

**MODEL WATER CONSERVATION PLAN FOR  
COLLEGE MOUND SPECIAL UTILITY DISTRICT  
12731 FM 429  
TERRELL, TEXAS 75161  
972-563-1355**

APRIL 2014



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## 1. Introduction and Objectives

Water supply has always been a key issue in the development of Texas. In recent years, the increasing population and economic development of North Central Texas have led to growing demands for water supplies. At the same time, local and less expensive sources of water supply are largely already developed. Additional supplies to meet future demands will be expensive and difficult to secure. Severe drought conditions in recent years have highlighted the importance of efficient use of our existing supplies to make them last as long as possible. This will delay the need for new supplies, minimize the environmental impacts associated with developing new supplies, and delay the high cost of additional water supply development.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation and drought contingency plans for wholesale water suppliers<sup>2</sup>. The TCEQ guidelines and requirements for wholesale suppliers are included in Appendix B. The College Mound Special Utility District (CMSUD) has developed this model water conservation plan pursuant to TCEQ guidelines and requirements. The best management practices established by the Water Conservation Implementation Task Force<sup>3</sup> were also considered in the development of the water conservation measures.

This model water conservation plan includes measures that are intended to result in ongoing, long-term water savings. This plan replaces the previous plan<sup>4</sup>.

The objectives of this water conservation plan are as follows:

- To reduce water consumption from the levels that would prevail without conservation efforts.
- To reduce the loss and waste of water.
- To improve efficiency in the use of water.
- Encourage efficient outdoor water use.
- To document the level of recycling and reuse in the water supply.
- To extend the life of current water supplies by reducing the rate of growth in demand.

The water conservation plan presented in this document is a model water conservation plan adopted by the College Mound Special Utility District Board of Directors. In order to adopt this plan, the College Mound Special Utility District did the following:

- Complete the water utility profile (provided in Appendix C).

- Complete the annual water conservation implementation report (in Appendix J).
- Set five-year and ten-year goals for per capita water use.
- Adopt ordinances approving the model plan.

The water utility profile, goals, and ordinances will be provided to NTMWD in draft form for review and comments. Final adopted versions will be provided to NTMWD, as well as TCEQ. This model plan includes all of the elements required by TCEQ. Some elements of this model plan go beyond TCEQ requirements.

<sup>1</sup> Superscripted numbers match references listed in Appendix A.

## 2. DEFINITIONS

1. ATHLETIC FIELD means a public sports competition field, the essential feature of which is turf grass, used primarily for organized sports practice, competition or exhibition events for schools, professional sports, or sanctioned league play.
2. COOL SEASON GRASSES are varieties of turf grass that grow best in cool climates primarily in northern and central regions of the U.S. Cool season grasses include perennial and annual rye grass, Kentucky blue grass and fescues.
3. CUSTOMERS include those entities to whom NTMWD provides water on a customer basis that are not members of NTMWD.
4. EVAPOTRANSPIRATION abbreviated as ET represents the amount of water lost from plant material to evaporation and transpiration. The amount of ET can be estimated based on the temperature, wind, and relative humidity.
5. ET/SMART CONTROLLERS are irrigation controllers that adjust their schedule and run times based on weather (ET) data. These controllers are designed to replace the amount of water lost to evapotranspiration.
6. EXECUTIVE DIRECTOR means the Executive Director of the North Texas Municipal Water District and includes a person the Director has designated to administer or perform any task, duty, function, role, or action related to this plan or on behalf of the Executive Director.
7. INSTITUTIONAL USE means the use of water by an establishment dedicated to public service, such as a school, university, church, hospital, nursing home, prison or government facility. All facilities dedicated to public service are considered institutional regardless of ownership.
8. MEMBER CITIES include the cities of Allen, Farmersville, Forney, Frisco, Garland, McKinney, Mesquite, Plano, Princeton, Richardson, Rockwall, Royce City, and Wylie, Texas.
9. MULTI-FAMILY PROPERTY means a property containing five or more dwelling units.
10. MUNICIPAL USE means the use of potable water provided by a public water supplier as well as the use of treated wastewater effluent for residential, commercial, industrial, agricultural, institutional, and wholesale uses.

11. RECLAIMED WATER means reclaimed municipal wastewater that has been treated to a quality that meets or exceeds the minimum standards of the 30 Texas Administrative Code, Chapter 210 and is used for lawn irrigation, industry, or other non-potable purposes.
12. REGULATED IRRIGATION PROPERTY means any property that uses 1 million gallons of water or more for irrigation purposes in a single calendar year or is greater than 1 acre in size.
13. RESIDENTIAL GALLONS PER CAPITA PER DAY (Residential GPCD) the total gallons sold for residential use by a public water supplier divided by the residential population served and then divided by the number of days in the year.
14. TOTAL GALLONS PER CAPITA PER DAY (Total GPCD) The total amount of water diverted and/or pumped for potable use divided by the total permanent population divided by the days of the year. Diversion volumes of reuse as defined in TAC 288.1 shall be credited against total diversion volumes for the purposes of calculating GPCD for targets and goals.
15. CMSUD CUSTOMERS means the customers that get their water supply directly from College Mound Special Utility District.
16. WATER CONSERVATION PLAN means this water conservation plan approved and adopted by the CMSUD Board of Directors on April 22, 2014.

### **3. REGULATORY BASIS FOR WATER CONSERVATION PLAN**

#### **3.1 TCEQ Rules Governing Conservation Plans**

The TCEQ rules governing development of water conservation plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code, which is included in Appendix B. For the purpose of these rules, a water conservation plan is defined as “A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water<sup>2</sup>.” The elements in the TCEQ water conservation rules covered in this conservation plan are listed below.

##### Minimum Conservation Plan Requirements

The minimum requirements in the Texas Administrative Code for Water Conservation Plans for Public Water Suppliers are covered in this report as follows:

- 288.2(a)(1)(A) – Utility Profile – Section 4 and Appendix C
- 288.2(a)(1)(B) – Specification of Goals – Section 5
- 288.2(a)(1)(C) – Specific, Quantified Goals – Section 5
- 288.2(a)(1)(D) – Accurate Metering – Section 6.1.1
- 288.2(a)(1)(E) – Universal Metering – Section 6.1.2
- 288.2(a)(1)(F) – Determination and Control of Water Loss – Section 6.1.3
- 288.2(a)(1)(G) – Public Education and Information Program – Section 6.2
- 288.2(a)(1)(H) – Non-Promotional Water Rate Structure – Section 7.1
- 288.2(a)(1)(I) – Reservoir System Operation Plan – Section 6.3
- 288.2(a)(1)(J) – Means of Implementation and Enforcement – Section 8
- 288.2(a)(1)(K) – Coordination with Regional Water Planning Group – Section 6.4 and Appendix F
- 288.2(c) – Review and Update of Plan – Section 9



### Conservation Additional Requirements (Population over 5,000)

- The Texas Administrative Code includes additional requirements for water conservation plans for drinking water supplies serving a population over 5,000
- 288.2(a)(2)(A) – Leak Detection, Repair, and Water Loss Accounting – Sections 6.1.4
- 288.2(a)(2)(B) – Record Management System – Section 6.1.5
- 288.2(a)(2)(C) – Requirement for Water Conservation Plans by Wholesale Customers – Section 6.6

### Additional Conservation Strategies

The TCEQ requires that a water conservation implementation report be completed and submitted on an annual basis. The template for this report is included in Appendix J.

In addition to the TCEQ required water conservation strategies, the NTMWD also requires the following strategy to be included in the Member City and Customer plans:

- 288.2(a)(3)(F) – Considerations for Landscape Water Management Regulations – Section 7.5 and Appendix E

TCEQ rules also include optional, but not required, conservation may be adopted by suppliers. The NTMWD recommends that the following strategies be included in the Member City and Customer water conservation plans:

- 288.2(a)(3)(A) – Conservation Oriented Water Rates – Section 7.1
- 288.2(a)(3)(B) – Ordinances, Plumbing Codes or Rules on Water-Conserving Fixtures – Section 7.2
- 288.2(a)(3)(C) – Replacement or Retrofit of Water-Conserving Plumbing Fixtures – Section 7.6
- 288.2(a)(3)(D) – Reuse and Recycling of Wastewater – Section 7.3
- 288.2(a)(3)(F) – Considerations for Landscape Water Management Regulations – Section 7.4, 7.5 and Appendix E
- 288.2(a)(3)(G) – Monitoring Method – Section 7.7
- 288.2(a)(3)(H) – Additional Conservation Ordinance Provisions – Section 7.6

### **3.2 Guidance and Methodology for Reporting on Water Conservation and Water Use**

In addition to TCEQ rules regarding water conservation, this plan also incorporates elements of the Guidance and Methodology for Reporting on Water Conservation and Water Use developed by TWDB and TCEQ, in consultation with the Water Conservation Advisory Council (the “Guidance”). The Guidance was developed in response to a charge by the 82<sup>nd</sup> Texas Legislature to develop water use and calculation methodology and guidance for preparation of water use reports and water conservation plans in accordance with TCEQ rules.

#### **4 WATER UTILITY PROFILE**

Appendix C to this model water conservation plan is a template water utility profile based on the format recommended by the TCEQ. In adopting this model water conservation plan, each Member City and Customer will provide a draft water utility profile to NTMWD for review and comment. A final water utility profile will be provided to NTMWD.

## 5. SPECIFICATION OF WATER CONSERVATION GOALS

TCEQ rules require the adoption of specific water conservation goals for a water conservation plan. As part of plan adoption, College Mound Special Utility District developed 5-year and 10 year goals for per capita municipal use. These goals will be submitted to NTMWD in draft form for review. The goals for this water conservation plan include the following:

- Maintain the total and residential per capita water use below the specified amount in gallons per capita per day in a dry year, as shown in the completed Table 5-1.
- Maintain the water loss percentage in the system below 12 percent annually in 2013 and subsequent years, as discussed in Section 6.1.3
- Implement and maintain a program of universal metering and meter replacement and repair, as discussed in Section 6.1.2.
- Increase efficient water usage through a water conservation ordinance, order or resolution as discussed in Section 7.5 and Appendix E. (This ordinance is required by the NTMWD.)
- Decrease waste in lawn irrigation by implementation and enforcement of landscape water management regulations, as discussed in Section 7.6. (These landscape water management regulations are recommended by NTMWD but are not required. CMSUD has not adopted landscape water management regulations.)
- Raise public awareness of water conservation and encourage responsible public behavior by a public education and information program, as discussed in Section 6.2.
- Develop a system specific strategy to conserve water during peak demands, thereby reducing the peak use.

**Table 5-1 Five-Year and Ten-Year Per Capita Water Use Goals (gpcd)**

Description	Current Average (gpcd)	5-Year Goal (gpcd)	10-Year Goal (gpcd)
Current 5-Year Average Total Per Capita Use with Credit for Reuse	70	110	110
Current 5-Year Average Residential Per Capita Use	60	100	100
Water Loss (GPCD) <sup>1</sup>	5	10	10
Water Loss (Percentage) <sup>2</sup>	7	12	12
Expected Reduction due to Low-Flow Plumbing Fixtures	0	0	0
Projected Reduction Due to Elements in this Plan	0	0	0
<b>Water Conservation Goals (with credit for reuse)</b>	<b>70</b>	<b>110</b>	<b>110</b>

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

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

## **6. BASIC WATER CONSERVATION STRATEGIES**

### **6.1 Metering, Water Use Records, Control of Water Loss, and Leak Detection and Repair**

One of the key elements of water conservation is tracking water use and controlling losses through illegal diversions and leaks. It is important to carefully meter water use, detect and repair leaks in the distribution system and provide regular monitoring of real losses.

#### **6.1.1 Accurate Metering of Treated Water Deliveries from NTMWD**

Water deliveries from NTMWD are metered by NTMWD using meters with accuracy of  $\pm 2\%$ . These meters are calibrated on an annual basis by NTMWD to maintain the required accuracy.

#### **6.1.2 Metering of Customer and Public Uses and Meter Testing, Repair, and Replacement**

The provision of water to all customers, including public and governmental users, should be metered. CMSUD already meter retail and wholesale water users

CMSUD tests and replaces their customer meters on a regular basis. All customer meters should be replaced on a minimum of a 15-year cycle or when a meter reaches 1 million gallons in usage.

#### **6.1.3 Determination and Control of Water Loss**

Total water loss is the difference between water delivered to CMSUD from NTMWD (and other supplies, if applicable) and metered water sales to customers plus authorized for use but not sold. (Authorized for use but not sold would include use for fire fighting, releases for flushing of lines, uses associated with new construction, etc.) Total water loss includes three categories:

- Apparent Losses – including inaccuracies in customer meters. (Customer meters tend to run more slowly as they age and under-report actual use.) Losses due to illegal connections and theft. (Included in Appendix H.) Accounts which are being used but have not yet been added to the billing system.
- Real Losses – includes physical losses from the system or mains, reported breaks and leaks, storage overflow.

- Unidentified Water Losses – (System Input - Total Authorized - Apparent Losses - Real Losses)

Measures to control water loss are part of the routine operations of CMSUD. Maintenance crews and personnel look for and report evidence of leaks in the water distribution system. A leak detection and repair program is described in Section 6.1.4 below. Meter readers watch for and report signs of illegal connections, so they can be quickly addressed.

Total water loss should be calculated in accordance with the provisions of Appendix J. With the measures described in this plan, College Mound Special Utility District should maintain water loss percentage below 12 percent in 2013 and subsequent years. If total water loss exceeds this goal, CMSUD will implement a more intensive audit to determine the source(s) of and reduce the water loss. The annual conservation report described below is the primary tool that should be used to monitor water loss.

#### **6.1.4 Leak Detection and Repair**

As described above, crews and personnel should look for and report evidence of leaks in the water distribution system. Areas of the water distribution system in which numerous leaks and line breaks occur should be targeted for replacement as funds are available.

#### **6.1.5 Record Management System**

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(2)(B), a record management system should allow for the separation of water sales and uses into residential, commercial, public/institutional, and industrial categories. This information should be included in an annual water conservation report, as described in Section 7.7 below.

## 6.2 Continuing Public Education and Information Campaign

The continuing public education and information campaign on water conservation includes the following elements:

- Utilize the “Water IQ: Know Your Water” and other public education materials produced by the NTMWD. A link is available on our website at CMSUD.com.
- Newsletters will include material developed by staff and material obtained from the NTMWD, TWDB, the TCEQ, and other sources.
- Encourage local media coverage of water conservation issues and the importance of water conservation.
- Notify local organizations, schools, and civic groups that the staff of the NTMWD are available to make presentations on the importance of water conservation and ways to save water.
- Promote the *Texas Smartscape* web site ([www.txsmartscape.com](http://www.txsmartscape.com)) and provide water conservation brochures and other water conservation materials available to the public at the office of College Mound and other public places.
- Make information on water conservation available on its website (if applicable) and include links to the “Water IQ: Know Your Water” website, *Texas Smartscape* website and to information on water conservation on the TWDB and TCEQ web sites and other resources. Customers are encouraged to follow us on Facebook for links to other water saving sites and information.
- NTMWD is an EPA Water Sense Partner and participates in the EPA Water Sense sponsored “Fix a Leak Week.”
- Utilize the Water My Yard website and encourage customers to sign-up to receive weekly watering advice.

## 6.3 NTMWD System Operation Plan

College Mound Special Utility District purchases treated water from NTMWD and does not have surface water supplies for which to implement a system operation plan. NTMWD operates multiple sources of water supply as a system. The operation of the reservoir system is intended to optimize the use of the District’s sources (within the constraints of existing water rights) while



minimizing energy use cost for pumping, maintaining water quality, minimizing potential impacts on recreational users of the reservoirs and fish and wildlife.

#### **6.4 Coordination with Regional Water Planning Group and NTMWD**

Appendix F includes a letter sent to the Chair of the Region C and Region D water planning group with this model water conservation plan. CMSUD will send a copy of their draft ordinances implementing the plan and their water utility profile to NTMWD for review and comment. The adopted ordinances and the adopted water utility profile will be sent to the Chair of the appropriate Water Planning Group and to NTMWD.

#### **6.5 Requirement for Water Conservation Plans by Wholesale Customers**

Every contract for the wholesale sale of water by CMSUD that is entered into, renewed, or extended after the adoption of this water conservation plan will include a requirement that the wholesale customer and any wholesale customers of that wholesale customer develop and implement a water conservation plan meeting the requirements of Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code. The requirement will also extend to each successive wholesale customer in the resale of the water.

## 7 ENHANCED WATER CONSERVATION STRATEGIES

### 7.1 Water Rate Structure

College Mound Special Utility District has adopted an increasing block rate water structure that is intended to encourage water conservation and discourage excessive use and waste of water.

#### Rates

1. Monthly minimum charge. \$ 32.00
2. 0-3000 gallons \$ 5.10
3. 3001-5000 gallons \$ 7.60
4. 5001-7000 gallons \$ 8.60
5. 7001- 10,000 gallons \$ 9.60
6. 10,000 & over \$10.70

## **7.2 Ordinances, Plumbing Codes, or Rules on Water-Conserving Fixtures**

The state has required water-conserving fixtures in new construction and renovations since 1992. The state standards call for flows of no more than 2.5 gallons per minute (gpm) for faucets, 2.5 gpm for showerheads, and 1.6 gallons per flush for toilets. Similar standards are now required nationally under federal law. These state and federal standards assure that all new construction and renovations will use water-conserving fixtures.

## **7.3 Reuse and Recycling of Wastewater**

College Mound Special Utility District does not own and operate their own wastewater treatment plants. If in the future, wastewater treatment is needed, College Mound may negotiate with NTMWD to provide service. NTMWD currently has the largest wastewater reuse program in the state. NTMWD has water rights allowing reuse of up to 71,882 acre-feet per year of this treated wastewater through Lavon Lake for municipal purposes. In addition, NTMWD has also developed the East Fork Raw Water Supply Project which can divert up to 157,393 acre-feet per year based on treated wastewater discharges by the NTMWD. When fully developed, these two reuse projects will provide up to 44 percent of the NTMWD's currently permitted water supplies. NTMWD also provides treated effluent from its wastewater treatment plants available for direct reuse for landscape irrigation and industrial use.

Those Member Cities and Customers who own and operate their own wastewater treatment plants should move toward reusing treated effluent for irrigation purposes at their plant site over the next three years. These entities should also seek other alternatives for reuse of recycled wastewater effluent.

## **7.4 Interactive Weather Stations / Water My Yard Program**

NTMWD has developed the Water My Yard program to install weather stations throughout its service area to provide consumers with a weekly e-mail and information through the Water My Yard website in determining an adequate amount of supplemental water that is needed to maintain healthy grass in specific locations. This service represents the largest network of weather stations providing ET-based irrigation recommendations in the State of Texas, and provides the public advanced information regarding outdoor irrigation needs, thereby reducing water use. Through a series of selections on the type of irrigation system a consumer has, a

weekly email is provided that will determine how long (in minutes) that an irrigation system needs to run based on the past seven days of weather. This recommendation provides the actual amount of supplemental water that is required for a healthy lawn based on research of the Texas A&M Agrilife Extension Service and proven technologies. This innovative program has been available to those within the NTMWD service area since May 2013.

## **7.5 Compulsory Landscape and Water Management Measures**

The following landscape water management measures are required by the CMSUD for this plan. These measures represent minimum measures to be implemented and enforced in order to irrigate the landscape appropriately, and are to remain in effect on a permanent basis unless water resource management stages are declared.

### **1. Landscape Water Management Measures**

- Limit landscape watering with sprinklers or irrigation systems at each service address to no more than two days per week (April 1 – October 31), with education that less than twice per week is usually adequate. Additional watering of landscape may be provided by hand-held hose with shutoff nozzle, use of dedicated irrigation drip zones, and/or soaker hose provided no runoff occurs.
- Limit landscape watering with sprinklers or irrigation systems at each service address to no more than one day per week beginning November 1 and ending March 31 of each year, with education that less than once per week is usually adequate.
- Prohibit lawn irrigation watering from 10 AM to 6 PM (April 1 – October 31).
- Prohibit the use of irrigation systems that water impervious surfaces. (Wind driven water drift will be taken into consideration.)
- Prohibit outdoor watering during precipitation or freeze events.
- Prohibition of use of poorly maintained sprinkler systems that waste water.
- Prohibit excess water runoff or other obvious waste.
- Require rain and freeze sensors and/or ET or Smart controllers on all new irrigation systems. Rain and freeze sensors and/or ET or Smart controllers must be maintained to function properly.

- Prohibit overseeding, sodding, sprigging, broadcasting or plugging with cool season grasses or watering cool season grasses, except for golf courses and athletic fields.
- Require that irrigation systems be inspected at the same time as initial backflow preventer inspection.
- Requirement that all new irrigation systems be in compliance with state design and installation regulations (TAC Title 30, Part 1, Chapter 344).
- Require the owner of a regulated irrigation property to obtain an evaluation of any permanently installed irrigation system on a periodic basis. The irrigation evaluation shall be conducted by an licensed irrigator in the state of Texas and be submitted to your local water provider (i.e., city, water supply corporation).

## **2. Additional Water Management Measures**

- Prohibit the use of potable water to fill or refill residential, amenity, and any other natural or manmade ponds. A pond is considered to be a still body of water with a surface area of 500 square feet or more.
- Non –commercial car washing can be done only when using a water hose with a shut-off nozzle.
- Hotels and motels shall offer a linen reuse water conservation option to customers.
- Restaurants, bars, and other commercial food or beverage establishments may not provide drinking water to customers unless a specific request is made by the customer for drinking water.

Appendix E is a summary of considerations for landscape water management regulations adopted as part of the development of this water conservation plan. These regulations are intended to minimize waste in landscape irrigation. Appendix E includes the required landscape water measures in this section.

## **7.6 Additional Water Conservation Measures (Not Required)**

NTMWD also urges College Mound Special Utility District to consider including the following additional water conservation measures from the NTMWD Model Water Conservation Plan in their plans: Member Cities and Customers are responsible for developing regulations, ordinances, policies, or procedures for enforcement of water conservation guidelines. CMSUD suggests their customers consider these practices but does not require these measures.

### **1. Landscape Water Management**

- All existing irrigation systems should be retrofitted with rain and freeze sensors and/or ET or Smart controllers capable of multiple programming. Rain and freeze sensors and/or ET or Smart controllers must be maintained to function properly.
- All new athletic fields should be irrigated by a separate irrigation system from surrounding areas.
- Implementation of other measures to encourage off-peak water use.

### **2. Landscape Suggestions**

- Appendix I is intended as a guideline to promote water efficient landscape design.
- Native, drought tolerant or adaptive plants should be encouraged.
- Drip irrigation systems should be promoted.
- ET/Smart controllers that only allow sprinkler systems to irrigate when necessary should be promoted.

### **3. Water Audits**

- Water audits are useful in finding ways in which water can be used more efficiently at a specific location. CMSUD provides brochures from the Texas Water Development Board (TWDB) free of charge with ideas on water saving tips to homeowners.

### **4. Additional water Saving Ideas**

- In addition to the conservation measures described above, CMSUD, also, recommends the following water conservation measures:
  - Low-flow toilet replacement,
  - Rain/freeze sensors and/or ET or Smart controllers,

- Low-flow showerhead and sink aerators,
- Water efficient clothes washer,
- Pressure reducing valve installations,
- Rain barrels,
- Pool covers,
- On-demand hot water heaters, and/or
- Other water conservation measures.

### **7.7 Monitoring of Effectiveness and Efficiency - Annual Water Conservation Report**

Appendix D is a form that should be used in the development of an annual water conservation report by Member Cities and Customers. This form should be completed by March 31 of the following year and used to monitor the effectiveness and efficiency of the water conservation program and to plan conservation-related activities for the next year. The form records the water use by category, per capita municipal use, and total water loss for the current year and compares them to historical values. As part of the development of Appendix D, Member Cities and Customers will complete the tracking tool by March 31 of the following year and submit them to NTMWD. The annual water conservation report should be sent to NTMWD, which will monitor NTMWD Member Cities' and Customers' water conservation trends.

### **7.8 Water Conservation Implementation Report**

Appendix J includes the TCEQ-required water conservation implementation report. The report is due to the TCEQ by May 1 of every year. This report lists the various water conservation strategies that have been implemented, including the date the strategy was implemented. The report also calls for the five-year and ten-year per capita water use goals from the previous water conservation plan. The reporting entity must answer whether or not these goals have been met and if not, why not. The amount of water saved is also requested.

## **8. IMPLEMENTATION AND ENFORCEMENT OF THE WATER CONSERVATION PLAN**

Appendix G contains a copy of Ordinance 2014-02 adopted by the Board of Directors of CMSUD regarding the model water conservation plan. The Ordinance designates responsible officials to implement and enforce the water conservation plan. Appendix E, the considerations for landscape water management regulations, also includes information about enforcement. Appendix H includes a copy of an Ordinance 2014-03 that was adopted related to illegal connections and water theft.



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## **9. REVIEW AND UPDATE OF WATER CONSERVATION PLAN**

TCEQ requires that the water conservation plans be updated prior to May 1, 2014. The plans are required to be updated every five years thereafter. The plan will be updated as required and as appropriate based on new or updated information.

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**APPENDIX A**  
**LIST OF REFERENCES**

## APPENDIX A

### LIST OF REFERENCES

1. Texas Commission on Environmental Quality Annual Report.  
[http://www.tceq.texas.gov/permitting/water\\_rights/conserve.html#imple](http://www.tceq.texas.gov/permitting/water_rights/conserve.html#imple)
2. Title 30 of the Texas Administrative Code, Part 1, Chapter 288, Subchapter A, Rules 288.1 and 288.5, and Subchapter B, Rule 288.22, downloaded from  
[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac\\_view=4&ti=30&pt=1&ch=288](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288),  
June 2013.
3. Water Conservation Implementation Task Force: “Texas Water Development Board Report 362, Water Conservation Best Management Practices Guide,” prepared for the Texas Water Development Board, Austin, November 2004.
4. Water Conservation Advisory Council: Guidance and Methodology for Reporting on Water Conservation and Water Use, December 2012
5. Freese and Nichols, INC.: Model Water Conservation Plan for NTMWD Members Cities and Customers, prepared for the North Texas Municipal Water District, Fort Worth, November 2013.
6. Definitions from City of Austin Water Conservation and Drought Contingency Ordinance adopted August 16, 2012.  
[http://www.austintexas.gov/sites/default/files/files/Water/Conservation/Planning\\_and\\_Policy/ProposedCodeRevision\\_DRAFT\\_with\\_watering\\_schedule-8-15-2012.pdf](http://www.austintexas.gov/sites/default/files/files/Water/Conservation/Planning_and_Policy/ProposedCodeRevision_DRAFT_with_watering_schedule-8-15-2012.pdf)
7. Definition from City of San Antonio Water Conservation Ordinance adopted 2005.  
[http://saws.org/conservation/ordinance/docs/Ch34\\_Ordinance\\_2009.pdf](http://saws.org/conservation/ordinance/docs/Ch34_Ordinance_2009.pdf)
8. Definition developed by Freese and Nichols Inc.
9. Texas Water Development Board, Texas Commission on Environmental Quality, Water Conservation Advisory Council. “DRAFT Guidance and Methodology for Water Conservation Reporting.”
10. Freese and Nichols Inc., Alan Plummer and Associates, CP & Y Inc. and Cooksey Communications. “2011 Region C Regional Water Plan”

## APPENDIX B

### TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES ON DROUGHT CONTINGENCY PLANS

11. [TITLE 30](#) ENVIRONMENTAL QUALITY
  12. [PART 1](#) TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
  13. [CHAPTER 288](#) WATER CONSERVATION PLANS, DROUGHT CONTINGENCY PLANS, GUIDELINES AND REQUIREMENTS
  14. [SUBCHAPTER B](#) DROUGHT CONTINGENCY PLANS
  15. [RULE §288.20](#) Drought Contingency Plans for Municipal Uses by Public Water Suppliers
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(a) A drought contingency plan for a retail public water supplier, where applicable, must include the following minimum elements.

(1) Minimum requirements. Drought contingency plans must include the following minimum elements.

(A) Preparation of the plan shall include provisions to actively inform the public and affirmatively provide opportunity for public input. Such acts may include, but are not limited to, having a public meeting at a time and location convenient to the public and providing written notice to the public concerning the proposed plan and meeting.

(B) Provisions shall be made for a program of continuing public education and information regarding the drought contingency plan.

(C) The drought contingency plan must document coordination with the regional water planning groups for the service area of the retail public water supplier to ensure consistency with the appropriate approved regional water plans.

(D) The drought contingency plan must include a description of the information to be monitored by the water supplier, and specific criteria for the initiation and termination of drought response stages, accompanied by an explanation of the rationale or basis for such triggering criteria.

(E) The drought contingency plan must include drought or emergency response stages providing for the implementation of measures in response to at least the following situations:

- (i) reduction in available water supply up to a repeat of the drought of record;
- (ii) water production or distribution system limitations;
- (iii) supply source contamination; or
- (iv) system outage due to the failure or damage of major water system components (e.g., pumps).

(F) The drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought. The entity preparing the plan shall establish the targets. The goals established by the entity under this subparagraph are not enforceable.

(G) The drought contingency plan must include the specific water supply or water demand management measures to be implemented during each stage of the plan including, but not limited to, the following:

- (i) curtailment of non-essential water uses; and
- (ii) utilization of alternative water sources and/or alternative delivery mechanisms with the prior approval of the executive director as appropriate (e.g., interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.).

(H) The drought contingency plan must include the procedures to be followed for the initiation or termination of each drought response stage, including procedures for notification of the public.

(I) The drought contingency plan must include procedures for granting variances to the plan.

(J) The drought contingency plan must include procedures for the enforcement of mandatory water use restrictions, including specification of penalties (e.g., fines, water rate surcharges, discontinuation of service) for violations of such restrictions.

(2) Privately-owned water utilities. Privately-owned water utilities shall prepare a drought contingency plan in accordance with this section and incorporate such plan into their tariff.

(3) Wholesale water customers. Any water supplier that receives all or a portion of its water supply from another water supplier shall consult with that supplier and shall include in the drought contingency plan

appropriate provisions for responding to reductions in that water supply.

(b) A wholesale or retail water supplier shall notify the executive director within five business days of the implementation of any mandatory provisions of the drought contingency plan.

(c) The retail public water supplier shall review and update, as appropriate, the drought contingency plan, at least every five years, based on new or updated information, such as the adoption or revision of the regional water plan.

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**Source Note:** The provisions of this §288.20 adopted to be effective February 21, 1999, 24 TexReg 949; amended to be effective April 27, 2000, 25 TexReg 3544; amended to be effective October 7, 2004, 29 TexReg 9384

17.

**APPENDIX C**  
**TCEQ WATER UTILITY PROFILE**



## Texas Commission on Environmental Quality

### UTILITY PROFILE AND WATER CONSERVATION PLAN REQUIREMENTS FOR MUNICIPAL WATER USE BY RETAIL PUBLIC WATER SUPPLIERS

This form is provided to assist retail public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Name: COLLEGE MOUND SPECIAL UTILITY DISTRICT

Address: 12731 FM 429 Terrell Texas 75161

Telephone Number: (972) 563-1355 Fax: (972) 551.7176

Water Right No.(s): N/A

Regional Water Planning Group: REGION C

Form Completed by: SHIRLEY BLAKELY

Title: GENERAL MANAGER

Person responsible for implementing conservation program: SHIRLEY BLAKELY Phone: (972) 563-1355

Signature: \_\_\_\_\_ Date: 03/24/2014

**NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.**



## UTILITY PROFILE

### POPULATION AND CUSTOMER DATA

#### Population and Service Area Data

Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).

Service area size (in square miles): 102.7 SQUARE MILES

(Please attach a copy of service-area map)

Current population of service area: 8964

Current population served for:

- a. Water: 8964
- b. Wastewater: N/A
- c. Population served for previous five years:
- d. Projected population for service area in the following decades:

Year	Population	Year	Population
2013	8964	2020	9200
2012	8874	2030	9400
2011	8913	2040	9700
2010	8880	2050	10,000
2009	8880	2060	10,300

List source or method for the calculation of current and projected population size.  
 NCTCOG ESTIMATE OF GROWTH AT 3%

**Customers Data**

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. [http://www.tceq.texas.gov/assets/public/permitting/watersupply/water\\_rights/sb181\\_guidance.pdf](http://www.tceq.texas.gov/assets/public/permitting/watersupply/water_rights/sb181_guidance.pdf)

Current number of active connections. Check whether multi-family service is counted as  Residential or  Commercial?

Treated Users	Water Metered	Non-Metered	Totals
Residential	2995	0	2995
Single-Family	2995	0	2995
Multi-Family	0	0	0
Commercial	27	0	27
Industrial/Mining	0	0	0
Institutional	0	0	0
Agriculture	0	0	0
Other/Wholesale	0	0	0

List the number of new connections per year for most recent three years.

Year	2011	2012	2013
Treated Water Users			
Residential	11	-13	30
Single-Family	11	-13	30
Multi-Family			
Commercial			
Industrial/Mining			
Institutional			
Agriculture			
Other/Wholesale			

List of annual water use for the five highest volume customers.

Customer	Use (1,000 gal/year)	Treated or Raw Water
1. BGH Enterprises	1588	TREATED
2. Y-C Nursery	969	TREATED
3. Premier Country Haven	949	TREATED
4. Circle K Ranch	801	TREATED
5. Hidden Acres	596	TREATED

**WATER USE DATA FOR SERVICE AREA**

Water Accounting Data

List the amount of water use for the previous five years (in 1,000 gallons).  
 Indicate whether this is  diverted or  treated water.

<i>Year</i>	2009	2010	2011	2012	2013
<i>Month</i>					
January	14200	23700	19700	12800	16200
February	14500	18800	18200	13700	12400
March	15200	18700	18700	14400	15800
April	15500	16400	16400	17500	15700
May	16200	20900	21000	22400	23700
June	21400	22000	24000	22500	23200
July	22500	23300	23300	21600	20200
August	21000	21000	20900	21900	21800
September	20400	22100	14000	19100	20600
October	26500	16100	12100	16000	17300
November	19000	15300	20100	17700	15700
December	21800	17600	23100	17800	15300
<b>Totals</b>	<b>228000</b>	<b>233900</b>	<b>231500</b>	<b>216400</b>	<b>218700</b>

Describe how the above figures were determine (e.g, from a master meter located at the point of a diversion from the source, or located at a point where raw water enters the treatment plant, or from water sales).

MASTER METER

Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

Year	2009	2010	2011	2012	2013
Account Types					
Residential					
Single-Family	155500	180000	181600	177000	178000
Multi-Family					
Commercial	7200	7400	7600	7500	7800
Industrial/Mining					
Institutional					
Agriculture					
Other/Wholesale					

3. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

Year	Amount (gallons)	Percent %
2009	37300	16.4
2010	25700	11
2011	14600	7
2012	18700	8.6
2013	20400	9.3

## 10.2 Projected Water Demands

If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

**11. WATER SUPPLY SYSTEM DATA**

**11.1 Water Supply Sources**

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

Water Type	Source	Amount Authorized
Surface Water	_____	_____
Groundwater	_____	_____
Contracts	NTMWD and City Terrell	814.62
Other	_____	_____

**11.2 Treatment and Distribution System**

Design daily capacity of system (MGD): 3.0

Storage capacity (MGD):

- a. Elevated 1.5
- b. Ground 1.5

If surface water, do you recycle filter backwash to the head of the plant?

Yes                       No                      If yes, approximate amount (MGD): N/A

**12. WASTEWATER SYSTEM DATA**

**12.1 Wastewater System Data (if applicable)**

Design capacity of wastewater treatment plant(s) (MGD): N/A

Treated effluent is used for  on-site irrigation,  off-site irrigation, for  plant wash-down, and/or for  chlorination/dechlorination.

If yes, approximate amount (in gallons per month):

Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

**12.2 Wastewater Data for Service Area (if applicable)**

Percent of water service area served by wastewater system: \_\_\_\_\_ %

Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	_____	_____	_____	_____	_____
<i>Month</i>	_____	_____	_____	_____	_____
January	_____	_____	_____	_____	_____
February	_____	_____	_____	_____	_____
March	_____	_____	_____	_____	_____
April	_____	_____	_____	_____	_____
May	_____	_____	_____	_____	_____
June	_____	_____	_____	_____	_____
July	_____	_____	_____	_____	_____
August	_____	_____	_____	_____	_____
September	_____	_____	_____	_____	_____
October	_____	_____	_____	_____	_____
November	_____	_____	_____	_____	_____
December	_____	_____	_____	_____	_____
<b>Totals</b>	_____	_____	_____	_____	_____

**13. ADDITIONAL REQUIRED INFORMATION**

In addition to the utility profile, please attach the following as required by Title 30, Texas Administrative Code, §288.2. Note: If the water conservation plan does not provide information for each requirement, an explanation must be included as to why the requirement is not applicable.

**13.1 Specific, Quantified 5 & 10-Year Targets**

The water conservation plan must include specific, quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use in gallons per capita per day. Note that the goals established by a public water supplier under this subparagraph are not enforceable

**13.2 Metering Devices**

The water conservation plan must include a statement about the water suppliers metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply.

### 13.3 Universal Metering

The water conservation plan must include and a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement.

### 13.4 Unaccounted- For Water Use

The water conservation plan must include measures to determine and control unaccounted-for uses of water (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections; abandoned services; etc.).

### 13.5 Continuing Public Education & Information

The water conservation plan must include a description of the program of continuing public education and information regarding water conservation by the water supplier.

### 13.6 Non-Promotional Water Rate Structure

The water supplier must have a water rate structure which is not “promotional,” i.e., a rate structure which is cost-based and which does not encourage the excessive use of water. This rate structure must be listed in the water conservation plan.

### 13.7 Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

### 13.8 Enforcement Procedure and Plan Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

### 13.9 Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

### 13.10 Plan Review and Update

A public water supplier for municipal use shall review and update its water conservation plan, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. The public water supplier for municipal use shall review and update the next revision of its water conservation plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.



## **14. ADDITIONAL REQUIREMENTS FOR LARGE SUPPLIERS**

Required of suppliers serving population of 5,000 or more or a projected population of 5,000 or more within ten years

### **14.1 Leak Detection and Repair**

The plan must include a description of the program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system in order to control unaccounted for uses of water.

### **14.2 Contract Requirements**

A requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution, or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter. If the customer intends to resell the water, the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

## **15. ADDITIONAL CONSERVATION STRATEGIES**

### **15.1 Conservation Strategies**

Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements of this chapter, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

Adoption of ordinances, plumbing codes, and/or rules requiring water conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;

A program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;

A program for reuse and/or recycling of wastewater and/or graywater;

A program for pressure control and/or reduction in the distribution system and/or for customer connections;

A program and/or ordinance(s) for landscape water management;

A method for monitoring the effectiveness and efficiency of the water conservation plan; and

Any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

### Best Management Practices

The Texas Water Developmental Board's (TWDB) Report 362 is the Water Conservation Best Management Practices (BMP) guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The Best Management Practices Guide broken out by sector, including Agriculture, Commercial, and Institutional, Industrial, Municipal and Wholesale along with any new or revised BMP's can be found at the following link on the Texas Water Developments Board's website: <http://www.twdb.state.tx.us/conservation/bmps/index.asp>

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 512-239-3282.

**APPENDIX D**  
**COLLEGE MOUND SUD ANNUAL WATER CONSERVATION REPORT**

**APPENDIX E**  
**LANDSCAPE WATER MANAGEMENT REGULATIONS**

## APPENDIX E

### LANDSCAPE WATER MANAGEMENT REGULATIONS

#### A. Purpose

The purpose of these proposed landscape water management regulations is to provide a consistent mechanism for preventing the waste of water resources. To enact these provisions, entities must verify legal authority to adopt such provisions, and must promulgate valid rules, orders, or ordinances.

#### B. Required Measures

The following landscape water conservation measures are required to be included in the landscape management regulations adopted and enforced in this plan.

##### 1. Lawn and Landscape Irrigation Restrictions

- a. A person commits an offense if the person irrigates, waters, or knowingly or recklessly causes or allows the irrigation or watering of any lawn or landscape located on any property owned, leased, or managed by the person between the hours of 10:00 a.m. and 6:00 p.m. from April 1 through October 31 of any year.
- b. A person commits an offense if the person knowingly or recklessly irrigates, waters, or causes or allows the irrigation or watering of lawn or landscape located on any property owned, leased, or managed by that person in such a manner that causes:
  - 1) over-watering lawn or landscape, such that a constant stream of water overflows from the lawn or landscape onto a street or other drainage area; or
  - 2) irrigating lawn or landscape during any form of precipitation or freezing conditions. This restriction applies to all forms of irrigation, including automatic sprinkler systems; or
  - 3) the irrigation of impervious surfaces or other non-irrigated areas, wind driven water drift taken into consideration.
- c. A person commits an offense if the person knowingly or recklessly allows the irrigation or watering of any lawn or landscape located on any property owned, leased, or managed by the person more than two days per week.

##### 2. Rain and Freeze Sensors and/or ET or Smart Controllers

Any new irrigation system installed on or after November 4, 2004, must be equipped with rain and freeze sensing devices and/or ET or Smart controllers in compliance with state design and installation regulations.

- a. A person commits an offense on property owned, leased or managed if the person:
  - 1) knowingly or recklessly installs or allows the installation of new irrigation systems in violation of Subsection B.2.a; or
  - 2) knowingly or recklessly operates or allows the operation of an irrigation system that does not comply with Subsection B.2.a.

### 3. Filling or Refilling of Ponds

A person commits an offense if the person knowingly or recklessly fills or refills any natural or manmade pond located on any property owned, leased, or managed by the person by introducing any treated water to fill or refill the pond. This does not restrict the filling or maintenance of pond levels by the effect of natural water runoff or the introduction of well water into the pond. A pond is considered to be a still body of water with a surface area of 500 square feet or more.

### 4. Washing of Vehicles

A person commits an offense if the person knowingly or recklessly washes a vehicle without using a water hose with a shut-off nozzle on any property owned, leased, or managed by the person.

### 5. Enforcement

The District commits to implement the requirements and procedures set forth in this plan by adopting Ordinance # 2014-02.

- a. **First Violation** - The customer will be notified by a written notice of their specific violation.
- b. **Second Violation** - The customer will be fined \$275.00 per day payable within 30 days. The District may install a flow-restricting device in the customer's service line to limit the amount of water that will pass through the meter in a 24 hour period. The cost of this shall be the actual cost to do the work and shall be paid by the customer.
- c. **Subsequent Violations** - The customer will be fined \$500.00 per day payable within 30 days. The District may terminate service for up to 7 days and charge for the service call to restore service.

## **C. Recommended Measures For Optimum Water Conservation by CMSUD Customers**

### **1. Lawn and Landscape Irrigation conservation Practices by Customers**

- a.** College Mound Customers should not knowingly or recklessly operates a lawn or irrigation system or device on property that the person owns, leases, or manages that:
  - 1) has broken or missing sprinkler head(s); or
  - 2) has not been properly maintained to prevent the waste of water.
- b.** College Mound Customers should not knowingly or recklessly overseeds a lawn with rye or winter grass on property that the person owns, leases, or manages. Golf courses and public athletic fields are exempt from this restriction.
- c.** All new athletic fields should have separate irrigation systems that are capable of irrigating the playing fields separately from other open spaces.

### **2. Rain and Freeze Sensors**

- a.** Existing irrigation systems should be retrofitted with similar rain and freeze sensors and be capable of multiprogramming within 5 years.

## **D. Variances**

### **1. In special cases, variances may be granted to persons demonstrating extreme hardship or need.**

Variances may be granted under the following circumstances:

- a.** the applicant must sign a compliance agreement agreeing to irrigate or water the lawn and/or landscape only in the amount and manner permitted by the variance; and
- b.** the variance must not cause an immediate significant reduction to the water supply; and
- c.** the extreme hardship or need requiring the variance must relate to the health, safety, or welfare of the person making the request; and
- d.** the health, safety, and welfare of the public and the person making the request must not be adversely affected by the requested variance.

### **2. A variance will be revoked upon a finding that:**

- a.** the applicant can no longer demonstrate extreme hardship or need; or
- b.** the terms of the compliance agreement are violated; or
- c.** the health, safety, or welfare of the public or other persons requires revocation.

**APPENDIX F**

**LETTERS TO REGION C AND REGION D WATER PLANNING GROUPS**



April 24, 2014

Region C Water Planning Group  
North Texas Municipal Water District  
P.O. Box 2408  
Wylie, TX 75098

Dear Sir:

Enclosed please find a copy of the recently updated Model Water Conservation Plan for the Member Cities and Customers of the North Texas Municipal Water District. I am submitting a copy of this model plan to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The Board of College Mound Special Utility District adopted the updated model plan on April 22, 2014.

Sincerely,

Shirley Blakely  
General Manager

April 24, 2014

Mr. Bret McCoy  
Chair, Region D Water Planning Group  
700 CR3347 Omaha, TX 75571

Dear Mr. McCoy:

Enclosed please find a copy of the recently updated Model Water Conservation Plan for the Member Cities and Customers of the North Texas Municipal Water District. I am submitting a copy of this model plan to the Region D Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules. The Board of College Mound Special Utility District adopted the updated model plan on March 22, 2014.

Sincerely,

Shirley Blakely  
General Manager

**APPENDIX G**  
**ADOPTION OF WATER CONSERVATION PLAN**

**College Mound Special Utility District Order  
Adopting Water Conservation Plan**

**Ordinance No. 2014-02**

**AN ORDER ADOPTING A WATER CONSERVATION PLAN FOR THE COLLEGE MOUND SPECIAL UTILITY DISTRICT TO PROMOTE THE RESPONSIBLE USE OF WATER AND TO PROVIDE FOR PENALTIES AND/OR THE DISCONNECTION OF WATER SERVICE FOR NONCOMPLIANCE WITH THE PROVISIONS OF THE WATER CONSERVATION PLAN.**

**WHEREAS**, the College Mound Special Utility District (the "District"), recognizes that the amount of water available to its water customers is limited; and

**WHEREAS**, the District recognizes that due to natural limitations, drought conditions, system failures and other acts of God which may occur, the District cannot guarantee an uninterrupted water supply for all purposes at all times; and

**WHEREAS**, the Water Code and the regulations of the Texas Commission on Environmental Quality (the "Commission") require that the District adopt a Water Conservation Plan; and

**WHEREAS**, the District has determined an urgent need in the best interest of the public to adopt a Water Conservation Plan; and

**WHEREAS**, pursuant to Chapter 65 of the Water Code, the District is authorized to adopt such policies necessary to accomplish the purposes for which it was created, including but not limited to the preservation and conservation of water resources; and

**WHEREAS**, the Board of Directors of the District desires to adopt the College Mound Special Utility District (the "CMSUD") Model Water Conservation Plan as official District policy for the conservation of water.

**NOW THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE COLLEGE MOUND SPECIAL UTILITY DISTRICT THAT:**

**Section 1.** The Board of Directors hereby approves and adopts the College Mound Special Utility District Water Conservation Plan (the "Plan"), attached hereto as Addendum A, as if recited verbatim herein. The District commits to implement the requirements and procedures set forth in the adopted Plan.

**Section 2.** Any customer, defined pursuant to 30 Tex. Admin. Code Chapter 291, failing to comply with the provisions of the Plan shall be subject to a monetary fine as allowed by law, and/or discontinuance of water service by the District. Proof of a culpable mental state is not required for a conviction of an

offense under this section. Each day a customer fails to comply with the Plan is a separate violation.

a. **First Violation** - The customer will be notified by a written notice of their specific violation.

b. **Second Violation** - The customer will be fined \$275.00 per day payable within 30 days. The District may install a flow-restricting device in the customer's service line to limit the amount of water that will pass through the meter in a 24 hour period. The cost of this shall be the actual cost to do the work and shall be paid by the customer.

c. **Subsequent Violations** - The customer will be fined \$500.00 per day payable within 30 days. The District may terminate service for up to 7 days and charge for the service call to restore service.

The District's authority to seek injunctive or other civil relief available under the law is not limited by this section.

**Section 3.** The Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place and subject of the meeting adopting this Order was posted at a designated place convenient to the public for the time required by law preceding the meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Order and the subject matter thereof has been discussed, considered and formally acted upon. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

**Section 4.** The General Manager or his designee is hereby directed to file a copy of the Plan and this Ordinance with the Commission in accordance with Title 30, Chapter 288 of the Texas Administrative Code.

**Section 5.** Should any paragraph, sentence, clause, phrase or word of this Order be declared unconstitutional or invalid for any reason, the remainder of this Order shall not be affected.

Approved and adopted by the Board of Directors on this 22 day of April 2014.

\_\_\_\_\_  
Maurice Pittman - President, Board of Directors

Attest:

\_\_\_\_\_  
Chuck Currie – Secretary/Treasurer

**APPENDIX H**  
**ILLEGAL WATER CONNECTIONS AND THEFT OF WATER**

**College Mound Special Utility District Order  
Pertaining to Illegal Water Connections and Theft of Water**

**Order No. 2014-03**

**AN ORDER PERTAINING TO ILLEGAL WATER CONNECTIONS AND/OR THE THEFT OF WATER RELATED TO THE WATER SUPPLY FOR THE COLLEGE MOUND SPECIAL UTILITY DISTRICT.**

**WHEREAS**, the College Mound Special Utility District (the “District”), recognizes that the amount of water available to its water customers is limited; and

**WHEREAS**, pursuant to Chapter 65 of the Water Code, the District is authorized to adopt such policies necessary to preserve and conserve available water supplies; and

**WHEREAS**, the District seeks to adopt an order pertaining to illegal water connections and theft of water.

**NOW THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF THE COLLEGE MOUND SPECIAL UTILITY DISTRICT THAT:**

**Section 1.** The Board of Directors hereby approves and adopts this Order as described herein.

**Section 2.** A person commits an offense of theft of water by any of the following actions:

(a) A person may not knowingly tamper, illegally connect to, or alter any component of the District’s water system including valves, meters, meter boxes, lids, hydrants, lines, pump stations, ground storage tanks, and elevated storage tanks. This shall include direct or indirect efforts to initiate or restore water service without the approval of the District.

(b) If, without the written consent of the District, the person knowingly causes, suffers or allows the initiation or restoration of water service to the property after termination of service(s). For purposes of this section, it shall be assumed that the owner, occupant, or person in control of the property caused, suffered, or allowed the unlawful initiation or restoration of service(s).

(c) A person may not knowingly make or cause a false report to be made to the District of a reading of a water meter installed for metered billing.

(d) A person commits a separate offense each day that the person performs an act prohibited by this section or fails to perform an act required by this section.

**Section 3.** An offense under this Order is punishable in accordance with the District’s rules and policies as stated in Section E-26 of the College Mound Special Utility District Rate Order and Service Policy regarding rates and fees and may result in disconnection of service.

**Section 4.** The Board of Directors does hereby find and declare that sufficient written notice of the date, hour, place and subject of the meeting considering this Order was posted at a designated place convenient to the public for the time required by law preceding this meeting, that such place of posting was readily accessible at all times to the general public, and that all of the foregoing was done as required by law at all times during which this Order, and the subject matter thereof has been discussed, considered and formally acted upon. The Board of Directors further ratifies, approves and confirms such written notice and the posting thereof.

**Section 5.** Should any paragraph, sentence, clause, phrase or word of this Order be declared unconstitutional or invalid for any reason, the remainder of this Order shall not be affected.

Approved and adopted by the Board of Directors on this 22 day of April 2014.

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Maurice Pittman - President, Board of Directors

Attest:

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Chuck Currie - Secretary/Treasurer



**APPENDIX I**  
**RECOMMENDED PLANT LIST**

## 2. RECOMMENDED PLANT LIST

*These native/adapted plants exhibit a combination of outstanding characteristics in low water use, low maintenance, disease and insect resistance, and appearance.*

### **Large Trees**

Bur Oak  
Cedar Elm  
Chinquapin Oak  
Lacebark Elm  
Live Oak  
Shumard Oak  
Texas Ash

### **Medium Trees**

Lacey Oak  
Little Gem Magnolia  
Shantung Maple  
Texas Pistache

### **Narrow-Leaf Trees**

Arizona Cypress  
Bald Cypress  
Deodar Cedar  
Eastern Red Cedar  
Spartan Juniper

### **Small Trees**

Crepe Myrtle  
Desert Willow  
Possumhaw Holly  
Redbud  
Savannah Holly

Texas Mountain Laurel  
Texas Persimmon  
Tree Yaupon Holly  
Vitex/Chaste Tree

### **Tall Shrubs**

Nellie R. Stevens Holly  
Oleander  
Wax Myrtle  
Yew

### **Medium/Small Shrubs**

Agave  
Boxleaf Euonymus  
Compact Eleagnus  
Compact Texas Sage  
Dwarf Burford Holly  
Dwarf Yaupon Holly  
Dwarf Oleander  
Indian Hawthorne  
Knock-Out Red/Pink Rose  
Lorapetalum  
Red Yucca  
Sandankwa Viburnum  
Softleaf Yucca  
Spineless Prickly Pear  
Upright Rosemary

### **Perennials**

Autumn Pink/Maroon Sage  
Black-Eyed Susan  
Blue Plumbago  
Gayfeather  
Indian Blanket  
Purple Coneflower  
Russian Sage  
Skeletonleaf Goldeneye  
Texas Lantana

### **Ornamental Grasses**

Big Muhly  
Dwarf Fountain Grass  
Mexican Feathergrass

### **Groundcover/Vines**

Carolina Jessamine  
Crossvine  
Liriope/Giant Liriope  
Trailing Rosemary

### **Turf**

Bermuda Grass  
Buffalo Grass  
Zoysia

**APPENDIX J**  
**TCEQ WATER CONSERVATION IMPLEMENTATION REPORT**



## 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: College Mound Special Utility District

Public Water Supply Identification Number (PWS ID): 1290012

CCN numbers: 10825

Water Right Permit numbers: N/A

Wastewater ID numbers: N/A

Check all that apply:

Retail Public Water Supplier

Wholesale Public Water Supplier

Address: 12731 FM 429 City: Terrell Zip Code: 75161

Email: [sblakely@collegemoundwater.com](mailto:sblakely@collegemoundwater.com) Telephone Number: 972.563.1355

Regional Water Planning Group: [Region C Map](#)

Groundwater Conservation District: [N/AMap](#)

Form Completed By: Shirley E Blakely Title: General Manager

Signature: \_\_\_\_\_ Date: 4/24/2014

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

Name: Shirley Blakely Phone: 972.563.1355 Email: [sblakely@collegemoundwater.com](mailto:sblakely@collegemoundwater.com)

Report Completed on Date: 4/23/2014

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 2009 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.

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	872,100 MG
Multi-Family Residential	
<b>TOTAL Residential Use<sup>1</sup></b>	<b>872,100 MG</b>
Industrial	
Commercial	37,500 MG
Institutional	
<b>TOTAL Retail Water Sold<sup>2</sup></b>	<b>909,600 MG</b>

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

### Option 2

Water Use Category *	Gallons Sold
<b>Residential</b> Select all of the sectors that your account for as "Residential". <input type="checkbox"/> Single Family <input type="checkbox"/> Multi-Family	
<b>Commercial</b> 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	
<b>Industrial</b> Please select all of the sectors that your account for as "Industrial". <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Institutional	
<b>Other</b> 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	
<b>TOTAL Retail Water Sold<sup>1</sup></b>	<b>0.00</b>

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.

<b>Water Use Category*</b>	<b>Gallons of Exported Wholesale Water</b>
Municipal Customers	
Agricultural Customers	
Industrial Customers	
Commercial Customers	
Institutional Customers	
<b>TOTAL Wholesale Water Exported <sup>1</sup></b>	<b>0.00</b>

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

## System Data

	<b>Total Gallons During the Five-Year Reporting Period</b>
<b>Water Produced:</b> Volume produced from own sources	
<b>Wholesale Water Imported :</b> Purchased wholesale water imported from other sources into the distribution system	1103.4
<b>Wholesale Water Exported:</b> Wholesale water sold or transferred out of the distribution system (Insert Total Volume calculated on Page 4)	0
<b>TOTAL System Input :</b> Total water supplied to the infrastructure	1103.4 [Produced + Imported – Exported = System Input]
<b>Retail Water Sold :</b> All retail water sold for public use and human consumption (Insert Total Residential Use from Option 1 or Option 2 calculated on Page 3)	909.6
<b>Other Consumption Authorized for Use but not Sold:</b> <ul style="list-style-type: none"> <li>- back flushing water            - line flushing</li> <li>- storage tank cleaning        - golf courses</li> <li>- fire department use          - parks</li> <li>- municipal government offices</li> </ul>	82.2
<b>TOTAL Authorized Water Use:</b> All water that has been authorized for use or consumption.	991.8 [Retail Water Sold + Other Consumption = Total Authorized]
<b>Apparent Losses – Water that has been consumed but not properly measured</b> (Includes customer meter accuracy, systematic data discrepancy, un- authorized consumption such as theft)	
<b>Real Losses – Physical losses from the distribution system prior to reaching the customer destination</b> (Includes physical losses from system or mains, reported breaks and leaks, storage overflow)	8.5
<b>Unidentified Water Losses</b>	103.1 [System Input- Total Authorized - Apparent Losses - Real Losses = Unidentified Water Losses]
<b>TOTAL Water Loss</b>	111.6 [Apparent + Real + Unidentified = Total Water Loss]



## 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.

<b>Date</b>	<b>Target for: Total GPCD</b>	<b>Target for: Water Loss (expressed in GPCD)</b>	<b>Target for: Water Loss Percentage (expressed in Percentage)</b>
<b>Five-year target date: 1/1/2018</b>	110	13	12 %
<b>Ten-year target date: 1/1/2023</b>	110	13	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.

<b>Total System Input in Gallons</b>	<b>Permanent Population</b>	<b>Current GPCD</b>
218,665,000 [Produced + Imported – Exported = System Input]	8967	67

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

<b>Total Residential Use</b>	<b>Permanent Population</b>	<b>Residential GPCD</b>
177,970,000	8886	64

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 <sup>1</sup>	Percent <sup>2</sup>
20,385,000 [Apparent + Real + Unidentified = Total Water Loss]	218,655,000 [Water Produced + Wholesale Imported - Wholesale Exported]	8967	1.24	9 %

1. [Total Water Loss ÷ Permanent Population] / 5/ 365 = Water Loss GPCD]
2. [Total Water Loss ÷ Total System Input] x 100 = 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.*

### 1. Water Conservation Plan

What year did your entity adopt, or revise, their most recent water conservation plan: April 22, 2014

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
<b>Conservation Analysis &amp; Planning</b>		
<input type="checkbox"/> Conservation Coordinator		
<input checked="" type="checkbox"/> Water Survey for Single-Family and Multi-Family Customers		
<b>Financial</b>		
<input type="checkbox"/> Wholesale Agency Assistance Programs		
<b>System Operations</b>		
<input checked="" type="checkbox"/> Water Loss Audits		
<input checked="" type="checkbox"/> Leak Detection		
<input checked="" type="checkbox"/> Universal Metering and Metering Repair		10,000
<b>Landscaping</b>		
<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		
<b>Education &amp; Public Awareness</b>		
<input type="checkbox"/> School Education		
X Public Information		50,000
<b>Rebate, Retrofit, and Incentive Programs</b>		
<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		
<b>Conservation Technology</b>		
<input type="checkbox"/> Recycling and Reuse Programs (Water or Wastewater Effluent)		
<input type="checkbox"/> Rainwater Harvesting and Condensate Reuse Programs		
<b>Regulatory and Enforcement</b>		
X Prohibition on Wasting Water		
<b>TOTAL</b>	\$ 0.00	60,000

### 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:	
<b>Estimated Volume of Recycled or Reuse</b>	0

### 4. Water Savings

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

<b>Estimated Gallons Saved</b> (Total from Conservation Programs Table)	<b>Estimated Gallons Recycled or Reused</b> (Total from Reuse Table)	<b>Total Volume of Water Saved <sup>1</sup></b>	<b>Dollar Value of Water Saved <sup>2</sup></b>
60,000		60,000	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.

\*\*College Mound SUD has a Take or Pay Contract so there is no monetary value unless we go over our allotted amount of water per year.

## 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:

	<b>Implemented</b>	<b>Number/Unit</b>
<i>Example: Brochures Distributed</i>	<input type="checkbox"/>	<i>10,000/year</i>
<i>Example: Educational School Programs</i>	<input type="checkbox"/>	<i>50 students/month</i>
Brochures Distributed	<input checked="" type="checkbox"/>	4000/year
Messages Provided on Utility Bills	<input checked="" type="checkbox"/>	35,800/year
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 checked="" type="checkbox"/>	16/year
Facility Tours	<input type="checkbox"/>	
Other : Newsletters	<input checked="" type="checkbox"/>	4/year

## 7. Leak Detection

During the five-year reporting period, how many leaks were repaired in the system or at service connections: [Click here to enter text.](#)

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	Total
Production Meters				
Meters larger than 1 1/2"	1			1
Meters 1 1/2 or smaller	2989	10	2999	2999

Does your system have automated meter reading? Yes  No

**All of our meters were replaced in 2010. (2989 meters)**

### 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?

Conservation rates have had the most effect on water reduction.

	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"/>	X
Industrial Customers	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Customers	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commercial Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Agricultural Customers	X	<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 X No

If yes, indicate the number of days that your water use restrictions were in effect: 730

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	X Other: Zebra Mussels effected source