
Upper Colorado River Authority

Name: Upper Colorado River Authority

Address: 512 Orient St.

Telephone Number: (325) -6550565 Fax: (325) -6551371

Water Right No.(s): 1190

Regional Water Planning Group: Region F

Form Completed by: Scott McWilliams

Title: Technical Services Coordinator

Person responsible for implementing conservation program: Chuck Brown Phone: (325) -6550565

Signature:  Date: 9/24/2015

PROFILE

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Service area size (in square miles): 1115
(Please attach a copy of service-area map)
2. Current population of service area: ~8000
3. Current population served for:
 - a. Water ~8000
 - b. Wastewater 0

4. Population served for previous five years:

Year	Population
FY 2012	~7000
FY 2013	~7500
FY 2014	~8000

5. Projected population for service area in the following decades:

Year	Population
2020	~8500
2030	~10000
2040	~12000
2050	~14000
2060	~16000

6. List source or method for the calculation of current and projected population size.
Extrapolated from CRWC plan.

B. Customers Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

Wholesale Customer	Contracted Amount (acre-feet)	Previous Year Amount of Water Delivered (acre-feet)
1. CRWC	100	80
2. Miles	140	87

3.	Paint Rock	50	50
4.	Red Creek	100	59
5.			

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

Year	Treated Water	Raw Water
FY 2012	61	7
FY 2013	146	50
FY 2014	226	50
Totals	433	107

B. Water Accounting Data

- Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

Year	FY2012	FY2013	FY2014		
<i>Month</i>					
January	12.9	13.24	16.33		
February	5.42	5.08	11.57		
March	7.08	6.12	14.35		
April	8.86	71.80	71.55		
May	11.10	11.73	22.53		
June	12.18	16.59	21.33		
July	10.21	15.81	18.97		
August		13.51	20.90		
September		20.98	27.53		
October		6.21	24.42		
November		7.94	17.04		
December		7.34	9.6		
Totals	67.75	196.35	276.12		

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

Year	Total Population Served	Total Annual Water Diverted for Municipal Use
FY 2012	~7000	67.75
FY 2013	~7500	196.35
FY2014	~8000	276.12

C. *Projected Water Demands*

All water availability that the UCRA currently has is obligated to customers.

III. **WATER SUPPLY SYSTEM DATA**

A. *Projected Water Demands*

List all current water supply sources and the amounts authorized (in acre feet) with each.

Water Type	Source	Amount Authorized
Surface Water		
Groundwater		
Other		

COSA utilizes surface water and groundwater sources for its supply. The percentage of groundwater and surface water changes with circumstances and the UCRA cannot predict the acre feet used from each source.

Through a trade agreement with COSA, the UCRA gives its water right in O.C. Fisher to COSA in exchange for 500 acre feet (up to 1000 acre feet, depending on availability of water from O.C. Fisher) of water from COSA's water system on an annual basis.

B. *Treatment and Distribution System (if providing treated water)*

1. Design daily capacity of system (MGD): NA
2. Storage capacity (MGD):
 - c. Elevated NA
 - d. Ground NA

3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks.

IV. WASTEWATER SYSTEM DATA

The UCRA does not operate any wastewater treatment facilities.

V. ADDITIONAL REQUIRED INFORMATION

A. *Specific, Quantified 5 & 10-Year Targets*

Because the UCRA obtains all water that it sells to its public supply customers from the City of San Angelo, the 5 and 10 year targets for municipal use in UCRA's water conservation plan are extrapolated from San Angelo's water conservation plan. The 5 year target (9/1/2019) is 150 GPCD. The 10 year target is 145 GPCD. The targets for water loss are as follows: 5 year - 17 GPCD and 10 year - 15 GPCD.

B. *Metering Devices*

The water that UCRA diverts from the source of supply is metered by the City of San Angelo at the point of diversion from the City's water supply system.

C. *Record Management Program*

The UCRA receives a monthly invoice from the City of San Angelo for all water that is diverted from the City's water supply system for UCRA's customers.

A cumulative record of the amount of water purchased and sold is maintained at UCRA's offices.

D. *Metering/Leak-Detection and Repair Program*

The UCRA does not have any storage, delivery or distribution system and therefore, does not have a program of metering and leak detection and repair.

E. *Reservoir Systems Operations Plan*

The UCRA does not operate any reservoirs and therefore, does not have a reservoir systems operations plan.

F. *Contract Requirements for Successive Customer Conservation*

The UCRA requires that every water supply contract entered into or renewed after official adoption of this water conservation plan, include a provision that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If UCRA's customer intends to resell the water, then the contract between the UCRA and its customer will include a provision 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 in accordance with the provisions of this chapter.

G. *Enforcement Procedure and Official Adoption*

The UCRA Board of Directors officially adopted the Water Conservation Plan on September 29, 2015 by passing a resolution of adoption at its regularly scheduled meeting.

H. Coordination with the Regional Water Planning Group(s)

The service area of the Upper Colorado River Authority (UCRA) is located within the Region F water planning area and the UCRA has provided a copy of this water conservation plan to the Region F water planning group.

I. Plan Review and Update

The UCRA will review and update the next revision of its water conservation plan no later than May 1, 2019, and every five years after that date to coincide with the regional water planning group. The revised plan will also include an **implementation** report.

J. Additional Conservation Strategies

The UCRA has adopted no other strategies.