#### ORDINANCE NO. 4383

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS, AMENDING CHAPTER 16 OF THE CODE OF THE CITY OF MESQUITE, TEXAS, AS AMENDED, BY DELETING SECTIONS 16-12, 16-13 AND 16-14 IN THEIR ENTIRETY AND ADDING NEW SECTIONS 16-12 AND 16-13; THEREBY ADOPTING THE SEPTEMBER 2015 WATER CONSERVATION PLAN AND THE SEPTEMBER 2015 DROUGHT CONTINGENCY AND **EMERGENCY** MANAGEMENT PLAN; PROVIDING A REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING FOR A PENALTY NOT TO EXCEED TWO THOUSAND (\$2,000.00) DOLLARS FOR EACH OFFENSE.

WHEREAS, on June 7, 1999, the City Council of the City of Mesquite ("City Council") duly passed Ordinance No. 3302, adopting the Water Conservation and Drought Contingency Plans (the "Plans"); and

WHEREAS, on May 1, 2006, the City Council duly passed Ordinance No. 3801, amending the Plans; and

WHEREAS, on June 5, 2006, the City Council duly passed Ordinance No. 3806, amending the Plans; and

WHEREAS, on June 18, 2007, the City Council duly passed Ordinance No. 3871, amending the Plans; and

WHEREAS, on May 19, 2008, the City Council duly passed Ordinance No. 3954, amending the Plans; and

WHEREAS, on April 20, 2009, the City Council duly passed Ordinance No. 4043, amending the Plans; and

WHEREAS, on October 17, 2011, the City Council duly passed Ordinance No. 4179, amending the Plans; and

WHEREAS, on April 21, 2014, the City Council duly passed Ordinance No. 4307, amending the Water Conservation Plan; and

WHEREAS, on July 21, 2014, the City Council duly passed Ordinance No. 4321, amending the Drought Contingency Plan; and

WHEREAS, the City Council has reviewed the September 2015 Water Conservation Plan, attached as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached as Exhibit "B," and incorporated herein by reference as if fully set forth in full, a copy of each Plan is on file in the office of the City Secretary, and finds it is in the best interest of the City to adopt the same.

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NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE, TEXAS:

SECTION 1. That the September 2015 Water Conservation Plan, attached hereto as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached hereto as Exhibit "B," are hereby adopted as the official policies of the City of Mesquite.

SECTION 2. That Chapter 16 of the Code of the City of Mesquite, Texas, as amended, is hereby amended by deleting Sections 16-12, 16-13 and 16-14 in their entirety and adding new Sections 16-12 and 16-13 to read as follows, in all other respects said Code and Chapter to remain in full force and effect:

### Sec. 16-12. Adoption of Water Conservation Plan and Drought Contingency and Emergency Management Plan.

That the City Council of the City of Mesquite hereby adopts the September 2015 City of Mesquite Water Conservation Plan and the September 2015 Drought Contingency and Emergency Management Plan, which are incorporated herein by reference as if set forth in full. A copy of each Plan shall be kept on file in the office of the City Secretary. The City Manager is authorized to order that the appropriate stage of emergency response, as detailed in the emergency water management plan, be implemented. To be effective, the order must be:

- (a) made by public announcement; and
- (b) published in a newspaper of general circulation in the City within 24 hours after the public announcement, which order becomes immediately effective upon publication.

#### Sec. 16-13. Violations, discontinuance of service and variances.

- (a) Generally.
  - (1) On the first violation, customers will be given a written warning that they have violated the applicable water use restriction.
  - (2) On the second and subsequent violations, citations may be issued to customers, with maximum fines established by ordinance.
  - (3) After three violations have occurred, in addition to the authority to issue citations, the City may cut off water service to the customer or seek civil remedies in court.
- (b) Violation of Water Conservation Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) a use of water or waste of water contrary to any provision of the adopted Water Conservation Plan or the terms and conditions of a variance approved under the provisions of the Plan;

- (2) the lawn or landscaping at a premises owned by the person or under their control to be watered between the hours of 10:00 a.m. and 6:00 p.m. between April 1 and October 31 of each year;
- (3) watering of lawn or landscaping at a premises owned by the person or under their control by using an irrigation system that is malfunctioning. A malfunctioning irrigation system includes but is not limited to a system with broken heads, lines or similarly damaged equipment that results in defective operation of the system causing the waste of water;
- (4) watering of lawn or landscaping at a premise owned by the person or under their control to be watered during precipitation or below freezing weather conditions or to allow excessive runoff flowing away from property; or
- (5) handwashing of a vehicle using a hose, providing, however, that it is an affirmative defense that a hose end positive shut off nozzle is used.
- (c) Violation of Drought Contingency and Emergency Management Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) use of water or waste of water contrary to the measures implemented by the City Manager as prescribed in the adopted Drought Contingency and Emergency Management Plan. For purposes of this subsection, it is presumed that a person has knowingly made, caused or permitted a use of water contrary to the measures implemented if the mandatory measures have been formally ordered consistent with the terms of the Drought Contingency and Emergency Management Plan and:
    - a. the manner of use has been prohibited by the Plan;
    - b. the amount of water used exceeds that allowed by the Plan; or
    - c. the manner or amount used violates the terms and conditions of a variance granted under the provisions of the Plan.
- (d) Penalty. Any person, firm or corporation who violates any term or provision of the adopted Water Conservation Plan or Drought Contingency and Emergency Management Plan incorporated into this code by Section 16-12 or the violations provided by Section 16-13 shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine in accordance with Section 1-6 of the Mesquite City Code for each offense. These criminal penalties may be imposed in addition to any administrative or civil remedy allowed by law. Each day a violation continues shall constitute a separate offense.
- (e) Person defined. For purposes of this section, "person" shall include the owner or other person in control of the property. Proof that the violation occurred shall constitute a rebuttable presumption that the owner or person in control of the property committed the violation. Parents or legal guardians shall be presumed to be responsible for violations of their minor children and proof that a violation,

committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation.

of the Water Conservation Plan or Drought Contingency and Emergency Management Plan at the same premises within a 12-month period, upon due notice sent to them by the City Manager or his designee in the same manner and at the same address as their water bill is sent for the premises where the violations occurred, shall have water service discontinued to the premises where the violations occurred. Such discontinued water service shall be restored only upon payment of a reconnection charge, as established by the City, which shall include all costs incurred by the City in discontinuing service, and upon giving written assurance, on a form provided by the City, that violations will not be repeated. Compliance may also be sought through injunctive relief in the district court.

#### (g) Variances.

- (1) Standard of review. Variances to the Water Conservation Plan and the Drought Contingency and Emergency Management Plan shall be granted or denied at the discretion of the City Manager or his designee. The City Manager may grant a variance if the failure to do so would cause an emergency condition adversely affecting health, sanitation or fire safety for the public or the applicant; compliance with this plan cannot be accomplished due to technical or other limitations; or alternative methods that achieve the same level of reduction in water use can be implemented. If issued, approval of the variance may be subject to reasonable terms and conditions.
- (2) Content of petition. All petitions for variances should be in writing include the following information:
  - a. Name and address of the petitioners.
  - b. Contact email address and telephone number.
  - c. Purpose of water use.
  - d. Specific provisions from which relief is requested.
  - e. Detailed statement of the adverse effect of the provision from which relief is requested.
  - f. Description of the relief requested.
  - g. Period of time for which the variance is sought.
  - h. Other pertinent information.

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- (3) Effect of stage elevation. Variances are considered temporary and must be re-submitted for reconsideration should the drought and emergency response stage elevate from the stage in which the temporary variance was approved to any higher stage of response.
- (4) Revocation of variances. The City Manager may revoke a variance granted when the City Manager determines that:
  - a. the conditions supporting the variance are no longer applicable;
  - b. the terms or conditions of the variance are being violated; or
  - c. the health, safety or welfare of other persons requires revocation.

SECTION 3. That all ordinances or portions thereof in conflict with the provisions of this ordinance, to the extent of such conflict, are hereby repealed. To the extent that such ordinances or portions thereof are not in conflict herewith, the same shall remain in full force and effect.

<u>SECTION 4.</u> That should any word, sentence, clause, paragraph or provision of this ordinance be held to be invalid or unconstitutional, the remaining portions of this ordinance shall remain in full force and effect.

SECTION 5. That any person (as defined in Chapter 1, Section 1-2 of the Code of the City of Mesquite, Texas, as amended) violating any of the provisions or terms of this ordinance shall be deemed to be guilty of a Class C Misdemeanor and upon conviction thereof, shall be subject to a fine not to exceed Two Thousand (\$2,000.00) Dollars for each offense, provided, however, if the maximum penalty provided for by this ordinance for an offense is greater than the maximum penalty provided for the same offense under the laws of the State of Texas, the maximum penalty for violation of this ordinance for such offense shall be the maximum penalty provided by the laws of the State of Texas. Each day or portion of a day any violation of this ordinance continues shall constitute a separate offense.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 21st day of September, 2015.

Stan Pickett

Mayor

ATTEST:

Sonja Land City Secretary B. J. Smith

City Attorney

APPROVED:

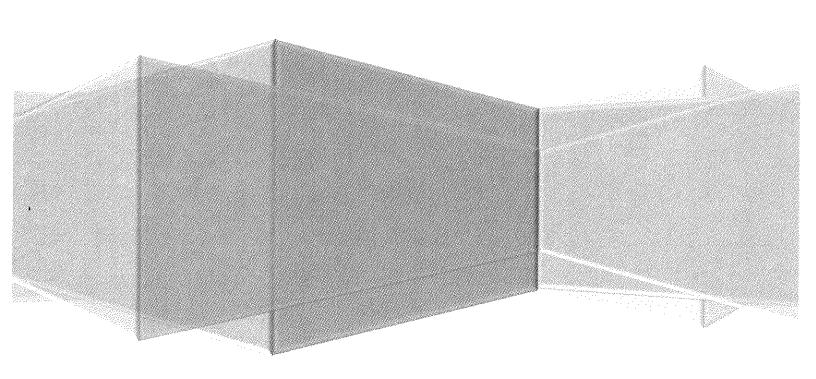
# EXHIBIT "A" SEPTEMBER 2015 WATER CONSERVATION PLAN

### September, 2015



### **Water Conservation Plan**

City of Mesquite, Texas



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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 already largely developed. Additional supplies to meet future demands will be expensive and difficult to secure. It is therefore important to make efficient use of our existing supplies and 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 public water suppliers. The City of Mesquite (City) has developed this Water Conservation Plan (Plan), pursuant to TCEQ guidelines and requirements. This Plan, intended as a year-round water efficiency plan, includes measures that are designed to result in ongoing, long-term water savings. The overall 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 the efficiency in the use of water
- To extend the life of current water supplies by reducing the rate of growth in demand

The City of Mesquite is located on the eastern edge of Dallas County and is bordered by the cities of Dallas, Garland, Sunnyvale, and Balch Springs. As of December 31, 2014 the City's current population is 142,210 with a total of 54,000 metered water utility connections. The City currently operates three pumping facilities at Barnes Bridge (North), Hailey (Central), and Southeast Mesquite (South). The ground storage capacity is 24.5 million gallons. The City also utilizes elevated storage tanks to meet peak-day water demands, replenishing the storage when the demand is lower. Four towers, located at Town East, Big Town, McKenzie, and Peachtree, have a total storage capacity of 9.5 million gallons. The total combined system has a pumping capacity of approximately 64 million gallons.

The City purchases treated water from the North Texas Municipal Water District (NTMWD). The NTMWD is a regional wholesale supplier for 13 Member Cities and numerous other customers in Collin, Dallas, Denton, Rockwall, Kaufman, Hunt, and Rains Counties in North Central Texas. The City provides wholesale water to Kaufman County MUD 9-12. This Plan has been developed in concert with the model plans for the NTMWD Member Cities and Customers and contains best management practices intended to meet the targets and goals identified in the plan.

#### 2. DEFINITIONS

- 1. AQUATIC LIFE means organisms dependent upon an aquatic environment to sustain its life.
- ATHLETIC FIELD means a sports playing 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.
- 3. CITY MANAGER means the City Manager of the City of Mesquite, Texas, or designee.
- 4. COMMERCIAL FACILITY means business or industrial buildings and the associated landscaping, but does not include the fairways, greens, or tees of a golf course.
- 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 and others.
- 6. COSMETIC POWER WASHING means treatment or cleaning of a surface with specialized equipment that uses a spray of or directed water for the cosmetic cleaning of buildings, vehicles or other mobile equipment, or outdoor surfaces. It does not include industrial cleaning, cleaning associated with manufacturing activities, hazardous or toxic waste cleaning, or cleaning necessary to remove graffiti.
- 7. DESIGNATED OUTDOOR WATER USE DAY means a day prescribed by rule on which a person is permitted to water outdoors.
- 8. DRIP IRRIGATION sometimes known as trickle irrigation, or micro-irrigation, is a method of low volume, low pressure water application on the landscape from a series of valves, pipes, tubes and emitters delivering water at a rate of 0.16 up to 4 gallons per hour (GPH).
- DROUGHT, for the purposes of this report, means an extended period of time when an area
  receives insufficient amounts of rainfall to replenish the water supply, causing water supply
  sources (in this case reservoirs) to be depleted.
- 10. EVAPOTRANSPIRATION abbreviated as ET represents the amount of water lost from plant material and soils through transpiration and evaporation. The amount of ET can be estimated based on the temperature, wind, and relative humidity.
- 11. 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.
- 12. 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.

- 13. FOUNDATION WATERING means an application of water to the soils directly abutting the foundation of a building or structure.
- 14. GOVERNMENT PROPERTY means a property owned or operated by a federal, state, or local governmental unit, entity, agency, or subdivision for public purpose.
- 15. HOSE-END SPRINKLER means an above-ground water distribution device that may be attached to a garden hose<sup>3</sup>.
- 16. MULTI-FAMILY PROPERTY means a property containing five or more dwelling units.
- 17. NEW LANDSCAPING means living vegetation comprised of turfgrasses, trees, shrubs, groundcovers, and annual or perennial herbaceous plants used ornamentally. Does not include fruits or vegetables.
- 18. ORNAMENTAL FOUNTAIN means an artificially created structure from which a jet, stream, or flow of water emanates and is not utilized for the preservation of aquatic life.
- 19. PERMANANTLY INSTALLED IRRIGATION SYSTEM means a custom-made, site-specific system of delivering water generally for landscape irrigation via a system of pipes or other conduits, valves, heads, or other equipment installed below ground.
- 20. POND is a still body of water with a surface area of 500 square feet or more.
- 21. RAIN/FREEZE SENSOR means a device designed to stop the flow of water to an automatic irrigation system when rainfall or freeze event has been detected.
- 22. 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.
- 23. RESIDENTIAL FACILITY means a site with four or fewer dwelling units.
- 24. 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<sup>6</sup>.
- 25. SOAKER HOSE means a perforated or permeable garden-type hose or pipe that is laid above ground that provides irrigation at a slow and constant rate.
- 26. SWIMMING POOL means any structure, basin, chamber, or tank including hot tubs, containing an artificial body of water for swimming, diving, or recreational bathing, and having a depth of two (2) feet or more at any point.
- 27. 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 TCA Chapter 288.1 shall be credited against total

- diversion volumes for the purposes of calculating gpcd for targets and goals. (TAC Chapter 288.1)
- 28. VEGETABLE/COMMUNITY GARDEN means any non-commercial vegetable garden planted primarily for household use; "non-commercial" includes incidental direct selling of produce from such a vegetable garden to the public.
- 29. VEHICLE WASH FACILITY means a permanently-located business that washes vehicles or other mobile equipment with water or water-based products, including but not limited to self-service car washes, full service car washes, roll-over/in-bay style car washes, and facilities managing vehicle fleets or vehicle inventory.
- 30. WATER SHORTAGE means a condition in which existing or projected water supply or delivery available to City customers is not anticipated to meet, or cannot meet, the ordinary water requirements of these customers.
- 31. WHOLESALE WATER CUSTOMER means any water supplier that receives all or a portion of its treated water supply directly from the City of Mesquite.

#### 3. WATER CONSERVATION PLAN

#### 3.1 Purpose and State Requirements

The purpose of a water conservation plan is to identify water conservation opportunities and set goals to be accomplished by water conservation measures. The main objective of this Plan is for a strategy or combination of strategies for reducing the consumption of water, reducing the loss or waste of water, and improving the efficiency in the use of water. This Plan meets the requirements set forth by the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ) rules governing development of water conservation plans for public water suppliers contained in TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288 (Appendix A). The Water Conservation Plan (Plan) must be updated every 5 years and must include a Utility Profile (Appendix C). 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 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.

The Texas Administrative Code includes the following 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
- 288.2(a)(2)(B) Record Management System
- 288.2(a)(2)(C) Requirement for Water Conservation Plans by Wholesale Customers

#### 3.2 Specification of Water Conservation Goals

TCEQ rules require the adoption of specific water conservation goals for water conservation plans. As part of Plan adoption, the City has developed 5-year and 10-year goals for per capita municipal use (see Table 3.1). The overall goals for this Plan are as follows:

- Maintain the per capita municipal water use below the specified amount in gallons per capita per day (GPCD) in a normal climate year, as shown in the completed Table 3.1
- Maintain the level of unaccounted water in the system below 12 percent annually in 2015 and subsequent years
- Implement and maintain a program of universal metering and meter replacement and repair
- Increase efficient water usage through water conservation measures with ordinance for enforcement

- Decrease waste in lawn irrigation by implementation and enforcement of landscape water management regulation
- Raise public awareness of water conservation and encourage responsible public behavior through a public education and information program
- Develop a system specific strategy to conserve water during peak demands, thereby reducing the peak use

Table 3.1
Five-Year and Ten-Year Municipal Per Capita Water Use Goals (gpcd)

Description	Historic 5yr Average (gpcd)1	Baseline2	5-Year Goal for year 2019	10-Year Goal for year 2024
Total GPCD	122	166	141	132
Residential GPCD	78	109	93	87
Water Loss (GPCD)	12.65	15.95	16.92	16
Water Loss (percentage)	10%	10%	12%	12%

<sup>1</sup> The Historic 5yr average includes over 800+ days of mandatory water restrictions due to drought stages and is unrealistically low to base future water use goals

# 3.3 Metering, Water Use Records, Control of Unaccounted Water, 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 unaccounted water.

#### 3.4 Accurate Metering of Treated Water Deliveries from NTMWD

Water deliveries from NTMWD are metered by NTMWD using meters with accuracy of ±2 percent. These meters are calibrated on a monthly basis by NTMWD to maintain the required accuracy.

<sup>2</sup> The baseline is calculated from 2009 water use numbers when weather patterns and outdoor water use were more typical of total and residential water use

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

The provision of water to all customers, including private, public and governmental users, will continue to be metered in the City of Mesquite. The City will test and replace their residential customer meters on a regular basis. The City has an established program to replace approximately 6% of all meters annually. Currently, the City has a water accounting program that is implemented by computerized water consumption tracking. Each metered connection is monitored for consistency in water use. If water consumption increases or decreases significantly, the meter becomes suspect and is tested and repaired or replaced as necessary.

#### 3.6 Record Management System

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(2)(B), the City will maintain a customer billing and record management system that allows for the separation of water sales and uses into single family residential, multifamily residential, commercial, public/institutional, and industrial categories. This information will be included in an annual water conservation report, as described in Section 3.9. Should TCEQ, TWDB, or NTMWD require the inclusion of additional customer classes, the City will add the required classes to its billing and records management system.

#### 3.7 Determination and Control of Unaccounted Water

Unaccounted water is the difference between water delivered to the City of Mesquite from NTMWD and metered water sales to customers plus authorized but unmetered uses. Authorized, but unmetered, uses would include use for firefighting, releases for flushing of lines, uses associated with new construction, etc. Unaccounted water can include several categories:

- Inaccuracies in customer meters (customer meters tend to run more slowly as they age and under-report actual use)
- Losses due to water main breaks and leaks in the water distribution system
- Losses due to fire fighting
- Losses due to illegal connections and theft
- Other

Measures to control unaccounted water will be part of the routine operations of the City. Maintenance crews and personnel will test for, observe for, and report evidence of leaks in the water distribution system. A leak detection and repair program is described in Section 3.8 below. With the measures described in this Plan, the City should maintain unaccounted water below 12 percent in 2015 and subsequent years. If unaccounted water exceeds this goal, the City will implement a more intensive

audit to determine the source(s) of and reduce the unaccounted water. The annual conservation report described in Section 3.9 (below) is the primary tool used to monitor unaccounted water.

#### 3.8 Leak Detection and Repair

The City currently has a continuous leak detection, location and repair program that includes an annual water audit. When a source of unaccounted-for water loss is located, corrective repairs or other actions are taken. Implementation of fire hydrant metering, along with the meter-replacement program, aids in reducing unaccounted-for water losses. In addition, meter readers and all utility personnel are instructed to watch for possible leaks and misuses of water while performing their daily tasks.

# 3.9 Monitoring of Effectiveness and Efficiency - Annual Water Conservation Report

The City will continue to complete an annual water conservation report by March 31 each year. This report is utilized to monitor the effectiveness and efficiency of the water conservation program and to plan conservation-related activities for the next year. The report records the water use by category, per capita municipal use and unaccounted water for the previous year and compares them to historical values. A copy of the annual report is provided to the TWDB, responsible for monitoring regional water conservation trends.

#### 3.10 Water Conservation Implementation Report

TCEQ requires the City to submit an annual water conservation implementation report (Appendix D). The report is due to the TWDB 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, whether or not these goals have been met and if not, why not, and the amount of water saved.

#### 4. PUBLIC INFORMATION AND EDUCATION CAMPAIGN

In the fall of 2005, the NTMWD began preparing a public education campaign. In June 2006, the NTMWD initiated a major educational campaign using the "Water IQ – Know your water" message originally developed for the state's Water Conservation Implementation Task Force in 2004. This was the first major local campaign based on this message. NTMWD hired Environmedia Social Marketing of Austin, Texas to assist in program implementation. NTMWD has invested \$11.2 million since 2006 in this public education campaign. The campaign includes multiple methods to reach and educate the public:

- Television ads
- Radio ads
- Billboards
- Yard signs
- Newspaper and magazine ads
- Messages on gasoline pumps
- · Movie theatre ads
- Mall ads
- Fact sheets
- Web site
- · An on-going media relations campaign with print and electronic media
- Outreach programs (including a traveling exhibit for community events, the Water My Yard website, and other educational campaigns)

The specifics of the public outreach and education campaign will vary depending on the circumstances of future droughts. The City resides within the media area where this campaign is focused from NTMWD. In addition to NTMWD campaign, the City employs the following public information strategies:

- Designated Water Conservation Coordinator to develop water conservation programs, materials, presentations, exhibits, and educational workshops
- Dedicated water conservation webpage to educate residents on both indoor and outdoor conservation, efficient watering practices, irrigation videos, and links to other resources (www.cityofmesquite.com/utilities)
- Periodic notices and articles dedicated to water conservation in the City's newsletter
- The City of Mesquite is an EPA WaterSense Partner and participates in their campaigns of "Fix a Leak Week", "Spruce Up Your Sprinkler", etc.
- The City promotes Texas Smartscape website (txsmartscape.com) on its conservation webpage and partners with cities in the region to host Water Conserving Plant Sales with local nurseries and retailers

- The City provides Waterwise Landscaping and Irrigation Workshops. The City's Water Conservation Coordinator conducts an educational series for residents on best management practices for lawns, landscapes, and irrigation systems to conserve resources
- Public outreach of K-12 level water conservation education to Mesquite Independent School District, home school groups, boys and girl scouts and environmental clubs
- Public outreach to HOA's and other speaking opportunities within the City and region
- The City provides periodic water conservation messages on the utility bill
- The City promotes water conservation at public events, city-sponsored events and more

#### 5. ENHANCED WATER CONSERVATION STRATEGIES

#### 5.1 Water Rate Structure

The Texas Administrative Code 288 .2(a)(1)(G) designates the use of a "water rate structure which is not 'promotional,' i.e., a rate structure which is cost-base and which does not encourage the excessive use of water." The City implemented an increasing block rate water structure in 2014 (Appendix F) intended to encourage water conservation and discourage excessive use and waste of water.

#### 5.2 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 2.2 gallons per minute (gpm) for faucets and 2.5 gpm for showerheads, and 1.28 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.

#### 5.3 Reuse and Recycling of Wastewater

The City does not own and operate a wastewater treatment plant. All wastewater for the City is treated by NTMWD at the South Mesquite Creek Regional Wastewater Treatment Plant. All effluent water from this treatment plant is released into Mesquite Creek which flows to the East Fork of the Trinity. A portion of this treated wastewater is diverted through the NTMWD's East Fork Wetlands Project for reuse that is permitted by the state. Because a significant percentage of Mesquite's waste water is reused through this process, the City has not considered gray water initiatives or implementation of direct use of effluent on parks.

#### **5.4 Landscape Water Management Measures**

Landscape water management measures are strategies for reducing the consumption of water, reducing the loss or waste of water, or improving or maintaining the efficiency in the use of water. The following landscape water management measures are required or recommended by the NTMWD 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 drought or water management stages are declared. These measures were developed specifically to address efficient use of water in the City. Based on existing or projected conditions, the City Manager may impose alternative provisions which may be more or less restrictive than specified herein. Factors which could influence such a decision could include, but are not limited to, changes in the City's distribution system, water quality concerns to protect the public health and safety, supply interruptions, or the need for additional water use reduction. Mandatory requirements include:

Limit landscape watering with sprinklers or irrigation systems at each service address, as
designated by the City Manager, to no more than two days per week, year round, with
education that less than twice per week is usually adequate. The City Manager is authorized to

determine the most effective manner of implementing this requirement, whether it be by area of the City, address, or other designation to assure that no undue burden is placed on water supply on the same days of the week. The following are exceptions to the applicable day of week watering limitation:

#### • Exceptions:

- Additional watering of landscape, if necessary, may be provided by hand-held hose, use of dedicated irrigation drip zones, and/or soaker hoses, provided no runoff occurs
- New landscaping, including sod replacement, may be watered as necessary for 30 days from the installation with City notification
- o Golf courses may water greens and tee boxes without restrictions
- o Public athletic fields used for competition may be watered without restrictions
- Locations using other sources of water supply only for irrigation may irrigate without day of the week restrictions provided proper signage is employed. However, irrigation using alternative sources of supply is subject to all other restrictions applicable to this stage
- Prohibit lawn/landscape watering from 10 AM to 6 PM April 1-October 31 each year
- Prohibit the use of irrigation systems that intentionally water impervious surfaces. (Wind driven water drift will be taken into consideration)
- Prohibit use of poorly maintained or malfunctioning irrigation systems that waste water
- Prohibit outdoor watering during precipitation or freeze events
- Prohibit water waste at all times. Water runoff to streets, alleys, or storm drains or failing to repair a controllable leak is considered water waste
- Require all new irrigation systems be in compliance with state design and installation regulations (TAC Title 30, Part 1, Chapter 344)
- Require rain and freeze sensors or ET Controllers on all new irrigation systems. Rain and freeze sensors and ET Controllers must be maintained to function properly. ET controllers ARE NOT exempt from water restrictions in this plan
- Require the playing surface on all new athletic fields be irrigated by a separate irrigation zone from surrounding areas

#### **ADDITIONAL REQUIRED WATER CONSERVATION MEASURES:**

- Non-commercial car washing can be done only when using a water hose with a positive shut-off nozzle
- Positive shut-off nozzles must be used in all restaurants and food service establishment kitchens to prevent wash and rinse water running continuously

# 6. IMPLEMENTATION/ENFORCEMENT OF THE WATER CONSERVATION PLAN

#### 6.1 Procedure for Enforcing Mandatory Water Use Restrictions

Procedures for the enforcement of mandatory water use restrictions, notice of violations, fines and penalties are outlined in Section 16-13, Chapter 16 of the Code of the City of Mesquite, Texas. (See Appendix B). The City Manager is authorized to implement the applicable provisions of this Plan to protect public health, safety, and welfare. The City Manager shall have the authority to initiate or terminate drought or other emergency response measures as described in this Plan. The authority to implement and enforce this Plan is established in Chapter 16 of the Code of the City of Mesquite, Texas (see Appendix B).

#### 6.2 Procedure for Granting Variances to the Plan

Procedures for granting variances to the Plan are outlined in Section 16-13, Chapter 16 of the Code of the City of Mesquite, Texas. (See Appendix B).

#### 7. COORDINATION WITH REGIONAL WATER PLANNING GROUPS

This Plan was prepared in cooperation with the NTMWD, other member and customer cities of the NTMWD, as well as other regional water suppliers. The City of Mesquite will provide a copy of this Plan to the Chairs of the Region C and Region D water planning groups (see transmittal letters in Appendix E) and will continue to work with the regional planning groups to improve efficient utilization of existing water resources and water conservation practices.

#### 8. REVIEW AND UPDATE OF THE WATER CONSERVATION PLAN

As required by TCEQ rules, the City of Mesquite will review this plan every five years. The plan will be updated as appropriate based on new or updated information.

#### 9. ADOPTION OF THE WATER CONSERVATION PLAN

Appendix B contains a copy of the formal adoption of the Water Conservation Plan through Ordinance No. 4383, approved on September 21, 2015 by Mesquite City Council to be effective at a time specified therein.

#### APPENDIX A

#### Texas Administrative Code

TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT

CONTINGENCY PLANS, GUIDELINES AND

REQUIREMENTS

SUBCHAPTER A WATER CONSERVATION PLANS

RULE §288.2 Water Conservation Plans for Municipal Uses by Public

Water Suppliers

- (a) A water conservation plan for municipal water use by public water suppliers must provide information in response to the following. If the plan does not provide information for each requirement, the public water supplier shall include in the plan an explanation of why the requirement is not applicable.
  - (1) Minimum requirements. All water conservation plans for municipal uses by public drinking water suppliers must include the following elements:
    - (A) a utility profile including, but not limited to, information regarding population and customer data, water use data, water supply system data, and wastewater system data;
    - (B) until May 1, 2005, specification of conservation goals including, but not limited to, municipal per capita water use goals, the basis for the development of such goals, and a time frame for achieving the specified goals;
    - (C) beginning May 1, 2005, 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. The goals established by a public water supplier under this subparagraph are not enforceable;
    - (D) 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;
    - (E) a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement;
    - (F) 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.);
    - (G) a program of continuing public education and information regarding water conservation:
    - (H) 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;
    - (I) 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 in order to optimize available water supplies; and
- (J) a means of implementation and enforcement which shall be evidenced by:
  - (i) a copy of the ordinance, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier, and
  - (ii) a description of the authority by which the water supplier will implement and enforce the conservation plan; and
- (K) documentation of coordination with the regional water planning groups for the service area of the public water supplier in order to ensure consistency with the appropriate approved regional water plans.
- (2) Additional content requirements. Water conservation plans for municipal uses by public drinking water suppliers serving a current population of 5,000 or more and/or a projected population of 5,000 or more within the next ten years subsequent to the effective date of the plan must include the following elements:
  - (A) a 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;
  - (B) a record management system to record water pumped, water deliveries, water sales, and water losses which allows for the desegregation of water sales and uses into the following user classes:
    - (i) residential;
    - (ii) commercial;
    - (iii) public and institutional; and
    - (iv) industrial; and
  - (C) 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, then 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 applicable provisions of this chapter.
- (3) Additional conservation strategies. Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements in paragraphs (1) and (2) of this subsection, if they are necessary to achieve the stated water conservation goals of the plan. The commission may require that any of the following strategies be implemented by the water supplier if the commission determines that the strategy is necessary to achieve the goals of the

water conservation plan:

- (A) 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;
- (B) adoption of ordinances, plumbing codes, and/or rules requiring waterconserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;
- (C) a program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;
- (D) reuse and/or recycling of wastewater and/or greywater;
- (E) a program for pressure control and/or reduction in the distribution system and/or for customer connections;
- (F) a program and/or ordinance(s) for landscape water management;
- (G) a method for monitoring the effectiveness and efficiency of the water conservation plan; and
- (H) 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.
- (b) A water conservation plan prepared in accordance with 31 TAC §363.15 (relating to Required Water Conservation Plan) of the Texas Water Development Board and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements in accordance with a memorandum of understanding between the commission and the Texas Water Development Board.
- (c) Beginning May 1, 2005, 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.

#### **APPENDIX B**

**Ordinance adopting Water Conservation Plan** 

#### ORDINANCE NO. 4383

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS. AMENDING CHAPTER 16 OF THE CODE OF THE CITY OF MESQUITE, TEXAS, AS AMENDED, BY DELETING SECTIONS 16-12, 16-13 AND 16-14 IN THEIR ENTIRETY AND ADDING NEW SECTIONS 16-12 AND 16-13; THEREBY ADOPTING THE SEPTEMBER 2015 WATER CONSERVATION PLAN AND THE SEPTEMBER 2015 DROUGHT CONTINGENCY AND **EMERGENCY** MANAGEMENT PLAN; PROVIDING A REPEALER CLAUSE: PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING FOR A PENALTY NOT TO EXCEED TWO THOUSAND (\$2,000.00) DOLLARS FOR EACH OFFENSE.

WHEREAS, on June 7, 1999, the City Council of the City of Mesquite ("City Council") duly passed Ordinance No. 3302, adopting the Water Conservation and Drought Contingency Plans (the "Plans"); and

WHEREAS, on May 1, 2006, the City Council duly passed Ordinance No. 3801, amending the Plans; and

WHEREAS, on June 5, 2006, the City Council duly passed Ordinance No. 3806, amending the Plans; and

WHEREAS, on June 18, 2007, the City Council duly passed Ordinance No. 3871, amending the Plans; and

WHEREAS, on May 19, 2008, the City Council duly passed Ordinance No. 3954, amending the Plans; and

WHEREAS, on April 20, 2009, the City Council duly passed Ordinance No. 4043, amending the Plans; and

WHEREAS, on October 17, 2011, the City Council duly passed Ordinance No. 4179, amending the Plans; and

WHEREAS, on April 21, 2014, the City Council duly passed Ordinance No. 4307, amending the Water Conservation Plan; and

WHEREAS, on July 21, 2014, the City Council duly passed Ordinance No. 4321, amending the Drought Contingency Plan; and

WHEREAS, the City Council has reviewed the September 2015 Water Conservation Plan, attached as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached as Exhibit "B," and incorporated herein by reference as if fully set forth in full, a copy of each Plan is on file in the office of the City Secretary, and finds it is in the best interest of the City to adopt the same.

PW/Water Conservation & Drought Contingency & Emergency Management Plans/09-21-15 Page 2 of 5

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE, TEXAS:

SECTION 1. That the September 2015 Water Conservation Plan, attached hereto as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached hereto as Exhibit "B," are hereby adopted as the official policies of the City of Mesquite.

SECTION 2. That Chapter 16 of the Code of the City of Mesquite, Texas, as amended, is hereby amended by deleting Sections 16-12, 16-13 and 16-14 in their entirety and adding new Sections 16-12 and 16-13 to read as follows, in all other respects said Code and Chapter to remain in full force and effect:

### Sec. 16-12. Adoption of Water Conservation Plan and Drought Contingency and Emergency Management Plan.

That the City Council of the City of Mesquite hereby adopts the September 2015 City of Mesquite Water Conservation Plan and the September 2015 Drought Contingency and Emergency Management Plan, which are incorporated herein by reference as if set forth in full. A copy of each Plan shall be kept on file in the office of the City Secretary. The City Manager is authorized to order that the appropriate stage of emergency response, as detailed in the emergency water management plan, be implemented. To be effective, the order must be:

- (a) made by public announcement; and
- (b) published in a newspaper of general circulation in the City within 24 hours after the public announcement, which order becomes immediately effective upon publication.

#### Sec. 16-13. Violations, discontinuance of service and variances.

- (a) Generally.
  - (1) On the first violation, customers will be given a written warning that they have violated the applicable water use restriction.
  - On the second and subsequent violations, citations may be issued to customers, with maximum fines established by ordinance.
  - (3) After three violations have occurred, in addition to the authority to issue citations, the City may cut off water service to the customer or seek civil remedies in court.
- (b) Violation of Water Conservation Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) a use of water or waste of water contrary to any provision of the adopted Water Conservation Plan or the terms and conditions of a variance approved under the provisions of the Plan;

- (2) the lawn or landscaping at a premises owned by the person or under their control to be watered between the hours of 10:00 a.m. and 6:00 p.m. between April 1 and October 31 of each year;
- (3) watering of lawn or landscaping at a premises owned by the person or under their control by using an irrigation system that is malfunctioning. A malfunctioning irrigation system includes but is not limited to a system with broken heads, lines or similarly damaged equipment that results in defective operation of the system causing the waste of water;
- (4) watering of lawn or landscaping at a premise owned by the person or under their control to be watered during precipitation or below freezing weather conditions or to allow excessive runoff flowing away from property; or
- (5) handwashing of a vehicle using a hose, providing, however, that it is an affirmative defense that a hose end positive shut off nozzle is used.
- (c) Violation of Drought Contingency and Emergency Management Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) use of water or waste of water contrary to the measures implemented by the City Manager as prescribed in the adopted Drought Contingency and Emergency Management Plan. For purposes of this subsection, it is presumed that a person has knowingly made, caused or permitted a use of water contrary to the measures implemented if the mandatory measures have been formally ordered consistent with the terms of the Drought Contingency and Emergency Management Plan and:
    - a. the manner of use has been prohibited by the Plan;
    - b. the amount of water used exceeds that allowed by the Plan; or
    - c. the manner or amount used violates the terms and conditions of a variance granted under the provisions of the Plan.
- (d) Penalty. Any person, firm or corporation who violates any term or provision of the adopted Water Conservation Plan or Drought Contingency and Emergency Management Plan incorporated into this code by Section 16-12 or the violations provided by Section 16-13 shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine in accordance with Section 1-6 of the Mesquite City Code for each offense. These criminal penalties may be imposed in addition to any administrative or civil remedy allowed by law. Each day a violation continues shall constitute a separate offense.
- (e) Person defined. For purposes of this section, "person" shall include the owner or other person in control of the property. Proof that the violation occurred shall constitute a rebuttable presumption that the owner or person in control of the property committed the violation. Parents or legal guardians shall be presumed to be responsible for violations of their minor children and proof that a violation,

committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation.

of the Water Conservation Plan or Drought Contingency and Emergency Management Plan at the same premises within a 12-month period, upon due notice sent to them by the City Manager or his designee in the same manner and at the same address as their water bill is sent for the premises where the violations occurred, shall have water service discontinued to the premises where the violations occurred. Such discontinued water service shall be restored only upon payment of a reconnection charge, as established by the City, which shall include all costs incurred by the City in discontinuing service, and upon giving written assurance, on a form provided by the City, that violations will not be repeated. Compliance may also be sought through injunctive relief in the district court.

#### (g) Variances.

- (1) Standard of review. Variances to the Water Conservation Plan and the Drought Contingency and Emergency Management Plan shall be granted or denied at the discretion of the City Manager or his designee. The City Manager may grant a variance if the failure to do so would cause an emergency condition adversely affecting health, sanitation or fire safety for the public or the applicant; compliance with this plan cannot be accomplished due to technical or other limitations; or alternative methods that achieve the same level of reduction in water use can be implemented. If issued, approval of the variance may be subject to reasonable terms and conditions.
- (2) Content of petition. All petitions for variances should be in writing include the following information:
  - a. Name and address of the petitioners.
  - b. Contact email address and telephone number.
  - c. Purpose of water use.
  - d. Specific provisions from which relief is requested.
  - e. Detailed statement of the adverse effect of the provision from which relief is requested.
  - f. Description of the relief requested.
  - g. Period of time for which the variance is sought.
  - h. Other pertinent information.

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- (3) Effect of stage elevation. Variances are considered temporary and must be re-submitted for reconsideration should the drought and emergency response stage elevate from the stage in which the temporary variance was approved to any higher stage of response.
- (4) Revocation of variances. The City Manager may revoke a variance granted when the City Manager determines that:
  - a. the conditions supporting the variance are no longer applicable;
  - b. the terms or conditions of the variance are being violated; or
  - c. the health, safety or welfare of other persons requires revocation.

SECTION 3. That all ordinances or portions thereof in conflict with the provisions of this ordinance, to the extent of such conflict, are hereby repealed. To the extent that such ordinances or portions thereof are not in conflict herewith, the same shall remain in full force and effect.

SECTION 4. That should any word, sentence, clause, paragraph or provision of this ordinance be held to be invalid or unconstitutional, the remaining portions of this ordinance shall remain in full force and effect.

SECTION 5. That any person (as defined in Chapter 1, Section 1-2 of the Code of the City of Mesquite, Texas, as amended) violating any of the provisions or terms of this ordinance shall be deemed to be guilty of a Class C Misdemeanor and upon conviction thereof, shall be subject to a fine not to exceed Two Thousand (\$2,000.00) Dollars for each offense, provided, however, if the maximum penalty provided for by this ordinance for an offense is greater than the maximum penalty provided for the same offense under the laws of the State of Texas, the maximum penalty for violation of this ordinance for such offense shall be the maximum penalty provided by the laws of the State of Texas. Each day or portion of a day any violation of this ordinance continues shall constitute a separate offense.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 21st day of September, 2015.

Stan Pickett Mayor

ATTEST:

City Secretary

APPROVED:

B.J. Smith
City Attorney

Utility Profile IWDB Form No. 1965 R Revised on: 9/1/13



### **UTILITY PROFILE FOR RETAIL WATER SUPPLIER**

Fill out this form as completely as possible.

If a field does not apply to your entity, leave it blank.

#### **CONTACT INFORMATION**

Name of Utility: City of Mesquite	
Public Water Supply Identification Number (PW	vs ID):
Certificate of Convenience and Necessity (CCN)	
Surface Water Right ID Number:	
Wastewater ID Number:	
Completed By: Michael Screws	Title: Manager of Utilities Division
	City: MesquiteZip Code:
	Telephone Number:
Date:	
Regional Water Planning Group: M Groundwater Conservation District: N/A	<u>ар</u> _ <u>Мар</u>
Check all that apply:	
Received financial assistance of \$500,0	000 or more from TWDB
Have 3,300 or more retail connections	S
Have a surface water right with TCEQ	

Utility Profile TWDB Form No. 1965 R Revised on: 9/1/13



## Section I: Utility Data

A. Po	pulation	and Service	<b>Area Data</b>

		46
1.	Current service area size in square miles:	
	(Attach or email a copy of the service area ma	p.)

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

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Service
2013	140,240	3,900	140,140
2012	139,950	4,739	139,850
2011	139,870	4,498	137,770
2010	139,550	4,452	139,440
2009	137,850	3,250	137,750

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

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Service
2020	155,738		155,638
2030	170,834		170,734
2040	186,335		186,235
2050	203,166	00 20 20 20 20 20 20 20 20 20 20 20 20 2	203,066
2060	219,576		219,476

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

Projected populations are from the proposed 2016 Region C water plan. Wholesale populations are provided by the wholesale customer.

Hillity Profile TWDB Form No. 1965 & Revised on: 9/1/13



#### B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported - Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2013		5,670,000,000	164,000,000	5,506,000,000	108
2012	· · · · · · · · · · · · · · · · · · ·	6,075,000,000	155,000,000	5,920,000,000	116
2011		6,801,000,000	163,000,000	6,638,000,000	130
2010		6,572,000,000	151,000,000	6,421,000,000	126
2009		6,139,000,000	108,000,000	6,031,000,000	120
Historic 5- year Average	0	6,251,400,000	148,200,000	6,103,200,000	120

C.	Water Suppl	y System	(Attach	description	of water	system)
----	-------------	----------	---------	-------------	----------	---------

L.	Designed daily ca	pacity of system	69,500,000 gallons per day.
2.	Storage Capacity:		
	Elevated	9,500,000 gallons	
	Ground	24,500,000 gallons	

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
North Texas Muncipal Wate	Contract	81,000,000
	Choose One	

<sup>\*</sup>Select one of the following source types: Surface water, Groundwater, or Contract

4.	If surface water is a sour	ce type, do you recycle backwash to the head of the plant'
	O Yes	estimated gallons per day
	O No	



#### D. Projected Demands

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

Year	Population	Water Demands (gallons)
2014	141,014	7,102,875,180
2015	143,561	7,178,767,805
2016	146,155	7,255,134,200
2017	148,796	7,331,922,900
2018	151,485	7,409,131,350
2019	154,222	7,486,706,990
2020	159,848	7,701,476,640
2021	162,738	7,840,716,840
2022	165,681	7,982,510,580
2023	168,667	8,126,376,060

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

Population taken from City of Mesquite's 2011 Master Water Plan developed by Freeman-Millican Inc. Projections were backed up in the plan three years to account for very low growth during the past economic downturn. Water demands were calculated using the five and ten year goals for gpcd taken from the previously adopted 2010 City of Mesquite Utility Profile GPCD Goals. These GPCDs were 141 by 2015 and 132 by 2020. The City of Mesquite has been under mandatory drought restrictions most of the last two years along with strong conservation measures when not in drought. This makes GPCDs and other estimates very difficult to average over the past five years.



#### E. High Volume Customers

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

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
Pepsi Bottling Co	Industrial	246,348,500	Treated
MISD	Institutional	112,238,800	Treated
Town East Mall	Commercial	49,005,100	Treated
2006 Mesquite LP (Apts)	Residential	36,672,000	Treated
CNC Swagat NIN LTD (Apts)	Residential	35,517,900	Treated

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

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

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
Kaufman Co. MUD # 12	Municipal	164,000,000	Treated
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

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

#### F. Utility Data Comment Section

Provide additional comments about utility data below.

-		
***************************************		
-		



### Section II: System Data

#### A. Retail Connections

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

	Active Retail Connections				
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections	
Residential – Single Family	37,832	A STATE OF THE STA	37,832	69%	
Residential – Multi-family (units)	13,377		13,377	24%	
Industrial	20		20	0%	
Commercial	3,272		3,272	6%	
Institutional	452	**************************************	452	1%	
Agricultural			0	0%	
TOTAL	54,953	0	54,953		

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

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

	Net Number of New Retail Connections				
Water Use Category*	2013	2012	2011	2010	2009
Residential – Single Family	33	19	108	2,247	0
Residential – Multi- family (units)	-73	0	24	803	0
Industrial	0	0	0	0	0
Commercial	15	25	25	15	377
Institutional	0	0	0	0	0
Agricultural					
TOTAL	-25	44	157	3,065	377

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



## B. Accounting Data

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

	Total Gallons of Retail Water						
Water Use Category*	2013	2012	2011	2010	2009		
Residential - Single Family	2,811,971,200	2,993,392,000	3,465,960,514	3,091,846,686	3,020,721,652		
Residential – Multi-family	798,444,500	820,987,600	885,653,100	900,203,500	889,070,900		
Industrial	273,703,500	247,260,300	240,778,100	225,016,500	217,656,800		
Commercial	831,180,100	845,605,000	995,087,800	1,034,660,600	1,068,150,000		
Institutional	234,718,300	266,248,400	388,986,800	365,775,400	265,477,900		
Agricultural							
TOTAL	4,950,017,600	5,173,493,300	5,976,466,314	5,617,502,686	5,461,077,252		

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

## C. Residential Water Use

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

			Residential GPCI		
Water Use Category*	2013	2012	2011	2010	2009
Residential - Single Family	69	73	85	76	75
Residential – Multi-family	77	80	86	87	87
		THE THE THE PERSON AS A STATE OF THE PERSON AS	**************************************	**************************************	**************************************

## D. Annual and Seasonal Water Use

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

		Total C	Sallons of Treated I	Retail Water	
Month	2013	2012	2011	2010	2009
January	356,088,764	325,131,600	370,659,616	399,000,000	399,000,000
February	333,824,405	345,198,300	362,322,166	375,000,000	373,000,000
March	315,591,215	317,235,200	325,609,016	388,000,000	389,000,000
April	375,769,133	326,377,600	412,460,196	401,000,000	400,000,000
May	389,876,866	386,370,900	414,656,166	395,000,000	393,000,000
June	414,784,414	485,635,400	465,717,026	457,000,000	456,000,000
July	466,862,056	500,772,600	664,765,541	624,000,000	623,000,000
August	533,006,094	623,216,700	771,091,636	625,000,000	624,000,000
September	551,916,909	591,724,000	873,065,266	596,000,000	597,000,000
October	520,501,723	475,742,600	563,597,291	544,000,000	447,000,000
November	385,580,315	394,642,800	406,725,076	465,000,000	416,530,000
December	341,474,971	414,624,600	357,479,076	379,000,000	360,510,000
TOTAL	4,985,276,865	5,186,672,300	5,988,148,072	5,648,000,000	5,478,040,000



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

		Tota	I Gallons of Raw Ro	etail Water	
Month	2013	2012	2011	2010	2009
January					
February					
March					
April					
May					
June			***************************************		
July					
August					
September					
October					
November					
December					
TOTAL	0	0	0	0	(

3. Summary of seasonal and annual water use.

		Average in				
Water Use	2013	2012	2011	2010	2009	Gallons
Summer Retail (Treated + Raw)	1,414,652,564	1,609,624,70	1,901,574,203	1,706,000,000	1,703,000,000	1,666,970,293  5yr Average
TOTAL Retail	4,985,276,865	5,186,672,31	5,988,148,072	5,648,000,000	5,478,040,000	5,457,227,447
(Treated + Raw)		4,000,270,000,100,072,010				5yr Average

## E. Water Loss

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365 Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2013	498,000,000	10	9%
2012	707,000,000	14	12%
2011	623,000,000	12	9%
2010	754,000,000	15	12%
2009	554,000,000	11	9%
5-year average	627,200,000	12	10%



## F. Peak Water Use

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

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2013	15,534,247	26,450,000	1.70
2012	16,598,361	30,856,000	1.86
2011	18,632,877	35,843,000	1.92
2010	18,005,479	37,699,000	2.09
2009	16,819,178	33,447,000	1.99

## G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	3,076,778,410	69%	1%
Residential MF	858,871,920	24%	0%
Industrial	240,883,040	0%	0%
Commercial	954,936,700	6%	0%
Institutional	304,241,360	1%	0%
Agricultural	0	0%	0%

## H. System Data Comment Section

Provide additional comments about system data below.

Formulas included are not correct in G.	Percent of Water Use.

Utility Profile TWDB Form No. 1965 - R Revised on: 9/1/13



## Section III: Wastewater System Data

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

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

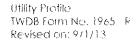
1.	Design capacity of wastewater treatment plant(s):
	gallons per day.

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

	Active Wastewater Connections						
Water Use Category*	Metered	Unmetered	Total Connections	Percent of Total Connections			
Municipal		35,997	35,997	94%			
Industrial	The state of the s	16	16	0%			
Commercial		1,915	1,915	5%			
Institutional	**************************************	344	344	1%			
Agricultural			0	0%			
TOTAL	0	38,272	38,272				

- 2. What percent of water is serviced by the wastewater system?  $\frac{100}{}$ %
- 3. For the <u>previous five years</u>, enter the number of gallons of wastewater that was treated by the utility.

	Total Gallons of Treated Wastewater					
Month	2013	2012	2011	2010	2009	
January						
February						
March				e un constant		
April						
May						
June						
July		***				
August	The same of the sa					
September		"				
October	***************************************					
November						
December					,	
TOTAL	0	0	0	0	0	



4.

Yes



B.	Reuse	Data	
	1.	Provide data on the types of recycling current reporting period.	and reuse activities implemented during the
		Type of Reuse	Total Annual Volume (in gallons)
On-s	ite irriga	tion	
Plan	t wash do	own	
}	rination/ strial	de-chlorination	***************************************
Lanc	lscape irr	igation (parks, golf courses)	
Agri	cultural		
Disc	harge to	surface water	
Evap	oration p	oond	
Othe	er		
L		TOTAL	0
Heg Dist		astewater Treatment Plant, operate	ed by the North Texas Municipal Water

Can treated wastewater be substituted for potable water?

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



## 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: City of Mesquite
Public Water Supply Identification Number (PWS ID):0570014 CCN numbers: 10060 Water Right Permit numbers: Click here to enter text. Wastewater ID numbers: 10060
Check all that apply:  ☐ Retail Public Water Supplier  ☐ Wholesale Public Water Supplier
Address: P.O. Box 850137 City: Mesquite Zip Code: 75185-0137
Email: mscrews@cityofmesquite.com Telephone Number: 972-216-6941
Regional Water Planning Group: <u>C Map</u>
Groundwater Conservation District: N/A Map
Form Completed By: Michael Screws Title: Manager of Utilities Division
Signature: Date: 4/10/2014
Contact information for the person or department responsible for implementing the water conservation plan:
Name: Michael Screws Phone: 972-216-6941 Email: mscrews@cityofmesquite.com
Report Completed on Date: 4/10/2014
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

lease 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*
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 <u>ONLY</u> provides wholesale water services <u>for public consumption</u>. For example, you <u>only</u> provide <u>wholesale</u> <u>water</u> to other municipalities or water districts.

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## 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 <u>one</u> 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	15,383,892,052
Multi-Family Residential	4,294,359,600
TOTAL Residential Use <sup>1</sup>	19,678,251,652
Industrial	1,204,415,200
Commercial	4,774,683,500
Institutional	1,521,206,800
TOTAL Retail Water Sold <sup>2</sup>	27,178,557,152

- 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".	
☐ Single Family ☐ Multi-Family	
Commercial	
Please select all of the sectors that your account for as	
"Commercial".	
☐ Commercial ☐ Multi-Family ☐ Industrial ☐ Institutional	
Industrial	
Please select all of the sectors that your account for as	
"Industrial".	
☐Industrial ☐ Commercial ☐ Institutional	
Other	
Please select all of the sectors that your account for as "Other".	
☐Commercial ☐Multi-Family ☐ Industrial ☐ Institutional	
TOTAL Retail Water Sold <sup>1</sup>	0.00

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

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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	74,100,0000		
Agricultural Customers			
Industrial Customers			
Commercial Customers			
Institutional Customers			
TOTAL Wholesale Water Exported 1	741,000,000.00		

<sup>1. [</sup>Mun +Agr +Ind +Com +Ins = Wholesale Water Exported]

TCEQ-20646 rev. (09-18-2013) Page 4 of 11

## 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	
Wholesale Water Imported: Purchased wholesale water imported from other sources into the distribution system	31,257,000,000
Wholesale Water Exported: Wholesale water sold or transferred out of the distribution system (Insert Total Volume calculated on Page 4)	741,000,000
TOTAL System Input: Total water supplied to the infrastructure	30,516,000,000.00 [Produced + Imported – Exported = System Input]
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)	27,178,557,152
Other Consumption Authorized for Use but not Sold:  - back flushing water - line flushing - storage tank cleaning - golf courses - fire department use - parks - municipal government offices	100,000,000
TOTAL Authorized Water Use: All water that has been authorized for use or consumption.	27,278,557,152.00 [Retail Water Sold + Other Consumption = Total Authorized]
Apparent Losses – Water that has been consumed but not properly measured (Includes customer meter accuracy, systematic data discrepancy, un- authorized consumption such as theft)	1,281,172,645
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)	840,798,460
Unidentified Water Losses	1,115,471,743.00
	[System Input- Total Authorized - Apparent Losses - Real Losses = Unidentified Water Losses]
TOTAL Water Loss	3,237,442,848.00 [Apparent + Real + Unidentified = Total Water Loss]

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## **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: 1/1/2016	141	17	12%
Ten-year target date: 1/1/2021	132	16	12%

Are targets in the water conservation plan being met? Yes  $\boxtimes$  No  $\square$  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.

	Permanent	
Total System Input in Gallons	Population	Current GPCD
31,257,000,000	140,240	122.13 [ (System Input ÷ Permanent Population) /5/
[Produced + Imported - Exported = System Input]		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
19,678,251,652	140240	76.89 [ (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 <sup>2</sup>
3,237,442,848.00  [Apparent + Real + Unidentified = Total Water	31,257,000,000 [Water Produced + Wholesale Imported - Wholesale Exported]	140240	12.65	10

- 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.

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: 2011

Does the	plan incorporat	e Best Manag	ement Practic	ces? 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		
□ Conservation Coordinator     □		
☐ Water Survey for Single-Family and Multi- Family Customers		
Financial		
☐ Wholesale Agency Assistance Programs		
☐ Water Conservation Pricing/ Rate Structures		
System Operations		
☐ Water Loss Audits		
□ Leak Detection     □		
☐ Universal Metering and Metering Repair		
Landscaping Landsc		
☐ Landscape Irrigation Conservation and Incentives		

☐ Golf Course Conservation		The second secon
☑ Park Conservation	1	
Education & Public Awareness		
⊠ School Education		
☑ Public Information		
Rebate, Retrofit, and Incentive Programs		
☐ Conservation Programs for ICI Accounts		
☐ Residential Clothes Washer Incentive Program		
Water Wise Landscape Design and Conversion Programs		
Showerhead, Aerator, and Toilet Flapper Retrofit     ■ Control of the Co		
☐ Residential Toilet Replacement Programs		
☐ Rainwater Harvesting Incentive Program		
☐ ICI Incentive Programs		
Conservation Technology		
☐ Recycling and Reuse Programs (Water or Wastewater Effluent)		
☐ Rainwater Harvesting and Condensate Reuse Programs		
Regulatory and Enforcement		
☑ 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 <sup>1</sup>	Dollar Value of Water Saved <sup>2</sup>
		0	

<sup>1. [</sup>Estimated Gallons Saved + Estimated Gallons Recycled or Reused = Total Volume Saved]

## 5. Conservation Pricing / Conservation Rate Structures

**	•	. 1	~	year reporting	. 1	1		,		.1	<b>3</b> Z a a   \(\siz \)	NT~	
1 11	rmo	the	TIVE-	vear renorting	neriod	nave i	vour rates	or rate	structure	changed/	I US I	170	1 1
* -		ULL V	***	TOUR LODGETHE	DOX LOG	XX14 7 W	TOUR RULES	OI IULO	DII WOLUL O	~			

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

☑ Uniform rates	☐ Water Budget Based rates	☐ Surcharge - seasonal
☐ Flat rates	☐ Excess Use Rates	☐ Surcharge - drought
☐ Inclining/ Inverted Block	☐ Drought Demand rates	☐ Surcharge - usage demand
☐ Declining Block rates	☐ Tailored rates	engages anguaren sepaka banda sepaka sepika dan keministi ANG 2000 dan
☐ Seasonal rates		Contracting to the contracting t

## 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
Example: Brochures Distributed		10,000/year
Example: Educational School Programs		50 students/month
Brochures Distributed		1,000/year
Messages Provided on Utility Bills		1/quarterly
Press Releases		6/year
TV Public Service Announcements		50/year
Radio Public Service Announcements		50/year
Educational School Programs		5/year
Displays, Exhibits, and Presentations	×	10/year
Community Events		2/year

<sup>2.</sup> 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.

Social Media campaigns	⊠	5/year
Facility Tours		
Other: Landscape irrigation classes	⊠	5/year

## 7. Leak Detection

During the five-year reporting period, how many leaks were repaired in the system or at service connections: 13,795

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

X	Leaks and breaks
	Un-metered utility or city uses
	Master meter problems
X	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	5	5	0
Meters			
Meters larger	2,000	2	290
than 1 ½"			
Meters 1 ½ or	38,673	1,379	13,190
smaller			

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			⊠	
Industrial Customers	⊠			
Institutional Customers			⊠	
Commercial Customers			⊠	
Agricultural Customers	×	П		

10.	Drought	Contingency	and	<b>Emergency</b>	Water	<b>Demand</b>	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: 900 to current

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

☑ Water Supply Shortage	☐ Equipment Failure
☐ High Seasonal Demand	☐ Impaired Infrastructure
☐ Capacity Issues	☐ 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.

## APPENDIX E

Letters to Region C and Region D Water Planning Groups



September 30, 2015

Jo M. (Jody) Puckett, P.E. Chair, Region C Water Planning Group 1500 Marilla, Suite 4AN Dallas, Texas 75201

Re: Water Conservation Plan and Drought Contingency & Emergency Management Plan for

the City of Mesquite, Texas

Dear Ms. Puckett:

Enclosed please find a copy of the recently adopted Water Conservation Plan and the Drought Contingency and Emergency Management Plan for the City of Mesquite, Texas.

This Plan is being submitted to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

The City of Mesquite City Council adopted these plans through Ordinance 4383 on September 21, 2015. Should you have any questions, please direct them to Kathy Fonville, Water Conservation Coordinator, at 972-329-8300.

Sincerely,

Michael Screws, Manager

**Utilities Division** 

**Enclosures** 

cc: Resource Protection Team, TCEQ

Texas Water Development Board Region D Water Planning Group

North Texas Municipal Water District



September 30, 2015

Linda Price, Chair Region D Water Planning Group P.O. Box 360 Linden, Texas 75563

Re: Water Conservation Plan and Drought Contingency & Emergency Management Plan for

the City of Mesquite, Texas

Dear Ms. Price:

Enclosed please find a copy of the recently adopted Water Conservation Plan and the Drought Contingency & Emergency Management Plan for the City of Mesquite, Texas.

This Plan is being submitted to the Region D Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

The City of Mesquite City Council adopted these plans through Ordinance 4383 on September 21, 2015. Should you have any questions, please direct them to Kathy Fonville, Water Conservation Coordinator, at 972-329-8300.

Sincerely,

Michael Screws, Manager

**Utilities Division** 

**Enclosures** 

cc: Resource Protection Team, TCEQ

Texas Water Development Board Region C Water Planning Group

North Texas Municipal Water District

## **Tiered Water Rate Information**

New water rates effective November 1, 2014.

## Minimum Bill: (based on meter size)

o.625 inch meter	\$11.00
1.000 inch meter	\$15.00
1.500 inch meter	\$20.00
2.000 inch meter	\$25.00
3.000 inch meter	\$30.00
4.000 inch meter	\$35.00
6.000 inch meter	\$40.00

## Tiered Rates: (amount per 1,000 gallons billed)

o - 1,000 gallons	\$0.00
1,001 – 5,000 gallons	\$4.65
5,001 – 10,000 gallons	\$5.00
10,001 – 50,000 gallons	\$5.25
50,001 - 70,000 gallons	\$5.50
70,001 – 500,000 gallons	\$5.75
Over 500,000 gallons	\$4.75

## **Sewer Rate Information**

• New sewer rates effective November 1, 2014.

Minimum Bill: (includes first 1,000 gallons)

All customers \$12.00

Tiered Rates: (amount per 1,000 gallons billed)

o – 1,000 gallons \$0.00

Over 1,000 gallons \$4.71

Residential customers are capped at 8,000 gallons

## **Example of Residential Bill for One Month:**

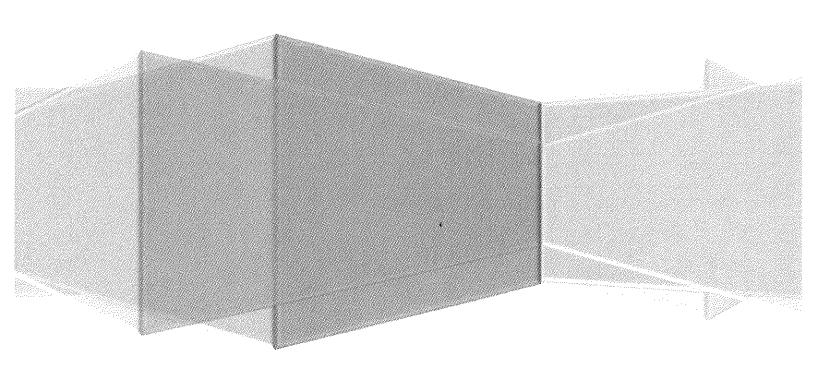
Most residential customers have a 0.625 water meter. A residential customer using 7,000 gallons of water in one month will pay...

```
Minimum Water Bill
                             $ 11.00
Water usage
   1,000 gallons (1 x $0) *
                              0.00
   4,000 gallons (4 x $4.65)
                              18.60
   2,000 gallons (2 x $5.00)
                              10.00
Minimum Sewer Bill
                              12.00
Sewer usage
  1,000 gallons (1 x $0) *
                               0.00
  6,000 gallons (6 x $4.71)
                              28.26
Total Utility Bill
                            $ 79.86
```

<sup>\*</sup> First 1,000 gallons are included in the minimum bill.



# Drought Contingency and Emergency Management Plan City of Mesquite, Texas



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## **APPENDICES**

APPENDIX A TAC, Title 30, Chapter 288, Subchapter B, Rule 288.20 & 288.22

APPENDIX B Texas Water Code Section §11.039

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APPENDIX D Ordinance adopting Drought Contingency and Emergency Management Plan

## 1. INTRODUCTION AND PURPOSE

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 already largely developed. Additional supplies to meet future demands will be expensive and difficult to secure. It is therefore important to make efficient use of our existing supplies and 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 public water suppliers. The City of Mesquite (City) has developed this Drought Contingency and Emergency Management Plan pursuant to TCEQ guidelines and requirements (see Appendix A, TAC Title 30, Chapter 288, Subchapter B, Rules 288.20 and 288.22. respectively).

The Drought Contingency and Emergency Management Plan (the Plan) address strategies designed to temporarily reduce water use in response to specific conditions as follows:

- To conserve the available water supply in times of drought or emergency
- To maintain supplies for domestic water use, sanitation, and fire protection
- To protect and preserve public health, welfare, and safety
- To minimize the adverse impacts of water supply shortages
- To minimize the adverse impacts of emergency water supply conditions

The main objective of this Drought Contingency and Emergency Management Plan is to have mechanisms in place to preserve supplies for essential uses under drought, water supply shortage, water emergency conditions, or other supply interruptions. This Plan has been developed in concert with the model plans for the NTMWD Member Cities and Customers, as well as coordination with other regional water suppliers. It should be noted that the effectiveness of the Plan is impacted by the availability and allocation of the water supply during water supply shortages and the level of customer compliance with the strategies outlined in this Plan. These factors are dynamic and, if circumstances warrant, modifications to the strategies may be necessary. Therefore, this Plan, as approved by City Council, gives the City Manager the authority to modify the strategies in the Plan as conditions warrant.

Water uses regulated or prohibited under this Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions is deemed to constitute a waste of water which subjects the violator(s) to penalties as provided in Section 16-13, Chapter 16 of the Code of the City of Mesquite, Texas. (See Appendix D)

The City of Mesquite is located on the eastern edge of Dallas County, and is bordered by the cities of Dallas, Garland, Sunnyvale, and Balch Springs. As of December 31, 2014 the City's current population is 142,210, with a total of 54,000 metered water utility connections. The City currently operates three pumping facilities at Barnes Bridge (North), Hailey (Central), and Southeast Mesquite (South). The ground storage capacity is 24.5 million gallons. The City also utilizes elevated storage tanks to meet peak-day water demands, replenishing the storage when the demand is lower. These towers, located at Town East, Big Town, McKenzie, and Peachtree, have a total storage capacity of 9.5 million gallons. The total combined system has a pumping capacity of approximately 64 million gallons.

The City purchases treated water from the North Texas Municipal Water District (NTMWD or the District). The NTMWD is a regional wholesale supplier for 13 Member Cities and numerous other customers in Collin, Dallas, Denton, Rockwall, Kaufman, Hunt, and Rains Counties in North Central Texas. The City provides wholesale water to Kaufman County MUD 9-12.

## 2. DEFINITIONS

- 1. AQUATIC LIFE means organisms dependent upon an aquatic environment to sustain its life.
- 2. ATHLETIC FIELD means a sports playing 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.
- 3. CITY MANAGER means the City Manager of the City of Mesquite, Texas, or designee.
- 4. COMMERCIAL FACILITY means business or industrial buildings and the associated landscaping, but does not include the fairways, greens, or tees of a golf course.
- 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 and others.
- 6. COSMETIC POWER WASHING means treatment or cleaning of a surface with specialized equipment that uses a spray of or directed water for the cosmetic cleaning of buildings, vehicles or other mobile equipment, or outdoor surfaces. It does not include industrial cleaning, cleaning associated with manufacturing activities, hazardous or toxic waste cleaning, or cleaning necessary to remove graffiti.
- DESIGNATED OUTDOOR WATER USE DAY means a day prescribed by rule on which a person is permitted to water outdoors.
- 8. DRIP IRRIGATION sometimes known as trickle irrigation, or micro-irrigation, is a method of low volume, low pressure water application on the landscape from a series of valves, pipes, tubes and emitters delivering water at a rate of 0.16 up to 4 gallons per hour (GPH).
- DROUGHT, for the purposes of this report, means an extended period of time when an area
  receives insufficient amounts of rainfall to replenish the water supply, causing water supply
  sources (in this case reservoirs) to be depleted.
- 10. EVAPOTRANSPIRATION abbreviated as ET represents the amount of water lost from plant material and soils through transpiration and evaporation. The amount of ET can be estimated based on the temperature, wind, and relative humidity.
- 11. 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.
- 12. 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.

- 13. FOUNDATION WATERING means an application of water to the soils directly abutting the foundation of a building or structure.
- 14. GOVERNMENT PROPERTY means a property owned or operated by a federal, state, or local governmental unit, entity, agency, or subdivision for public purpose.
- 15. HOSE-END SPRINKLER means an above-ground water distribution device that may be attached to a garden hose<sup>3</sup>.
- 16. MULTI-FAMILY PROPERTY means a property containing five or more dwelling units.
- 17. NEW LANDSCAPING means living vegetation comprised of turf grasses, trees, shrubs, groundcovers, and annual or perennial herbaceous plants used ornamentally. Does not include fruits or vegetables.
- 18. ORNAMENTAL FOUNTAIN means an artificially created structure from which a jet, stream, or flow of water emanates and is not utilized for the preservation of aquatic life.
- 19. PERMANANTLY INSTALLED IRRIGATION SYSTEM means a custom-made, site-specific system of delivering water generally for landscape irrigation via a system of pipes or other conduits, valves, heads, or other equipment installed below ground.
- 20. POND is a still body of water with a surface area of 500 square feet or more.
- 21. RAIN/FREEZE SENSOR means a device designed to stop the flow of water to an automatic irrigation system when rainfall or freeze event has been detected.
- 22. 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.
- 23. RESIDENTIAL FACILITY means a site with four or fewer dwelling units.
- 24. 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<sup>6</sup>.
- 25. SOAKER HOSE means a perforated or permeable garden-type hose or pipe that is laid above ground that provides irrigation at a slow and constant rate.
- 26. SWIMMING POOL means any structure, basin, chamber, or tank including hot tubs, containing an artificial body of water for swimming, diving, or recreational bathing, and having a depth of two (2) feet or more at any point.
- 27. 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 TCA Chapter 288.1 shall be credited against total diversion volumes for the purposes of calculating gpcd for targets and goals. (TAC Chapter 288.1)
- 28. VEGETABLE/COMMUNITY GARDEN means any non-commercial vegetable garden planted primarily for household use; "non-commercial" includes incidental direct selling of produce from such a vegetable garden to the public.
- 29. VEHICLE WASH FACILITY means a permanently-located business that washes vehicles or other mobile equipment with water or water-based products, including but not limited to self-service car washes, full service car washes, roll-over/in-bay style car washes, and facilities managing vehicle fleets or vehicle inventory.
- 30. WATER SHORTAGE means a condition in which existing or projected water supply or delivery available to City customers is not anticipated to meet, or cannot meet, the ordinary water requirements of these customers.
- 31. WHOLESALE WATER CUSTOMER means any water supplier that receives all or a portion of its treated water supply directly from the City of Mesquite.

## 3. DROUGHT CONTINGENCY AND EMERGENCY MANAGEMENT PLAN

## 3.1 Introduction

The Drought Contingency and Emergency Management Plan (Plan) is intended to provide short-term water savings during drought or emergency conditions. The purpose of this Plan is as follows:

- To conserve the available water supply in times of drought, water supply shortage, and emergency
- To maintain supplies for domestic water use, sanitation, and fire protection
- To protect and preserve public health, welfare, and safety
- To minimize the adverse impacts of water supply shortages
- To minimize the adverse impacts of emergency water supply conditions

In the absence of drought response measures, demand tends to increase during a drought due to increased demand for lawn irrigation. The severity of a drought depends on the degree of depletion of supplies and on the relationship of demand to available supplies. The City receives all treated water from NTMWD. The NTMWD considers a drought to end when all of its supply reservoirs refill to near conservation storage pool level.

It is important to note that a water supply shortage can be the result of drought or the result of conditions which may render all or some portion of the water supply unavailable. These conditions can include but are not limited to presence of invasive species, contamination of the water supply, or infrastructure failure.

The Drought Contingency and Emergency Management Plan applies to all metered water users utilizing the City of Mesquite's public water supply and consists of **three (3) stages** and will be initiated based on criteria set forth in the Plan.

## 3.2 Provisions to Inform the Public and Opportunity for Public Input

Opportunity for the public and our wholesale water customer(s) to provide input in the development of this Plan was provided by the City of Mesquite by the following means:

- Providing written notice of the proposed plan and the opportunity to comment on the plan through the local newspaper, the City of Mesquite website, and posted notice
- Holding public meetings for input on the Plan at Mesquite City Hall on September 8 and September 21, 2015
- Making the plan available to the public through the City website and the NTMWD's web site
- Notifying wholesale customer(s) of the proposed plan
- · Providing a copy of the draft version of this Plan to any person requesting it
- Notifying local organizations, schools, and civic groups in both the City of Mesquite and our wholesale customer(s) that staff are available to make presentations on the Plan (in conjunction with presentations on water conservation programs)

At any time that the Plan is activated or the Plan changes, the City will notify local media of the issues, the management stage (if applicable), and the specific actions required of the public. The information will also be publicized on the City's web site and through other media outlets. Billing inserts will also be used as appropriate.

## 3.3 Public Education

The City will periodically provide the public and its wholesale water customer(s) with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of, but not limited to, an appropriate combination of the following items:

- Public service announcements on cable television and radio
- Newspaper articles and announcements
- Press releases, media alerts, and social media
- Water Conservation/Drought Contingency Hotline
- Water Conservation/Drought Contingency website
- Messages in utility bills
- Distribution of fact sheets, brochures, and pamphlets
- Mass mailings of notification letters
- Public meetings and education seminars
- Commercial, industrial, and institutional education seminars

## 3.4 Initiation and Termination of Management Stages

The City will initiate and terminate stages of this plan as requested by the NTMWD, provided however, that the City Manager may also initiate stages based on a city-wide emergency as described in this plan. In addition, the City Manager may impose alternative provisions, mandatory requirements, and restrictions within each stage which may be more or less restrictive than specified herein based on existing or projected conditions including but not limited to, changes in the City's distribution system, water quality concerns to protect the public health and safety, supply interruptions, or the need for additional water use reduction. Below are the NTMWD's and the City's criteria for initiation and termination of the stages of the plan.

## Initiation of a Drought Contingency/Emergency Management Stage

The following actions will be taken when a drought stage is initiated:

- The public and retail water customers will be notified through local media that provides details
  of the reasons for initiation of the management stage
- Wholesale water customer(s) will be notified by mail, email, or telephone, or certified mail

- If any mandatory provisions of the Plan are activated, the City will notify the Executive Director of the NTMWD and TCEQ within 5 business days
- The Executive Director or City Manager may decide not to order the implementation of a
  management stage even though one or more of the trigger criteria for the stage is met Factors
  which could influence such a decision include, but are not limited to, the time of the year,
  weather conditions, the anticipation of replenished water supplies, or the anticipation that
  additional facilities will become available to meet needs
- In the event of a City-wide emergency, the order shall be made by public announcement in the City within twenty-four hours on implementation. In the event of an emergency of limited geographically extent, door-to-door notification shall be made by door hangers and/or in person, at which time the City Manager authorized state of emergency shall become immediately effective. Once an emergency has been declared, the City Manager may utilize supplemental public notifications including notices posted at City Hall, Civic Centers, libraries, fire stations, post offices, major supermarkets, schools, major corporate centers, Chamber of Commerce, direct mail, television, radio, internet website announcement, social media, local television news, newspaper, and other news media to notify the public

## **Termination of a Management Stage**

The NTMWD may order the termination of a management stage when the District determines that conditions for termination of the respective stage are met. The following actions will be taken when a drought contingency and water emergency stage is terminated:

- The public and retail water customers will be notified through local media
- Wholesale water customer(s) will be notified by mail, email, or telephone, or certified mail
- When any mandatory provisions of the Plan that have been activated are terminated, the City will notify the Executive Director of the NTMWD and TCEQ within 5 business days
- The Executive Director or City Manager may decide not to order the termination of a
  management stage even though the conditions for termination of the stage are met. Factors
  which could influence such a decision include, but are not limited to, the time of the year,
  weather conditions, or the anticipation of potential changed conditions that warrant the
  continuation of the management stage

## 3.5 Initiation and Termination Conditions for Stage One (1)

Stage 1 may be initiated by the NTMWD if one or more of the following conditions exist:

- Water demand is projected to approach the limit of the permitted supply
- The storage level in Lavon Lake is less than 55 percent of the total conservation pool capacity
- NTMWD's storage in Jim Chapman Lake is less than 55 percent of the total conservation pool capacity
- The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a mild drought

- NTMWD has concern that Lake Texoma, the East Fork Raw Water Supply Project, or some other
   NTMWD source may be limited in availability within the next 6 months
- Water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days
- Water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate
- Supply source becomes contaminated
- Supply source is interrupted or unavailable due to invasive species
- Water supply system is unable to deliver water due to the failure or damage of major water system components

In addition to NTMWD triggers provided above, in the event of a city-wide emergency, the City Manager shall order implementation of Stage 1 restrictions. The order shall be initiated by public announcement in the manner provided in Section 3.4 within twenty-four hours of implementation. A city-wide emergency may be triggered in any of the following ways:

- The City's water demand exceeds 90 percent of the amount that can be delivered to customers for three consecutive days
- The City's water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate
- The City's water supply source becomes contaminated
- The City's water supply system is unable to deliver water due to the failure or damage of major water system components
- The City's water system experiences overhead water storage levels incapable of filling above 80 percent for three consecutive days

Stage 1 may be terminated by the City Manager when NTMWD terminates its Stage 1 condition or when the City Manager determines that the circumstances causing the initiation of Stage 1 no longer exist.

### Goal for Use Reduction and Actions Available under Stage 1

The goal for water use reduction under Stage 1 is a **five percent (5%) reduction** in the amount of water obtained from NTMWD. If circumstances warrant or if required by NTMWD, the City Manager can set a goal for greater or lesser water use reduction in the City. The City Manager may order the implementation of any/all of the actions listed below, as deemed necessary to achieve a five percent reduction. Stage One includes implementation of the following management measures:

- Continue all actions in the water conservation plan
- Notify wholesale customers of actions being taken and implement similar procedures
- Further accelerate public education efforts on ways to reduce water use
- Halt non-essential city government water use (examples include street cleaning, vehicle washing, operation of ornamental fountains, etc.)

• Encourage the public to wait until the current drought or emergency situation has passed before establishing new landscaping

### Stage One Mandatory Requirements and Prohibitions (requires notification to TCEQ):

- Limit landscape watering with sprinklers or irrigation systems at each service address to no more than two days per week between April 1 through October 31, and to one day per week, between November 1 through March 31. The City Manager is authorized to determine the most effective manner of implementing this requirement, whether it be by area of the City, by address, or other designation to assure that no undue burden is placed on water supply on the same days of the week. The City Manager shall notify retail and wholesale water customers as provided in Section 3.4 of this Plan. The following are exceptions to the applicable day of week watering limitation:
  - New landscaping associated with new construction may be watered as necessary for 30 days from the date of installation provided that a variance is obtained as provided in this Plan
  - Additional watering of landscapes (excluding lawns), trees, or building foundations may be provided by hand-held hose with a positive shutoff nozzle, dedicated irrigation drip zones, and soaker hoses up to two hours on any day, provided no runoff occurs
  - o Golf courses may water greens and tee boxes without restrictions
  - o Public athletic fields used for competition may be watered twice per week
  - Locations using other sources of water supply only for irrigation may irrigate without day
    of the week restrictions provided proper signage is employed. However, irrigation using
    alternative sources of supply is subject to all other restrictions applicable to this stage
- Prohibit hosing of paved areas, buildings, windows, or structures. Pressure washing of impervious surfaces is allowed

## 3.6 Initiation and Termination Conditions for Stage Two (2)

Stage 2 may be initiated by the NTMWD if one or more of the following conditions exist:

- Water demand is projected to approach the limit of the permitted supply
- The water storage in Lavon Lake is less than 45 percent of the total conservation pool capacity
- NTMWD's storage in Jim Chapman Lake is less than 45 percent of NTMWD's total conservation pool capacity
- The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD (Lake Tawakoni and/or Lake Fork) are in a Moderate drought
- NTMWD has concern that Lake Texoma, the East Fork Raw Water Supply Project, or some other
   NTMWD source may be limited in availability within the next 3 months
- Water demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days
- Water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate

- Supply source becomes contaminated
- Supply source is interrupted or unavailable due to invasive species
- Water supply system is unable to deliver water due to the failure or damage of major water system components

In addition to NTMWD triggers provided above, in the event of a city-wide emergency, the City Manager shall order implementation of Stage 2 restrictions. The order shall be initiated by public announcement in the manner proved in Section 3.4 within twenty-four hours of implementation. A city-wide emergency may be triggered in any of the following ways:

- The City's water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days
- The City's water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate
- The City's water supply source becomes contaminated
- The City's water supply system is unable to deliver water due to the failure or damage of major water system components
- The City's water system experiences overhead water storage levels that do no refill above 65 percent for three consecutive days

Stage 2 may be terminated by the City Manager when NTMWD terminates its Stage 2 condition or when the City Manager determines that the circumstances causing the initiation of Stage 2 no longer exist.

### Goal for Use Reduction and Actions Available under Stage 2

The goal for water use reduction under Stage 2 is a reduction of **ten percent (10%)** in the amount of water obtained from NTMWD. If circumstances warrant or if required by NTMWD, the City Manager can set a goal for greater or lesser water use reduction in the City. The City Manager may order the implementation of any/all of the actions listed below, as deemed necessary to achieve a ten percent reduction. Stage Two includes implementation of the following management measures:

- Continue or initiate any/all actions available under Conservation Plan and Stage 1
- Notify wholesale customer(s) of actions being taken and implement similar procedures

### Stage Two Mandatory Requirements and Prohibitions (requires TCEQ notification):

• Limit landscape watering with sprinklers or irrigation systems at each service address to one day per week between April 1 – October 31 and to one day every other week between November 1 through March 31. The City Manager is authorized to determine the most effective manner of implementing this requirement, whether it be by area of the City, by address, or other designation to assure that no undue burden is placed on water supply on the same days of the week. The City Manager shall notify retail and wholesale water customers as provided in Section 3.4 of this Plan. The following are exceptions to the applicable day of week watering limitation:

- New landscaping associated with new construction may be watered as necessary for 30 days from the date of installation provided that a variance is obtained as set forth in this Plan
- O Trees, within a 10 foot radius of its trunk; shrubs; and building foundations may be watered up to two hours on designated days, as determined by City Manager, by hand-held hose, a dedicated irrigation drip zone, and/or a soaker hose provided no runoff occurs
- Public athletic fields used for competition may be watered twice per week, unless further reductions become necessary
- o Golf course greens and tee boxes may be watered as needed
- Locations using other sources of water supply only for irrigation may irrigate without day
  of the week restrictions provided proper signage is employed. However, irrigation using
  alternative sources of supply is subject to all other restrictions applicable to this stage
- Prohibit new sod, hydro seeding, hydro mulching, and sprigging. Exception is for new construction provided that a variance is obtained as set forth in this Plan
- Existing private and public pools may add water to replace normal water loss but may not be
  drained and refilled. In the event of structural damage that is causing significant water loss, a
  variance may be obtained as set forth in this plan to drain and refill in order to repair cracks, leaks,
  or equipment to prevent further water loss
- Prohibit hosing of paved areas, buildings, structures, or windows except for commercial pressure washing of impervious surfaces for human health and safety purposes
- Vehicle wash fundraisers may only be conducted at commercial car washing facilities using the facility's equipment, provided that the owner's permission is obtained. Excessive runoff is not allowed
- Prohibit the operation of all spray ground water parks or other water spray recreation activities that do not treat and recirculate water
- Initiate a rate surcharge as requested by NTMWD or as deemed necessary by the City Manager

## 3.7 Initiation and Termination Conditions for Stage Three (3)

Stage 3 may be initiated by the NTMWD if one or more of the following conditions exist:

- Water demand is projected to approach or exceed the limit of the permitted supply
- The storage in Lavon Lake is less than 35 percent of the total conservation pool capacity
- NTMWD's storage in Jim Chapman Lake is less than 35 percent of NTMWD's total conservation pool capacity
- The Sabine River Authority has indicated that its Upper Basin water supplies used by NTMWD
  (Lake Tawakoni and/or Lake Fork) are in a severe drought. (Measures required by SRA under a
  severe drought designation are similar to those under NTMWD's Stage 3)
- The supply from Lake Texoma, the East Fork Raw Water Supply Project, or some other NTMWD source has become limited in availability
- Water demand exceeds the amount that can be delivered to customers

- Water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate
- Supply source becomes contaminated
- Water supply system is unable to deliver water due to the failure or damage of major water system components

In addition to NTMWD triggers provided above, in the event of a city-wide emergency, the City Manager shall order implementation of Stage 3 restrictions. The order shall be initiated by public announcement in the manner provided in Section 3.4 within twenty-four hours on implementation. A city-wide emergency may be triggered in any of the following ways:

- The City's water demand exceeds the amount that can be delivered to customers
- The City's water demand for all or part of the delivery system seriously exceeds delivery capacity because the delivery capacity is inadequate
- The City's water supply source becomes contaminated
- The City's water supply system is unable to deliver water due to the failure or damage of major water system components
- The City's water system experiences water storage levels incapable of filling above 40 percent for three consecutive days

Stage 3 may be terminated by the City Manager when NTMWD terminates its Stage 3 condition or when the City Manager determines that the circumstances causing the initiation of Stage no longer exist.

#### Goal for Use Reduction and Actions Available under Stage 3

The goal for water use reduction under Stage 3 is a reduction of whatever amount is necessary in the amount of water obtained from NTMWD from the previous annual payment period prior to drought restrictions. If circumstances warrant or if required by NTMWD, the City Manager can set a goal for greater or lesser water use reduction. The City Manager may order the implementation of any/all of the actions listed below, as deemed necessary to achieve the necessary reduction. Stage 3 includes implementation of the following management measures:

- Continue or initiate any actions available under Conservation Plan, Stage 1 and Stage 2
- Notify wholesale customers of actions being taken to implement similar procedures
- No new contract for a new wholesale customer shall be entertained unless there is an emergency situation

#### Stage 3 Mandatory Requirements and Prohibitions (requires TCEQ notification):

- Prohibit all commercial and residential landscape/lawn watering. Trees, within a 10 foot radius
  of its trunk, and building foundations may be watered up to two hours on designated days, as
  determined by City Manager, by a dedicated irrigation drip zone and/or a soaker hose provided
  no runoff occurs
- Prohibit installation of new landscaping, new sod, hydro seeding, hydro mulching, and sprigging

- Prohibit hosing of paved areas, buildings, windows, or structures, except for pressure washing of impervious surfaces for human health and safety
- Watering of golf courses and athletic fields used for competition with potable water is prohibited unless a variance is obtained as set forth in this Plan
- Prohibit operation of all ornamental fountains or ponds that use potable water except where supporting aquatic life or where physical damage may occur
- Prohibit the filling, draining and refilling of existing swimming pools except to maintain structural
  integrity, proper operation and maintenance, or to alleviate a public safety risk. Existing pools
  may add water to replace losses from normal use and evaporation. Permitting of new swimming
  pools is prohibited
- Prohibit washing of vehicles except at commercial car wash facilities
- Prohibit the operation of interactive water features such as water sprays, dancing water jets, waterfalls, dumping buckets, shooting water cannons, or splash pads that are maintained for public recreation
- If necessary, require all commercial water users to reduce water use by a percentage established by the City Manager
- Initiate a rate surcharge as requested by NTMWD or as deemed necessary by the City Manager

#### 3.8 Emergency Water Management

In the event that initiation of Stage 3 measures do not provide sufficient conservation measures to maintain supplies for domestic water use, sanitation, and fire protection or protect and preserve health, welfare and safety, the City Manager may set forth additional measures necessary including, but not limited to, temporary prohibitions on certain aspects of new building and developments, water rationing, or locking irrigation systems to prevent use.

## 3.9 Procedure for Curtailment of Water Supplies

Any mandatory reduction to deliveries from NTMWD to its Member Cities and Customers shall be distributed as required by Texas Water Code §11.039. In addition, every wholesale water supply contract entered into or renewed after adoption of this plan, including contract extensions, shall include a provision that water will be distributed on a pro rata basis in accordance with Texas Water Code §11.039 in case of a water shortage resulting from drought or water emergency. If a shortage of water results from drought, accident, or other cause, the water to be distributed shall be divided among all customers pro rata, including the City's wholesale customer(s), according to the amount each may be entitled to, so that preference is given to no one.

#### 3.10 Wholesale Water Contracts

Any wholesale water contract entered into or renewed after the adoption of this Plan, including any contract extensions, will contain language that in case of shortage of water resulting from a drought,

accident, loss of supply, or other cause, the water to be distributed shall be divided in accordance with Texas Water Code §11.039.

## 3.11 Procedure for Granting Variances to the Plan

Procedures for granting variances to the Plan are outlined in Section 16-13, Chapter 16 of the Code of the City of Mesquite, Texas. (See Appendix D).

## 3.12 Enforcement of Mandatory Water Use Restrictions

Procedures for the enforcement of mandatory water use restrictions, notice of violations, fines and penalties are outlined in Section 16-13, Chapter 16 of the Code of the City of Mesquite, Texas. (See Appendix D).

The City Manager is authorized to implement the applicable provisions of this Plan to protect public health, safety, and welfare. The City Manager shall have the authority to initiate or terminate drought or other emergency response measures as described in this Plan. The authority to implement and enforce this Plan is established in Chapter 16 of the Code of the City of Mesquite, Texas (see Appendix D).

## 3.13 Severability

It is hereby declared to be the intention of the City that the sections, paragraphs, sentences, clauses and phrases of this Plan are severable and if any phrase, clause, sentence, paragraph or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Plan.

## 3.14 Coordination with the Regional Water Planning Groups

In cooperation with other NTMWD member cities and other regional water providers, this Plan includes a three-stage drought plan, rather than the previous four-stage plan. Regional water providers, including the North Texas Municipal Water District, Tarrant Regional Water District, Upper Trinity River Water District, and the Dallas Water Utilities, have all adopted the three-stage drought plan. The City of Mesquite will provide a copy of this Plan to the Chairs of the Region C and Region D water planning groups (see transmittal letters in Appendix C) and will continue to work with the regional planning groups to improve efficient utilization of existing water resources and water conservation practices.

# 3.15 Review and Update of Drought Contingency and Emergency Management Plan

As required by TCEQ rules, the City of Mesquite will review this Plan every five years. The plan will be updated as appropriate based on new or updated information.

## 3.16 Adoption of the Plan

Appendix D contains a copy of the formal adoption of the Drought Contingency and Emergency Management Plan through Ordinance No. 4383, approved on September 21, 2015 by Mesquite City Council.

#### APPENDIX A

## **Texas Administrative Code**

TITLE 30 ENVIRONMENTAL QUALITY

<u>PART 1</u> TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT CONTINGENCY

PLANS, GUIDELINES AND REQUIREMENTS

SUBCHAPTER B DROUGHT CONTINGENCY PLANS

RULE §288.20 Drought Contingency Plans for Municipal Uses by Public Water

**Suppliers** 

- (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:
      - (if) 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.

## **Texas Administrative Code**

TITLE 30 ENVIRONMENTAL QUALITY

PART 1 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CHAPTER 288 WATER CONSERVATION PLANS, DROUGHT CONTINGENCY

PLANS, GUIDELINES AND REQUIREMENTS

SUBCHAPTER B DROUGHT CONTINGENCY PLANS

RULE §288.22 Drought Contingency Plans for Wholesale Water Suppliers

(a) A drought contingency plan for a wholesale water supplier must include the following minimum elements.

- (1) Preparation of the plan shall include provisions to actively inform the public and to affirmatively provide opportunity for user input in the preparation of the plan and for informing wholesale customers about the plan. 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.
- (2) The drought contingency plan must document coordination with the regional water planning groups for the service area of the wholesale public water supplier to ensure consistency with the appropriate approved regional water plans.
- (3) 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.
- (4) The drought contingency plan must include a minimum of three drought or emergency response stages providing for the implementation of measures in response to water supply conditions during a repeat of the drought-of-record.
- (5) The drought contingency plan must include the procedures to be followed for the initiation or termination of drought response stages, including procedures for notification of wholesale customers regarding the initiation or termination of drought response stages.
- (6) 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 paragraph are not enforceable.

- (7) 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:
- (A) pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, §11.039; and
- (B) utilization of alternative water sources 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.).
- (8) The drought contingency plan must include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039.
- (9) The drought contingency plan must include procedures for granting variances to the plan.
- (10) The drought contingency plan must include procedures for the enforcement of any mandatory water use restrictions including specification of penalties (e.g., liquidated damages, water rate surcharges, discontinuation of service) for violations of such restrictions.
- (b) The wholesale public 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 wholesale 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 adoption or revision of the regional water plan.

**Source Note:** The provisions of this §288.22 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

#### APPENDIX B

#### WATER CODE

#### TITLE 2. WATER ADMINISTRATION

#### SUBTITLE B. WATER RIGHTS

#### CHAPTER 11. WATER RIGHTS

Sec. §11.039. DISTRIBUTION OF WATER DURING SHORTAGE. (a) If a shortage of water in a water supply not covered by a water conservation plan prepared in compliance with Texas Natural Resource Conservation Commission or Texas Water Development Board rules results from drought, accident, or other cause, the water to be distributed shall be divided among all customers pro rata, according to the amount each may be entitled to, so that preference is given to no one and everyone suffers alike.

- (b) If a shortage of water in a water supply covered by a water conservation plan prepared in compliance with Texas Natural Resource Conservation Commission or Texas Water Development Board rules results from drought, accident, or other cause, the person, association of persons, or corporation owning or controlling the water shall divide the water to be distributed among all customers pro rata, according to:
  - (1) the amount of water to which each customer may be entitled; or
- (2) the amount of water to which each customer may be entitled, less the amount of water the customer would have saved if the customer had operated its water system in compliance with the water conservation plan.
- (c) Nothing in Subsection (a) or (b) precludes the person, association of persons, or corporation owning or controlling the water from supplying water to a person who has a prior vested right to the water under the laws of this state.

Amended by Acts 1977, 65th Leg., p. 2207, ch. 870, Sec. 1, eff. Sept. 1, 1977; Acts 2001, 77th Leg., ch. 1126, Sec. 1, eff. June 15, 2001.

## **APPENDIX C**

Letters to Region C and Region D Water Planning Groups



September 30, 2015

Jo M. (Jody) Puckett, P.E. Chair, Region C Water Planning Group 1500 Marilla, Suite 4AN Dallas, Texas 75201

Re: Water Conservation Plan and Drought Contingency & Emergency Management Plan for

the City of Mesquite, Texas

Dear Ms. Puckett:

Enclosed please find a copy of the recently adopted Water Conservation Plan and the Drought Contingency and Emergency Management Plan for the City of Mesquite, Texas.

This Plan is being submitted to the Region C Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

The City of Mesquite City Council adopted these plans through Ordinance 4383 on September 21, 2015. Should you have any questions, please direct them to Kathy Fonville, Water Conservation Coordinator, at 972-329-8300.

Sincerely,

Michael Screws, Manager

**Utilities Division** 

**Enclosures** 

cc: Resource Protection Team, TCEQ

Texas Water Development Board Region D Water Planning Group

North Texas Municipal Water District



September 30, 2015

Linda Price, Chair Region D Water Planning Group P.O. Box 360 Linden, Texas 75563

Re: Water Conservation Plan and Drought Contingency & Emergency Management Plan for

the City of Mesquite, Texas

Dear Ms. Price:

Enclosed please find a copy of the recently adopted Water Conservation Plan and the Drought Contingency & Emergency Management Plan for the City of Mesquite, Texas.

This Plan is being submitted to the Region D Water Planning Group in accordance with the Texas Water Development Board and Texas Commission on Environmental Quality rules.

The City of Mesquite City Council adopted these plans through Ordinance 4383 on September 21, 2015. Should you have any questions, please direct them to Kathy Fonville, Water Conservation Coordinator, at 972-329-8300.

Sincerely,

Michael Screws, Manager

**Utilities Division** 

Enclosures

cc: Resource Protection Team, TCEQ

Texas Water Development Board Region C Water Planning Group

North Texas Municipal Water District

## APPENDIX D

Ordinance adopting Drought Contingency and Emergency Management Plan

## ORDINANCE NO. 4383

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS, AMENDING CHAPTER 16 OF THE CODE OF THE CITY OF MESQUITE, TEXAS, AS AMENDED, BY DELETING SECTIONS 16-12, 16-13 AND 16-14 IN THEIR ENTIRETY AND ADDING NEW SECTIONS 16-12 AND 16-13; THEREBY ADOPTING THE SEPTEMBER 2015 WATER CONSERVATION PLAN AND THE SEPTEMBER 2015 DROUGHT CONTINGENCY AND **EMERGENCY** MANAGEMENT PLAN; PROVIDING A REPEALER CLAUSE: PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING FOR A PENALTY NOT TO EXCEED TWO THOUSAND (\$2,000.00) DOLLARS FOR EACH OFFENSE.

WHEREAS, on June 7, 1999, the City Council of the City of Mesquite ("City Council") duly passed Ordinance No. 3302, adopting the Water Conservation and Drought Contingency Plans (the "Plans"); and

WHEREAS, on May 1, 2006, the City Council duly passed Ordinance No. 3801, amending the Plans; and

WHEREAS, on June 5, 2006, the City Council duly passed Ordinance No. 3806, amending the Plans; and

WHEREAS, on June 18, 2007, the City Council duly passed Ordinance No. 3871, amending the Plans; and

WHEREAS, on May 19, 2008, the City Council duly passed Ordinance No. 3954, amending the Plans; and

WHEREAS, on April 20, 2009, the City Council duly passed Ordinance No. 4043, amending the Plans; and

WHEREAS, on October 17, 2011, the City Council duly passed Ordinance No. 4179, amending the Plans; and

WHEREAS, on April 21, 2014, the City Council duly passed Ordinance No. 4307, amending the Water Conservation Plan; and

WHEREAS, on July 21, 2014, the City Council duly passed Ordinance No. 4321, amending the Drought Contingency Plan; and

WHEREAS, the City Council has reviewed the September 2015 Water Conservation Plan, attached as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached as Exhibit "B," and incorporated herein by reference as if fully set forth in full, a copy of each Plan is on file in the office of the City Secretary, and finds it is in the best interest of the City to adopt the same.

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NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE, TEXAS:

SECTION 1. That the September 2015 Water Conservation Plan, attached hereto as Exhibit "A," and the September 2015 Drought Contingency and Emergency Management Plan, attached hereto as Exhibit "B," are hereby adopted as the official policies of the City of Mesquite.

SECTION 2. That Chapter 16 of the Code of the City of Mesquite, Texas, as amended, is hereby amended by deleting Sections 16-12, 16-13 and 16-14 in their entirety and adding new Sections 16-12 and 16-13 to read as follows, in all other respects said Code and Chapter to remain in full force and effect:

## Sec. 16-12. Adoption of Water Conservation Plan and Drought Contingency and Emergency Management Plan.

That the City Council of the City of Mesquite hereby adopts the September 2015 City of Mesquite Water Conservation Plan and the September 2015 Drought Contingency and Emergency Management Plan, which are incorporated herein by reference as if set forth in full. A copy of each Plan shall be kept on file in the office of the City Secretary. The City Manager is authorized to order that the appropriate stage of emergency response, as detailed in the emergency water management plan, be implemented. To be effective, the order must be:

- (a) made by public announcement; and
- (b) published in a newspaper of general circulation in the City within 24 hours after the public announcement, which order becomes immediately effective upon publication.

## Sec. 16-13. Violations, discontinuance of service and variances.

- (a) Generally.
  - (1) On the first violation, customers will be given a written warning that they have violated the applicable water use restriction.
  - (2) On the second and subsequent violations, citations may be issued to customers, with maximum fines established by ordinance.
  - (3) After three violations have occurred, in addition to the authority to issue citations, the City may cut off water service to the customer or seek civil remedies in court.
- (b) Violation of Water Conservation Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) a use of water or waste of water contrary to any provision of the adopted Water Conservation Plan or the terms and conditions of a variance approved under the provisions of the Plan;

- (2) the lawn or landscaping at a premises owned by the person or under their control to be watered between the hours of 10:00 a.m. and 6:00 p.m. between April 1 and October 31 of each year;
- (3) watering of lawn or landscaping at a premises owned by the person or under their control by using an irrigation system that is malfunctioning. A malfunctioning irrigation system includes but is not limited to a system with broken heads, lines or similarly damaged equipment that results in defective operation of the system causing the waste of water;
- (4) watering of lawn or landscaping at a premise owned by the person or under their control to be watered during precipitation or below freezing weather conditions or to allow excessive runoff flowing away from property; or
- (5) handwashing of a vehicle using a hose, providing, however, that it is an affirmative defense that a hose end positive shut off nozzle is used.
- (c) Violation of Drought Contingency and Emergency Management Plan. A person commits an offense if he knowingly makes, causes, allows or permits:
  - (1) use of water or waste of water contrary to the measures implemented by the City Manager as prescribed in the adopted Drought Contingency and Emergency Management Plan. For purposes of this subsection, it is presumed that a person has knowingly made, caused or permitted a use of water contrary to the measures implemented if the mandatory measures have been formally ordered consistent with the terms of the Drought Contingency and Emergency Management Plan and:
    - a. the manner of use has been prohibited by the Plan;
    - b. the amount of water used exceeds that allowed by the Plan; or
    - c. the manner or amount used violates the terms and conditions of a variance granted under the provisions of the Plan.
- (d) Penalty. Any person, firm or corporation who violates any term or provision of the adopted Water Conservation Plan or Drought Contingency and Emergency Management Plan incorporated into this code by Section 16-12 or the violations provided by Section 16-13 shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine in accordance with Section 1-6 of the Mesquite City Code for each offense. These criminal penalties may be imposed in addition to any administrative or civil remedy allowed by law. Each day a violation continues shall constitute a separate offense.
- (e) Person defined. For purposes of this section, "person" shall include the owner or other person in control of the property. Proof that the violation occurred shall constitute a rebuttable presumption that the owner or person in control of the property committed the violation. Parents or legal guardians shall be presumed to be responsible for violations of their minor children and proof that a violation,

committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation.

of the Water Conservation Plan or Drought Contingency and Emergency Management Plan at the same premises within a 12-month period, upon due notice sent to them by the City Manager or his designee in the same manner and at the same address as their water bill is sent for the premises where the violations occurred, shall have water service discontinued to the premises where the violations occurred. Such discontinued water service shall be restored only upon payment of a reconnection charge, as established by the City, which shall include all costs incurred by the City in discontinuing service, and upon giving written assurance, on a form provided by the City, that violations will not be repeated. Compliance may also be sought through injunctive relief in the district court.

#### (g) Variances.

- (1) Standard of review. Variances to the Water Conservation Plan and the Drought Contingency and Emergency Management Plan shall be granted or denied at the discretion of the City Manager or his designee. The City Manager may grant a variance if the failure to do so would cause an emergency condition adversely affecting health, sanitation or fire safety for the public or the applicant; compliance with this plan cannot be accomplished due to technical or other limitations; or alternative methods that achieve the same level of reduction in water use can be implemented. If issued, approval of the variance may be subject to reasonable terms and conditions.
- (2) Content of petition. All petitions for variances should be in writing include the following information:
  - a. Name and address of the petitioners.
  - b. Contact email address and telephone number.
  - c. Purpose of water use.
  - d. Specific provisions from which relief is requested.
  - e. Detailed statement of the adverse effect of the provision from which relief is requested.
  - f. Description of the relief requested.
  - g. Period of time for which the variance is sought.
  - h. Other pertinent information.

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- (3) Effect of stage elevation. Variances are considered temporary and must be re-submitted for reconsideration should the drought and emergency response stage elevate from the stage in which the temporary variance was approved to any higher stage of response.
- (4) Revocation of variances. The City Manager may revoke a variance granted when the City Manager determines that:
  - a. the conditions supporting the variance are no longer applicable;
  - b. the terms or conditions of the variance are being violated; or
  - c. the health, safety or welfare of other persons requires revocation.

SECTION 3. That all ordinances or portions thereof in conflict with the provisions of this ordinance, to the extent of such conflict, are hereby repealed. To the extent that such ordinances or portions thereof are not in conflict herewith, the same shall remain in full force and effect.

SECTION 4. That should any word, sentence, clause, paragraph or provision of this ordinance be held to be invalid or unconstitutional, the remaining portions of this ordinance shall remain in full force and effect.

SECTION 5. That any person (as defined in Chapter 1, Section 1-2 of the Code of the City of Mesquite, Texas, as amended) violating any of the provisions or terms of this ordinance shall be deemed to be guilty of a Class C Misdemeanor and upon conviction thereof, shall be subject to a fine not to exceed Two Thousand (\$2,000.00) Dollars for each offense, provided, however, if the maximum penalty provided for by this ordinance for an offense is greater than the maximum penalty provided for the same offense under the laws of the State of Texas, the maximum penalty for violation of this ordinance for such offense shall be the maximum penalty provided by the laws of the State of Texas. Each day or portion of a day any violation of this ordinance continues shall constitute a separate offense.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 21st day of September, 2015.

Stan Pickett Mayor

ATTEST:

City Secretary

APPROVED:

B.J. Smith
City Attorney