UPPER JASPER COUNTY WATER AUTHORITY

WATER CONSERVATION PLAN



Firm Registration No. F-000520 8865 College Street Beaumont, Texas 77707 (409)866-0341

January 2019

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WATER CONSERVATION PLAN

A. <u>REQUIREMENTS AND PURPOSE</u>

The Texas Water Development Board (TWDB) requires entities that receive financial assistance of more than \$500,000 must report annually for at least the first 3 years on the progress of implementation of the water conservation plan. The adoption of the plan was by resolution of the Upper Jasper County Water Authority and is included in Appendix A. The water conservation plan and any subsequent amendments will be filed with the East Texas Regional Water Planning Group (Region I).

B. UTILITY PROFILE

The evaluation of the success of a water conservation plan requires comparison of data between time periods. The data used for comparison must be consistent in derivation. A Utility Profile is a requirement of a water conservation plan and provides a basis for the collection of data. A copy of the completed profile is included as Appendix B and includes the following items.

- Utility Profile (TWDB-1965-R)
- Projections of water supply requirements.
- Service Area Map

C. <u>FIVE- AND TEN-YEAR GOALS</u>

The current gallon per capita usage (gpcd), based on an average of the last five years is approximately 95 gpcd, 39 gpcd, and 16 gpcd for total, residential, and water loss, respectively. The 5 year goal for water usage is to have total, residential, and water loss usage of 93, 37, and 15 gpcd, respectively. The 10 year goals for water usage are to have total, residential, and water loss usage of 91, 35, and 13 gpcd, respectively. These values are reflected in TWDB Form 1964 in Appendix B. The savings are based on passive conservation measures largely related to replacement of plumbing fixtures with modern water conserving fixtures.

The guidelines for a Water Conservation Plan require an entity to set five and ten year goals for water conservation. The goals, which are non-enforceable, must be in a measurable form such as gpcd usage. Setting of the goals should be based on identifying water conservation strategies that the community can successfully implement and assigning an anticipated water savings value to the strategy. The TWDB has developed *Report 362 Water Conservation Best Management Practices (2)*, also referred to as BMP GUIDE, to outline implementation of various water conservation strategies. Strategies that are practical for implementation in the UJCWA area include the following:



- System Water Audit and Water Loss
 - o Universal Metering
 - Leak Control
- Water Conservation Pricing
- Public Outreach (Public Information)

The Region I Water Plan includes discussion of water conservation management strategies that can be found online. The strategies being employed by the city are discussed in Section D of this conservation plan.

D. WATER CONSERVATION STRATEGIES

Universal Metering

UJCWA has a master meter in place at each water source and is committed to universal metering for all connections in their system. Any unmetered connections that are discovered will have meters installed.

Leak Control

UJCWA conducts periodic visual inspections and will include a request for customers to contact the Authority if they see excessive water around water line locations as part of their public information campaign. A continuous program of leak detection and repair and water loss accounting helps to control water loss.

Water Conservation Pricing

The Authority presently has a water rate structure that encourages water conservation. The Authority's current water rate structure has a base monthly rate with zero usage, with unit pricing per 1,000 gallons that increases at 5,000 gallon thresholds to encourage the conservation of water. The complete current water rate structure is attached in Appendix C. Comparisons will be made with current guidelines and rates will be restructured on a regular basis to ensure compliance with current guidelines.

Education & Information

The authority will make water conservation flyers available to new customers when service applications are requested. Also, UJCWA will print helpful water conservation tips on the water billing to encourage conservation. During summer months UJCWA can also post "Conserve Water" signs at the main office and at facility sites located throughout the system as reminders.



E. <u>SCHEDULE</u>

Each of the selected strategies requires varying degrees of effort to implement. The schedule for implementation is based on key completion dates for the four strategies; system water audit, leak control, metering, water conservation pricing, and public outreach. The following table outlines completion dates for planned activities.

Activity	Completion Date	
Implementation of public outreach and system	January 13, 2022	
audit strategies related to water conservation		
Annual review of water conservation plan strategies	(every year)	
Complete Annual Report	(every year)	
Review Rate Structure	(every year)	

F. TRACKING IMPLEMENTATION AND EFFECTIVENESS

The ability to meet the goals of the plan requires periodic review of the status of the implementation and evaluation of effectiveness by comparison of the measures for the established goal. 30TAC Chapter 288 requires that all Water Conservation Plans be reviewed and updated beginning May 1, 2009 and every five years thereafter to coincide with regional water planning group cycles. Items to be addressed in the review should include the following:

- changes in water supply and/or demand which require more stringent implementation of the program
- changes in state regulations
- > coordination with regional water planning effort.

In addition, the TWDB requires entities that receive financial assistance of more than \$500,000 must report annually for at least the first 3 years on the progress of implementation of the water conservation plan. This water conservation plan, and subsequent amendments, is required to be filed with the Regional Water Planning Group I. Notice will be filed as included in Appendix A.

Annual System Audit

The Office Manager will be responsible for managing the overall implementation of the water conservation strategies. The measure of the effectiveness of the program will be evaluated based on comparative data developed from the Water System Audit and updating of the Utility Profile. An annual review will be made with all members who have authority for the various water conservation strategies. The review will include evaluation of the effectiveness of the existing strategy and identify new strategies that can be implemented. The format for reporting the result of the annual review is provided by TWDB Form No. 1966.



G. IMPLEMENTATION AND ENFORCEMENT

The implementation of the plan is effective by adoption of the board. A copy of the resolution is included in Appendix A. The authority for implementation and enforcement of the water conservation measures will vary by the type of strategy implemented.

Any future contracts for the Authority to supply water service to outside entities will contain provisions requiring the entities to adopt water conservation plans, or alternatively provisions imposing applicable requirements of the Authority's water conservation plan on those entities. Such contracts will also include provisions to pass similar requirements along to any lower tier wholesale customers as part of the next new, amended, or renewed contract.

Similar provisions for the Drought Contingency Plan will apply to any direct or lower tier wholesale water customers. In addition, this Water Conservation Plan, and any amendments thereto is to be submitted to the East Texas Regional Water Planning Group.

References

(1) East Texas Regional Water Plan, Texas Water Development Board, dated December 1, 2015, prepared pursuant to Senate Bill 1, 1997, requiring comprehensive statewide water planning by regions.

(2) Report 362, Water Conservation Best Management Practices, Texas Water Development Board Water Conservation Implementation Task Force, November 2004.



APPENDIX A

Notice to Water Planning Group Upper Jasper County Water Authority Resolution



January 1, 2019

Mrs. Nancy Richards Team Manager, East Texas Team (Region I) Water Supply and Infrastructure **Texas Water Development Board** 1700 N. Congress Ave Austin, Texas 78711

Re: Water Conservation and Drought Contingency Plan

Dear Mrs. Richards,

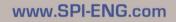
This letter is to notify you that the Upper Jasper County Water Authority recently adopted a water conservation plan and drought contingency plan. This notice is in accordance with Texas Water Development Board and Texas Commission on Environmental Quality rules.

The plan is available upon request.

Sincerely, Schaumburg & Polk, Inc.

Steve Jordan, P.E.

Cc: Shelley Vaught, Office Manager – Upper Jasper Water County Authority



APPENDIX B

Utility Profile Texas Water Development Board Form 1964 Service Area Map

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible. If a field does not apply to your entity, leave it blank.

CONTACT INFORMATION

Name of Utility:	_	_
Public Water Supply Identification Number (PWS ID):		
Certificate of Convenience and Necessity (CCN) Number	:	
Surface Water Right ID Number:		
Wastewater ID Number:		
Completed By:	Title:	
Address:	_ City:	_Zip Code:
Email:	_ Telephone Number:	
Date:		
Regional Water Planning Group: <u>Map</u>		
Groundwater Conservation District: <u>Map</u>		
Check all that apply:		
Received financial assistance of \$500,000 or m	ore from TWDB	
Have 3,300 or more retail connections		
Have a surface water right with TCEQ		

Section I: Utility Data

A. Population and Service Area Data

- 2. Provide historical service area population for the <u>previous five years</u>, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service

3. Provide the projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020			
2030			
2040			
2050			
2060			

4. Describe the source(s)/method(s) for estimating current and projected populations.

B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
Historic 5- year Average					

C. Water Supply System (Attach description of water system)

- 1. Designed daily capacity of system _____ gallons per day.
- 2. Storage Capacity: Elevated ______ gallons Ground ______ gallons
- 3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons

*Select one of the following source types: Surface water, Groundwater, or Contract

4. If surface water is a source type, do you recycle backwash to the head of the plant?

Yes ______ estimated **gallons** per day

No

D. Projected Demands

1. Estimate the water supply requirements for the <u>next ten years</u> using population trends, historical water use, economic growth, etc.

Year	Population	Water Demands (gallons)

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.



E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw

*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers**. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw

*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

F. Utility Data Comment Section

Provide additional comments about utility data below.

Section II: System Data

A. Retail Connections

1. List the active retail connections by major water use category.

	Active Retail Connections					
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections		
Residential – Single Family						
Residential – Multi-family (units)						
Industrial						
Commercial						
Institutional						
Agricultural						
тот/	AL					

*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

2. List the net number of new retail connections by water use category for the previous five years.

Mater Lice Cotegory*	Net Number of New Retail Connections				
Water Use Category*					
Residential – Single					
Family					
Residential – Multi-					
family (units)					
Industrial					
Commercial					
Institutional					
Agricultural					
TOTAL					

*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

B. Accounting Data

For the <u>previous five years</u>, enter the number of gallons of RETAIL water provided in each major water use category.

Mater Hee Cetegows*	Total Gallons of Retail Water				
Water Use Category*					
Residential - Single Family					
Residential – Multi-family					
Industrial					
Commercial					
Institutional					
Agricultural					
TOTAL					

*For definitions on recommended customer categories for classifying customer water use, refer to the online <u>Guidance and</u> <u>Methodology for Reporting on Water Conservation and Water Use.</u>

C. Residential Water Use

For the <u>previous five years</u>, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
Residential - Single Family					
Residential – Multi-family					

D. Annual and Seasonal Water Use

1. For the <u>previous five years</u>, enter the gallons of treated water provided to RETAIL customers.

N A a weble	Total Gallons of Treated Retail Water					
Month						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTAL						

2. For the <u>previous five years</u>, enter the gallons of raw water provided to RETAIL customers.

Month	Tota	l Gallons of Raw Re	etail Water	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL				

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use Avera				Average in	
					Gallons	
Summer Retail (Treated + Raw)						 5yr Average
TOTAL Retail (Treated + Raw)						 5yr Average

E. Water Loss

Provide Water Loss data for the <u>previous five years</u>. Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365 Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
5-year average			



F. Peak Water Use

Provide the Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)

G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF			
Residential MF			
Industrial			
Commercial			
Institutional			
Agricultural			

H. System Data Comment Section

Provide additional comments about system data below.

Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the <u>Water Conservation Plan Checklist</u> to complete your Water Conservation Plan.

A. Wastewater System Data (Attach a description of your wastewater system.)

- 2. List the active wastewater connections by major water use category.

		Active Wastewater Connections		
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal				
Industrial				
Commercial				
Institutional				
Agricultural				
TOTAL				

- 2. What percent of water is serviced by the wastewater system? ____%
- 3. For the <u>previous five years</u>, enter the number of gallons of wastewater that was treated by the utility.

	Total Gallon	s of Treated Waste	ewater	
Month				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
TOTAL				

4. Can treated wastewater be substituted for potable water?

No

Yes

B. Reuse Data

1. Provide data on the types of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other	
то	TAL

C. Wastewater System Data Comment

Provide additional comments about wastewater system data below.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the <u>Water</u> <u>Conservation Plan Checklist</u> to complete your Water Conservation Plan.



WATER CONSERVATION PLAN 5- AND 10-YR GOALS FOR WATER SAVINGS

Facility Name: _____

Water Conservation Plan Year:

	Historic 5yr Average	Baseline	5-yr Goal for year	10-yr Goal for year
Total GPCD ¹				
Residential GPCD ²				
Water Loss (GPCD) ³				
Water Loss (Percentage) ⁴	%	%	%	%

1. Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

2. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

3. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

4. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

Upper Jasper County Water Authority PWS 1210060

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APPENDIX C

Water Rate Schedule

Meter Size	Tap Fee*	Deposit	Continuous Rate of Flow	Monthly Rate	Gallons Minimum
3/4"	\$822.00	\$100.00	10 GPM	\$ 35.00	0
1"	\$922.00	\$250.00	25 GPM	\$ 87.50	0
1.5"	\$1,322.00	\$500.00	50 GPM	\$ 175.00	0
2.0"	\$2,322.00	\$800.00	80 GPM	\$ 280.00	0
3.0"	\$3,522.00	\$900.00	90 GPM	\$ 315.00	0
4.0"	\$4,322.00	\$2,500.00	250 GPM	\$ 875.00	0

UPPER JASPER COUNTY WATER AUTHORITY WATER RATES AND FEES

Possible Additions to the Tap Fee

*Our personnel must checkout each new installation location to see if that location requires more than the customary tap fee. All road bores will be at the expense of the customer. The meter will be set on the property line closest to our water main. If the property line is in excess of 200 feet from our water main, there will be <u>the Tap Fee plus</u> -- \$400/day labor charge for installation of the extra pipe plus cost of additional pipe and other necessary supplies and equipment that are incurred because of the excessive footage.

**The monthly minimum rate, if there is <u>no</u> water usage for a state regulated care giving facility for testing only, is 1/3 of the usual monthly minimum rate. If water <u>is</u> used, usual rates apply.

Rate per 1,000 gallons:		\$4.00 per 1,000 gallons for first 5,000 gallons \$5.00 per 1,000 gallons for second 5,000 gallons \$6.00 per 1,000 gallons for remainder		
Additions to the monthly bill:		1: .5% Regulatory Assessment Fee		
		\$15.00 Late Charge if bill is paid after the 15 th of the month		
Other Services:	\$ 3	35.00 Connect Water Service to existing tap		
	\$ 3	35.00 Transfer of Water Service in Name Only		
	\$ 3	35.00 Unlock Water Service		
	\$ 7	70.00 Additional charge for Unlock if requested after 2 p.m. M-F		
	\$ 1	0.00 Re-Read Meter at customer request		
	\$ 3	35.00 Service Call		
\$ 200.0		00.00 Relocate Meter at Customer request 20' or less		
	\$ 7	75.00 UJCWA's Hand Valve Replacement - if broken by customer		
	\$ 3	35.00 Lock Replacement		
	\$ 3	35.00 Returned checks for non-sufficient funds		
	\$	2.50 Fax long distance per page		
	\$	1.00 Fax local per page		
	\$.10 Copy per page (Black & White)		
	\$.20 Copy per page (Color)		

TCEQ Regulatory Guidance:

One meter is required for each residential, commercial, or industrial service connection. All charges for water service shall be based on meter measurements. The customer at his own expense must install a cutoff valve on the customer's side of the meter. The minimum pressure to be provided is regulated by TCEQ but the maximum pressure has no limit. Our main lines have pressure regulators installed, but when they break you would still need protection. It is recommended that the customer install a pressure regulator on his side of the meter.

APPENDIX D

Drought Contingency Plan

DROUGHT PLAN



UPPER JASPER COUNTY WATER AUTHORITY

NORTH & SOUTH SYSTEM

Drought Contingency Plan Upper Jasper County Water Authority

Upper Jasper County Water Authority		
269 County Road 080 Jasper, Texas 75951		
(409) 384-6301	Fax: (409) 384-3177	
TX1210060 TX1210064		
East Texas (Region I) Regional Water Planning Group		
Shelley Vaught		
Office Manager		
Rodger Morgan	Phone: (409) 384-6301	
	Date: / /	
	269 County Road 080 Jasper (409) 384-6301 TX1210060 TX1210064 East Texas (Region I) Regiona Shelley Vaught Office Manager	

Section I: Declaration of Policy, Purpose, and Intent

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

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

Section II: Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by the Upper Jasper County Water Authority by means of scheduling and providing public notice of a public meeting to accept input on the Plan.

Section III: Public Education

The Upper Jasper County Water Authority will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of press releases, updates on the Authority's web page at http://www.ujcwa.com, email and text alerts.

Section IV: Coordination with Regional Water Planning Groups

The service area of the Upper Jasper County Water Authority is located within the East Texas (Region I) Regional Water Planning Group. Upper Jasper County Water Authority has provided a copy of this Plan to the East Texas (Region I) Regional Water Planning Group.

Section V: Authorization

The Board of Directors, at the suggestion of the Field Supervisor 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, at the suggestion of the Field Supervisor or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VI: Application

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

Section VII: Definitions

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

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

<u>Commercial and institutional water use</u>: 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.

<u>Conservation</u>: 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 Upper Jasper County Water

Authority.

<u>Domestic water use</u>: 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.

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

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

<u>Landscape irrigation use</u>: 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.

<u>Non-essential water use</u>: 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.

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

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

The Field Supervisor or his/her designee shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified "triggers" are reached.

The triggering criteria described below are based on water source levels, water usage, gallons pumped per day, and climatological conditions.

Stage 1 Triggers -- MILD Water Shortage Conditions

Requirements for initiation

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII Definitions, when total daily water demand equals or exceeds .3 million gallons for 4 consecutive days or .35 million gallons on a single day.

Requirements for termination

Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 4 consecutive days.

Stage 2 Triggers -- MODERATE Water Shortage Conditions

Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section IX of this Plan when total daily water demand equals or exceeds .35 million gallons for 4 consecutive days or .40 million gallons on a single day.

Requirements for termination

Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 4 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

Stage 3 Triggers – SEVERE Water Shortage Conditions

Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when the tank level does not refill above 75% overnight.

Requirements for termination

Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

Stage 4 Triggers -- CRITICAL Water Shortage Conditions

Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan when the tank level does not refill above 50% overnight.

Requirements for termination

Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have

ceased to exist for a period of 3 consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

Stage 5 Triggers -- EMERGENCY Water Shortage Conditions

Requirements for initiation

Customers shall be required to comply with the requirements and restrictions for Stage 5 of this Plan when the Field Supervisor, or his/her designee, determines that a water supply emergency exists based on:

- 1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; **or**
- 2. Natural or man-made contamination of the water supply source(s).

Requirements for termination

Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

Stage 6 Triggers -- WATER ALLOCATION

Requirements for initiation

Customers shall be required to comply with the water allocation plan prescribed in Section IX of this Plan and comply with the requirements and restrictions for Stage 5 of this Plan when the tank level does not refill 50% overnight.

<u>Requirements for termination</u> - Water allocation may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

Section IX: Drought Response Stages

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

Notification

Notification of the Board of Directors:

The Field Supervisor or his/ her designee shall notify the Board of Directors by telephone, text or email.

The Board of Directors, at the suggestion of the Field Supervisor 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, at the suggestion of the Field Supervisor 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.

Notification of the Public:

The Board of Directors, at the suggestion of the Field Supervisor or his/ her designee shall notify the public by means of:

press releases, signs and/or fliers, updates on the Authority's web page at http://www.ujcwa.com, email and text alerts.

Additional Notification:

The Board of Directors, at the suggestion of the Field Supervisor or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

Fire Chief(s) County Emergency Management Coordinator(s) County Judge & Commissioner(s) TCEQ (required when mandatory restrictions are imposed) Major water users Critical water users, i.e. Assisted Living Centers Parks / street superintendents & public facilities managers

Stage 1 Response -- MILD Water Shortage Conditions

<u>Target</u>: Achieve a voluntary 10 percent reduction in daily water demand.

Best Management Practices for Supply Management:

Measures to be implemented directly by Upper Jasper County Water Authority to manage limited water supplies and/or reduce water demand would be discontinue all bulk water sales.

Voluntary Water Use Restrictions for Reducing Demand :

- (a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.
- (b) All operations of the Upper Jasper County Water Authority shall adhere to water use

restrictions prescribed for Stage 2 of the Plan.

(c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

Stage 2 Response -- MODERATE Water Shortage Conditions

Target: Achieve a 20 percent reduction in daily water demand.

Best Management Practices for Supply Management:

Measures to be implemented directly by Upper Jasper County Water Authority to manage limited water supplies and/or reduce water demand would be limit unmetered water use for fire departments by asking that they use water for firefighting only, no training.

Water Use Restrictions for Demand Reduction:

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

- (a) Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
- (c) Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is

prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

- (e) 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 Upper Jasper County Water Authority.
- (f) Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the Upper Jasper County Water Authority, the facility shall not be subject to these regulations.
- (g) All restaurants are prohibited from serving water to patrons except upon request of the patron.
- (h) The following uses of water are defined as non-essential and are prohibited:
 - 1. wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
 - 2. use of water to wash down buildings or structures for purposes other than immediate fire protection;
 - 3. use of water for dust control;
 - 4. flushing gutters or permitting water to run or accumulate in any gutter or street; and
 - 5. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Stage 3 Response -- SEVERE Water Shortage Conditions

Target: Achieve a 25 percent reduction in daily water demand.

Best Management Practices for Supply Management:

Measures to be implemented directly by Upper Jasper County Water Authority to manage limited water supplies and/or reduce water demand would be reduce flushing of water mains.

<u>Water Use Restrictions for Demand Reduction</u>: All requirements of Stage 2 shall remain in effect during Stage 3 except:

(a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.

- (b) The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the Upper Jasper County Water Authority.
- (c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

Stage 4 Response -- CRITICAL Water Shortage Conditions

Target: Achieve a 30 percent reduction in daily water demand.

Best Management Practices for Supply Management:

Measures to be implemented directly by Upper Jasper County Water Authority to manage limited water supplies and/or reduce water demand would be discontinued flushing of water mains.

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

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 6:00 a.m. and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, or drip irrigation only. The use of hose-end sprinklers or permanently installed automatic sprinkler systems are prohibited at all times.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10 p.m.
- (c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) 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 or a higher-numbered stage shall be in effect.

Stage 5 Response -- EMERGENCY Water Shortage Conditions

Target: Achieve a 40 percent reduction in daily water demand.

Best Management Practices for Supply Management:

Measures to be implemented directly by Upper Jasper County Water Authority to manage limited water supplies and/or reduce water demand would be for the Board of Directors to deliberate and determine appropriate water conservation rates and implement the approved rate structure.

<u>Water Use Restrictions for Reducing Demand</u>. All requirements of Stage 2, 3, and 4 shall remain in effect during Stage 5 except:

- (a) Irrigation of landscaped areas is absolutely prohibited.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

Stage 6 Response -- WATER ALLOCATION

In the event that water shortage conditions threaten public health, safety, and welfare, the Board of Directors, at the suggestion of the Field Supervisor or his/her designee is hereby authorized to allocate water according to the following water allocation plan:

Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	Gallons per Month
1 or 2	6,000
3 or 4	7,000
5 or 6	8,000
7 or 8	9,000
9 or 10	10,000
11 or more	12,000

"Household" means the residential premises served by the customer's meter. "Persons per household" include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the Upper Jasper County Water Authority of a greater number of persons per household on a form prescribed by the Board of Directors. The Board of Directors shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the Upper Jasper County Water Authority offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the Board of Directors. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the Upper Jasper County Water Authority on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the Upper Jasper County Water Authority in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the Board of Directors shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the Upper Jasper County Water Authority of a reduction in the number of person in a household shall be fined not less than \$35.00.

Residential water customers shall pay the following surcharges:

\$10 for the first 1,000 gallons over allocation.\$20 for the second 1,000 gallons over allocation.\$30 for the third 1,000 gallons over allocation.\$40 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (example: apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the Upper Jasper County Water Authority of a greater number on a form prescribed by the Board of Directors. The Board of Directors shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the Upper Jasper County Water Authority offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service

on the form prescribed by the Board of Directors. If the number of dwelling units served by a master meter is reduced, the customer shall notify the Upper Jasper County Water Authority in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the Board of Directors shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the Upper Jasper County Water Authority of a reduction in the number of persons in a household shall be fined not less than \$35.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

- \$10 for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
- \$20, thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.
- \$30, thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.
- \$40, thereafter for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Commercial Customers

A monthly water allocation shall be established by the Board of Directors, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 75 percent of the customer's usage for corresponding month's billing period for the previous 12 months. 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. Provided, however, a customer, 75 percent of whose monthly usage is less than 4,000 gallons, shall be allocated 4,000 gallons. The Board of Directors shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the Upper Jasper County Water Authority to determine the allocation. Upon request of the customer or at the initiative of the Board of Directors, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Board of Directors. Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is 1,000 gallons through 3,999 gallons per month:

\$10 per thousand gallons for the first 1,000 gallons over allocation.

\$20 per thousand gallons for the second 1,000 gallons over allocation.

- \$30 per thousand gallons for the third 1,000 gallons over allocation.
- \$40 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 4,000 gallons per month or more:

- 1 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
- 2 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
- 3 times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
- 4 times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. 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.

Industrial Customers

A monthly water allocation shall be established by the Board of Directors, or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer's allocation shall be approximately 90 percent of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers, the industrial customer's allocation shall be further reduced to 85 percent of the customer's water usage baseline. The industrial customer's water use baseline will be computed on the average water use for the 12 month period ending prior to the date of implementation of Stage 2 of the Plan. If the industrial water 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 billing history exists. The Board of Directors shall give his/her best effort to see that notice of each industrial customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the Upper Jasper County Water Authority to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Board of Directors, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water use because the customer had shutdown a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shutdown or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce water use is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Board of Directors. Industrial customers shall pay the following surcharges:

Customers whose allocation is 1,000 gallons through 3,999 gallons per month:

- \$10 per thousand gallons for the first 1,000 gallons over allocation.
- \$20 per thousand gallons for the second 1,000 gallons over allocation.
- \$30 per thousand gallons for the third 1,000 gallons over allocation.
- \$40 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 4,000 gallons per month or more:

- 1 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
- 2 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
- 3 times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
- 4 times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. 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.

Section X: Enforcement

- (a) No person shall knowingly or intentionally allow the use of water from the Upper Jasper County Water Authority for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the Board of Directors, or his/her designee, in accordance with provisions of this Plan.
- (b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than \$50.00 and not more than \$100.00. Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Board of Directors shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at \$35.00, and any other costs incurred by the Upper Jasper County Water Authority in discontinuing service. In addition, suitable assurance must be given to the Board of Directors that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

- (c) Any person, including a person classified as a water customer of the Upper Jasper County Water Authority, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.
- (d) Any employee of the Upper Jasper County Water Authority, police officer, or other law enforcement employee designated by the Board of Directors, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

Section XI: Variances

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

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

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the Upper Jasper County Water Authority within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the 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 Ordinance.
- (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.