

CERTIFICATE FOR ORDER

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

I, the undersigned officer of the Board of Directors of Harris County Municipal Utility District No. 18, hereby certify as follows:

1 The Board of Directors of Harris County Municipal Utility District No. 18 convened in regular session on April 14, 2014, outside the boundaries of the District, and the roll was called of the members of the Board:

- | | |
|--------------------|--------------------------|
| Arved E. White | President |
| Roy A. Beversdorf | Vice President |
| Robert Bernardini | Assistant Vice President |
| Michael Murr | Secretary |
| Karl Skarboszewski | Assistant Secretary |

and all of said persons were present except Director(s) WHITE, thus constituting a quorum. Whereupon, among other business, the following was transacted at the meeting: a written

ORDER ADOPTING AMENDED AND RESTATED WATER CONSERVATION PLAN;
PROVIDING FOR IMPLEMENTATION AND ENFORCEMENT THEREOF;
AND CONTAINING OTHER PROVISIONS RELATED TO THE SUBJECT

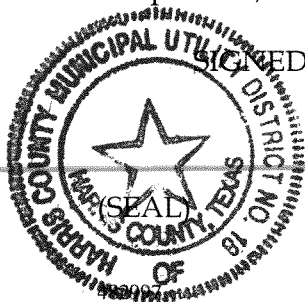
was introduced for the consideration of the Board. It was then duly moved and seconded that the order be adopted, and, after due discussion, the motion, carrying with it the adoption of the order, prevailed and carried unanimously.

2. A true, full, and correct copy of the aforesaid order adopted at the meeting described in the above and foregoing paragraph is attached to and follows this certificate; the action approving the order has been duly recorded in the Board's minutes of the meeting; the persons named in the above and foregoing paragraph are the duly chosen, qualified, and acting officers and members of the Board as indicated therein; each of the officers and members of the Board was duly and sufficiently notified officially and personally, in advance, of the time, place, and purpose of the aforesaid meeting, and that the order would be introduced and considered for adoption at the meeting, and each of the officers and members consented, in advance, to the holding of the meeting for such purpose; the meeting was open to the public as required by law; and public notice of the time, place, and subject of the meeting was given as required by Chapter 551, Texas Government Code, and Section 49.063, Texas Water Code.

WITNESSED AND SEALED on April 14, 2014.



Secretary, Board of Directors



ORDER ADOPTING AMENDED AND RESTATED WATER CONSERVATION PLAN;
PROVIDING FOR IMPLEMENTATION AND ENFORCEMENT THEREOF;
AND CONTAINING OTHER PROVISIONS RELATED TO THE SUBJECT

WHEREAS, the Board of Directors (the "Board") of Harris County Municipal Utility District No. 18 (the "District") has carefully considered the current water conditions in the District and area-wide and has determined that the adoption of this Amended and Restated Water Conservation Plan (the "Plan") by the District is necessary to ensure that an adequate supply of water is maintained; and

WHEREAS, the Board of the District desires to evidence its approval of this Plan and to adopt such Plan as the official policy of the District and to replace any prior Plan that may have been in effect; NOW, THEREFORE,

BE IT ORDERED BY THE BOARD OF THE DISTRICT THAT:

Section 1. Approval of the Plan. The Board of the District hereby approves and adopts this Plan as set forth in Appendix "A" to this Order.

Section 2. Declaration of Policy, Purpose and Intent. The purpose of the Plan is to promote the efficient and responsible use of water by (1) implementing structural programs that result in quantifiable water conservation results, (2) developing, maintaining and enforcing water conservation policies and ordinances, and (3) supporting public education programs that educate customers about water facilities operations, water quantity and quality, water conservation and non-point source protection.

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PASSED AND APPROVED this 14th day of April, 2014.

**HARRIS COUNTY MUNICIPAL UTILITY
DISTRICT NO. 18**

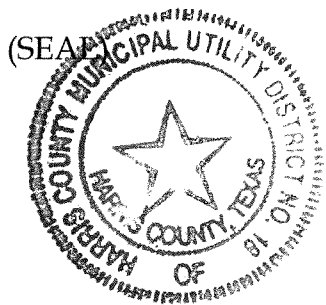


VKE President, Board of Directors

ATTEST:



Secretary, Board of Directors



APPENDIX "A"
WATER CONSERVATION PLAN



The Harris County Municipal Utility District No. 18 Water Conservation Plan

This Water Conservation Plan (the "Plan") is intended to meet the requirements of the Texas Water Code and the rules promulgated by the Texas Commission on Environmental Quality ("TCEQ") and the Texas Water Development Board ("TWDB"). This Plan is a strategy or combination of strategies for reducing the consumption of water, reducing the loss or waste of water, improving or maintaining the efficiency in the use of water, or increasing recycling and reuse of water. It contains best management practice measures to try to meet the targets and goals identified in the Plan.

Section 1. Utility Profile. Profile data for the Harris County Municipal Utility District No. 18, (the "District") is provided in Exhibit 1, Form TWDB-1965. Exhibit 1 includes data on existing and projected service populations, number of connections, historical metered water sales, water production, and general utility systems information. Exhibit 1 shall be updated at least once every five years.

Section 2. Five-year and Ten-year Targets. The District shall use reasonable efforts to reduce water loss and municipal use of water. In doing so, the District has identified five and ten year goals for water savings and water loss as provided in Exhibit 2, Form TWDB-1964.

Notwithstanding the targets identified in Exhibit 2, the District shall not be obligated to achieve any water savings, and the District's failure to do so shall not subject the District to any liability whatsoever.

Section 3. Implementation Schedule. The following implementation schedule shall be adhered to in order to achieve the District's targets and goals.

- A. If no initial system review has previously been conducted, the District will complete an initial system review required by Section 4 to determine "unaccounted" for water no later than May 1, 2015.
- B. The District shall have master meters required by Section 5 in place no later than May 1, 2015.
- C. The District shall meter both customer and public uses of water, and the District's operator shall implement any reasonable program for meter testing and repair, and for periodic replacement, as required by Section 6, no later than May 1, 2015.
- D. The District's operator shall implement any reasonable program to determine unaccounted for uses of water, as required by Section 7, no later than May 1, 2015.



- E. The District shall implement its educational program described in Sections 9.A. and B. no later than May 1, 2015.

Section 4. Method for Tracking the Implementation and Effectiveness of the Plan. If the District has not previously conducted an initial system review, it will complete an initial system review to measure “unaccounted” for water use. The District will determine a method to track “unaccounted” for water use and use this information to evaluate annual water use and the implementation and effectiveness of conservation procedures. Progress shall be measured annually, and, at a minimum, evaluate the progress towards meeting the targets and goals of the Plan.

Section 5. Master Meter. The District shall have a master meter to measure and account for the amount of water produced or received from the source(s) of supply. All metering devices that monitor the amount of water produced or received by the District will be calibrated regularly to ensure an accuracy of plus or minus 5.0%.

Section 6. Universal Metering. The District shall meter both customer and public uses of water, and the District’s operator shall implement any reasonable program for meter testing and repair, and for periodic meter replacement. However, unless otherwise specified in the District’s Rate Order, as amended, water used for such public purposes as fire-fighting, main or hydrant flushing, and street sweeping, shall not be required to be metered.

Section 7. Measures to Determine and Control Water Loss. The District authorizes the District’s operator to implement any reasonable program to determine unaccounted for uses of water and to make recommendations to the District regarding measures to control such unaccounted for uses of water. Such measures may include periodic visual inspections along distribution lines, annual or monthly audits of the water system to determine illegal connection, investigation of abandoned services.

Section 8. Continuous Program of Leak Detection, Repair, and Water Loss Accounting. The above described measures shall serve as a continuous program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system in order to control water loss.

Section 9. Continuing Public Education and Information. The District hereby institutes an educational program, to be implemented as soon as reasonably practicable, to promote the Plan to the general public which should include the following:

- A. Direct distributions, distributed at least annually, to all District customers (including wholesale water customers) (together, the “Users”), regarding water conservation; and



- B. Direct distribution of water conservation literature to new customers when they apply for service.

Additional educational activities may include: (i) conducting an informational school program in a school attended by students within the District's service area, or (ii) conducting an educational program for Users at a public place within or accessible to residents of the District, or (iii) conducting or engaging in such other informational or educational activity designed to further water conservation measures as, in the discretion of the Board of Directors, may be consistent with the purposes and policies of this Plan, or (iv) any combination of the foregoing.

Section 10. Cost-based Rate Structure. The District hereby acknowledges that it has adopted an increasing block water rate structure, as reflected in the Rate Order which is attached as Exhibit 3, which is intended to encourage water conservation and discourage excessive use and waste of water.

Section 11. Implementation and Enforcement. Without limitation to specific actions stated in this Plan to be taken by the District's operator, the District's operator will administer and enforce this Plan, and will oversee and be responsible for the execution and implementation of all elements of this Plan. The operator shall keep adequate records for Plan verification. The operator shall prepare the required annual report and the required implementation report every five years beginning in 2014. The District's operator shall report to the Board of the District, at meetings of the Board, regarding actions taken and which need to be taken under this Plan. The District has the authority under the Texas Water Code to implement and enforce this Plan. The District has the ability under the Texas Water Code to adopt and enforce rules pertaining to prevention of waste and the unauthorized use of water.

Section 12. Coordination with Regional Water Planning Groups. The water service area of the District is located within the Region H Regional Water Planning Group and the District will provide a copy of the Plan to the Region H Regional Water Planning Group, as soon as reasonably practicable.

Section 13. Wholesale Water Customers. The District shall require that each wholesale customer, if any, develop and implement a water conservation plan or water conservation measures in compliance with all applicable rules of the TCEQ or TWDB. This requirement will also extend to each successive wholesale customer, if any, in the resale of water.

Section 14. Five-year Review. The District shall review and update the Plan every five years, or more frequently, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information.



EXHIBIT 1

**Water Conservation Utility Profile
Form TWDB-1965**



EXHIBIT 2

**Five and Ten Year Goals for Water Savings
Form TWDB-1964**





Texas Commission on Environmental Quality

Water Conservation Implementation Report Public Water Supplier

This five year report must be completed by entities that are required to submit a water conservation plan to the TCEQ in accordance with Title 30 Texas Administrative Code, Chapter 288. Please complete this report and submit it to the TCEQ. If you need assistance in completing this form, please contact the Resource Protection Team in the Water Availability Division at (512) 239-4691.

CONTACT INFORMATION

Name of Entity: Harris County MUD 18

Public Water Supply Identification Number (PWS ID): 1010512

CCN numbers: [Click here to enter text.](#)

Water Right Permit numbers: [Click here to enter text.](#)

Wastewater ID numbers: [Click here to enter text.](#)

Check all that apply:

- Retail Public Water Supplier
- Wholesale Public Water Supplier

Address: PO Box 11750 City: Spring Zip Code: 77391-1750

Email: mplunkett@eaglewatermanagement.com Telephone Number: 281-374-8989

Regional Water Planning Group: HMap

Groundwater Conservation District: HGSDMap

Form Completed By: Mike Plunkett Title: Compliance Manager

Signature: _____ Date: 6/4/2014

Contact information for the person or department responsible for implementing the water conservation plan:

Name: Eagle Water Management Phone: 281-374-8989 Email: tracyr@eaglewatermanagement.com

Report Completed on Date: 5/29/2014

Reporting Period (**check only one**):

- Fiscal Period Begin: [Click here to enter a date.](#) Period End: [Click here to enter a date.](#)
- Calendar Period Begin: January 2013 Period End: December 2013



Please check all of the following that apply to your entity:

- A surface water right holder of 1,000 acre-feet/year or more for non-irrigation uses
- A surface water right holder of 10,000 acre-feet/year or more for irrigation uses

Important

If your entity meets the following description, please skip page 3 and go directly to page 4.

Your entity is a Wholesale Public Water Supplier that ONLY provides wholesale water services for public consumption. For example, you only provide wholesale water to other municipalities or water districts.



Water Use Accounting

Retail Water Sold: *All retail water sold for public use and human consumption.*

Helpful Hints: There are two options available for you to provide the requested information. Both options ask the same information; however, the level of detail and break down of information differs between the two options. Please select just one option that works best for your entity and fill in the fields as completely as possible.

Fields that are gray are entered by the user.
Select fields that are white and press F9 to updated fields.

For the five-year reporting period, enter the gallons of **RETAIL water sold** in each major water use category. Use **only one** of the following options.

Option 1

Water Use Category*	Gallons Sold
Single Family Residential	190074000
Multi-Family Residential	0
TOTAL Residential Use¹	190,074,000
Industrial	0
Commercial	12705000
Institutional	1108000
TOTAL Retail Water Sold²	203,887,000

1. [SF Res +MF Res = Residential Use]
2. [Res +Ind +Com +Ins = Retail Water Sold]

Option 2

Water Use Category *	Gallons Sold
Residential Select all of the sectors that your account for as "Residential". <input type="checkbox"/> Single Family <input type="checkbox"/> Multi-Family	
Commercial Please select all of the sectors that your account for as "Commercial". <input type="checkbox"/> Commercial <input type="checkbox"/> Multi-Family <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional	
Industrial Please select all of the sectors that your account for as "Industrial". <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Institutional	
Other Please select all of the sectors that your account for as "Other". <input type="checkbox"/> Commercial <input type="checkbox"/> Multi-Family <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional	
TOTAL Retail Water Sold¹	0.00

1. [Res +Com +Ind + Other = Retail Water Sold]



Wholesale Water Exported: *Wholesale water sold or transferred out of the distribution system.*

For the five-year reporting period, enter the gallons of **WHOLESALE water exported** to each major water use category.

Water Use Category*	Gallons of Exported Wholesale Water
Municipal Customers	0
Agricultural Customers	0
Industrial Customers	0
Commercial Customers	0
Institutional Customers	0
TOTAL Wholesale Water Exported¹	0.00

1. [Mun +Agr +Ind +Com +Ins = Wholesale Water Exported]



System Data

Fields that are gray are entered by the user.
Select fields that are white and hit F9 to updated fields.

	Total Gallons During the Five-Year Reporting Period
Water Produced: Volume produced from own sources	41153000
Wholesale Water Imported : Purchased wholesale water imported from other sources into the distribution system	183771000
Wholesale Water Exported: Wholesale water sold or transferred out of the distribution system (Insert Total Volume calculated on Page 4)	0
TOTAL System Input : Total water supplied to the infrastructure	224,924,000.00 <small>[Produced + Imported – Exported = System Input]</small>
Retail Water Sold : All retail water sold for public use and human consumption (Insert Total Residential Use from Option 1 or Option 2 calculated on Page 3)	203887000
Other Consumption Authorized for Use but not Sold: <ul style="list-style-type: none"> - back flushing water - line flushing - storage tank cleaning - golf courses - fire department use - parks - municipal government offices 	3355000
TOTAL Authorized Water Use: All water that has been authorized for use or consumption.	207,242,000.00 <small>[Retail Water Sold + Other Consumption = Total Authorized]</small>
Apparent Losses – Water that has been consumed but not properly measured (Includes customer meter accuracy, systematic data discrepancy, un- authorized consumption such as theft)	0
Real Losses – Physical losses from the distribution system prior to reaching the customer destination (Includes physical losses from system or mains, reported breaks and leaks, storage overflow)	636000
Unidentified Water Losses	17,046,000.00 <small>[System Input- Total Authorized - Apparent Losses - Real Losses = Unidentified Water Losses]</small>
TOTAL Water Loss	17,682,000.00 <small>[Apparent + Real + Unidentified = Total Water Loss]</small>



Targets and Goals

In the table below, please provide the **specific and quantified five and ten-year targets for water savings** listed in your water conservation plan.

Fields that are gray are entered by the user.
Select fields that are white and hit F9 to update fields.

Date	Target for: Total GPCD	Target for: Water Loss (expressed in GPCD)	Target for: Water Loss Percentage (expressed in Percentage)
Five-year target date: 12/31/2014	135	7	12%
Ten-year target date: 12/31/2019	132	10	12%

Are targets in the water conservation plan being met? Yes No

If these targets are not being met, provide an explanation as to why, including any progress on these targets: [Click here to enter text.](#)

Gallons per Capita per Day (GPCD) and Water Loss

Compare your current gpcd and water loss to the above targets and goals set in your previous water conservation plan.

Total System Input in Gallons	Permanent Population	Current GPCD
224924000 [Produced + Imported – Exported = System Input]	4041	30.50 [(System Input ÷ Permanent Population) /5/ 365]

Permanent Population is the total permanent population of the service area. This includes single family, multi-family, and group quarter populations.

Total Residential Use	Permanent Population	Residential GPCD
190074000	4041	25.77 [(Residential Use ÷ Residential Population) / 5/365]

Residential Population is the total residential population of the service area including single & multi-family population.



Total Water Loss	Total System Input in Gallons	Permanent Population	Water Loss calculated in	
			GPCD ¹	Percent ²
17682000 [Apparent + Real + Unidentified = Total Water Loss]	224924000 [Water Produced + Wholesale Imported - Wholesale Exported]	4041	2.40	8

1. $[\text{Total Water Loss} \div \text{Permanent Population}] / 5 / 365 = \text{Water Loss GPCD}$
2. $[\text{Total Water Loss} \div \text{Total System Input}] \times 100 = \text{Water Loss Percentage}$

Water Conservation Programs and Activities

As you complete this section, please review your water conservation plan to see if you are making progress towards meeting your stated goals.

Fields that are gray are entered by the user. Select fields that are white and hit F9 to updated fields.

1. Water Conservation Plan

What year did your entity adopt, or revise, their most recent water conservation plan: [Click here](#) to enter text.

Does the plan incorporate Best Management Practices? Yes No

2. Water Conservation Programs

For the reporting period, please select the types of activities and programs that have been actively administered, and estimate the expense and savings that incurred in implementing the conservation activities and programs for the past five years. Leave the field blank if unknown:

Program or Activity	Estimated Expenses	Estimated Gallons Saved
Conservation Analysis & Planning		
<input type="checkbox"/> Conservation Coordinator		
<input type="checkbox"/> Water Survey for Single-Family and Multi-Family Customers		
Financial		
<input type="checkbox"/> Wholesale Agency Assistance Programs		
<input type="checkbox"/> Water Conservation Pricing/ Rate Structures		
System Operations		
<input type="checkbox"/> Water Loss Audits		
<input type="checkbox"/> Leak Detection		
<input type="checkbox"/> Universal Metering and Metering Repair		
Landscaping		
<input type="checkbox"/> Landscape Irrigation Conservation and		



Incentives		
<input type="checkbox"/> Athletic Fields Conservation		
<input type="checkbox"/> Golf Course Conservation		
<input type="checkbox"/> Park Conservation		
Education & Public Awareness		
<input type="checkbox"/> School Education		
<input type="checkbox"/> Public Information		
Rebate, Retrofit, and Incentive Programs		
<input type="checkbox"/> Conservation Programs for ICI Accounts		
<input type="checkbox"/> Residential Clothes Washer Incentive Program		
<input type="checkbox"/> Water Wise Landscape Design and Conversion Programs		
<input type="checkbox"/> Showerhead, Aerator, and Toilet Flapper Retrofit		
<input type="checkbox"/> Residential Toilet Replacement Programs		
<input type="checkbox"/> Rainwater Harvesting Incentive Program		
<input type="checkbox"/> ICI Incentive Programs		
Conservation Technology		
<input type="checkbox"/> Recycling and Reuse Programs (Water or Wastewater Effluent)		
<input type="checkbox"/> Rainwater Harvesting and Condensate Reuse Programs		
Regulatory and Enforcement		
<input type="checkbox"/> Prohibition on Wasting Water		
TOTAL	\$ 0.00	0

3. Reuse (Water or Wastewater Effluent)

For the reporting period, please provide the following data regarding the types of direct and indirect reuse activities that were administered for the past five years:

Reuse Activity	Estimated Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Other, please describe:	
Estimated Volume of Recycled or Reuse	0



4. Water Savings

For the five-year reporting period, estimate the total savings that resulted from your overall water conservation activities and programs?

Estimated Gallons Saved (Total from Conservation Programs Table)	Estimated Gallons Recycled or Reused (Total from Reuse Table)	Total Volume of Water Saved ¹	Dollar Value of Water Saved ²
		0	

1. [Estimated Gallons Saved + Estimated Gallons Recycled or Reused = Total Volume Saved]

2. Estimate this value by taking into account water savings, the cost of treatment or purchase of your water, and any deferred capital costs due to conservation.

5. Conservation Pricing / Conservation Rate Structures

During the five-year reporting period, have your rates or rate structure changed? Yes No

Please indicate the type of rate pricing structures that you use:

<input type="checkbox"/> Uniform rates	<input type="checkbox"/> Water Budget Based rates	<input type="checkbox"/> Surcharge - seasonal
<input type="checkbox"/> Flat rates	<input type="checkbox"/> Excess Use Rates	<input type="checkbox"/> Surcharge - drought
<input checked="" type="checkbox"/> Inclining/ Inverted Block	<input type="checkbox"/> Drought Demand rates	<input type="checkbox"/> Surcharge - usage demand
<input type="checkbox"/> Declining Block rates	<input type="checkbox"/> Tailored rates	
<input type="checkbox"/> Seasonal rates		

6. Public Awareness and Education Program

For the five-year reporting period, please check the appropriate boxes regarding any public awareness and educational activities that your entity has provided:

	Implemented	Number/Unit
<i>Example: Brochures Distributed</i>	<input type="checkbox"/>	<i>10,000/year</i>
<i>Example: Educational School</i>	<input type="checkbox"/>	<i>50 students/month</i>
Brochures Distributed	<input type="checkbox"/>	
Messages Provided on Utility Bills	<input type="checkbox"/>	
Press Releases	<input type="checkbox"/>	
TV Public Service Announcements	<input type="checkbox"/>	
Radio Public Service Announcements	<input type="checkbox"/>	
Educational School Programs	<input type="checkbox"/>	
Displays, Exhibits, and Presentations	<input type="checkbox"/>	
Community Events	<input type="checkbox"/>	



Social Media campaigns	<input type="checkbox"/>	
Facility Tours	<input type="checkbox"/>	
Other :	<input type="checkbox"/>	

7. Leak Detection

During the five-year reporting period, how many leaks were repaired in the system or at service connections: 34

Please check the appropriate boxes regarding the main cause of water loss in your system during the reporting period:

- Leaks and breaks
- Un-metered utility or city uses
- Master meter problems
- Customer meter problems
- Record and data problems
- Other: Click here to enter text.
- Other: Click here to enter text.

8. Universal Metering and Meter Repair

For the five-year reporting period, please provide the following information regarding meter repair:

	Total Number	Total Tested	Total Repaired
Production Meters	3	3	0
Meters larger than 1 ½"	18	18	0
Meters 1 ½ or smaller	1347	0	45

Does your system have automated meter reading? Yes No



9. Conservation Communication Effectiveness

In your opinion, how would you rank the effectiveness of your conservation activities in reaching the following types of customers for the past five years?

	Do not have activities or programs that target this type customer.	Less Than Effective	Somewhat Effective	Highly Effective
Residential Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agricultural Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Drought Contingency and Emergency Water Demand Management

During the five-year reporting period, did you implement your Drought Contingency Plan?

Yes No

If yes, indicate the number of days that your water use restrictions were in effect: [Click here to enter text.](#)

If yes, please check all the appropriate reasons for your drought contingency efforts going into effect.

<input type="checkbox"/> Water Supply Shortage	<input type="checkbox"/> Equipment Failure
<input type="checkbox"/> High Seasonal Demand	<input type="checkbox"/> Impaired Infrastructure
<input type="checkbox"/> Capacity Issues	<input type="checkbox"/> Other:

If you have any questions on how to fill out this form or about the Water Conservation program, please contact us at 512/239-4691.

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512-239-3282.



EXHIBIT 3

Rate Order

