ORDINANCE NO. 3871

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS, AMENDING CHAPTER 16 OF THE CODE OF THE CITY OF MESQUITE BY DELETING SECTION 16-10 IN ITS ENTIRETY AND ADDING A NEW SECTION 16-10 THEREBY ADOPTING THE WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN; PROVIDING A REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY NOT TO EXCEED TWO THOUSAND ($2,000.00) DOLLARS FOR EACH OFFENSE; AND DECLARING AN EFFECTIVE DATE THEREOF.

WHEREAS, it has been determined that the City and its water supplier's (North Texas Municipal Water District) ability to maintain water supply, storage reserves, pressure and adequate fire protection capabilities may require restrictions from time to time and/or prohibition be placed on use of outside water; and

WHEREAS, the City desires to reduce yearly per capita water consumption in order to increase the service capacity of the water system.

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

SECTION 1. That Chapter 16 of the Code of the City of Mesquite, Texas, is hereby amended by deleting Section 16-10 in its entirety and adding a new Section 16-10 to read as follows, in all other respects said Code and Chapter to remain in full force and effect.

Sec. 16-10. Water conservation and drought contingency plan adopted.

The Water Conservation and Drought Contingency Plan is hereby adopted as follows:

INTRODUCTION

Water supply has always been a key issue in the development of Texas. In recent years, the growing population and economic development of North Central Texas have led to increasing demands for water supplies. At the same time, local and less expensive sources of water supply are largely developed. Additional supplies to meet higher demands will be expensive and difficult to develop. It is therefore important that we 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. In addition, the Drought Contingency Plan provides procedures for voluntary and mandatory actions to be placed into effect to temporarily reduce the demand placed upon the City's water supply system during a water shortage emergency.

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 TCEQ requirements and guidelines have been utilized in the development of this plan.

PLANNING AREA AND PROJECT DESCRIPTION

The City of Mesquite (the City) is located on the eastern edge of Dallas County and has a current population of 135,894. The City also has a large business and industrial base with planned residential, commercial and industrial zoned areas.

The City's water supply is currently derived from the North Texas Municipal Water District (NTMWD). 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 are located at Town East, Big Town, McKenzie and Peachtree and have a storage capacity of 9.5 million gallons. The total combined system has a pumping capacity of approximately 64 million gallons.

WATER CONSERVATION

PLAN OBJECTIVES

The objectives of this conservation plan are as follows:

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES

The TCEQ rules governing development of water conservation plans for public water suppliers are contained in Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2 of the Texas Administrative Code. The elements in the TCEQ water conservation rules covered in this conservation plan are listed below.

MINIMUM CONSERVATION PLAN REQUIREMENTS

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

- 288.2(a)(1)(A) – Utility Profile
- 288.2(a)(1)(B) – Specification of Goals

- 288.2(a)(1)(C) – Accurate Metering
- 288.2(a)(1)(D) – Universal Metering
- 288.2(a)(1)(E) – Determination and Control of Unaccounted Water
- 288.2(a)(1)(F) – Public Education and Information Program
- 288.2(a)(1)(G) – Non-Promotional Water Rater Structure
- 288.2(a)(1)(H) – Reservoir System Operation Plan
- 288.2(a)(1)(I) – Means of Implementation and Enforcement
- 288.2(a)(1)(J) - Coordination with Regional Water Planning Group

CONSERVATION ADDITIONAL REQUIREMENTS
(Population over 5, 000)

The Texas Administrative Code includes additional requirements for water conservation plans for cities with 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

TCEQ rules list additional optional but not required strategies, which may be included in future conservation planning. These strategies include:

- 288.2(a)(3)(A) – Conservation Oriented Water Rates
- 288.2(a)(3)(D) – Reuse and Recycling of Wastewater
- 288.2(a)(3)(F) – Considerations for Landscape Water Management Regulations

GOALS OF THE PROGRAM

The City will develop and provide copies of a water utility profile to NTMWD and the Texas Water Development Board. The water utility profile is developed utilizing procedures provided by the TCEQ to calculate gallons per capita per day in a dry year. Stated goals based on the water utility profile include:

- Reduction of per capita use by five percent in five years, and six percent in 10 years. The five- and ten-year goals will be measured following completion of calendar years 2010 and 2015. Goals were established utilizing the 2004 Water Utility Profile. This decrease in water consumption will effectively reduce water demands, thereby increasing the service capacity of the water and wastewater systems.
- Maintain the current level of unaccounted for water loss throughout the City system below 12 percent annually. Seek methods of further reducing the percentage of unaccounted for water.
- Continue program of universal metering and meter replacement and repair.
- Raise public awareness of water conservation and encourage responsible water use through a public education and information

program.

- Develop a system specific strategy to conserve water during peak demands, thereby reducing the peak use.

ACCURATE METERING OF TREATED WATER DELIVERIES FROM NTMWD

NTMWD supplies all of the water used by its member cities and customers. Water deliveries are metered by NTMWD using meters with accuracy of plus or minus two percent. These meters are calibrated on a monthly basis by NTMWD to maintain the TCEQ required accuracy of plus or minus five percent.

UNIVERSAL METERING AND METER REPAIR/REPLACEMENT PROGRAM

The City currently requires water meters for most bulk water uses. This includes the use of fire hydrant meters for construction and other purposes. There are some water uses from fire hydrants, however, that go undetected. The City will implement a plan to include estimating non-metered fire hydrant uses including Fire Department uses, and main flushing for both maintenance and new construction. This plan will improve the accuracy of information used in the water audit and leak detection program.

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.

In addition to meters identified by the water accounting program, the City has established a meter testing and replacement program. Meter repair and replacement, coupled with the ongoing water accounting or auditing, will be used in conjunction with other programs such as leak detection and repair to potentially save significant quantities of water.

RECORD MANAGEMENT SYSTEM

As required by TAC Title 30, Part 1, Chapter 288, Subchapter A, Rule 288.2(a)(2)(B), the current water record management system will be modified to allow for separation of water sales into four categories of use. During the next five years the City will move to implement a program desegregating water usage into a minimum of four categories to include residential, commercial, public/institutional and industrial usages.

DETERMINATION AND CONTROL OF UNACCOUNTED WATER

Unaccounted water is the difference between water delivered to the City from NTMWD and metered deliveries plus authorized but unmetered uses such as fire fighting. Unaccounted water can include several categories:

- Inaccuracies in customer meters. (Meters tend to run more slowly as they age and under-report actual use.)
- Accounts that are being used but have not yet been added to the billing system.
- Losses due to water main breaks and leaks in the water distribution system.
- Losses due to illegal connections and theft.
- Other.

Measures to control unaccounted water are part of the routine water operations. Maintenance crews and personnel are asked to look for and report evidence of leaks in the water distribution system. Areas of the water distribution system in which numerous leaks and line breaks occur are targeted for replacement as funds become available. In addition, the water distribution system has been changed from a single pressure plain to a dual pressure plain system. Balancing of water pressures between dual pressure plains assists in controlling water losses.

1. WATER AUDITS AND LEAK DETECTION.

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 has begun, along with the meter-testing program which will aid 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.

2. MONITORING OF EFFECTIVENESS AND EFFICIENCY – ANNUAL WATER CONSERVATION REPORT.

The City will develop an annual water conservation report by March 31 each year. This report will be 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 current year and compares them to historical values. A copy of the annual report will be sent to NTMWD, which will monitor regional water conservation trends.

EDUCATION AND INFORMATION

The City will promote water conservation by informing the public of methods to conserve water. The public education and information campaign on water conservation will include the following elements:

1. INITIAL PROGRAM.

The initial program will include the distribution of educational materials including brochures and/or newsletters to all customers. The information will explain the water conservation program in addition to

methods of conserving water. This initial distribution will be accompanied by a news release in order to distribute the information to a broader audience. The educational materials and news releases will promote water conservation by informing water users about ways to save water inside homes, in landscaping and lawn uses, and in recreational uses. The water conservation methods to be emphasized by the City will include:

- Bathroom water saving hints
- Kitchen water saving hints
- Laundry water saving hints
- Appliance and plumbing practices
- Outdoor water conservation

2. LONG TERM PROGRAM.

The long-term program will include semi-annual distribution of educational materials and news releases corresponding to seasonal peak demand periods. The news releases will be used to provide information on water conserving practices, encourage water conservation and report progress on achieving the City's water conservation goal. Other news releases may be used if conditions warrant.

Notify local organizations, schools, and civic groups that either City or NTMWD staff is available to make presentations on the importance of water conservation and ways to save water.

Information on water conservation will be available on the City website including links to the *Texas Smartscape* website and to other information on water conservation on the Texas Water Development Board (TWDB) and TCEQ websites.

As a regional water supplier, the NTMWD has made the "Learning to Be Water Wise" educational materials for fifth grade students available to local school districts. This program contains individual kits and activities to educate students on the importance of water and water conservation activities in the community and in their homes. In addition, the NTMWD has contracted with an advertising agency, EnviroMedia Inc., to develop a water conservation campaign for all member cities.

3. NEW CUSTOMER PROGRAM.

New customers will receive the initial conservation education material that describes the conservation program and other general conservation information when they apply for service. This information will be included in the newcomer packet.

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." In future water rate studies, consideration will be given to a block-rate structure of billing to encourage water use efficiency and conservation.

OTHER WATER CONSERVATION MEASURES

WATER CONSERVATION PLUMBING CODE

The City of Mesquite plumbing regulations include water saving plumbing requirements and standards. The standards for residential and commercial fixtures are established as summarized below:

• Tank-type toilets	No more than 1.6 gallons per flush
• Flush valve toilets	No more than 1.6 gallons per flush
• Tank-type urinals	No more than 2.0 gallons per flush
• Flush valve urinals	No more than 1.0 gallons per flush
• Shower heads	No more than 2.7 gallons per minute
• Lavatory and kitchen	No more than 2.2 gallons per minute
• Faucets	Flow Restricting Type
• All hot water lines	Insulated
• Swimming pool	New pools must have re-circulating filtration equipment

WATER CONSERVATION PLUMBING RETROFIT

Customers and owners of buildings that do not have water conserving plumbing devices will be encouraged to retrofit their old fixtures. The educational and advertising program will help inform them of the advantages of installing water saving devices as well as the availability of these items. A long-term program goal will be to evaluate programs that might provide incentives for homeowners to retrofit plumbing fixtures.

WATER CONSERVING LANDSCAPING

The public education program will include suggestions on landscaping and irrigation procedures which will result in reduced water consumption and reduced water bills. These practices will be implemented as much as possible on public grounds in order to set an example for the general public. All new irrigation systems shall include rain and freeze sensors. A long-term program goal will be to provide incentives for businesses and homeowners to install water saving irrigation systems and retrofit existing systems with rain and freeze sensors. The City will develop landscape management requirements to limit misuse and waste of water used for landscaping purposes.

RECYCLING AND REUSE

At the present time the City has few water recycling and reuse processes. A long-term goal of the Water Conservation Program will be to encourage and provide incentives for the utilization of water reuse for certain types of activities.

RESERVIOR SYSTEM OPERATION PLAN

The City purchases treated water from NTMWD and does not have surface water supplies for which to implement a reservoir system operation plan. NTMWD's permits do allow some coordinated operation of its reservoirs, and NTMWD is seeking additional water rights for coordinated operation to optimize its available water supplies.

REQUIREMENT FOR WATER CONSERVATION PLANS BY WHOLESALE CUSTOMERS

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

COORDINATION WITH REGIONAL PLANNING GROUP

A copy of this plan and the utility profile shall be delivered to both the NTMWD and the Chair of the Region C water planning group. In addition, future modifications to the plan or utility profile will be forwarded to NTMWD and the Region C planning group.

IMPLEMENTATION

The City Manager or his designee will act as the Administrator of the Water Conservation and Drought Contingency Plan. The Administrator will oversee the execution and implementation of all elements of the plan. They will also be responsible to oversee the keeping of adequate records for program verification.

As a means to implement the Water Conservation and Drought Contingency Plan, the City has recently implemented the following documents:

- *An ordinance by the City to implement the legal documents necessary to enact this Water Conservation and Drought Contingency Plan.*

- *Enforcement of current Plumbing Code requirements to utilize Water Conservation Fixtures and Devices.*

DROUGHT CONTINGENCY

DECLARATION OF POLICY, PURPOSE AND INTENT

In order to conserve the available water supply in times of drought and emergency; in order to maintain supplies for domestic water use, sanitation and fire protection; in order to protect and preserve public health, welfare and safety; in order to minimize the adverse impacts of water supply shortages; and in order to minimize the adverse impacts of emergency water supply conditions, the following regulations and restrictions on the delivery and consumption of water are hereby adopted.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and the continuation of such uses during times of water shortage or other water supply emergency are deemed to constitute a waste of water that will subject offenders to both civil and criminal fines and penalties.

DEFINITIONS

In this article:

(A) *Aesthetic water use* means water use for ornamental or decorative purposes such as fountains, reflecting pools and water gardens.

(B) *Commercial and institutional water use* means water use that is integral to the operations of commercial and institutional establishments such as retail businesses, hotels and motels, restaurants and office buildings.

(C) *Conservation* means those practices, techniques and technologies that reduce the consumption of water, reduce the loss or waste of water, improve efficiency in the use of water or increase the recycling and reuse of water so that an adequate supply of water is conserved and made available for future or alternative uses.

(D) *Customer* means any person using or receiving water supplied by the City.

(E) *City Manager* means the City Manager of the City of Mesquite, his or her designee, or such other individual to whom the City Manager has appointed the duties and authority under this article.

(F) *Director* means the Director of Public Works of the City of Mesquite.

(G) *Domestic water use* means water use for personal, household or sanitary purposes, such as drinking, bathing, heating, cooking or sanitation, or for cleaning a residence, business, industry or institution.

(H) *Industrial water use* means the use of water in processes designed to convert material of lower value into forms having greater usability and value.

(I) *Landscape irrigation use* means water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.

TRIGGERING CRITERIA FOR INITIATION AND TERMINATION OF DROUGHT RESPONSE STAGES.

(A) The Director shall monitor water supply or demand conditions on a daily basis and may order the implementation of a drought response stage or water emergency when one or more of the trigger conditions for that stage is met. The Director may decide not to order the implementation of a drought response stage or water emergency even though one or more of the trigger criteria for the stage are 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. The reason for this decision shall be documented. When drought stages are imposed by the City's wholesale water provider North Texas Municipal Water District (NTMWD), action shall be initiated by the City and customers. The Director shall endeavor to provide the following actions when a drought stage is initiated:

(1) The public shall be notified by means of publication of notices in a newspaper of general circulation in the City and the City's internet website, by posting notices on the City's public access CATV channel, through customer mailings and by posting signs in City buildings.

(2) NTMWD shall be notified by telephone with a follow-up letter, e-mail or fax that provides details of the reasons for initiation of the drought stage.

(3) The Executive Director of the Texas Commission on Environmental Quality (TCEQ) shall be notified within five business days if any mandatory provisions of the drought contingency plan are activated.

(B) The Plan becomes effective immediately upon the first publication of notice and shall remain in effect until the Director orders the termination of the Plan.

(C) The Director may order the termination of a drought response stage or water emergency when the conditions for termination are met or at their discretion. The Director may decide not to order the termination of a drought response stage or water emergency 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 drought stage. The reason for this decision shall be documented. The Director shall endeavor to provide the following actions when a drought stage is terminated:

(1) The public shall be notified by means of publication of notices in a newspaper of general circulation in the City and the City's internet website, by posting notices on the City's public access CATV channel, through customer mailings and by posting signs in City

buildings.

(2) NTMWD shall be notified by telephone with a follow-up letter, e-mail or fax that provides details of the reasons for the termination of the drought stage.

(3) The Executive Director of the TCEQ shall be notified within five business days that activated mandatory provisions of the drought contingency plan are terminated.

(D) Depending on the circumstances prevailing at the time the Plan is put into effect, the Director may determine that a water shortage or other water supply emergency exists under one of the following stages:

(1) **STAGE 1 – MILD WATER SHORTAGE CONDITIONS**

Requirements for initiation – The Director may initiate voluntary water conservation efforts applicable to a Stage 1 shortage when:

(a) NTMWD notifies the Director that they have initiated Stage 1 conditions, which may have been initiated by the following:

(i) the water level in Lake Lavon has fallen below elevation 484.0 mean sea level (msl) (eight feet below the top of conservation storage);

(ii) the water level in Lake Chapman has fallen below elevation 432.0 msl (eight feet below the top of conservation storage);

(iii) NTMWD has concerns that Lake Texoma or some other NTMWD source may be limited in availability in the next six months;

(iv) The NTMWD Executive Director finds that conditions warrant the declaration of a Stage 1 drought;

(v) NTMWD's demand exceeds 90 percent of the amount that can be delivered to customers for seven consecutive days;

(vi) water demand for all or part of NTMWD's delivery system approaches delivery capacity because delivery capacity is inadequate;

(vii) NTMWD's supply source becomes contaminated;

(viii) NTMWD's water supply system is unable to deliver water due to the failure or damage of major water system components; or

(ix) water use is projected to approach the limit of the permitted supply.

(b) total daily water demand equals 85 percent of the amount

that can be delivered to customers for three consecutive days;

(c) water demand for all or part of the delivery system approaches delivery capacity because delivery capacity is inadequate;

(d) supply source becomes contaminated;

(e) water system is unable to deliver water due to the failure or damage of major water system components; or

(f) the water system experiences continually falling treated water reservoir levels that do not refill above 90 percent overnight for seven consecutive days.

(g) the water system experiences overhead water storage levels that do not refill above 90 percent for three consecutive days.

Requirements for termination – Stage 1 may be rescinded when NTMWD terminates its Stage 1 condition or when all of the above-listed triggering events have ceased to exist for a period of three consecutive days and the Director authorizes the termination of Stage 1.

(2) **STAGE 2 – MODERATE WATER SHORTAGE CONDITIONS**

Requirements for initiation – the Director may initiate restrictions on certain non-essential water uses applicable to a Stage 2 water shortage when:

(a) NTMWD notifies the Director that they have initiated Stage 2 conditions, which may have been initiated by the following:

(i) the water level in Lake Lavon has fallen below elevation 481.0 msl (11 feet below the top of conservation storage);

(ii) the water level of Lake Chapman has fallen below elevation 430.0 msl (10 feet below the top of conservation storage);

(iii) NTMWD has concerns that Lake Texoma or some other NTMWD source may be limited in availability in the next three months;

(iv) The NTMWD Executive Director finds that the conditions warrant the declaration of a Stage 2 drought;

(v) NTMWD's demand exceeds 95 percent of the amount that can be delivered to customers for five consecutive days;

(vi) water demand for all or part of NTMWD's delivery

system equals delivery capacity because delivery capacity is inadequate;

(vii) NTMWD's supply source becomes contaminated;

(viii) NTMWD's water supply system is unable to deliver water due to the failure or damage of major water system components; or

(ix) water use is projected to approach the limit of the permitted supply.

(b) total daily water demand exceeds 90 percent of the amount that can be delivered to customers for three consecutive days;

(c) water demand for all or part of the delivery system equals delivery capacity because delivery capacity is inadequate;

(d) supply source becomes contaminated;

(e) water system is unable to deliver water due to the failure or damage of major water system components; or

(f) the water system experiences continually falling treated water reservoir levels that do not refill above 80 percent overnight for seven consecutive days.

(g) the water system experiences overhead water storage levels that do not refill above 80 percent for three consecutive days.

Requirements for termination – Stage 2 may be rescinded when NTMWD terminates its Stage 2 condition or when all of the above-listed triggering events have ceased to exist for a period of three consecutive days and the Director authorizes the termination of Stage 2. Upon termination of Stage 2, Stage 1 becomes operative until terminated by the Director.

(3) STAGE 3 – SEVERE WATER SHORTAGE CONDITIONS

Requirements for initiation – the Director may initiate restrictions on certain non-essential water uses applicable to a Stage 3 water shortage when:

(a) NTMWD notifies the Director that they have initiated Stage 3 conditions, which may have been initiated by the following:

(i) the water level in Lake Lavon has fallen below elevation 478.0 msl (14 feet below the top of conservation storage);

(ii) the water level in Lake Chapman has fallen below elevation 426.0 msl (14 feet below the top of conservation storage);

(iii) the supply from Lake Texoma or some other NTMWD source has become limited in availability;

(iv) the NTMWD Executive Director finds that conditions warrant the declaration of a Stage 3 drought;

(v) NTMWD's demand exceeds 98 percent of the amount that can be delivered to customers for three consecutive days;

(vi) water demand for all or part of NTMWD's delivery system exceeds delivery capacity because delivery capacity is inadequate;

(vii) NTMWD's supply source becomes contaminated;

(viii) NTMWD's water supply system is unable to deliver water due to the failure or damage of major water system components; or

(ix) water use is projected to approach or exceed the limit of the permitted supply.

(b) total daily water demand exceeds 95 percent of the amount that can be delivered to customers for three consecutive days;

(c) water demand for all or part of the delivery system exceeds delivery capacity because delivery capacity is inadequate;

(d) supply source becomes contaminated;

(e) water system is unable to deliver water due to the failure or damage of major water system components; or

(f) the water system experiences continually falling treated water reservoir levels that do not refill above 65 percent overnight for three consecutive days.

(g) the water system experiences overhead water storage levels that do not refill above 65 percent for three consecutive days.

Requirements for termination – Stage 3 may be rescinded when NTMWD terminates its Stage 3 condition or when all of the above-listed triggering events have ceased to exist for a period of three consecutive days and the Director authorizes the termination of Stage 3. Upon termination of Stage 3, Stage 2 becomes operative until terminated by the Director.

(4) **STAGE 4 – EMERGENCY WATER SHORTAGE CONDITIONS**

Requirements for initiation – the Director may initiate restrictions on certain non-essential water uses applicable to a Stage 4 water shortage when:

(a) NTMWD notifies the Director that they have initiated Stage 4 conditions, which may have been initiated by the following:

(i) the water level in Lake Lavon has fallen below elevation 475.0 msl (17 feet below the top of conservation storage);

(ii) the water level of Lake Chapman has fallen below elevation 423.0 msl (17 feet below the top of conservation storage);

(iii) the supply from Lake Texoma or some other NTMWD source has become severely limited in availability;

(iv) the NTMWD Executive Director finds that conditions warrant the declaration of a Stage 4 drought;

(v) NTMWD demand exceeds the amount that can be delivered to customers;

(vi) water demand for all or part of NTMWD's delivery system seriously exceeds delivery capacity because delivery capacity is inadequate;

(vii) NTMWD's supply source becomes contaminated;

(viii) NTMWD's water supply system is unable to deliver water due to the failure or damage of major water system components; or

(ix) water use is projected to approach or exceed the limit of the permitted supply.

(b) total daily water demand exceeds the amount that can be delivered to customers;

(c) water demand for all or part of the delivery system seriously exceeds delivery capacity because delivery capacity is inadequate;

(d) supply source becomes contaminated;

(e) water supply system is unable to deliver water due to the failure or damage of major water system components; or

(f) the water system experiences continually falling treated water ground and overhead storage does not refill above 40 percent overnight for two consecutive days.

Requirements for termination – Stage 4 may be rescinded when NTMWD terminates its Stage 4 condition or when all of the above-listed triggering events have ceased to exist for a period of three consecutive days and the Director authorizes the termination of Stage 4. Upon termination of Stage 4, Stage 3 becomes operative until terminated by the Director.

DROUGHT STAGE RESPONSES.

Based upon an analysis of water supply and demand conditions and in accordance with the triggering criteria set forth in above, the Director may implement the following responses as appropriate to the water shortage or water emergency being experienced:

(A) STAGE 1 – MILD WATER SHORTAGE REQUIREMENTS

Stage 1 is intended to raise public awareness of potential drought problems.

(1) Customers will be requested to voluntarily practice water conservation and to minimize or discontinue water use for non-essential purposes.

(2) City will increase public education efforts on ways to reduce water use, which may include bulletins posted in public buildings, information posted on the City's website and inserts included in utility bills.

(3) City will review the problems that caused the initiation of Stage 1.

(4) City will notify major water users and work with them to achieve voluntary water use reductions.

(5) City will intensify efforts on leak detection and repair.

(6) City will reduce non-essential City government water use. (i.e. street cleaning, vehicle washing, operation of ornamental fountains, etc.)

(7) City will reduce water use for landscape irrigation.

(8) Customers will be requested to voluntarily limit the irrigation of landscaped areas.

(B) STAGE 2 – MODERATE WATER SHORTAGE REQUIREMENTS

The goal for water use reduction under Stage 2 is a two percent reduction in the amount of water produced by NTMWD.

(1) City will continue or initiate any actions available under Stage 1.

(2) City will initiate engineering studies to evaluate alternatives should conditions worsen.

(3) City will halt non-essential City government water use.

(4) City will delay non-essential landscape projects until drought conditions improve.

(5) City will accelerate public education efforts on ways to reduce water use.

(6) Customers will be requested to wait until the current drought or emergency situation has passed before establishing new landscaping.

(7) Customers are required to limit watering of lawns and landscaped areas. Prohibit customers watering lawn and landscaping between the hours of 10:00 a.m. and 6:00 p.m. to reduce water loss through evaporation. This is a mandatory requirement. Encourage customers to use drip type irrigation systems or soaker hoses for watering landscaped areas.

(8) Use of water to wash any vehicle, including without limitation a motor vehicle, motorcycle, boat, trailer or airplane, should be done only as needed. Routine washing of vehicles is discouraged until drought conditions improve. Vehicle washing should be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Excessive runoff is not allowed. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Fund raising car washes are discouraged during this stage. Washing of City owned equipment will be performed no more than once per week, and then only when necessary for sanitary or operational need.

(9) Customers are encouraged to postpone installation of new pools, hot tubs or decorative garden ponds until the drought conditions end. If drought conditions worsen the opportunity to fill such structures could be severely limited. Water may be added to pools to replace losses during normal use. All new installations are strongly discouraged.

(10) The operation of any ornamental fountain or pond for aesthetic or scenic purposes should be discouraged except when necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(11) The use of water from hydrants except in fire fighting and related activities, or other activities necessary to maintain public health, safety and welfare, should be terminated until the drought has passed. The use of water from hydrants for construction purposes may be allowed under a variance from the Director.

(12) The use of water for the irrigation of golf greens and tee boxes is permitted. The use of water to irrigate fairways is limited to two days per week unless the golf course uses a non-potable water source or a water source other than that provided by the City

(13) The use of water to wash down sidewalks, walkways, driveways, parking lots, tennis courts or other hard-surface areas is discouraged. Customers are asked to use a broom or blower for these activities.

(14) The use of water to wash down buildings or structures for purposes other than immediate fire protection is discouraged.

(15) The use of water for dust control is discouraged unless special permission is granted by the Director for public health concerns.

(16) The use of water for flushing gutters or permitting water to run or accumulate in any gutter or street is discouraged.

(17) It is an offense to fail or refuse to repair a controllable leak within a reasonable period after having been given notice directing the repair of such leak(s).

(C) **STAGE 3 – SEVERE WATER SHORTAGE REQUIREMENTS**

The goal for water use reduction under Stage 3 is a reduction of five percent in the amount of water produced by NTMWD. The Director shall implement any action(s) required by NTMWD. The Director shall notify the TCEQ within five business days when any requirement in this stage is implemented.

(1) City will continue or initiate any actions available under Stages 1 and 2.

(2) City will implement viable alternative water supply strategies.

(3) The operation of any ornamental fountain or pond that uses treated water for aesthetic or scenic purposes is prohibited except when necessary to support aquatic life. This is a mandatory requirement.

(4) Use of water to wash any vehicle, including without limitation a motor vehicle, motorcycle, boat, trailer or airplane, should be done only as needed. Vehicle washing should be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Excessive runoff is not allowed. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. It is an affirmative defense to prosecution under this subsection if the vehicle washing was done in the interest of public health such as the washing of garbage trucks and vehicles used to transport food and perishables. This is a mandatory requirement.

(5) Use of water in such a manner as to allow runoff or other waste is prohibited. This is a mandatory requirement.

(6) Irrigation of foundations and new plantings of trees and shrubs only may be watered for up to two hours on any day by a hand-held hose or a soaker hose. Lawn watering shall be limited to two days per week. The recommended days for watering by designated address are: addresses ending in a 0, 1, 6 or 7 water on Mondays and Thursdays; addresses ending in a 2, 3, 8 or 9 water on Tuesdays and Fridays; addresses ending in a 4 or 5 water on Wednesdays and Saturdays. Watering is prohibited between the hours of 10:00 a.m. and 6:00 p.m. to limit water loss through evaporation. This is a mandatory requirement.

(7) The establishment of new landscaping is discouraged. Landscaping requirements can be deferred by the City until drought conditions improve.

(8) The use of water for the irrigation of golf greens and tee boxes is

permitted. The use of water to irrigate fairways is limited to two days per week unless the golf course uses a non-potable water source or a water source other than that provided by the City. This is a mandatory requirement.

(9) Initiate a rate surcharge as requested by NTMWD.

(10) Notify wholesale customers of actions being taken and require them to implement the same procedures.

(11) Impose the same percent reduction on wholesale customers should NTMWD impose a reduction of water to the city.

(12) The use of water to wash down sidewalks, walkways, driveways, parking lots, tennis courts or other hard-surface areas is prohibited unless special permission is granted by the Director. This is a mandatory requirement.

(13) The use of water to wash down buildings or structures for purposes other than immediate fire protection is prohibited unless special permission is granted by the Director. This is a mandatory requirement.

(14) The use of water for dust control is prohibited unless special permission is granted by the Director for public health concerns. This is a mandatory requirement.

(D) **STAGE 4 – EMERGENCY WATER SHORTAGE REQUIREMENTS**

The goal for water use reduction under Stage 4 is a reduction of ten percent in the amount of water produced by NTMWD. The Director shall implement any action(s) required by NTMWD. The Director shall notify the TCEQ within five business days when any requirement in this stage is implemented.

(1) City will continue or initiate any actions available under Stages 1, 2 and 3.

(2) City will implement viable alternative water supply strategies.

(3) Use of water to wash any vehicle, including without limitation a motor vehicle, motorcycle, boat, trailer or airplane, is prohibited. Commercial car washing will be allowed. It is an affirmative defense to prosecution under this subsection if the vehicle washing was done in the interest of public health such as the washing of garbage trucks and vehicles used to transport food and perishables. This is a mandatory requirement.

(4) Prohibit the establishment of new landscape.

(5) Irrigation of landscape areas is prohibited. Foundations may be watered for up to two hours on any day by a hand-held hose or a soaker hose. This is a mandatory requirement.

(6) Prohibit the permitting of pools. This is a mandatory requirement.

(7) City will discontinue City government water use for landscape

irrigation except as needed to prevent foundation damage.

(8) City will require all commercial water users to reduce water use by a percentage established by the Director. This is a mandatory requirement.

ENFORCEMENT

No person shall knowingly or intentionally allow the use of water from residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager or his designee in accordance with provisions of this Plan.

Any person who violates the mandatory water use restrictions of this Plan is guilty of a Class C misdemeanor and, upon conviction in the Municipal Court shall be punished by a fine not to exceed Two Thousand Dollars for each offense. Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the City Manager shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a reconnection charge, as established by the City, and any other costs incurred by the City in discontinuing service. In addition, suitable assurance must be given to the City Manager that the same action shall not be repeated while the Plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.

Any person, including a person classified as a water customer of the City, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a reputable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a reputable presumption that the parent committed the violation.

City Code Enforcement Officials including Police Officers may issue a citation to a person he reasonably believes to be in violation of this ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him to appear in the Municipal Court on or before the 12th day from the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in Municipal Court to enter a plea of

guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in Municipal Court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant.

VARIANCES

(A) The City Manager or his designee may, in writing, grant a temporary variance of existing water uses otherwise prohibited under the Plan if it is determined that the failure to grant such a variance would cause an emergency condition adversely affecting the public health, safety or welfare, or the person requesting the variance would suffer an undue hardship and the person demonstrates that:

(1) Compliance with the Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect;

(2) Alternative methods can be implemented which will achieve a similar level of water reduction.

(B) A person requesting an exemption from the requirements of this article must file a petition for a variance with the Director within 10 working days after the Plan or a particular drought response stage has been initiated. A petition for a variance must include the following:

(1) The name and address of the petitioner(s);

(2) The purpose of the intended water use;

(3) The specific requirement of the Plan from which the petitioner is requesting relief;

(4) A detailed statement as to how the specific requirement creates a hardship unique to the petitioner or adversely affects the petitioner and a statement as to what damage or harm will occur to the petitioner or others if the petitioner complies with this article;

(5) A description of the relief requested;

(6) The period of time for which the variance is sought; and

(7) A description of what alternative water use restrictions or other measures the petitioner is taking or proposes to take in order to meet the intent of this Plan.

(C) Unless waived or modified in writing by the Director, a variance granted under this section shall include a timetable for compliance and shall contain a condition terminating the variance if the petitioner fails to meet a specified requirement of the variance.

(D) A variance expires when the Plan is no longer in effect. No variance will be retroactive or otherwise justify any violation of this Plan that occurs prior to the issuance of the variance.

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, since the same would not have been enacted by the City without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 2. 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 3. 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 4. That where the Water Conservation and Drought Contingency Plan implemented pursuant to this ordinance includes mandatory restrictions or prohibitions, any person, firm or corporation violating any of the restrictions or prohibitions of such Water Conservation and Drought Contingency Plan and thus the provisions or terms of this ordinance, shall be deemed to be guilty of a Class C Misdemeanor and upon conviction in the Municipal Court shall be punished by a fine not to exceed Two Thousand ($2,000.00) Dollars for each offense.

SECTION 5. That this ordinance shall go into effective immediately from and after its passage.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 18th day of June, 2007.

Mike Anderson
Mayor

ATTEST:

Judy Womack
City Secretary

APPROVED:

B. J. Smith
City Attorney