ORDINANCE NO. O-2014-99

AN ORDINANCE AMENDING THE TYLER CITY CODE CHAPTER 19, "UTILITIES", BY ADOPTING THE 5 YEAR UPDATED WATER CONSERVATION AND EMERGENCY DEMAND MANAGEMENT PLAN;; PROVIDING FOR PUBLICATION AND ORDAINING OTHER MATTERS RELATED TO THE FOREGOING; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City Council has determined there is an urgency need in the best public interest of the City of Tyler to adopt the amended 5 Year Water Conservation and Emergency Demand Management Plan, and the City Council further determines that such a public need is of an emergency nature and the legal requirement of two required separate readings of the subject ordinance be dispensed with and waived; and

WHEREAS, the City Council now desires to evidence its approval of the 5 Year Water Conservation and Emergency demand Management Plan and adopt such a plan as an official policy of the City;

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

PART 1: That the City Council hereby approves and adopts the amended 5 Year Updated Water Conservation/ Emergency Demand Management Plan by amending Tyler City Code Chapter 19, "Utilities", Article X, "Water Conservation/Emergency Demand Management Plan", by amending the following sections to read as follows:

ARTICLEX. Water Conservation/ Emergency Demand Management Plan

Sec. 19-300. No changes…

Sec. 19-301. Implementation.

In regards to implementation and enforcement of the Water Conservation/Emergency Demand Management Plan, the City Manager is designated as the official responsible for implementation and enforcement, and the following guidelines are adopted:

a. Mild drought occurs when:

1. Average daily water consumption reaches 85% of production capacity. Production capacity is defined as on line capacity in case of failure of a water source.
2. Average daily water consumption will be reduced by 5% or 1.25 MGD
3. Consumption (85%) has existed for a period of three days.
4. Weather conditions are considered in drought classification determination. Predicted long, hot or dry periods are to be considered in the impact analysis.

Threshold Condition - Wholesale Average Daily Demand Reduction

Mild Drought - During this Stage of the Plan, the wholesale Customers would be required to reduce their average Daily demand by 5% or calculated gallons per day *(actual reductions based on customer's Average Daily Demand)*

b. Moderate drought conditions are reached when:

1. Average daily water consumption reaches 90% of rated production capacity for a three day period. Production capacity is defined as on line capacity in case of failure or shut down of one or both water treatment plants.
2. Average daily water consumption will be reduced by 10% or 2.50 MGD
3. Weather conditions indicate mild drought will exist five (5) days or more.
4. One or more ground storage tank is taken out of service during mild drought period.
5. Storage capacity (water level) is not being maintained during period of 100% rated production period.
6. Existence of any one listed condition for a duration of 36 hours.

Moderate Drought - Wholesale water customers during this stage, will be required to reduce their average daily demand by 10% or calculated gallons per day *(actual reductions based on customer's Average Daily Demand)*

c. Severe drought classification is reached when:

1. Average daily water consumption reaches 100% of production capacity. Production capacity is defined as on line capacity in case of failure or shut down of one or both water treatment facilities.
2. Average daily water consumption will be reduced by 25% or 6.25 MGD
3. Average daily water consumption will not enable storage levels to be maintained.
4. System demand exceeds available high service pump capacity.
5. Any two (2) conditions listed in moderate drought classification occurs at the same time for a 24 hour period.
6. Water system is contaminated either accidentally or intentionally. Severe condition is reached immediately upon detection.
7. Water system fails – from acts of God, (tornadoes, hurricanes) or man. Severe condition is reached immediately upon detection.

Severe Drought - Wholesale water customers during this stage will be required to reduce their average daily demand by 15% or calculated gallons per day *(actual reductions based on customer's Average Daily Demand)*

d. Triggering Criteria - Stage 4 Critical Water Shortage Condition

Requirement for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan and:

1. When Total Daily Water Demand equals or exceeds 70 million gallons for 3 consecutive days.

2. Major water line breaks, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when

3. Natural or man-made contamination of water supply (s) has occurred

e. Triggering Criteria - Stage 5 Emergency Water Shortage Condition

Requirement for initiation - The city of Tyler will recognize that an emergency water shortage condition exists when:

(1) Major water line breaks, one of the water treatment facilities is rendered inoperable, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when

(2) When Total Daily Water Demand equals or exceeds 70 million gallons a day for five (5) consecutive days.

(3) Natural or man-made contamination of water supply (s) has occurred.

f. In the event severe, critical or Emergency classification conditions persist (Item c., Item d. and Item e. above) for an extended period of time, the City may ration water usage and/ or terminate service to selected users of the system in accordance with the following sequence:

1. Hospitals
2. Nursing Homes
3. Schools
4. Industrial
5. Commercial
6. Residential
7. Recreational

(Ord. 0-2011-15, 2/23/11) (Ord. 0-2014-99, 10/22/14)

Sec. 19-302. No changes…

Sec. 19-303. No changes…

Section 19-304. Water Conservation Plan and Best Management Practices

a.No changes…

b. The Best Management Practices that have been adopted and implemented by the City of Tyler are:

Educational Best Management Practice (BMP)
Plumbing Codes BMP
Water Conservation Retrofit Program
Conservation Oriented Water Rate Structure
System Water Audit and Water Loss BMP
Industrial Alternate Sources and Reuse BMP
Metering of All Connections and Retrofit of Existing Connections BMP
Prohibition on Wasting Water BMP
Industrial Site Specific Conservation BMP

Cooling Towers BMP
Contracts with Other Political Subdivisions
Record Management System
Annual Reporting (Ord. No. 0-2014-99; 10/22/14)

c. through f. No changes…

g. Conservation Oriented Water Rate Structure
City of Tyler Water Rate Structure

(30 TAC 288.2 (a)(1)(H)
Tyler's rate structure is a "Declining Block" Rate Structure. The Declining Block Rate Structure is cost-based and does not encourage the excessive use of water. Tyler uses a declining block rate structure because it reflects the manner in which costs are incurred and equitably allocates these costs among the various types of customers served. Tyler reviews and updates its costs and usage patterns every five years and updates its rates accordingly. To date, cost analyses have determined that lower volume charges at the selected consumption blocks fairly and equitably allocates costs to its customers.
Tyler uses a single volume rate for all retail customers and does not have separate volume charges for residential, commercial and industrial retail customers. Tyler's rate structure was designed to differentiate between large users (typically users with constant demand and lower demand factors) and smaller users (typically residential users with variable demands and higher demand factors) through different prices for different consumption blocks. The AWWA M1 Manual recognizes that it is appropriate to use a declining block rate structure in such circumstances.

Water Conservation (30 TAC 288.2) and Drought Contingency Plans for Wholesale Water Suppliers (30 TAC 288.22)":
6.3 Water Conservation. Wholesale Water Buyer shall cooperate with and assist Tyler in its efforts to develop and implement plans, programs, and rules to develop water resources and to promote practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in use of water, or increase the recycling and reuse of water. This may include the development of any conservation rationing plans by either Tyler or Wholesale Water Buyer that may be necessary or appropriate to address operational constraints, whether or not the same are required by any state or federal regulatory agency. Wholesale Water Buyer agrees to develop and implement drought contingency and conservation plans or measures required by federal or state agencies or other regulatory jurisdictions, including but not limited to 30 TAC Section 288.2 (a)(2) and (3). The buyer shall provide a copy of such plans to Tyler within ten (10) days of Plan implementation date. Such Plans shall be consistent with and as stringent as Tyler's adopted Plans. If Tyler determines that the Buyer's plans do not meet this standard, Tyler shall notify the Buyer of the deficiency in writing. The Buyer shall then amend its plans to and re-submit the Plans for Tyler's review.

6.3(a) Demand Management. Wholesale Water Contracts shall include the following to meet the requirements that every wholesale water contract that in a water shortage will be distributed in accordance with TWC 11.039 (30 TAC 288.22 (a) (8).
If Tyler shall manage demand through rationing the use of water to its retail customers, then a proportional rationing of water supplied to (name of wholesale company) by Tyler shall be instituted, at Tyler's option. Rationing does not relieve buyer from its obligation to pay the

monthly Demand Charge. See Exhibit below this section for approximate reductions based on Average Daily Demand.

6.3.(b) Temporary Rationing. Where emergency conditions may dictate temporary conservation or rationing requirements not exceeding 180 days for either Tyler or the 2nd party of this contract, either party may implement any measures considered appropriate by it to alleviate the emergency conditions. If the buyer implements measures to alleviate an emergency condition, the buyer shall notify City of Tyler in writing within five (5) days. Action taken under this subsection of the wholesale water contract, does not relieve the buyer from its obligation to pay monthly Demand Charges.

Wholesale Connections (Average Daily Demand)& Reduction Percentages								
	Average Daily Demand (Gallons)	Average Daily Demand (MGD)	5 % ADD Reduction (Gallons)	5 % ADD Reduction (MGD)	10 % ADD Reduction (Gallons)	10 % ADD Reduction (MGD)	15 % ADD Reduction (Gallons)	15 % ADD Reductior (MGD)
Community Water	49,853	0.0499	2,493	0.0025	4,985	0.0050	7,478	0.0075
City of Whitehouse	95,141	0.0951	4,757	0.0048	9,514	0.0095	14,271	0.0143
Walnut Grove	603,761	0.6038	30,188	0.0302	60,376	0.0604	90,564	0.0906

See Code Sections 19-278 – 19-280.

"Drought Contingency Plans for Wholesale Water Suppliers (30 TAC 288.22 (a)(7)(A)&(B))":

City of Tyler is forward thinking and is well prepared in the availability of water and water sources. Currently, the City of Tyler has three (3) Major Water sources available for high water demand and emergency drought events. The City has Two (2) surface water treatment plants at their disposal. No.1 source is Lake Tyler and Lake Tyler East which is treated and distributed by Golden Road Water Treatment Plant. Lake Tyler/Lake Tyler East have a combined permitted water right for 50,000 acre feet per year. Golden Road Plant is rated at Thirty two (32) MGD. The No.2 Source is Lake Palestine and the city has 68,908 acre feet per year available from this source. Raw water is piped from Lake Palestine to the Lake Palestine Water Treatment Plant for treatment and distribution. The Lake Palestine water treatment plant is rated at Thirty (30) MGD. The No. 3 source is 12 (active) deep ground water wells, however, only 10 of the wells are used regularly. Two of the wells are only operated in emergency conditions. The wells pull from the Carrizo/ Wilcox Aquifer. The wells are used regularly and for backup. The wells have the combined capacity of approximately Nine (9) MGD.

Also, the city has Lake Bellwood, typically used to supply Raw water to Industries, with 2,200 acre feet per year available. This is minor in comparison to the other 3 major sources of water the City has available to it.

In case of a failure of one of the water treatment plants the other plant will take over the water distribution. The wells will be circulated, and the elevated storage monitored, to help with peak and emergency demands during a drought, or other possible water shortage event.

h. through p. No changes...

q. Record Management System
(30 TAC 288.2 (a) (1) (B);

The city of Tyler has a record management system which allows for the classification of sales and uses into the most detailed level of water use data currently available to it, including lists in the sectors listed in clauses (i)- (vi) of (30 TAC 288.2 (a) (1)(B):

(i) residential
  (I) single family;
  (II) multi family;
(ii) commercial;
(iii) institutional;
(iv) industrial;
(v) agricultural/ Irrigation; and,
(vi) wholesale. (Ord. No. 0-2014-99; 10/22/14)

r. Annual Reporting

The City through adoption of this Plan, will continue to commit to report to the Executive Director of the Texas Commission on Environmental Quality Water, annually. The report to the Director will contain information describing:

1. Progress in Conservation Plan implementation.
2. Public response to plan implementation and operation.
3. Quantitative effectiveness with reference to:
   (a) System reduction
   (b) Reduction in customer or per capita use
4. List of public information released during the year. (Ord. 0-2011-15, 2/23/11) (Ord. No. 0-2014-99; 10/22/14)

Sec. 19-305. Emergency Demand Management Plan

a. Threshold Condition

The Texas Commission on Environmental Quality Water suggests at least three (3) levels or conditions for determining degree of urgency for initiation of an Emergency Demand Management Plan. These three (3) levels plus two additional levels of drought conditions are listed below as they relate to the City of Tyler water system. Drinking water for the City of Tyler is to be obtained from deep water wells located in the Carrizo and Wilcox Aquifers, and surface water from Lake Tyler, Lake Tyler East, and Lake Palestine.

1 through 3. No changes...

4. Critical Water Shortage Condition
   a. Requirements for initiation - The city will recognize that Critical water shortage condition exists when under Stage III or/and as defined in Section 19-276 of the Plan:
      (1) Major water line breaks, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when
      (2) Total Daily Water Demand equals or exceeds 70 million gallons a day for three (3) consecutive days.
      (3) Natural or man-made contamination of water supply (s) has occurred.

5. Emergency Water Shortage Condition
   (a) Requirements for initiation - The city will recognize that an emergency water shortage condition exists when under Stage IV or/and as defined in Section 19-276 of the Plan:
      1. Major water line breaks, one of the water treatment facilities is rendered inoperable, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when
      2. Total Daily Water Demand equals or exceeds 70 million gallons a day for five (5) consecutive days.
      3. Natural or man-made contamination of water supply (s) has occurred.

b. Drought Contingency Measures:

The Water Conservation and Emergency Demand Management Ordinance, adopted and included as part of this Plan, enables the City Manager or his designee to initiate action that will effectively implement the Plan. The following steps are recommended:

1. Step I

Step 1 drought measures as related to mild drought conditions and will initiate the following listed action. (Listed action is voluntary by user):

(a)Open the developed Information Center and designate the responsible information person.

(b)Advise public of condition and continually publicize any available information from City.

(c) Encourage voluntary reduction of water use.

(d)Contact commercial and industrial users and explain necessity for implementation of the Drought Contingency Plan and initiation of strict conservation methods.

(e)Implementation of system oversight and make adjustments required to meet changing conditions.

(f)Average daily water consumption will be reduced by 5% or 1.25 MGD.

(g) Wholesale water customers during this stage will be required to reduce their average daily demand by 5% or calculated gallons per day. *(actual reductions based on customer's Average Daily Demand)*

2. Step II

Step II curtailment is to be initiated by the City Manager when moderate drought conditions exist. Listed action is compulsory on users and is intended to prohibit water waste. ("Water Waste" is defined as washing house windows, sidings, eaves and roof with hose, without the use of a bucket; washing driveways, streets, curbs and gutters, washing vehicles without cutoff valve and bucket, and unattended sprinkling of landscape shrubs and grass; draining and filling of swimming pools and flushing water system.)

(a) Outdoor residential use of water will be permitted on specified days. Outdoor water usage shall be allowed every fourth day with the schedule being developed by the City Manager. Outdoor residential uses consist of washing vehicles, boats, trailers, landscape sprinkler systems and irrigation, recreational use of sprinklers, outside showers (in parks) and water slides.

(b) The City Manager will monitor system function and establish hours for outside water use, depending upon system performance.
(c) Information Center (City Hall) and publicity elements shall keep the public advised of curtailment status
(d) Commercial and industrial users will be visited to insure required conservation methods have been initiated.
(e) Average daily water consumption will be reduced by 10% or 2.5MGD.
(f) Wholesale water customers during this stage will be required to reduce their average daily demand by 10% or calculated gallons per day *(actual reductions based on customer's Average Daily Demand)*

3. Step III

Step III curtailment shall be initiated upon existence of severe conditions as determined by the City Manager. The City Manager will curtail the use of water for:

(a) Vehicle washing, window washing, and outside watering (lawn, shrub, faucet dripping, garden, etc.)
(b) Public water uses which are not essential for health, safety and sanitary purposes. These include:
(c) Street washing, fire hydrant flushing, filling of pools, watering of athletic fields and golf courses, and dust control sprinkling.
(d) Commercial users not listed and industrial users will be controlled to the extent dictated by the City Manager.
(e) The average daily water consumption will be reduced by 25% or 6.25MGD.
(f) Wholesale water customers during this stage will be required to reduce their average daily demand by 15% or calculated gallons per day *(actual reductions based on customer's Average Daily Demand)*

4. Step IV

Step IV curtailment shall be initiated upon the existence of Critical Water Shortage Conditions

Requirement for initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan and:

a. When Total Daily Water Demand equals or exceeds 70 million gallons for three (3) consecutive days.
b. Major water line breaks, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when
c. Natural or man-made contamination of the water supply source(s) has occurred.

5. Step V

Step V curtailment shall be initiated upon the existence of Emergency Water Shortage Condition when:

a. When Total Daily Water Demand equals or exceeds 70 million gallons for five (5) consecutive days.
b. Major water line breaks, water treatment facility is rendered inoperable, or pump or system failures occur which cause unprecedented loss of capability to provide water service; or when
c. Natural or man-made contamination of the water supply source(s) has occurred.

Businesses requiring water as a basic function of the business, such as nurseries, commercial car wash, Laundromats, high pressure water cleaning, etc., will obtain written permission from the City Manager for intended water use.
The System Priority for water service shall be made on the following basis:

1. Hospitals
2. Nursing Homes
3. Schools
4. Industrial
5. Commercial
6. Residential
7. Recreational

c. through g. No changes… (Ord. No. 0-2011-15, 2/23/11) (Ord. No. 0-2014-54, 6/25/14)(Ord. No. 0-2014-99; 10/22/14)

Sec. 19-306 – 309. Reserved.

PART 2: That if any provision or any section of this ordinance shall be held to be void or unconstitutional, such holding shall in no way affect the validity of the remaining provisions or sections of this ordinance, which shall remain in full force and effect.

PART 3: That any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine as provided in Section 1-4 of Tyler City Code. Each day such violation shall continue, or be permitted to continue, shall be deemed a separate offense. Since this ordinance has a penalty for violation, it shall become effective upon its publication in the newspaper as provided by Section 85 of the Charter of the City of Tyler, Texas, which date is expected to be October 24, 2014.

PASSED AND APPROVED this 22nd day of October, A.D., 2014

MARTIN HEINES, MAYOR OF
THE CITY OF TYLER, TEXAS

ATTEST:

CASSANDRA BRAGER, CITY CLERK

CITY OF TYLER SEAL TEXAS

APPROVED:

STEVE M. KEAN, DEPUTY CITY ATTORNEY