ORDINANCE NO. 13-010

AN ORDINANCE ADOPTING THE CITY OF MARLIN AMENDED WATER CONSERVATION PLAN DATED MARCH 2013; REGULATORY COMPLIANCE ISSUES AND THE NEED FOR A CONSERVATION PLAN TO PROTECT THE CITY'S WATER RESOURCES CREATES THE EMERGENT NEED FOR THE IMMEDIATE PASSAGE OF THIS ORDINANCE WITHOUT TWO (2) READINGS, AND THE VOTE ADOPTING THIS ORDINANCE IS IN ADDITION A VOTE TO DECLARE SUCH EMERGENT NEED AND TO ADOPT THIS ORDINANCE TO BECOME EFFECTIVE IMMEDIATELY WITHOUT THE NECESSITY OF A FURTHER READING.

WHEREAS, the City of Marlin Texas has formulated a PLAN for conserving water; and

WHEREAS, the City of Marlin believes that it is the best interest of the citizens of Marlin to conserve its water supply, and

WHEREAS, effective March 12,2013, the Water Conservation Plan is required to be reviewed and updated every five years to include specific quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use, in gallons per capita per day;

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

SECTION 1: That the City Council hereby approves and adopts the amended Water Conservation Plan attached hereto.

SECTION 2: That this ordinance shall take effect immediately from and after its passage.

SECTION 3. It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance 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 ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 4. This ordinance shall become effective upon passage and publication in accordance with laws of the State of Texas and the Charter of the City of Marlin.

SECTION 5. The fact that the present ordinances and regulations of the City of Marlin, Texas, are inadequate to properly safeguard the health, safety, morals, peace and general welfare of the public creates an emergency which requires that this ordinance become effective from and after the date of its passage and publication, and it is accordingly so ordained.

SECTION 6. The City Secretary is hereby directed to publish the caption of this Ordinance at least one time in the official City newspaper.

SECTION 7. It is found and declared that the City Council meeting at which this Ordinance has been adopted was open to the public and was noticed and held in accordance with Chapter 551 of the government code.

PASSED this 12th day of March, 2013 by a vote of 6 AYES to 0 NAYS with 1 Absentions.

CITY OF MARLIN TEXAS 1866

Elizabeth Nelson
Elizabeth Nelson, Mayor

Sandra Herring
Sandra Herring, City Secretary

4833 Spicewood Springs Road
Suite 204
Austin, TX 78759
512.342.6868

KSA ENGINEERS

February 21, 2013

William McDonald, City Manager
City of Marlin
101 Fortune Street
Marlin, TX 76661

Via Email

RE: **City of Marlin**
Water Conservation Plan

Mr. McDonald:

The Water Conservation Plan is being completed to meet TWDB minimum requirements for the Drinking Water and Clean Water State Revolving Fund Loans. The City of Marlin Water Conservation Plan will be in compliance with the TCEQ and TWDB minimum rules. The Plan will be presented to the City of Marlin City Council on February 12, 2013.

The Water Conservation Plan includes, Ordinance 13-010, City of Marlin Utility Profile, the excepts from the 2011 Brazos G Regional Water Plan, the City's water rates, and Notification to the Regional Water Planning Group. The water conservation values prepared by the Brazos G Region planning group were used as the basis for the water conservation goals.

If you have any questions concerning the Water Conservation Plan, please contact Stuart W. Cowell, E.I.T. Thank you.

Sincerely,
KSA ENGINEERS, INC.

Stuart W. Cowell, E.I.T.
Design Engineer

Enclosure: Water Conservation Plan (with copy of cover letter)
Ordinance 13-010
City of Marlin Utility Profile
2011 Brazos G Regional Water Plan
City of Marlin Water Rates

c: Brent Bassett, Project Engineer (w/o encl)
MAR-021\Task 013 - Water Conservation Plan Update\2011\To Be Reviewed

CITY OF MARLIN

WATER CONSERVATION PLAN

Prepared 8 February 2013 for
CITY OF MARLIN TEXAS
101 Fortune Street
Marlin, Texas 76661
PWS #0730002
RN102886892
CN600506604

Compiled by:
KSA Engineers, Inc.
4833 Spicewood Springs Drive
Austin, TX 78759
(512) 342-6868

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Water Conservation and Drought Contingency Plans

INTRODUCTION

The City of Marlin has a current combined Water Conservation and Drought Contingency Plan entitled "Water Conservation and Drought Contingency Plan" (Attachment A). This original document was prepared in 2002 by Hunter Associates Texas, Ltd. The City Council adopted this Plan via ordinance on October 8, 2002, and the Plan was subsequently approved by the TCEQ.

Effective October 7, 2004, the Texas Commission on Environmental Quality (TCEQ) adopted revised rules and regulations pertaining to Water Conservation and Drought Contingency plans requiring inclusion of new elements not previously required in such plans. The City of Marlin's current Plan substantially complies with the revised rules. However, the TCEQ has reviewed the plan and found that a minor update is required. Therefore, this document shall be considered the amendment to the current Water Conservation portion of the Water Conservation and Drought Contingency Plan.

The City of Marlin is to adopt the City of Marlin Water Conservation Plan by Ordinance 13-010 (Attachment B). The ordinance of the City Council to adopt the Water Conservation Plan shall authorize the City to implement, enforce, and administer the program outline in this Water Conservation Plan. This ordinance supersedes the September 2002 Water Conservation & Drought Contingency Plans. Specifically, the 2013 ordinance includes the following provisions:

Updated utility profile, 5-year and 10-year target goals for reduction in municipal use expressed in gallons per capita per day (gpcpd) including a schedule for implementing the plan to achieve the targeted reductions, a method of tracking the implementation and effectiveness, continuing educating the City on water conservation, describes the City water rate structure and enforcement procedures.

Each of these elements is detailed below:

UTILITY PROFILE

POPULATION AND CUSTOMER DATA

The City's Water Services Department manages a water distribution service area of 4.6 square miles and serves a population of over 5,967 residents. The City provides drinking water to its customers through a network of nearly 55 miles of transmission and distribution mains that provide service to over 2,363 water connections. See Attachment C for the full Utility Profile.

The official U.S. Census population count for the city in 2010 was 5,967, a decrease of about 10% from the 1990 Census. Population projections for Marlin, described in the Brazos G Regional Water Planning Area's 2011 Brazos G Regional Water Plan, forecast the City's population will reach 7,155 by 2020, and 7,455 by 2030. In comparison, the City's water consumption peak day demand is expected to increase to almost 2,749 ac-ft (2.45 MGD) by 2020 and over 2,800 ac-ft (2.5 MGD) by 2030. References to the Brazos G Regional Water Planning Area's 2011 Brazos G Regional Water Plan are in Attachment D.

WATER USE DATA

Table 1 below summarizes key water use statistics for 2008 to 2011. Average per person usage is given in gallons per capita per day (gpcd). Average peak daily water demand is given in million gallons per day (MGD). The peak day to average day ratio is based on the Texas Commission on Environmental Quality (TCEQ) maximum daily demand (30 TAC §290.38. (41))

> *§290.38. (41)* **Maximum daily demand** -- In the absence of verified historical data or in cases where a public water system has imposed mandatory water use restrictions within the past 36 months, maximum daily demand means 2.4 times the average daily demand of the system.

The maximum daily demand for the City is 5.65 MGD, reached in 2011. The City's water production and pumping system capacity is currently 3.024 MGD and 20.052 MGD, respectively.

Table 1. Municipal Water Demand 2008-2011

Year	2008	2009	2010	2011
Peak GPCD	588	727	492	576
Annual Average GPCD	245	303	205	240
Peak Day (MGD)	3.89	4.81	3.26	3.44
Average Day (MGD)	1.62	2.00	1.36	1.43
Peaking Factor	2.4	2.4	2.4	2.4

WATER PRODUCTION AND DELIVERY SYSTEM

The City utilizes surface water for its public water supply and has developed its own water production facilities. The City receives most of their water supply from the City Lakes and purchases the rest of their water from the Brazos River Authority. The purchased water is pumped from the Brazos River by their pump station (located on the west side on the city along Highway 7) to the City Lake; the City Lake is located on the Northeast part of the city.

SPECIFIC, QUANTIFIED 5 & 10-YEAR TARGETS

WATER LOSS GOALS

Marlin is undertaking a comprehensive effort to reduce unaccounted-for water, and to improve the quality of data in water loss estimates. The City currently has loans to replace meters and water lines throughout the city. It is expected that water loss percentages will fluctuate annually with weather and demand conditions, and that some fluctuations will occur as a result of improved data collection. Marlin intends to increase its water conservation, and reduce its percentage of lost water as follows:

Table 2. Water Conservation Plan 5- and 10- Yr Goals

Description	Historic 5-yr (Average)	Current (2011)	5-yr Goal (Yr)	10-yr Goal (Yr)
Total GPCD	218	240	220	210
Water Conserved (GPCD)			20	30
Residental GPCD	48	54	50	49
Water Loss (GPCD)	54	111	90	85
Water Loss (%)	24.8	46.3	39.1	38.6

IMPLEMENTATION SCHEDULE

The way the city plans on obtaining these water loss goals are described below:

1. Reduce per capita consumption through education by presenting non-wasteful uses of water and techniques that can be employed to conserve water. Information will be distributed in the local newspapers and other media outlets during high-use seasons to expand public awareness.

2. Once a year, the City will review consumption patterns and its income and expense levels and evaluate whether or not the current water rates are effective and appropriate. A progressive water rate structure may be considered by the City and adjustments will be made as needed.

3. The City will provide information regarding the water rate structure to each of its customers once a year. City will also provide customers with historical water use for the previous 12 months upon request.

4. A leak detection and repair program will be maintained as well as a meter testing and repair/replacement program. Accounting data of the water produced versus consumption will be monitored to determine water loss and unaccounted water.

5. Replacement of water lines found to be leaking or in generally poor condition will be completed as quickly as practical to ensure minimal water loss.

TRACKING OF WATER CONSERVATION PLAN EFFECTIVENESS

The City will keep track of the Water Conservation Plan's progress via the following four processes.

1. In order to track the effectiveness of water conservation measures, and to monitor the water distribution system efficiency, the City is updating their master meters, and universal metering system. The master meter will measure any water diverted from the source into the water distribution system. The universal metering system will measure water used by customers and by public sites. These provide the data required to track annual water use, and evaluate progress towards the City's goals.

2. The City will collect information about its programs and the population to evaluate the effectiveness of the program at least once every five years. For literature pieces, the number of such pieces and topics covered will be documented. The number of news programs or advertisements will also be documented and the total population of the service area will be tracked.

3. Guidelines for meter selection based on customer usage, meter replacement policies, and records on each meter in the system will be recorded and maintained.

4. To control water theft, and water loss (both real and apparent), the City has developed schedules for meter inspection and maintenance, and visual line inspection. This schedule will be part of a continuous program of leak detection, repair, and water loss accounting.

    a. These will be done on a monthly basis:
        i. Visual inspection of all distribution lines
        ii. Inspection of all commercial meters to check accuracy
        iii. A water audit to detect water theft and abandoned services
    b. All residential meters will be inspected for accuracy and tampering every four years with 25% inspected each year.
    c. Any leaks or faulty meters discovered during these inspections or reported to the City will be repaired or replaced as soon as is reasonably possible.

CONTINUING PUBLIC EDUCATION & INFORMATION

Through education and information dissemination, the City will continue to inform its water customers of the benefits of water conservation. The City will accomplish this by implementing the following steps:

1. The City will prepare a mail-out and newspaper article containing information describing the newly adopted water conservation program.

2. The City will provide information to all new customers describing the water conservation and drought contingency programs upon application for service.

3. On an annual basis the City will request that local newspapers publish water conservation literature.

4. The City Manager will report annually on the effectiveness of the City's water conservation measures and the per capita water usage. If the Water Conservation Plan is not effective, the City Manager will make recommendations for modifying the plan to increase its effectiveness. The City Manager will send a copy of the annual report to the executive administrator of the Texas Water Development Board.

WATER RATE STRUCTURE

The City utilizes an inclining water rate structure to encourage customers to reduce both peak and overall water usage, while fairly allocating cost of service to each customer class. Under an inclining rate structure, the rate per thousand gallons increases as the amount of water used increases. The City currently has adopted a cost-based rate structure which discourages excessive water use. The water rates for the City are documented in Attachment E.

This rate structure will be reviewed on a regular basis to ensure that the rates adequately recover the cost of service and meet the goals of this water conservation plan.

ENFORCEMENT PROCEDURE AND PLAN ADOPTION

The water conservation and drought contingency plans will be put into effect by notices being given to water customers through the local newspaper. The City Manager or his/her duly appointed representative will act as the Administrator of the Water Conservation and Drought Contingency Plans. The Administrator will oversee the

execution and implementation of all elements of the plan and be responsible for overseeing and keeping adequate records for program verification.

OTHER

Attachment F is provided as documentation that the regional water planning group for the City's service area has been notified of the Water Conservation Plan update.

ATTACHMENT A.
WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN - SEPTEMBER 2002

The City of Marlin, Texas
Falls County

Water Conservation & Drought Contingency Plans

HUNTER ASSOCIATES TEXAS, LTD.
ENGINEERS/PLANNERS/SURVEYORS
DALLAS 214-369-9171
AUSTIN 512-454-8716

The City of Marlin, Texas

PO Box 980

Marlin, TX 76661

September 2002 **34020**

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1.0 INTRODUCTION

The Public Works Department of the City of Marlin, Texas has developed a Water Conservation Plan fulfilling the requirements of Title 30, Chapter 288, Subchapter A of the Texas Administrative Code. The objective of the water conservation plan is to conserve water. This will be accomplished by reducing the consumption of water.

The City of Marlin currently has strategies for reducing water consumption. These strategies include, but not limited too, a rate structure discouraging the excess use of water, metering devices with an accuracy of plus or minus 5% radio advertisements highlighting water conservation tips, regular inspections of water lines, and a program for replacing meters. The benefits of conserving water are protecting the most valuable resource (water), reducing the amount of water treated by water and wastewater plants therefore reducing operating expenses, and reducing consumer water bills.

2.0 DESCRIPTION OF SERVICE AREA

The City of Marlin is located in Falls County, Central Texas. The City is about 25 miles East of I-35 between Temple and Waco. The Brazos River is about 5 miles Southwest of Marlin, and it is a source of water for the City. The city service area (see Attachment # 1) is approximately 6.9 square miles with population of 6,628 according to the 2000 U.S. Census Bureau (see Attachment # 2). The projected population for 2050 is 9,169, which will increase the water demand 38%.

3.0 GOALS

The City of Marlin has and will continue to conserve water via programs discussed later in this report. Marlin intends to reduce the water consumption in the service area by 55.7%, from 219 gpcd to 122 gpcd by the year 2050. This will be accomplished by realizing the following water conservation goals:

- Periodic distribution of water conservation literature to the citizens of Marlin
- Continue radio announcements giving water conservation tips
- Continue to replace old meters
- Test all meters periodically
- Continue regular inspection of water lines
- Continue unaccounted for losses of less than 15%
- Continue a water rate structure discouraging excess water consumption
- Look into developing a Water Recycling and Reuse Program
- Look into adopting water saving amendments to the Plumbing Code

4.0 UTILITY EVALUATION DATA

The City of Marlin currently acquires its water supply from the Brazos River and the New Marlin Reservoir. The City also has a contract with the Brazos River Authority for 2000 acre-feet. The amount of water available fro the New Marlin Reservoir is 4000 acre-feet with an additional 4000 acre-feet from the Brazos River when rains are adequate. The design daily capacity of the water treatment plant is 3.024 MGD. Marlin also has an elevated tank with a capacity of 1.05 MGD and a ground storage tank with a capacity of 0.925 MGD. (See Attachment # 3 for a map of the water system)

5.0 WATER CONSERVATION PLAN

The Water Conservation Plan consist of (15) components; the first (8) components are the minimum requirements of Title 30, Chapter 288, Subchapter A of the Texas Administrative Code and the remaining (7) are additional conservation strategies. Each component is described in detail.

5.1 Metering

The City of Marlin currently meters 100% of the water used, both residential and commercial and they only use meters with 5% accuracy. The City currently has a meter replacement program which replaces 200-300 of the oldest meters every year. Therefore, each meter will be replace approximately every ten years.

The City also tests and replaces or repairs any meters that appear to have abnormally high or low water usage. The City has established a regular schedule for testing meters. The schedule is as follows:

1. Production (Master) meters – test annually
2. 1" and larger meters – test annually
3. 1" and smaller meters – test once every five years

5.2 Education and Information

The City of Marlin will educate and inform the public in order to promote water conservation among its customers. The City currently has radio advertising highlighting water conservation tips. The City plans to inform both residential and commercial customers with the following type of information to encourage water conservation:

1. Distribution of educational materials to all customers four times during the first year of the program and two times per year thereafter. These distributions will be timed in accordance with peak summer and winter demand periods.
2. Publications of articles in the local paper at times corresponding to the distribution mentioned above and more often if conditions warrant.
3. New customers will receive water conservation literature.

The first distribution of the first year will include information promoting the Water Conservation Plan. The distribution will explain the need for this plan, encourage customers to start conserving water, list simple ways to conserve water, and will be accompanied by an article in the Gonzales paper and a City proclamation for Water Conservation Awareness Week.

The second distribution of the first year will include brochures promoting indoor water conservation. The third distribution will include brochures promoting outdoor water conservation. The fourth distribution will include brochures promoting water saving fixtures. An article in the Marlin Paper will accompany each distribution in the first year. Appendix B has a list of sources of water conservation literature and educational materials.

5.3 Water Rate Structure

The most recent water rate structure that encourages water conservation was adopted on MARCH 24, 1998. The City's water and sewer rates discourage the use of large quantities of water (see Attachment No. 5). The City will explain the water rate structure to new accounts (customers).

5.4 Implementation and Enforcement

The Director of Utilities of the City of Marlin is responsible for the implementation and enforcement of this plan. This plan will be enforced by the following methods:

1. City Council adopting a resolution supporting this plan and its goals.
2. The water rate structure will be enforced; the water will be disconnected for any customers not paying the monthly bill.
3. The building inspector will not certify new construction unless it meets adopted plumbing codes.

5.5 Coordination with Regional Planning Group

The City of Marlin has sent a copy of this plan to the Brazos Regional Water Planning Group for their review.

5.6 Leak Detection and Repair

The City of Marlin currently has a leak detection and repair program that includes the following:

1. Monthly water use accounting by computer billing.
2. Frequent monitoring of elevated and ground storage tanks to detect water-main breaks.

3. Visual Inspection by meter readers and employees who keep a watch out for abnormal conditions that could lead to leaks.
4. An adequate maintenance staff, which is available to repair any leaks.
5. In the event that a major leak is detected, the City will consider conducting a leak detection survey of the suggested area and possibly use the Texas Water Development Board personnel to assist the City in setting up a leak detection survey program.

5.7 Record Management System

The City of Marlin computer system records the amount of water pumped and delivered and the amount of sales. The amount of water losses is found by subtracting the amount of water pumped from the amount of water sold. This system records the water sales according to the account: residential, commercial, industrial, or public and institutional.

5.8 Wholesale Customers

The City of Marlin does not have a wholesale customer.

5.9 Plumbing Codes

The City of Marlin should consider adopting an amendment to their plumbing code that requires the use of water saving fixtures for all new construction and for replacement of plumbing in existing structures. The standards for residential and commercial fixtures are given in the following table.

Fixture	Maximum Usage
Tank-type toilets	1.5 gallons per flush
Flush valve toilets	3.0 gallons per flush
Tank-type urinals	3.0 gallons per flush
Flush valve urinals	1.0 gallons per flush
Shower heads	3.0 gallons per minute
Lavatory & kitchen faucets	2.75 gallons per minute
All hot water lines	Insulated
Swimming pools	New pools must have recirculating filtration equipment

5.10 Retrofit Program

The City of Marlin has not adopted a retrofit program. The distributions mentioned above should include literature that encourages customers to replace their old plumbing fixtures with new water saving fixtures.

5.11 Recycling and Reuse

The City of Marlin has looked into recycling and reusing water, but no formal action has been taken.

5.12 Pressure Control in Distribution System

The City's distribution system does not have insufficient or excessive pressure; therefore, there are no proposed changes.

5.13 Water Conservation Landscaping

The City has not adopted regulations requiring property owners to plant vegetation requiring little water. The distributions mentioned above should include suggestions on landscaping and irrigation procedures that will conserve water. In addition, the city should encourage local plant nurseries, commercial landscapers and other in the landscaping industry to promote water conserving landscaping practices.

5.14 Contracts with Other Political Subdivisions or Water Supply Corporations

In the event the City of Marlin contracts to sell water to other political subdivisions or water supply corporations, the contract will require that the purchaser adopt the City's water conservation plan or develop and adopt their own plan in accordance with the Texas Water Development Board regulations.

5.15 Conservation Plan Annual Report

A member of the City staff should file an Annual Report addressing the progress and effectiveness of the Water Conservation Plan. The report should include the following:

1. Public information that has been issued
2. Implementation progress and status of the City's water conservation program
3. Effectiveness of the water conservation plan reducing water use by providing consumption data
4. Public response to the water conservation plan

Appendix A

Water Utility Profile

The purpose of the Water Utility Profile is to assist an applicant with water conservation plan development and to ensure that important information and data be considered when preparing your water conservation plan and goals. This form should be used by applicants for financial assistance (submitted to the TWDB) or by an entity applying for a water right (submitted to the TNRCC). Please complete all questions as completely and objectively as possible. You may contact the Municipal Water Conservation Unit of the TWDB at 512-936-2391 for assistance, or the Resource Protection Team at 512-239-4691 if submitted to the TNRCC.

Name of Utility: City of Marlin

Address & Zip: PO Box 980 Marlin, TX 76661-0980

Telephone Number: 254-883-3371 **Fax:** 254-883-1456

Form Completed By: Jeff Morris, P.E. - information provided by City of Marlin

Title: Project Manager

Signature: [signature] **Date:** 9/5/2002

Name and Phone Number of Person/Department responsible for implementing a water conservation program:

Tom Winder, City Manager

I. CUSTOMER DATA

A. Population and Service Area Data

1. Please attach a copy of your Certificate of Convenience and Necessity (CCN) from the TNRCC, and a service-area map. See Attachment No. 1
2. Service area size (square miles): 6.9 square miles
3. Current population of service area: 6,628

4. Current population served by utility: a: water 6,628
b: wastewater 6,628

5. Population served by water utility for the previous five years:

Year	Population
2001	6,628
2000	6,628
1999	6,386
1998	6,386
1997	6,386

6. Projected population for service area in the following decades:

Year	Population
2010	7,367
2020	7,774
2030	8,225
2040	8,684
2050	9,169

7. List source(s)/method(s) for the calculation of current and projected population:

U.S. Bureau of Census (1997-2001)
Texas Water Development Board (2010-2040)
See Attachment No. 2

B. Active Connections

1. Current number of active connections by user type. Check whether multi-family service is counted as Residential ____ or Commercial __X__

Treated water users:	Metered	Not-metered	Total
Residential	2092		2092
Commercial	250		250
Industrial	02		02
Public	73		73
Other	34		34

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

Year	1999	2000	2001
Residential	3	10	11
Commercial	1		
Industrial			
Public			
Other			

C. High Volume Customers

List annual water use for the five highest volume retail and wholesale customers (please indicate if treated or raw water delivery)

	Customer	Use (1,000gal./yr.)	Treated/Raw Water
(1)	TDOT	38,575	Treated
(2)	Tx Youth Comm.	13,886	Treated
(3)	Jon-Lin	11,752	Treated
(4)	Elmwood Nursing	5,403	Treated
(5)	M&M Apts.	4,880	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

1. Amount of water use for previous five years (in 1,000 gal.):
Please indicate : Diverted Water ____X____
Treated Water _____

Year	1997	1998	1999	2000	2001
January	40,917	54,229	39,174	38,539	50,655
February	33,194	44,954	36,225	34,484	42,482
March	39,323	37,198	37,622	29,468	41,271
April	35,271	36,581	36,202	32,168	40,195
May	35,067	44,094	36,605	30,483	47,902
June	36,568	51,072	39,759	33,141	53,071
July	48,134	59,331	45,264	46,885	58,997
August	44,830	52,354	54,963	60,373	65,357
September	42,901	47,125	54,930	56,084	52,243
October	41,502	39,797	58,287	46,115	48,779
November	39,869	35,013	50,311	41,443	43,461
December	39,857	40,307	50,582	44,036	47,550
Total	477,433	542,055	539,924	493,276	591,963

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

_____Master meter where raw water enters plant _____

_____

_____

2. Amount of water (in 1,000 gallons) delivered (sold) as recorded by the following account types (*See #1, Appendix A*) for the past five years.

Year	Residential	Commercial	Industrial	Wholesale	Other	Total Sold
1997	218,244	95,328	68,849	N/A	N/A	382,421
1998	233,356	157,495	98,709	N/A	N/A	489,560
1999	184,977	85,442	62,252	N/A	N/A	332,671
2000	187,296	88,112	74,567	N/A	N/A	349,975
2001	165,416	84,933	64,206	N/A	N/A	314,556

3. List previous five years records for unaccounted-for water use (See #2, Appendix A)

Year	Amount (gal.)	%
1997	95,012,000	20
1998	52,495,000	9.7
1999	207,253,000	38
2000	143,301,000	29
2001	279,407,000	47

4. List previous five years records for annual peak-to-average daily use ratio (See #3, Appendix A)

Year	Average MGD	Peak MGD	Ratio
1997	1.32	2.23	1.69
1998	1.49	2.63	1.77
1999	1.48	2.83	1.91
2000	1.35	2.34	1.73
2001	1.63	2.56	1.57

5. Municipal per capita water use for previous five years (See #4, Appendix A):

Year	Population	Total Diverted (or Treated) (1,000 gal.)	Industrial Sales (1,000 gal.)	Municipal Per Capita Use (gpcd)
1997	6,386	477,433	68,849	175
1998	6,386	542,055	98,709	190
1999	6,386	539,924	62,252	205
2000	6,628	493,276	74,567	173
2001	6,628	593,963	64,206	219

6. Seasonal water use for the previous five years (in gallons/person/day) (See #5, Appendix A):

Year	Population	Base Per Capita Use	Summer Per Capita Use	Seasonal Use
1997	6,386	195	225	30
1998	6,386	242	277	35
1999	6,386	197	238	41
2000	6,628	207	235	28
2001	6,628	230	297	67

B. Projected Water Demands

Provide estimates for total water demands for the planning horizon of the utility. Indicate sources of data and how projected water demands were determined. Attach additional sheets if necessary.

Diverted Water	2001 - 592 MG	(Pop = 6628)
	2010 - 658 MG	(Pop = 7367)
	2020 - 694 MG	(Pop = 7774)
	2030 - 735 MG	(Pop = 8225)
	2040 - 776 MG	(Pop = 8684)
	2050 - 819 MG	(Pop = 9169)

III. WATER SUPPLY SYSTEM

A. Water Supply Sources

List all current water supply sources and the amounts available with each:

	Source	Amount Available
Surface Water:	Brazos River _New Marlin Reservoir_____	3.57 ____3.57_____MGD
Groundwater:	__N/A_____	_____MGD
Contracts:	__Brazos River Authority_____	___1.07_____MGD
Other:	_N/A_____	_____MGD

B. Treatment and Distribution System

1. Design daily capacity of system: ____3.024_____ MGD

2. Storage Capacity: Elevated __1.05__ MGD, Ground _0.925_ MGD

3. If surface water, do you recycle filter backwash to the head of the plant? Yes __X___ No _____. If yes, approximately __0.17__ MGD.

4. Please describe the water system. Include the number of treatment plants, wells, and storage tanks. If possible, include a sketch of the system layout.

WTP Description:

1 water treatment plant
0 wells
4 elevated storage tanks
2 ground storage tanks

See Water System Map in Attachment No. 3

IV. WASTEWATER UTILITY SYSTEM

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s): ___2.0_____ MGD

2. Is treated effluent used for irrigation on-site _NO__, off-site _NO__, plant washdown _NO__, or chlorination/dechlorination _NO___?
If yes, approximately _____ gallons per month. Could this be substituted for potable water now being used in these areas _____?

3. Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed of. Where applicable, identify treatment plant(s) with the TNRCC name and number, the operator, owner, and, if wastewater is discharged, the receiving stream. Please provide a sketch or map which locates the plant(s) and discharge points or disposal sites.

Two waste water treatment plants (one plant is a trickling filter plant rated @ 1.25 MGD; the other plant is an aerated lagoon type plant rated @ 2 MGD);

8 lift stations

6"-18" lines with one 18" pvc force main.

The treated wastewater is disposed of in the Brazos River (below Whitney Lake in segment No. 1242 of the Brazos River Basin).

See map in Attachment No. 4

B. Wastewater Data for Service Area

1. Percent of water service area served by wastewater system: 95 %

2. Monthly volume treated for previous three years (in 1,000 gallons):

Year	1999	2000	2001
January	45,405	49,586	48,538
February	41,207	44,433	38,728
March	45,212	44,059	40,807
April	45,121	44,172	40,735
May	47,212	54,429	47,673
June	51,305	48,964	52,838
July	55,467	66,292	61,678
August	66,270	68,311	62,096
September	66,125	61,074	51,237
October	66,480	50,042	48,454
November	58,327	46,243	44,445
December	59,122	47,268	48,229
Total	647,253	624,873	525,549

V. UTILITY OPERATING DATA

A. List (or attach) water and wastewater rates, and rate structure for all classes.

See Attachment No. 5

B. Other relevant data: Please indicate other data or information that is relevant to both the applicant's water management operations and design of a water conservation plan.

Received 11/4/02 KC

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 30, 2002

Tom Winder, City Manager
City of Marlin
P.O. Drawer 980
Marlin, Texas 76661

CERTIFIED MAIL

RE: City of Marlin
Application to Extend Time to Commence and Complete Construction
TWC § 11.145, Requiring Mailed Notice and Publication
Brushy Creek, Brazos River Basin
Falls County, Texas

Done

Dear Mr. Windor:

This acknowledges the receipt, on September 5, 2002, of the City of Marlin's "Water Conservation & Drought Contingency Plans."

Before the application can be declared administratively complete, we will need the following:

Pursuant to an Interoffice Memorandum from our Resource Protection Team (copy enclosed), **the City of Marlin must submit evidence indicating the official adoption of the September 2002 water conservation and drought contingency plan.**

Please provide the requested information no later than November 15, or the application will be returned pursuant 30 TAC § 281.18.

If you have any questions, please do not hesitate to contact me at (512)239-2270 or via e-mail at talleman@tceq .state.tx.us.

Sincerely,

Tom Allemand - Mail Code 160
Project Manager
Water Rights Permitting Team
Water Supply Division

Enclosure

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Tom Allemand, Project Manager
Water Rights Permitting Team
Water Supply Division

Date: October 30, 2002

10/30/02

From: Dean Minchillo, Water Conservation Specialist
Resource Protection Team
Water Supply Division

Subject: Review of Water Conservation Plan for Administrative Completeness.
City of Marlin, Texas

Certificate of Adjudication No. 12-4355, as amended, authorizes the owner to maintain two existing reservoirs and dams, New Marlin Reservoir and Marlin City Lake Reservoir, on Big Sandy Creek, tributary of Big Creek, tributary of Mussel Run Creek, tributary of the Brazos River, Brazos River Basin, Falls County, Texas. New Marlin Reservoir impounds, not to exceed, 3,135 acre-feet of water per annum and Marlin City Lake Reservoir impounds, not to exceed, 791 acre-feet of water per annum.

Owner is also authorized to impound, not to exceed, 6,560 acre-feet of water in the Soil Conservation Service Dam, SCS Site No. 19 on Brushy Creek, tributary of Big Creek.

Certificate of Adjudication No. 12-4355, as amended, authorizes the owner to divert and use, not to exceed, 4,000 acre-feet of water per annum from New Marlin Reservoir and Brushy Creek Reservoir for municipal purposes, to divert and use, not to exceed, 2,000 acre-feet of water per annum from the Brazos River for municipal purposes, to divert and use, not to exceed, 2,000 acre-feet of water per annum from the Brazos River for industrial purposes, and to use the impounded water of the aforesaid reservoirs for recreational purposes, and to use the aforesaid Marlin City Lake for municipal use as a sedimentation basin.

Applicant seeks an extension of time to commence and complete construction of Brushy Creek Dam with a proposed start date of May 8, 2004 and a completion date of May 8, 2009. The original commencement and completion dates were April 19, 1991 and April 19, 1996. The currently authorized dates are April 19, 1998 and April 19, 2003.

TAC § 295.9(1) states:
Applications to appropriate or to use water for municipal use, industrial or mining use, or irrigation use. The water conservation and drought contingency plans submitted with an application to appropriate or to use state water for municipal use, industrial or mining use, or irrigation use must be submitted in accordance with guidelines set forth in Chapter 288 of the title (related to Water Conservation Plans, Drought Contingency Plans, Guidelines and Requirements).

The water conservation plan, submitted by the City of Marlin, was reviewed for administrative sufficiency for municipal use. In order to find the plan administratively sufficient per 30 TAC Chapter 288.2, the following is required:

The City of Marlin must submit evidence indicating the official adoption of the September 2002 water conservation and drought contingency plan.

Upon receipt of the requested required information, the Water Conservation Staff of the Resource Protection Team will review the plans for administrative completeness per §288.2 and §288.20.

Attachment

cc: Bill Billingsley, Resource Protection Team

ORDINANCE NO. 02-25

AN ORDINANCE ADOPTING THE CITY OF MARLIN WATER CONSERVATION PLAN AND DROUGHT CONTINGENCY PLAN DATED OCTOBER 2002 AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARLIN, TEXAS.

WHEREAS, the City of Marlin Texas has formulated a PLAN for conserving water and a PLAN to lesson the effect of droughts; and

WHEREAS, the City of Marlin believes that it is in the best interest of the citizens of Marlin to conserve it's water supply; therefore,

PASSED, APPROVED AND ADOPTED THIS THE 8TH DAY OF OCTOBER 2002.

CITY OF MARLIN

Karen Little Meyer

Karen Little Meyer, Mayor

ATTEST:

Dora Rae Vaughan

Dora Rae Vaughan, City Secretary

ORDINANCE NO. 02-25

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PASSED, APPROVED AND ADOPTED THIS THE 8TH DAY OF OCTOBER 2002.

CITY OF MARLIN

Karen Little Meyer

Karen Little Meyer, Mayor

ATTEST:

Dora Rae Vaughan

Dora Rae Vaughan, City Secretary

Attachment No. 3

Water System Map

VI. CONSERVATION GOALS

Please use the data provided in this survey to establish conservation goals (additional data may be used).

A. Water conservation goals for municipal utilities are generally established to maintain or reduce consumption, as measured in:

1. gallons per capita per day used;
2. unaccounted-for water uses;
3. peak-day to average-day ratio; and/or
4. an increase in reuse or recycling of water.

B. TNRCC/TWDB conservation staff assess the reasonableness of water conservation goals based on whether the applicant addresses the following steps:

1. identification of a water or wastewater problem;
2. completion of the utility profile;
3. selection of goals based on the technical potential to save water as identified in the utility profile; and
4. performance of a cost-benefit analysis of conservation strategies.

If at least the first three steps have been completed and are summarized in the water conservation plan, then staff can conclude that there is substantiated basis for the goals, and that the water conservation plan is integrated into water management. Therefore, the established conservation goals can be deemed reasonable.

C. Complete the following in gallons per capita per day (gpcd) to quantify the water conservation goals for the utility's service area:

1. Estimation of the technical potential for reducing per capita water use (*see Appendix B*).

	(See Attachment # 6 for calculations)	Conservation Scenario Mostly Likely
a.	Reduction in unaccounted-for uses:	70
b.	Reduction in indoor water use due to water-conserving plumbing fixtures:	20.5 most likely 21.7 advanced
c.	Reduction in seasonal use:	3.03 most likely 8.66 advanced
d.	Reduction in water use due to public education programs:	3.85 most likely 9.62 advanced
	TOTAL TECHNICAL POTENTIAL FOR REDUCING PER CAPITA WATER USE:	97.38 most likely, 109.98 gpcd

*Subtract these totals from the dry-year per capita use to calculate the long-run planning goal.

2. Planning goal

The planning goal equals the dry year per capita water use minus the total technical potentials calculated in number one above.

Planning goal (in gpcd): 122 most likely, 109 advanced

Goal to be achieved by year: 2050

3. Needed reduction in per capita use to meet planning goal

Current per capita use: 219

Planning goal (from #2 above): 122 most likely, 109 advanced

Difference between current use and goal: 97 most likely, 110 advanced
(Represents needed reduction in per capita use to meet goal.)

Appendix A

Definitions of Utility Profile terms

1. **Residential** sales should include residential sales to residential class customers only.
   Industrial sales should include manufacturing and other heavy industry.
   Commercial sales should include all retail businesses, offices, hospitals, etc.
   Wholesale sales should include water sold to another utility for a resale to the public for human consumption.

2. **Unaccounted-for water** is the difference between water diverted or treated (as reported in Section IIA1, p. 4) and water delivered (sold)(as reported in Section IIA2, p. 4). Unaccounted-for water can result from:

   1. inaccurate or incomplete record keeping;
   2. meter error;

3. unmetered uses such as firefighting, line flushing, and water for public buildings and water treatment plants;
4. leaks; and
5. water theft and unauthorized use.

3. The **peak-day to average-day ratio** is calculated by dividing the maximum daily pumpage (in million gallons per day) by the average daily pumpage. Average daily pumpage is the total pumpage for the year (as reported in Section IIA1, p. 4) divided by 365 and expressed in million gallons per day.

4. **Municipal per capita use** is defined as total municipal water use dividing by the population and the 365 days. Total municipal water use is calculated by subtracting the **industrial sales** and **wholesale** from the total water diverted or treated (as reported in Section IIA1, p. 4).

Total municipal water use = Total water diverted or treated - industrial sales - wholesale
Municipal per capita use (gpcd) = Total municipal water use/population/365 days

Note: The AWWA considers the municipal per capita use as the most representative figure to use in long-range water supply and conservation planning.

5. **Seasonal water use** is the difference between base (winter) daily per capita use and summer daily per capita use. To calculate the **base daily per capita use**, average the monthly diversions for December, January, and February, and divide this average by 30. Then divide this figure by the population. To calculate the **summer daily per capita use**, use the months of June, July, and August.

Appendix B

Estimating the Technical Potential for Reducing Per Capita Water Use

The technical potential for reducing per capita water use is the range in potential water savings that can be achieved by implementing specific water conservation measures. The bottom of the range represents the potential savings under a "most likely," or real-world conservation scenario. The top of the range represents the potential savings under an "advanced" conservation scenario. The conservation measures include:

- reducing unaccounted-for water uses;
- reducing indoor water use due to water-conserving plumbing fixtures;
- reducing seasonal water use; and
- reducing water use through public education programs.

Guidelines and examples for calculating the technical potential water savings for each of these conservation

measures are given below.

I. Reducing unaccounted-for water uses

The TNRCC considers unaccounted-for water uses of 15% or less as acceptable for communities serving more than 5,000 people. Smaller, older systems that have a larger service area may legitimately experience larger losses. Losses above 15% may be an area of concern, and provide a conservation potential.

The bottom of the range for technical potential savings for unaccounted-for uses is zero. To calculate the top of the range, see the following example:

Unaccounted-for uses = 19.5%
Dry-year per capita water use = 250 gallons per capita per day (gpcd)
Potential for reduction in unaccounted-for use = (250 gpcd x 19.5%) - (250 gpcd x 15%)
= 48.75 gpcd - 37.5 gpcd
= 11.25 gpcd
Technical Potential Savings Range = 0 to 11.25 gpcd

II Reducing Indoor Water Use due to Water-Conserving Plumbing Fixtures

The TNRCC uses **20.5 gpcd** as the most reliable figure upon which to base potential water savings, which represents the "most likely" conservation scenario. This figure is based upon the estimate that by 2050, 90% of pre-1990 homes, and all new homes will have been equipped with water conserving plumbing fixtures.

The figure used for the "advanced" conservation scenario, **21.7 gpcd**, is an estimate of the average savings that would result from a home equipped exclusively with water-conserving plumbing fixtures. This figure is considered "advanced" because in a typical city, 100% of the homes are not exclusively equipped with water-conserving fixtures.

III. Reducing Seasonal Water Use

The Texas Water Development Board (TWDB) has calculated seasonal use as a percentage of average annual per capita use for East Texas (20%), West Texas (25%), and a statewide average of 22.5%. Seasonal water use is calculated by multiplying the average annual per capita use in gpcd by the appropriate percentage.

The technical potential for reduction in seasonal use is then calculated by multiplying the seasonal use by 7% for the "most likely" conservation scenario, and by 20% for the "advanced" scenario. Below is an example calculation:

Average annual per capita use = 185 gpcd
Geographical location = West Texas
Seasonal use = (185 gpcd x 25%) = 46.25 gpcd
Potential reduction in seasonal use (Most Likely scenario) = (46.25 x 7%) = 3.24 gpcd

Potential reduction in seasonal use (Advanced scenario) = (46.25 x 20%) = 9.25 gpcd

Technical Potential Savings Range = 3.24 to 9.25 gpcd

IV. Reducing Water Use through Public Education Programs

The technical potential for water conservation from public education programs is estimated to be from 2% of the average annual per capita use for the "most likely" conservation scenario to 5% for the "advanced" scenario, according to the "Water Conservation Guidebook," published in 1993 by the American Water Works Association. Below is an example calculation:

Average annual per capita use = 185 gpcd
Potential reduction in water use (Most Likely scenario) = (185 x 2%) = 3.7 gpcd
Potential reduction in water use (Advanced scenario) = (185 x 5%) = 9.25 gpcd
Technical Potential Savings Range = 3.7 to 9.25 gpcd

To calculate the total technical potential for reducing municipal per capita water use, simply add the individual technical potential amounts calculated in items I - IV above. In this case the total technical potential range equals 27.44 gpcd to 51.45 gpcd.

Summary of Technical Potential Calculations

Conservation Measure	Calculation Procedure	Example Result
Reducing unaccounted-for uses	(Dry-year demand) x (Unacc.-for percentage if more than 15%, minus 15%)	0 to 11.25 gpcd
Reducing indoor water use due to water- efficient plumbing fixtures	20.5 gpcd ("rule of thumb") to 21.7 gpcd (advanced)	20.5 to 21.7 gpcd
Reducing seasonal water use	Seasonal use (Avg. use x 22.5%) x 7% and 20%	3.24 to 9.25 gpcd
Reducing water use through public education programs	Average use x 2% and 5%	3.7 to 9.25 gpcd
	Total Technical Potential Savings	**27.44 to 51.45 gpcd**

To calculate the long-run planning goal, subtract these totals from the dry-year water demand. For example:

Long-run planning goal = (Dry year water demand) minus (total technical potential)
= 250 gpcd - 27.44 gpcd = 222.56 gpcd ("most likely" scenario)
= 250 gpcd - 51.45 gpcd =198.55 gpcd ("advanced" scenario)

Long-run planning goal for municipal water use = 222.56 to 198.55 gpcd

Appendix B

DROUGHT CONTINGENCY PLAN
FOR THE
City of Marlin
10-4-02

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Marlin hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

Section II: Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by the City of Marlin by means of a city council meeting, which was open to the public for input.

Section III: Public Education

The City of Marlin will periodically provide the public 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 local newspapers.

Section IV: Coordination with Regional Water Planning Groups

The service area of the City of Marlin is located within Region G and the City of Marlin has provided a copy of this Plan to the Texas Water Development Board.

Section V: Authorization

The City Manager of Marlin or his/her designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The City Manager or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VI: Application

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the City of Marlin. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VII: Definitions

For the purposes of this Plan, the following definitions shall apply:

Aesthetic water use: water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Commercial and institutional water use: water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as retail establishments, hotels and motels, restaurants, and office buildings.

Conservation: those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Customer: any person, company, or organization using water supplied by City of Marlin

Domestic water use: water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Even number address: street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

Industrial water use: the use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: 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.

Non-essential water use: water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

(a) irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
(b) use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
(c) use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
(d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
(e) flushing gutters or permitting water to run or accumulate in any gutter or street;
(f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or jacuzzi-type pools;
(g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
(h) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
(i) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Odd numbered address: street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

Section VIII: Criteria for Initiation and Termination of Drought Response Stages

The City Manager or his/her designee shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified "triggers" are reached.

The triggering criteria described below are based on the Marlin City Lake level. The Water Treatment Plant operator at the Marlin City Lake takes sight level readings daily and alerts City management when and if significant drops of lake water level are detected. These site readings are routinely compiled weekly and a report is submitted to the City Manager.

Stage 1 Triggers -- MILD Water Shortage Conditions

Requirements for initiation

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII - Definitions, when summer months are present and the water demand is high. This shall be observed annually beginning on May 1 through September 30.

Requirements for termination
Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

Stage 2 Triggers -- MODERATE Water Shortage Conditions

Requirements for initiation
Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section IX of this Plan when the Treatment Plant reading of the clearwell is 4 feet below "full" for a 7 day period.

Requirements for termination
Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

Stage 3 Triggers -- SEVERE Water Shortage Conditions

Requirements for initiation
Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when the Treatment Plant reading of the clearwell is 6 feet below "full" for a 7 day period.

Requirements for termination
Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

Stage 4 Triggers -- CRITICAL Water Shortage Conditions

Requirements 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 when the levels in the treated water reservoirs are continually falling to a level threatening a system outage.

Requirements for termination

Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

Stage 5 Triggers -- EMERGENCY Water Shortage Conditions

Requirements for initiation
Customers shall be required to comply with the requirements and restrictions for Stage 5 of this Plan when the total daily water demand equals or exceeds the Water Treatment Plant capacity for 3 consecutive days or when one or both of the following occurs:

1. Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; or
2. Natural or man-made contamination of the water supply source(s).

Requirements for termination
Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 48 hours.

Stage 6 Triggers -- WATER ALLOCATION

Requirements for initiation
Customers shall be required to comply with the water allocation plan prescribed in Section IX of this Plan and comply with the requirements and restrictions for Stage 5 of this Plan when the Treatment Plant reading of the clearwell is 8 feet below "full" for a 3 day period.

Requirements for termination - Water allocation may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

Section IX: Drought Response Stages

The City Mayor or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of this Plan, shall determine that a mild, moderate, severe, critical, emergency or water shortage condition exists and shall implement the following notification procedures:

Notification

Notification of the Public:
The City Manager or his/ here designee shall notify the public by means of:

1. Posting notices of the drought condition at City Hall

2. General circulation of newspapers

3. Notifying Waco TV stations KXXV, KWTX, and local cable company

4. Distributing information concerning the City's drought contingency plan and explaining the need for such a plan

Additional Notification:
The City Manager or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities:

Mayor and members of the City Council
Fire Chief(s)
City and/or County Emergency Management Coordinator(s)
TNRCC
Major water users

Stage 1 Response -- MILD Water Shortage Conditions

Goal: Achieve a voluntary 5 percent reduction in total water use.

Supply Management Measures:

(a) Reduced or discontinued flushing of water mains

(b) Use of reclaimed water for non-potable purposes

Voluntary Water Use Restrictions:

Encourage the public not to waste water and voluntarily reduce water use by:

(a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.

(b) All operations of the City of Marlin shall adhere to water use restrictions prescribed for Stage 2 of the plan.

(c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

Stage 2 Response -- MODERATE Water Shortage Conditions

Goal: Achieve a 10 percent reduction in total water use.

Supply Management Measures:

(a) Reduced or discontinued flushing of water mains

(b) Reduced or discontinued irrigation of public landscaped areas

(c) Use of an alternative supply source(s)

(d) Use of reclaimed water for non-potable purposes

Water Use Restrictions. Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

Continue implementation of all relevant actions in preceding phase, and the following public water-uses, not essential for public health or safety, are prohibited:

(a) Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rises. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is

contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.

(c) Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight.

(d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(e) Use of water from hydrants shall be limited to fire fighting, related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the City of Marlin.

(f) Use of water for the irrigation of golf course greens, tees, and fairways is prohibited except on designated watering days between the hours 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight. However, if the golf course utilizes a water source other than that provided by the City of Marlin.

(g) All restaurants are prohibited from serving water to patrons except upon request of the patron.

(h) The following uses of water are defined as non-essential and are prohibited:

1. wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
2. use of water to wash down buildings or structures for purposes other than immediate fire protection;
3. use of water for dust control;
4. flushing gutters or permitting water to run or accumulate in any gutter or street; and
5. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Stage 3 Response -- SEVERE Water Shortage Conditions

Goal: Achieve a 15 percent reduction in total water use.

Supply Management Measures:

(a) Reduced or discontinued flushing of water mains

(b) Reduced or discontinued irrigation of public landscaped areas

(c) Use of an alternative supply source(s)

(d) Use of reclaimed water for non-potable purposes

Water Use Restrictions. All requirements of Stage 2 shall remain in effect during Stage 3 except:

(a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.

(b) The watering of golf course tees is prohibited unless the golf course utilizes a water source other than that provided by the City of Marlin.

(c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

Stage 4 Response -- CRITICAL Water Shortage Conditions

Goal: Achieve a 20 percent reduction in total water use.

Supply Management Measures:

(a) Reduced or discontinued flushing of water mains

(b) Reduced or discontinued irrigation of public landscaped areas

(c) Use of an alternative supply source(s)

(d) Use of reclaimed water for non-potable purposes

Water Use Restrictions. All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:

(a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 6:00 a.m. and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, or drip

irrigation only. The use of hose-end sprinklers or permanently installed automatic sprinkler systems are prohibited at all times.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10 p.m.

(c) The filling, refilling, or adding of water to swimming pools, wading pools, and jacuzzi-type pools is prohibited.

(d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(e) No application for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be approved, and time limits for approval of such applications are hereby suspended for such time as this drought response stage or a higher-numbered stage shall be in effect.

Stage 5 Response -- EMERGENCY Water Shortage Conditions

Goal: Achieve a 25 percent reduction in total water use.

Supply Management Measures:

(a) Reduced or discontinued flushing of water mains

(b) Reduced or discontinued irrigation of public landscaped areas

(c) Use of an alternative supply source(s)

(d) Use of reclaimed water for non-potable purposes

Water Use Restrictions. All requirements of Stage 2, 3, and 4 shall remain in effect during Stage 5 except:

(a) Irrigation of landscaped areas is absolutely prohibited.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

Stage 6 Response -- WATER ALLOCATION

In the event that water shortage conditions threaten public health, safety, and welfare, the City Manager is hereby authorized to allocate water according to the following water allocation plan:

Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	Gallons per Month
1 or 2	6,000
3 or 4	7,000
5 or 6	8,000
7 or 8	9,000
9 or 10	10,000
11 or more	12,000

"Household" means the residential premises served by the customer's meter. "Persons per household" includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the City of Marlin of a greater number of persons per household on a form prescribed by the City Manager. The City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Marlin offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the City Manager. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the City of Marlin on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the City of Marlin in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a

household or fails to timely notify the City of Marlin of a reduction in the number of person in a household shall be fined not less than $50.00.

Residential water customers shall pay the following surcharges:

$6.00 for the first 1,000 gallons over allocation.
$9.00 for the second 1,000 gallons over allocation.
$12.00 for the third 1,000 gallons over allocation.
$15.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the City of Marlin of a greater number on a form prescribed by the City Manager. The City Manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Marlin offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the City Manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City of Marlin in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the City Manager shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the City of Marlin of a reduction in the number of person in a household shall be fined not less than $50.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

$6.00 for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
$9.00, thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.
$12.00, thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.
$15.00, thereafter for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Commercial Customers

A monthly water allocation shall be established by the City Manager, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 75% percent of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Marlin to determine the allocation. Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager or a special water allocation review committee. Nonresidential commercial customers shall pay the following surcharges:

Customers whose allocation is 8,500 gallons through 25,000 gallons per month:

$6.00 per thousand gallons for the first 1,000 gallons over allocation.
$9.00 per thousand gallons for the second 1,000 gallons over allocation.
$12.00 per thousand gallons for the third 1,000 gallons over allocation.
$15.00 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 25,000 gallons per month or more:

_2_ times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
_3_ times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
_4_ times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.
_5_ times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Industrial Customers

A monthly water allocation shall be established by the City Manager, or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer's allocation shall be approximately 90% of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers, the industrial customer's allocation shall be further reduced to 85% of the customer's water usage baseline. The industrial customer's water use baseline will be computed on the average water use for the 12 month period ending prior to the date of implementation of Stage 2 of the Plan. If the industrial water customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists. The City Manager shall give his/her best effort to see that notice of each industrial customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Marlin to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the City Manager, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water use because the customer had shutdown a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shutdown or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce water use is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager or a special water allocation review committee. Industrial customers shall pay the following surcharges:

Customers whose allocation is2,000,500 gallons through 2,675,250 gallons per month:

$6.00 per thousand gallons for the first 1,000 gallons over allocation.
$9.00 per thousand gallons for the second 1,000 gallons over allocation.
$12.00 per thousand gallons for the third 1,000 gallons over allocation.
$15.00 per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is 2,675,250 gallons per month or more:

2 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
3 times the block rate for each 1,000 gallons from 5 percent

through 10 percent above allocation.

_4_ times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.

_5_ times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Section X: Enforcement

(a) No person shall knowingly or intentionally allow the use of water from the City of Marlin for 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 City Manager, or his/her designee, in accordance with provisions of this Plan.

(b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than one hundred dollars ($100) and not more than five hundred dollars ($500). 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 re-connection charge, hereby established at $50.00, and any other costs incurred by the City of Marlin 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.

(c) Any person, including a person classified as a water customer of the City of Marlin, 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 rebuttable 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 rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the

water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

(d) Any employee of the City of Marlin, police officer, or other person(s) designated by the City Manager, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and addresss of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the Marlin Municipal Court on the date shown on the citation for which the date shall not be less than 3 days nor more than 5 days 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 Marlin 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 Marlin Municiple Court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in Marlin Municipal Court before all other cases.

Section XI: Variances

The City Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

(a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
(b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the City of Marlin within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the City Manager, or his/her designee, and shall include the following:

(a) Name and address of the petitioner(s).
(b) Purpose of water use.
(c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
(d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
(e) Description of the relief requested.

(f) Period of time for which the variance is sought.
(g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
(h) Other pertinent information.

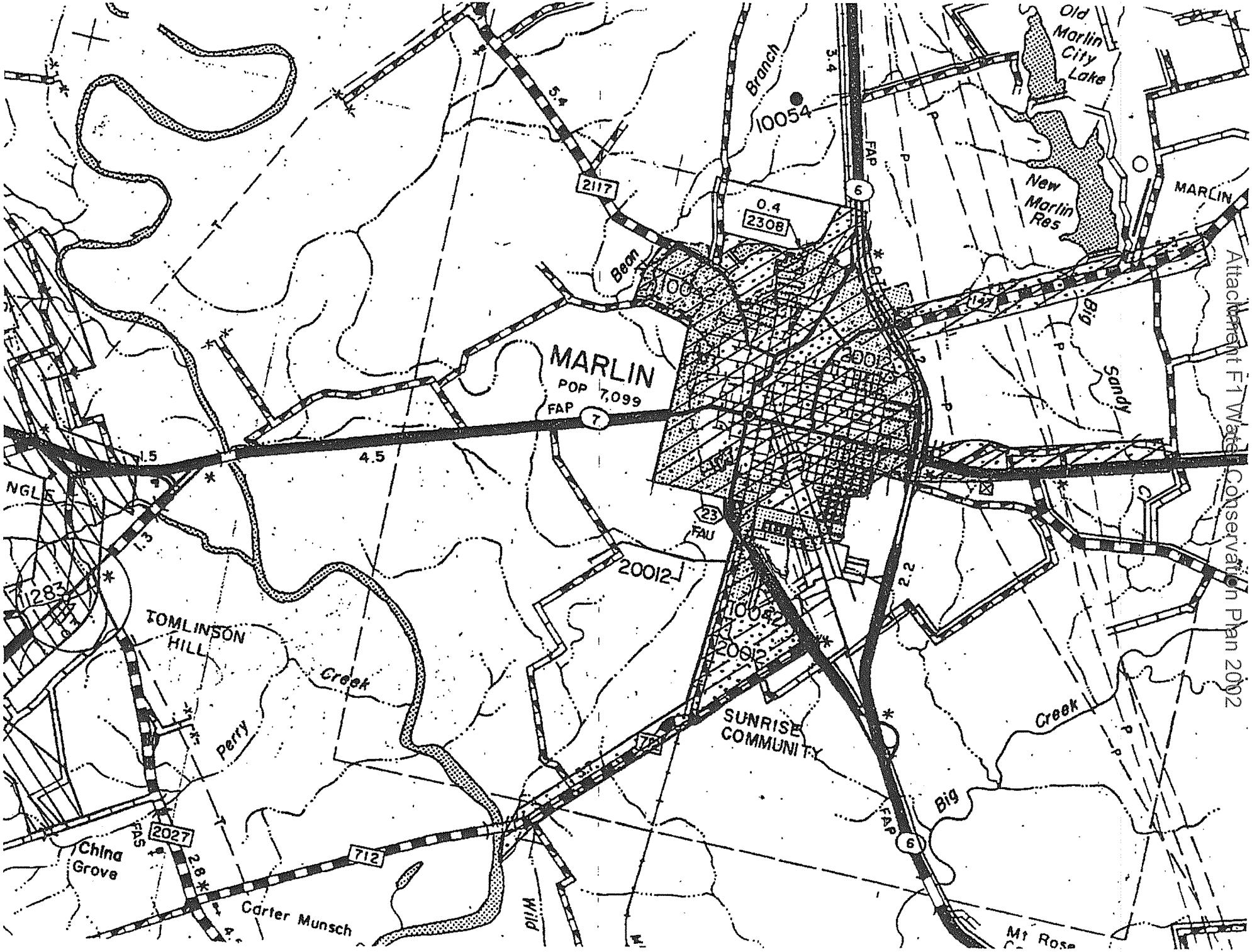
Variances granted by the City of Marlin shall be subject to the following conditions, unless waived or modified by the City Manager or his/her designee:

(a) Variances granted shall include a timetable for compliance.
(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Attachment No. 1

Certificate of Convenience and Necessity (CCN)
&
Service-Area Map



Attachment No. 2

U.S. Bureau of Census
&
Texas Water Development Board

GCT-PH1. Population, Housing Units, Area, and Density: 2000
Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
Geographic Area: Texas -- Place

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see http://factfinder.census.gov/home/en/datanotes/expsf1u.htm.

Geographic area	Population	Housing units	Area in square miles			Density per square mile of land area	
			Total area	Water area	Land area	Population	Housing units
Texas	20,851,820	8,157,575	268,580.82	6,783.70	261,797.12	79.6	31.2
PLACE							
Abbott city, Hill County	300	144	0.58	0.00	0.58	518.0	248.6
Abernathy city	2,839	1,081	1.18	0.00	1.18	2,402.0	914.6
Hale County (part)	2,131	803	0.93	0.00	0.93	2,289.2	862.6
Lubbock County (part)	708	278	0.25	0.00	0.25	2,820.1	1,107.3
Abilene city	115,930	45,618	110.61	5.48	105.13	1,102.7	433.9
Jones County (part)	5,488	452	17.06	3.91	13.15	417.3	34.4
Taylor County (part)	110,442	45,166	93.55	1.57	91.98	1,200.7	491.0
Abram-Perezville CDP, Hidalgo County	5,444	3,060	5.26	0.19	5.07	1,073.9	603.6
Ackerly city	245	96	0.31	0.00	0.31	792.5	310.5
Dawson County (part)	163	61	0.15	0.00	0.15	1,121.5	419.7
Martin County (part)	82	35	0.16	0.00	0.16	500.5	213.6
Addison town, Dallas County	14,166	8,205	4.43	0.00	4.43	3,200.0	1,853.4
Adrian city, Oldham County	159	82	0.88	0.00	0.88	179.9	92.8
Agua Dulce CDP, El Paso County	738	233	8.09	0.00	8.09	91.3	28.8
Agua Dulce city, Nueces County	737	257	0.32	0.00	0.32	2,338.1	815.3
Airport Road Addition CDP, Brooks County	132	45	2.11	0.00	2.11	62.5	21.3
Alamo city, Hidalgo County	14,760	6,208	5.72	0.00	5.72	2,580.8	1,085.5
Alamo Heights city, Bexar County	7,319	3,460	1.85	0.00	1.85	3,964.9	1,874.4
Alba town	430	232	1.11	0.00	1.11	387.8	209.2
Rains County (part)	0	0	0.01	0.00	0.01	0.0	0.0
Wood County (part)	430	232	1.10	0.00	1.10	392.6	211.8
Albany city, Shackelford County	1,921	880	1.47	0.00	1.47	1,305.9	598.2
Aldine CDP, Harris County	13,979	4,403	8.09	0.00	8.09	1,727.0	543.9
Aledo city, Parker County	1,726	625	1.90	0.00	1.90	909.2	329.2
Alfred-South La Paloma CDP, Jim Wells County	451	187	4.47	0.01	4.46	101.1	41.9
Alice city, Jim Wells County	19,010	6,998	12.30	0.40	11.90	1,597.4	588.0
Alice Acres CDP, Jim Wells County	491	141	5.90	0.00	5.90	83.2	23.9
Allen city, Collin County	43,554	15,227	26.34	0.00	26.34	1,653.6	578.1
Alma town, Ellis County	302	114	5.03	0.00	5.03	60.0	22.7
Alpine city, Brewster County	5,786	2,852	4.08	0.00	4.08	1,416.5	698.2
Alto town, Cherokee County	1,190	534	1.68	0.00	1.68	707.1	317.3
Alto Bonito CDP, Starr County	569	153	0.12	0.00	0.12	4,692.8	1,261.9
Alton city, Hidalgo County	4,384	1,175	2.11	0.00	2.11	2,075.5	556.3
Alton North CDP, Hidalgo County	5,051	1,255	4.19	0.00	4.19	1,205.3	299.5
Alvarado city, Johnson County	3,288	1,266	3.91	0.01	3.90	842.5	324.4
Alvin city, Brazoria County	21,413	8,442	17.34	0.91	16.43	1,302.9	513.7
Alvord town, Wise County	1,007	434	1.38	0.00	1.38	732.0	315.5
Amarillo city	173,627	72,408	90.31	0.45	89.86	1,932.1	805.8
Potter County (part)	99,833	41,088	64.43	0.38	64.06	1,558.5	641.4
Randall County (part)	73,794	31,320	25.88	0.07	25.81	2,859.3	1,213.6
Ames city, Liberty County	1,079	444	3.17	0.00	3.17	340.5	140.1
Amherst city, Lamb County	791	341	0.83	0.00	0.83	951.4	410.2

Geographic area	Population	Housing units	Area in square miles			Density per square mile of land area	
			Total area	Water area	Land area	Population	Housing units
Manor city, Travis County	1,204	436	1.14	0.00	1.14	1,051.7	380.8
Mansfield city	28,031	9,172	36.51	0.04	36.48	768.5	251.4
Ellis County (part)	129	48	1.52	0.00	1.52	84.7	31.5
Johnson County (part)	622	198	6.89	0.00	6.89	90.3	28.7
Tarrant County (part)	27,280	8,926	28.10	0.04	28.06	972.1	318.1
Manvel city, Brazoria County	3,046	1,148	23.30	0.00	23.30	130.7	49.3
Marathon CDP, Brewster County	455	287	5.25	0.00	5.25	86.6	54.6
Marble Falls city, Burnet County	4,959	2,085	6.70	0.55	6.14	807.1	339.3
Marfa city, Presidio County	2,121	1,126	1.57	0.00	1.57	1,354.6	719.1
Marietta town, Cass County	112	75	0.58	0.00	0.58	194.0	129.9
Marion city, Guadalupe County	1,099	395	0.71	0.00	0.71	1,544.0	554.9
Markham CDP, Matagorda County	1,138	446	2.29	0.00	2.29	497.5	195.0
Marlin city, Falls County	6,628	2,826	4.57	0.05	4.52	1,465.4	624.8
Marquez city, Leon County	220	113	1.20	0.00	1.20	183.3	94.1
Marshall city, Harrison County	23,935	9,923	29.64	0.08	29.57	809.5	335.6
Marshall Creek town, Denton County	431	167	0.23	0.00	0.23	1,864.5	722.4
Mart city	2,273	934	1.34	0.00	1.34	1,692.0	695.2
Limestone County (part)	0	0	0.08	0.00	0.08	0.0	0.0
McLennan County (part)	2,273	934	1.26	0.00	1.26	1,804.8	741.6
Martindale city, Caldwell County	953	363	2.02	0.00	2.02	472.4	179.9
Mason city, Mason County	2,134	1,103	3.68	0.00	3.68	579.7	299.6
Matador town, Motley County	740	395	1.30	0.00	1.30	569.5	304.0
Mathis city, San Patricio County	5,034	1,715	1.99	0.00	1.99	2,532.0	862.6
Maud city, Bowie County	1,028	473	1.49	0.00	1.49	691.3	318.1
Mauriceville CDP, Orange County	2,743	1,021	8.51	0.00	8.51	322.4	120.0
Maypearl city, Ellis County	746	263	0.47	0.00	0.47	1,590.2	560.6
Meadow town, Terry County	658	236	1.60	0.00	1.60	411.3	147.5
Meadowlakes city, Burnet County	1,293	599	0.79	0.01	0.77	1,673.2	775.1
Meadows Place city, Fort Bend County	4,912	1,616	0.94	0.00	0.94	5,247.8	1,726.5
Medina CDP, Zapata County	2,960	999	1.77	0.01	1.77	1,675.2	565.4
Megargel town, Archer County	248	132	0.61	0.00	0.61	404.4	215.3
Melissa city, Collin County	1,350	501	4.59	0.00	4.59	294.4	109.3
Melvin town, McCulloch County	155	100	0.47	0.00	0.47	329.2	212.4
Memphis city, Hall County	2,479	1,245	2.24	0.00	2.24	1,105.2	555.1
Menard city, Menard County	1,653	851	2.06	0.00	2.06	803.5	413.6
Mercedes city, Hidalgo County	13,649	5,455	8.64	0.06	8.58	1,591.2	636.0
Meridian city, Bosque County	1,491	600	2.17	0.01	2.16	689.3	277.4
Merkel town, Taylor County	2,637	1,202	1.96	0.00	1.96	1,342.0	611.7
Mertens town, Hill County	146	65	0.44	0.00	0.44	332.3	148.0
Mertzon city, Irion County	839	364	1.52	0.00	1.52	551.4	239.2
Mesquite city	124,523	46,245	43.46	0.05	43.42	2,868.1	1,065.2
Dallas County (part)	124,522	46,244	43.22	0.05	43.17	2,884.4	1,071.2
Kaufman County (part)	1	1	0.25	0.00	0.25	4.1	4.1
Mexia city, Limestone County	6,563	2,750	5.15	0.00	5.15	1,273.9	533.8
Miami city, Roberts County	588	283	1.17	0.00	1.17	504.0	242.6
Midland city	94,996	39,855	66.79	0.19	66.61	1,426.2	598.3
Martin County (part)	0	0	8.95	0.10	8.85	0.0	0.0
Midland County (part)	94,996	39,855	57.85	0.09	57.76	1,644.8	690.1
Midlothian city, Ellis County	7,480	2,792	37.89	0.19	37.71	198.4	74.0
Midway city, Madison County	288	151	1.60	0.00	1.60	179.6	94.2
Midway North CDP, Hidalgo County	3,946	902	2.07	0.00	2.07	1,908.7	436.3
Midway South CDP, Hidalgo County	1,711	461	1.24	0.00	1.24	1,376.3	370.8
Mila Doce CDP, Hidalgo County	4,907	1,147	3.29	0.00	3.29	1,492.2	348.8
Milam CDP, Sabine County	1,329	1,010	33.40	0.57	32.84	40.5	30.8
Milano city, Milam County	400	192	1.96	0.01	1.95	205.3	98.5
Mildred town, Navarro County	405	147	2.28	0.07	2.21	182.8	66.4
Miles city, Runnels County	850	361	1.34	0.00	1.34	636.2	270.2
Milford town, Ellis County	685	311	1.83	0.00	1.83	374.6	170.1

2002 State Water Plan
Population Projections by City

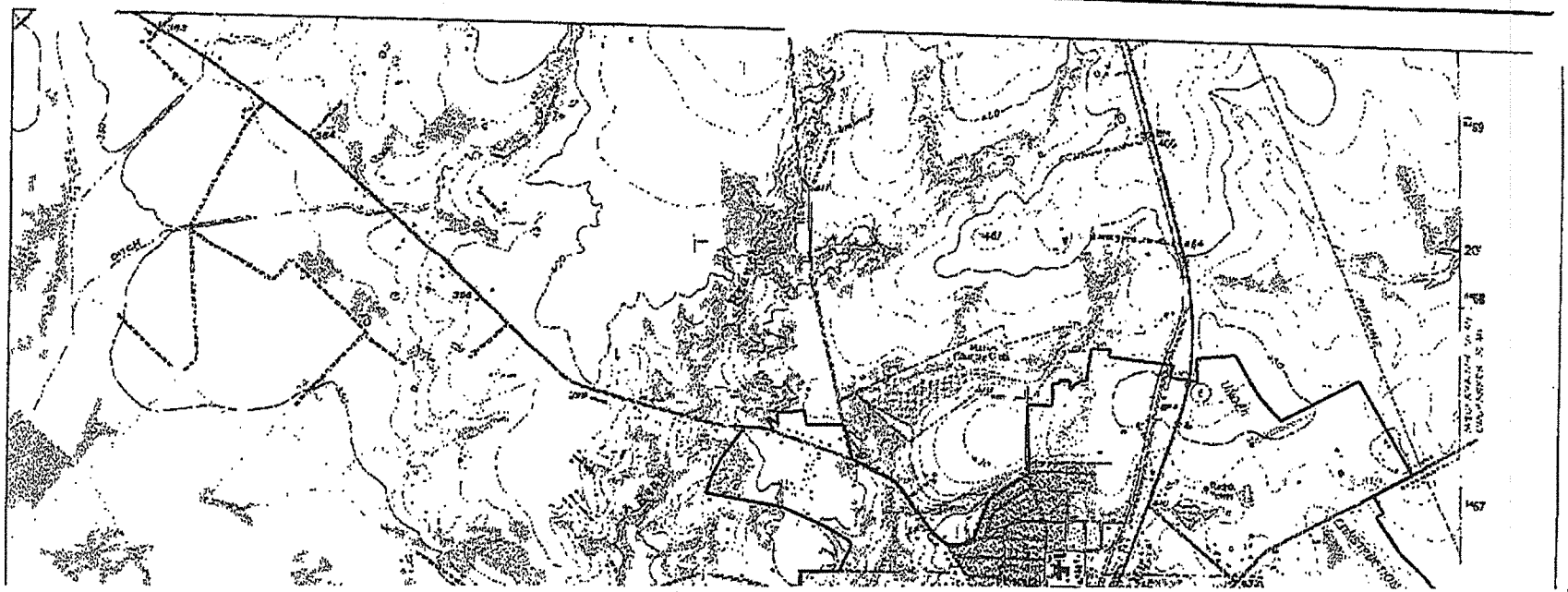
Population Projections by City for 2000-2050:

CITY	P1990 Census	P2000	P2010	P2020	P2030	P2040	P2050
BERNATHY	2,720	3,131	3,390	3,636	3,827	3,943	4,064
BILENE	106,654	119,932	132,480	146,339	157,693	169,927	178,617
DDISON	8,783	12,802	15,292	17,038	18,803	20,762	22,156
GUA DULCE	794	744	721	674	668	666	665
LAMO	8,210	12,821	16,566	19,256	22,367	24,143	26,060
LAMO HEIGHTS	6,502	7,039	7,391	7,759	7,868	7,959	8,051
LBANY	1,962	2,043	2,143	2,800	2,850	2,900	3,000
LDINE (CDP)	11,133	12,798	12,938	13,030	13,106	13,197	13,274
LEDO	1,169	1,633	2,282	3,187	4,453	5,173	5,173
LICE	19,788	22,123	23,649	24,910	25,105	24,982	24,860
LLEN	18,309	44,000	80,000	106,300	117,000	121,000	125,136
LPINE	5,637	6,479	7,521	8,981	9,916	10,942	12,074
LTO	1,027	1,137	1,235	1,335	1,443	1,556	1,656
[illegible]N	3,069	5,098	6,035	6,946	7,855	8,572	9,354
[illegible]DO	2,918	3,266	4,039	4,851	5,718	6,348	7,047
ALVIN	19,220	24,075	28,723	33,822	40,240	45,715	51,935
AMORD	865	1,089	1,131	1,154	1,175	1,217	1,292
AMARILLO	157,615	177,644	197,586	219,534	239,155	261,723	286,692
ANAS	989	1,368	1,538	1,747	1,983	2,156	2,345
ANDERSON	742	722	684	634	587	568	554
ANGLETON	1,993	2,476	3,361	4,456	5,165	5,707	6,306
ANSON	320	469	511	547	577	556	536
ANSON MILL (CDP)	9,468	13,832	14,704	15,347	16,243	17,214	18,014
ANTHEWS	10,678	12,029	13,472	14,551	15,045	15,300	15,559
APLETON	17,140	23,870	28,737	34,037	40,661	46,372	52,884
[illegible]	904	1,168	1,282	1,381	1,487	1,552	1,622
ARGETTA	672	945	1,329	1,870	2,630	3,699	5,203
ARLTON	2,644	2,772	2,940	3,084	3,236	3,378	3,526
ARTONY	3,328	4,403	5,378	6,422	7,519	8,380	9,340
ASTIN	1,212	1,350	1,397	1,474	1,478	1,455	1,432
ATSAS PASS	7,180	9,458	10,977	12,739	14,424	16,332	18,492
AUER CITY	1,748	1,855	1,916	1,925	1,910	1,868	1,806
AVILLE	1,575	2,226	7,081	11,935	14,983	16,550	18,282
AYTOWN	261,721	318,653	336,400	366,760	384,917	399,173	413,986
[illegible]	812	942	1,020	1,072	1,116	1,150	1,173
EARTON	1,608	1,747	1,927	2,113	2,355	2,617	2,908
EAUMONT	1,214	1,199	1,194	1,182	1,152	1,106	1,062

MAGNOLIA	946	1,413	1,659	1,869	2,249	2,658	2,847
MALAKOFF	2,038	2,378	2,615	2,824	2,924	2,974	3,071
MANOR	1,041	1,424	1,862	2,208	2,523	2,728	2,950
MANSFIELD	15,607	26,463	34,066	46,214	55,573	73,303	91,169
MANVEL	3,733	5,152	6,084	7,080	8,352	9,412	10,606
MARBLE FALLS	4,007	5,975	7,435	8,995	10,268	10,739	11,231
MARFA	2,424	2,612	2,986	3,428	3,790	3,668	3,550
MARION	984	1,051	1,078	1,104	1,130	1,158	1,187
MARKHAM (CDP)	1,206	1,464	1,551	1,612	1,675	1,729	1,797
MARLIN	6,386	6,947	7,367	7,774	8,225	8,684	9,169
MARSHALL	23,682	25,316	27,835	29,631	31,674	33,832	35,918
MART	2,004	2,323	2,592	2,751	2,917	3,057	3,191
MARTINDALE	904	1,108	1,182	1,238	1,297	1,410	1,547
MASON	2,041	2,157	2,172	2,179	2,183	2,185	2,186
MATADOR	790	757	727	679	631	568	497
MATHIS	5,423	6,440	7,105	7,871	8,375	9,144	9,984
MAUD	1,049	1,023	1,112	1,202	1,292	1,382	1,471
MAYPEARL	781	962	980	1,010	1,012	1,013	1,063
MCALLEN	84,021	116,891	128,278	139,070	154,689	178,632	206,280
MCCAMEY	2,493	2,665	2,943	3,142	3,147	3,113	3,079
MCGREGOR	4,683	5,228	5,670	5,845	6,106	6,311	6,523
MCKINNEY	21,283	50,000	100,000	145,000	190,000	234,000	277,200
MCLEAN	849	891	931	970	868	850	832
MCLEAN AIR	2,000	2,457	2,643	2,908	2,994	3,155	3,325
MCQUEENEY (CDP)	2,063	2,130	2,294	2,432	2,735	2,957	3,095
MEADOW	547	620	632	631	619	594	558
MEADOW LAKES	514	1,010	1,045	1,058	1,072	1,130	1,202
MEADOWS	4,606	7,261	9,061	11,407	14,285	17,654	21,819
MELISSA	557	952	1,200	1,300	1,450	1,500	1,579
MEMPHIS	2,465	2,338	2,306	2,264	2,190	2,117	2,057
MENARD	1,606	1,652	1,670	1,715	1,715	1,716	1,717
MENTONE	50	51	45	35	29	24	20
MERCEDES	12,694	15,962	18,745	21,797	25,691	29,302	33,421
MERIDIAN	1,390	1,520	1,662	1,818	1,989	2,175	2,379
MERKEL	2,469	3,416	3,782	4,130	4,452	4,699	4,960
MERTZON	778	731	767	779	785	788	790
MESQUITE	101,484	117,742	138,042	159,638	180,723	200,956	221,454
MEXIA	6,933	7,410	7,561	8,042	8,462	8,866	9,289
MIAMI	675	710	748	737	703	663	625
MIDLAND	89,443	109,885	127,222	144,454	161,267	181,036	203,228
MIDLOTHIAN	5,141	9,185	11,938	14,789	17,552	19,114	20,815
MILES	793	898	916	915	897	860	835
MILFORD	711	919	976	1,017	1,040	1,042	1,051
MINEOLA	4,321	4,838	5,457	6,076	6,695	7,314	7,933
MINERAL WELLS	14,870	15,856	16,612	17,408	18,325	18,978	19,658

Attachment No. 4

Wastewater System Map



BOUNDARY OF TREATMENT FACILITIES

THIS DRAWING CONTAINS AN EXCERPT FROM THE USGS QUADRANGLE ENTITLED "MARLIN"

MARLIN, TEXAS
WWTP DISCHARGE APPL.
ATTACHMENT #3–SITE MAP

HUNTER ASSOCIATES TEXAS, LTD.
ENGINEERS/PLANNERS/SURVEYORS
DALLAS 214-349-9731 AUSTIN 512-454-6716

DESIGN BY:	SCALE: 1" = 3000'	
DRAWN BY: JKM	CADD ID: USGS.DWG	
JOB NUMBER: A-93021E	DATE: 2/8/00	SHEET 1 OF 1

Attachment No. 5

Water and Wastewater Rates

Water Rates

There shall be charged and collected from each residential consumer of water inside the city limits a monthly minimum charge of $14.00, including the first two thousand (2,000) gallons of water consumed, plus a charge per rate of consumption thereafter as follows:

Rates For Water Service Inside City Limits (Residential)

There shall be charged and collected from each residential customer of water inside the City Limits a monthly minimum charge of $14.00, including the first 2,000 gallons of water consumed, plus a rate of consumption thereafter as follows:

Amount	Rate per 1,000 gallons
0 to 2,000 gallons	$ -0-
2,001 to 15,000 gallons	3.00
15,001 to 25,000 gallons	3.15
25,001 gallons and above	3.30

That the Code of Ordinances of the City of Marlin relative to water rates be amended and such rates for water services are found to be reasonable and necessary due to the higher cost of service outside the City Limits, and such rates shall hereafter be as follows:

Rates For Water Service Outside City Limits (Residential)

There shall be charged and collected from each residential consumer of water outside the City Limits a monthly minimum charge of $23.25; including the first 2,00 gallons of water consumed, plus a rate of consumption thereafter as follows:

Amount	Rate per 1,000 gallons
0 to 2,000 gallons	$ -0-
2,001 to 15,000 gallons	3.00
15,001 to 25,000 gallons	3.15
25,001 gallons and above	3.30

CHURCHES AND SCHOOLS. Churches shall be billed as Residential Inside City Limits connections, except those outside the City Limits and they shall be billed as Residential Outside City Limits connections. Schools shall be billed as Commercial connections in like manner.

COMMERCIAL INSIDE CITY LIMITS. There shall be charged and collected from each consumer of water a monthly minimum charge of $26.50 per month for the first 2,000 gallons of water used by Commercial Outside the City Limits consumer, plus a rate of consumption thereafter as follows:

Amount	Rate per 1,000 gallons
0 to 2,000 gallons	$ -0-
2,001 to 5,000 gallons	3.45
5,001 to 15,000 gallons	3.35
15,001 to 25,000 gallons	3.25
25,001 to 50,000 gallons	3.00
50,001 to 500,000 gallons	2.90
over 500,000 gallons	2.25

COMMERCIAL OUTSIDE THE CITY LIMITS. There shall be charged and collected from each consumer of water a monthly minimum charge of $26.50 per month for the first 2,000 gallons of water used by Commercial Outside the City Limits consumer, plus a rate of consumption thereafter as follows:

Amount	Rate per 1,000 gallons
0 to 2,000 gallons	$ -0-
2,001 to 5,000 gallons	3.45
5,001 to 15,000 gallons	3.35
15,001 to 25,000 gallons	3.25
25,001 to 50,000 gallons	3.00
50,001 to 500,000 gallons	2.90
over 500,000 gallons	2.25

Wastewater Rates

All users or accounts of the City of Marlin Sanitary Sewer System within the city limits shall be charged as follows:

RESIDENTIAL RATE – A minimum flat rate of $15.00 for the first 5,000 gallons of the monthly water usage and $3.00 per thousand gallons over 5,000 gallons of monthly water usage.

COMMERCIAL RATE – A commercial rate of $2.25 per thousand gallons of monthly water usage.

Attachment No. 6

Calculations for Conservation Goals

Reduction in unaccounted-for uses:

Dry-year per capita water use = 219gpcd

Potential for reduction in unaccounted-for use: = (219 gpcd * 47%)-(219 gpcd * 15%)
= 102.93 - 32.85
= 70.08

Reduction in seasonal use:

Average annual per capita use = (175 gpcpd + 190 gpcd+ 205 gpcd + 173 gpcd+ 219 gpcd)
= 192.4 gpcd

Geographical location = Central Texas = 22.5%

Seasonal use = 192.4 gpcd * 22.5% = 43.29 gpcd

Potential reduction in seasonal use (most likely scenario) = 43.29 gpcd * 7% = **3.03 gpcd**

Potential reduction in seasonal use (advanced scenario) = 43.29 gpcd * 20% = **8.66 gpcd**

Reduction in water use due to public education programs:

Average annual per capita use = 192.4

Potential reduction in water use (most likely scenario) = 192.4 gpcd * 2% = **3.85 gpcd**

Potential reduction in water use (advanced scenario) = 192.4 gpcd * 5 % = **9.62 gpcd**

ATTACHMENT B.
ORDINANCE 13-010

ORDINANCE NO. 13-010

AN ORDINANCE ADAPTING THE CITY OF MARLIN WATER CONSERVATION PLAN DATED MARCH 2013. REGULATORY COMPLIANCE ISSUES AND THE NEED FOR A CONSERVATION PLAN TO PROTECT THE CITY'S WATER RESOURCES CREATES THE EMERGENT NEED FOR THE IMMEDIATE PASSAGE OF THIS ORDINANCE WITHOUT TWO (2) READINGS, AND THE VOTE ADOPTING THIS ORDINANCE IS IN ADDITION A VOTE TO DECLARE SUCH EMERGENT NEED AND TO ADOPT THIS ORDINANCE TO BECOME EFFECTIVE IMMEDIATELY WITHOUT THE NECESSITY OF A FURTHER READING.

WHEREAS, the City of Marlin Texas has formulated a PLAN for conserving water; and

WHEREAS, the City of Marlin believes that it is the best interest of the citizens of Marlin to conserve its water supply, and

WHEREAS, effective March 12,2013, the Water Conservation Plan is required to be reviewed and updated every five years to include specific quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use, in gallons per capita per day;

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

PART 1: That the City Council hereby approves the Water Conservation Plan.

PART 2: That this ordinance shall take effect immediately from and after its passage.

ADOPTED this 12 day of March, A.D. 2013

ATTEST: APPROVED:

_____ _____

City Secretary MAYOR

APPROVED:

_____

City Attorney

ATTACHMENT C.
CITY OF MARLIN UTILITY PROFILE

TEXAS WATER DEVELOPMENT BOARD
UTILITY PROFILE (TWDB - 1965)

(Formerly WRD 264)

The purpose of the Utility Profile is to assist with water conservation plan development and to ensure that important information and data be considered when preparing your water conservation plan and its target and goals. Please complete all questions as completely and objectively as possible. See *Water Conservation Plan Guidance Checklist* (TWDB-1968) for information on other water conservation plan provisions. You may contact the Municipal Water Conservation Unit of the TWDB at 512.463.7955 or wcpteam@twdb.state.tx.us for assistance.

APPLICANT DATA

Name of Utility: City of Marlin

Public Water Supply Identification Number (PWS ID): 0730002

Address: 101 Fortune Street City: Marlin

State: TX Zip Code: 76661 Email: w.mcdonald@marlintx.net

Telephone Number: (254) 883-1450 Fax: (254) 883-1456

Regional Water Planning Group: G

Groundwater Conservation District: None

Form Completed By: William McDonald Title: City Manager

Signature: _____ Date: _____

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

Name: William McDonald Phone: (254) 883-1450

Email: w.mcdonald@marlintx.net

UTILITY DATA

A. Population and Service Area Data

1. Current population of service area: 5,967

2. Current population served by utility: Water: 5,967

   Wastewater: 5,967

3. Population served by water utility for the previous five years starting with the most recent year:

Year	Population
2011	5,967
2010	6,628
2009	6,628
2008	6,628
2007	6,628

4. Projected population for service area in the following decades:

Year	Population
2010	6,862
2020	7,155
2030	7,455
2040	7,718
2050	7,927

5. List source(s)/method(s) for the calculation of current and projected population:

2011 Brazos G Regional Water Plan, and from the Texas Water Development Board Web site at https://www.twdb.state.tx.us/apps/db12/defaultReadOnly.asp

B. Active Connections

1. Current number of active connections by user type. If not a separate classification, check whether multi-family service is counted as **Residential** ◉ or **Commercial** ○

Water User Type*	Metered	Un-metered	Total
Residential Single Family	2,048	0	2,048
Residential Multi-family	0	0	0
Commercial/Institutional	315	0	315
Industrial	0	0	0
Other (please describe):	0	0	0

* See Appendix A #1.

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

Water User Type*	2011	2010	2009
Residential Single Family	0	0	0
Residential Multi-family	0	0	0
Commercial/Institutional	0	0	0
Industrial	0	0	0
Other (please describe):	0	0	0

* See Appendix A #1.

C. High Volume Customers

List annual water use for the five highest volume retail and wholesale customers. Please indicate if treated or raw water delivery.

Customer	Water User Type*	Annual Water Use (in gallons)	Treated	Raw
TDCJ Hobby Unit	City	38,575,000	◉	○
Tx Youth Community	Other	13,886,000	◉	○
Jon-Lin	Commerical	11,752,000	◉	○
Elmwood Nursing	Residental	5,403,000	◉	○
M&M Apts	Residental	4,880,000	◉	○

* See Appendix A #1

D. Water Supply System

1. Design daily capacity of system: 3,024,000 **gallons** per day

2. Storage Capacity: Elevated 900,000 **gallons** per day

   Ground 888,000 **gallons** per day

3. If surface water, do you recycle filter backwash to the head of the plant?
   Yes ○ **No** ◉. If yes, approximately _____ **gallons** per day.

E. Water Accounting Data

1. Amount of water use in **gallons** for previous five years.
   Please indicate whether: **Treated Water** ◉ or **Raw Water** ○

YEAR	2011	2010	2009	2008	2007
January	41,236,000	43,805,000	82,133,000	34,867,000	20,421,038
February	41,650,000	37,932,000	107,717,000	33,566,000	16,922,600
March	38,077,000	41,053,000	74,263,000	34,240,000	19,643,000
April	38,138,000	35,448,000	35,587,000	34,846,000	20,106,200
May	40,974,000	40,849,000	37,107,000	37,552,000	18,776,000
June	45,235,000	43,741,000	42,769,000	44,688,000	19,053,200
July	51,148,000	41,745,000	79,902,000	50,726,000	19,977,300
August	47,737,000	45,597,000	118,644,000	101,121,000	23,717,200
September	46,448,000	43,249,000	42,301,000	54,367,000	19,023,300
October	44,080,000	42,998,000	40,559,000	72,950,000	24,930,100
November	42,659,000	38,681,000	39,740,000	47,971,000	19,537,900
December	45,938,000	40,823,000	31,513,000	45,035,000	18,915,600
TOTAL	523,320,000	495,921,000	732,235,000	591,929,000	241,023,438

Please indicate how the above figures were determined (e.g., from a master meter located at the point of a diversion from a stream or located at a point where raw water enters the treatment plant).

From city meters

2. Amount of water sold in **gallons** as recorded by Water User Type for the previous five years (See Appendix A #1)

Year	Residential Single Family	Residential Multi Family	Commercial/ Institutional	Industrial	Other	Wholesale	Total Sold
2011	118,470,168	0	129,977,300	0	0	0	248,447,468
2010	101,174,300	0	159,205,200	0	0	0	260,379,500
2009	109,660,663	0	150,041,700	0	0	0	259,702,363
2008	137,824,900	0	147,278,200	654,200	0	0	285,757,300
2007	101,496,000	0	131,522,700	0	0	0	233,018,700

3. GPCD and Seasonal Water Use for the previous five years

					SEASONAL WATER USE***	
Year	Population	Total Water Use	Total gallons per capita per day (GPCD)*	Residential GPCD**	Winter per capita per day	Summer per capita per day
2011	5,967	523,320,000	240	54	240	268
2010	6,628	495,921,000	205	42	205	220
2009	6,628	732,235,000	303	45	371	405
2008	6,628	591,929,000	245	57	190	329
2007	6,628	241,023,438	100	42	94	105
Five Year Average	6,496	516,885,688	218	48	220	265

* Total GPCD (See Appendix A #2):

** Residential GPCD (See Appendix A #3):

*** Seasonal Water Use (See Appendix A #4)

4. Water Loss Data for the previous five years (See Appendix A #5)

Year	Water Loss expressed in gallons	Water Loss expressed in GPCD	Water Loss expressed as a percentage
2011	241,530,000	111	46.15%
2010	215,000,926	89	43.35%
2009	96,827,517	40	13.22%
2008	46,069,740	19	7.78%
2007	24,425,000	10	10.13%
Five Year Average	124,770,637	54	24.13%

5. Peak Day Use (in **gallons**) to Average Daily Use (in **gallons**) Ratio for the previous five years (See Appendix A #6)

Year	Average Daily Use	Peak Day Use	Ratio
2011	1,433,753	3,441,010	2.40
2010	1,358,688	3,260,850	2.40
2009	2,006,123	4,814,695	2.40
2008	1,621,723	3,892,135	2.40
2007	660,338	1,584,811	2.40

F. Projected Demands

Estimate water supply requirements for at least the next ten years using population trends, historical water use, and economic growth, etc.

Year	Population	Water Demand (in gallons)
2012	6,099	225,600,000
2013	6,231	227,500,000
2014	6,363	229,500,000
2015	6,495	231,500,000
2016	6,627	233,500,000
2017	6,759	235,500,000
2018	6,891	237,500,000
2019	7,023	239,500,000
2020	7,155	241,500,000
2021	7,188	243,400,000

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

2011 Brazos G Regional Water Plan, and from the Texas Water Development Board Web site at https://www.twdb.state.tx.us/apps/db12/defaultReadOnly.asp

G. Wastewater System Data

1. Design capacity of wastewater treatment plant(s): 2,000,000 **gallons** per day

2. Is treated effluent used for:

Use	Total Annual Volume (in gallons)
On-site irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (parks, golf courses)	
Agricultural	
Other (please describe):	

Could treated effluent be substituted for certain potable water now being used? **Yes** ◯ **No** ◯

H. Wastewater Data for Service Area

1. Percent of water service area served by wastewater system: 95 %

2. Monthly wastewater volume in **gallons**, treated for previous five years.

YEAR	2011	2010	2009	2008	2007
January	24,087,000	31,372,000	12,369,000	11,005,000	31,403,000
February	15,820,000	32,480,000	12,964,000	10,668,000	13,804,000
March	16,058,000	32,147,000	14,291,000	18,383,000	26,536,000
April	14,850,000	121,770,000	22,680,000	11,070,000	16,620,000
May	24,769,000	139,748,000	23,901,000	15,345,000	31,217,000
June	21,660,000	135,240,000	22,920,000	10,080,000	25,380,000
July	23,033,000	26,040,000	24,862,000	10,013,000	24,118,000
August	18,879,000	24,552,000	15,717,000	15,159,000	12,245,000
September	19,710,000	23,340,000	35,250,000	11,040,000	22,080,000
October	19,592,000	22,165,000	34,627,000	11,873,000	1,271,000
November	25,410,000	24,960,000	43,890,000	14,700,000	5,250,000
December	33,759,000	22,599,000	67,580,000	14,043,000	11,532,000
TOTAL	257,627,000	636,413,000	331,051,000	153,379,000	221,456,000

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ATTACHMENT D.
2011 BRAZOS G REGIONAL WATER PLAN

Brazos G Regional Water Planning Area

2011 Brazos G Regional Water Plan

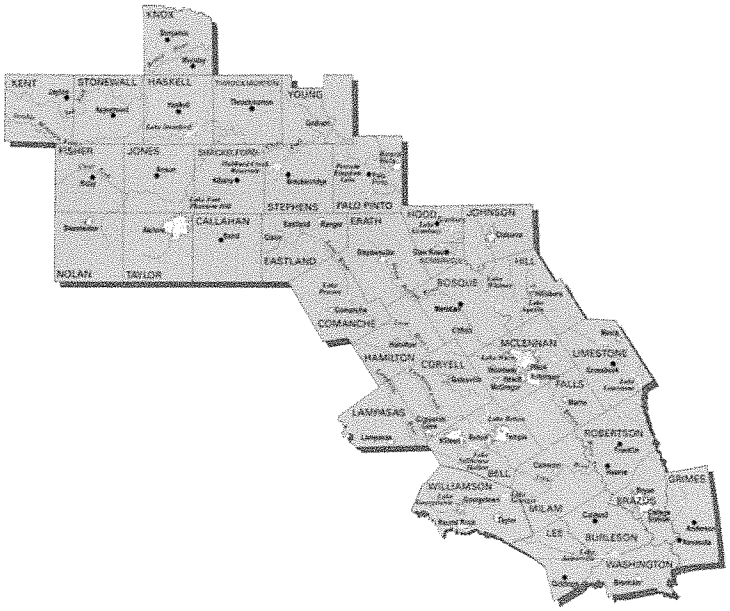
Volume I – Executive Summary and Regional Water Plan

Prepared by:

Brazos G Regional Water Planning Group

With administration by:

Brazos River Authority



With technical assistance by:

HDR Engineering, Inc.

In association with:
Freese and Nichols, Inc.
R.W. Harden and Associates, Inc.
Hicks and Company, Inc.
Fletcher Communications

September 2010

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Table 2-1 (Continued)

City/County	Historical		Projections[1]						Percent Growth[2] 1990-00	Percent Growth 2000-60
	1990	2000	2010	2020	2030	2040	2050	2060		
Coryell County										
Copperas Cove (P)	24,079	29,455	34,762	40,893	46,866	51,092	54,790	57,765	2.04%	1.13%
Elm Creek WSC (P)		320	470	643	812	931	1,036	1,120	NA	2.11%
Fort Gates WSC		2,000	2,279	2,602	2,916	3,138	3,333	3,490	NA	0.93%
Fort Hood CDP (P)	18,559	16,429	16,429	16,429	16,429	16,429	16,429	16,429	-1.21%	0.00%
Gatesville	11,492	15,591	19,637	24,312	28,866	32,088	34,908	37,177	3.10%	1.46%
Kempner WSC		3,409	5,039	6,922	8,756	10,054	11,190	12,104	NA	2.13%
County-Other	10,083	7,774	9,091	10,613	12,096	13,146	14,063	14,801	-2.57%	1.08%
Coryell County Total	*64,213*	*74,978*	*87,707*	*102,414*	*116,741*	*126,878*	*135,749*	*142,886*	1.56%	1.08%
Eastland County										
Cisco	3,813	3,851	3,859	3,869	3,801	3,697	3,576	3,415	0.10%	-0.20%
Eastland	3,690	3,769	4,017	4,028	3,957	3,849	3,723	3,555	0.21%	-0.10%
Gorman	1,290	1,236	1,239	1,242	1,220	1,187	1,148	1,096	-0.43%	-0.20%
Ranger	2,803	2,584	2,590	2,596	2,551	2,481	2,399	2,292	-0.81%	-0.20%
Rising Star	859	835	837	839	824	802	775	740	-0.28%	-0.20%
Stephens County Rural WSC (P)		13	13	13	13	12	12	12	NA	-0.13%
County-Other	6,033	6,009	5,781	5,795	5,695	5,538	5,356	5,116	-0.04%	-0.27%
Eastland County Total	*18,488*	*18,297*	*18,336*	*18,382*	*18,061*	*17,566*	*16,989*	*16,226*	-0.10%	-0.20%
Erath County										
Dublin	3,190	3,754	4,167	4,611	5,011	5,413	6,479	7,149	1.64%	1.08%
Stephenville	13,502	14,921	15,959	17,076	18,082	19,094	21,775	23,462	1.00%	0.76%
County-Other	11,299	14,326	16,540	18,922	21,067	23,227	28,946	32,544	2.40%	1.38%
Erath County Total	*27,991*	*33,001*	*36,666*	*40,609*	*44,160*	*47,734*	*57,200*	*63,155*	1.66%	1.09%
Falls County										
Bell-Milam Falls WSC (P)		915	1,223	1,609	2,004	2,351	2,627	2,952	NA	1.97%
Bruceville-Eddy (P)		2	4	6	8	10	12	14	NA	3.30%
East Bell County WSC (P)		612	729	876	1,026	1,158	1,263	1,386	NA	1.37%
Elm Creek WSC (P)		32	46	64	83	99	112	127	NA	2.32%
Lott		724	724	724	724	724	724	724	NA	0.00%
Marlin	6,386	6,628	6,862	7,155	7,455	7,718	7,927	8,173	0.37%	0.35%
Rosebud	1,638	1,493	1,493	1,493	1,493	1,493	1,493	1,493	-0.92%	0.00%
Tri-County SUD (P)		2,614	2,975	3,428	3,891	4,298	4,622	5,003	NA	1.09%
West Brazos WSC (P)		1,820	2,298	2,898	3,511	4,050	4,478	4,982	NA	1.69%
County-Other	9,688	3,736	3,246	2,631	2,001	1,449	1,009	492	-9.09%	-3.32%
Falls County Total	*17,712*	*18,576*	*19,600*	*20,884*	*22,196*	*23,350*	*24,267*	*25,346*	0.48%	0.52%
Fisher County										
Bitter Creek WSC (P)		1,150	1,165	1,166	1,196	1,219	1,230	1,266	NA	0.16%
Roby	616	673	682	683	702	716	723	745	0.89%	0.17%
Rotan	1,913	1,611	1,562	1,559	1,461	1,385	1,347	1,230	-1.70%	-0.45%
County-Other	2,313	910	855	851	738	652	610	476	-8.91%	-1.07%
Fisher County Total	*4,842*	*4,344*	*4,264*	*4,259*	*4,097*	*3,972*	*3,910*	*3,717*	-1.08%	-0.26%
Grimes County										
Navasota	6,296	6,789	7,111	7,470	7,753	7,950	8,107	8,262	0.76%	0.33%
Wickson Creek SUD (P)		2,792	4,614	6,646	8,249	9,363	10,253	11,128	NA	2.33%
County-Other	12,532	13,971	14,910	15,957	16,783	17,357	17,816	18,267	1.09%	0.45%
Grimes County Total	*18,828*	*23,552*	*26,635*	*30,073*	*32,785*	*34,670*	*36,176*	*37,657*	2.26%	0.79%

Table 2-4 (Continued)

Water User Group	Per Capita Use Rates[1,4]							Reduction due to Plumbing Fixtures Act (2010 to 2060)
	Base (2000)	2010	2020	2030	2040	2050	2060	
LIMESTONE COUNTY-OTHER	104	100	97	94	91	90	90	10
LIPAN[3]		255	253	250	248	248	248	7
LITTLE RIVER-ACADEMY	141	137	134	131	128	127	127	10
LOMETA	138	134	131	128	126	125	126	8
LORENA	206	201	197	194	192	191	191	10
LOTT	122	120	116	113	110	109	109	11
MANSFIELD	212	235	243	241	241	241	242	0
MANVILLE WSC	123	119	117	115	114	114	114	5
MARLIN	350	346	343	340	337	336	336	10
MART	125	121	118	115	113	112	112	9
MCGREGOR	179	175	172	169	166	164	164	11
MCLENNAN COUNTY-OTHER	221	217	213	211	208	207	207	10
MERIDIAN	130	126	123	120	117	116	116	10
MERKEL	148	144	141	138	135	134	134	10
MEXIA	165	162	159	156	152	150	150	12
MILAM COUNTY-OTHER	138	135	132	129	126	124	124	11
MILANO WSC	99	95	91	89	87	86	86	9
MINERAL WELLS	175	171	168	166	163	162	162	9
MOFFAT WSC	84	81	78	76	74	73	73	8
MOODY	127	124	120	117	114	113	113	11
MORGAN[3]		116	115	113	112	110	110	6
MORGANS POINT RESORT	104	100	97	95	94	93	93	7
MOUNTAIN PEAK WSC	166	161	159	158	156	156	156	5
MUNDAY	161	157	154	151	148	146	146	11
NAVASOTA	182	179	175	172	169	168	168	11
NEWCASTLE	93	91	86	83	81	79	79	12
NOLAN COUNTY-OTHER	94	91	87	84	81	80	80	11
NOLANVILLE	124	119	116	113	110	109	109	10
NORTH BOSQUE WSC	185	180	177	176	175	174	174	6
OAK TRAIL SHORES SUBDIVISION	134	130	128	125	123	122	122	8
PALO PINTO COUNTY-OTHER	134	130	126	123	121	120	120	10
PARKER WSC	121	117	114	111	110	109	109	8
PENDLETON WSC	85	80	78	75	73	72	72	8
POTOSI WSC	103	100	97	95	92	91	91	9
RANGER	113	109	106	103	100	98	98	11
RIESEL	95	91	88	85	83	82	82	9
RIO VISTA	88	84	80	77	75	74	74	10
RISING STAR	82	79	76	73	70	68	68	11
ROBERTSON COUNTY WSC	77	72	69	67	66	65	65	7
ROBERTSON COUNTY-OTHER	120	117	114	112	110	109	109	8
ROBINSON	122	118	115	112	109	108	108	10
ROBY	103	99	98	95	92	91	91	8
ROCKDALE	188	200	200	200	200	200	200	0
ROGERS	159	156	153	150	147	145	145	11
ROSCOE	121	117	113	110	107	106	106	11

Table 2-5 (Continued)

City/County	Historical		Projections[1]					
	1990	2000	2010	2020	2030	2040	2050	2060
Stephens County Rural WSC (P)		1	2	2	2	1	1	1
County-Other	1,128	835	784	767	734	696	660	631
Eastland County Total	*3,066*	*3,003*	*2,962*	*2,909*	*2,796*	*2,662*	*2,535*	*2,421*
Erath County								
Dublin	428	454	485	516	544	576	682	753
Stephenville	2,397	2,624	2,717	2,850	2,957	3,058	3,464	3,732
County-Other	1,388	1,541	1,705	1,886	2,053	2,211	2,724	3,062
Erath County Total	*4,213*	*4,619*	*4,907*	*5,252*	*5,554*	*5,845*	*6,870*	*7,547*
Falls County								
Bell-Milam Falls WSC (P)		138	178	229	281	327	362	407
Bruceville-Eddy (P)		1	2	3	4	5	5	6
East Bell County WSC (P)		67	77	89	101	112	120	132
Elm Creek WSC (P)		3	5	6	8	9	11	12
Lott		99	97	94	92	89	88	88
Marlin	1,281	2,599	2,660	2,749	2,839	2,913	2,983	3,076
Rosebud	182	177	171	166	161	156	152	152
Tri-County SUD (P)		234	253	280	305	327	347	375
West Brazos WSC (P)		159	190	230	267	304	331	368
County-Other	1,250	418	360	286	213	146	97	47
Falls County Total	*2,713*	*3,895*	*3,993*	*4,132*	*4,271*	*4,388*	*4,496*	*4,663*
Fisher County								
Bitter Creek WSC (P)		121	117	114	113	111	110	113
Roby	54	78	76	75	75	74	74	76
Rotan	214	291	278	271	249	231	222	203
County-Other	457	199	185	181	155	134	124	97
Fisher County Total	*725*	*689*	*656*	*641*	*592*	*550*	*530*	*489*
Grimes County								
Navasota	1,210	1,384	1,426	1,464	1,494	1,505	1,526	1,555
Wickson Creek SUD (P)		303	625	878	1,044	1,175	1,286	1,396
County-Other	1,564	1,236	1,269	1,287	1,317	1,303	1,317	1,351
Grimes County Total	*2,774*	*2,923*	*3,320*	*3,629*	*3,855*	*3,983*	*4,129*	*4,302*
Hamilton County								
Hamilton	637	570	554	542	531	521	513	513
Hico	241	291	302	297	292	288	285	285
County-Other	471	499	431	407	384	375	356	355
Hamilton County Total	*1,349*	*1,360*	*1,287*	*1,246*	*1,207*	*1,184*	*1,154*	*1,153*
Haskell County								
Haskell	450	585	559	538	518	503	487	472
Rule	127	86	81	77	72	69	66	62
Stamford (P)	8	8	8	8	8	8	8	8
County-Other	240	257	235	221	203	192	180	166
Haskell County Total	*825*	*936*	*883*	*844*	*801*	*772*	*741*	*708*

4C.10.2 City of Marlin

4C.10.2.1 Description of Supply

The City of Marlin obtains its water supply from surface water from local reservoirs and the Brazos River. The City owns and operates two existing reservoirs—Marlin City Lake and New Marlin Reservoir—that impound runoff from Big Sandy Creek. The City also owns water rights that authorize diversion of 4,000 acft/yr from the Brazos River and have contracted with the Brazos River Authority for 1,200 acft/yr from the BRA System. Currently, the City utilizes surface water from the two existing reservoirs as its primary supply and diverts water from Brazos River only in an emergency, to supplement the supply in the two existing reservoirs.

4C.10.2.2 Water Supply Plan

The supplies projected are not adequate to meet the City's water demand through 2060.

The following plan is recommended by the Brazos G RWPG for the City of Marlin:

- Conservation.
- Additional supply from Brushy Creek Reservoir

4C.10.2.3 Costs

a. Conservation
   - Date to be Implemented: before 2010 – use rate exceeds 140 gpcd
   - Annual Cost: maximum of $161,500 in 2060

b. Brushy Creek Reservoir (Volume II, Section 4B.12.10)
   - Cost Source: Transmission and Treatment (Volume II, Section 4B.17)
   - Date to be Implemented: 2010
   - Total Project Cost: $18,553,000
   - Annual Cost: $1,012,000

Table 4C.10-2.
Recommended Plan Costs by Decade for the City of Marlin

Plan Element	*2010*	*2020*	*2030*	*2040*	*2050*	*2060*
Projected Surplus/(Shortage) (acft/yr)	(1,860)	(1,949)	(2,039)	(2,113)	(2,183)	(2,276)
Conservation						
Supply From Plan Element (acft/yr)	46	112	141	169	242	340
Annual Cost ($/yr)	$21,850	$53,200	$66,975	$80,275	$114,950	$161,500
Unit Cost ($/acft)	$475	$475	$475	$475	$475	$475
Brushy Creek Reservoir						
Supply From Plan Element (acft/yr)	2,090	2,090	2,090	2,090	2,090	2,090
Annual Cost ($/yr)	$1,012,000	$1,012,000	$449,000	$449,000	$140,000	$140,000
Unit Cost ($/acft)	$485	$485	$215	$215	$67	$67

4C.10.3 City of Rosebud

The City of Rosebud obtains its water supply from the Central Texas WSC, which treats and delivers water from Lake Belton. The City of Rosebud has contracted with Central Texas WSC for 693 acft/yr of supply and from BRA for 100 act/yr, which exceeds its 2060 projected water demand of 152 acft/yr. No change in water supply is recommended.

4C.10.4 Tri-County SUD

Tri-County SUD obtains its water supply from the Trinity and Carrizo-Wilcox Aquifers. Tri-County SUD has adequate water supplies to meet its projected water demands. Therefore, no water supply plan is recommended. This WUG is located in multiple counties (Limestone, McLennan, Robertson, and Falls). The surplus shown in Table 4C.10-1 represents the cumulative totals for Tri-County SUD in all counties it serves.

4C.10.5 West Brazos WSC

4C.10.5.1 Description of Supply

This WUG is located in multiple counties (McLennan and Falls). The shortages shown in Table 4C.10-3 represent the cumulative totals for West Brazos WSC in both counties.

- Source: Groundwater – Trinity Aquifer, and
- Estimated Reliable Supply: 127 acft/yr.

ATTACHMENT E.
WATER RATES

City of Marlin Water Office
P.O. Box 980 – 101 Fortune Street
Marlin, Texas 76661
Phone (254) 883-1452 Fax (254) 883-3842

Water Rates As of October 2012

Rates For Water Service Inside City Limits Residential
There shall be charged and collected from each residential customer of water inside the City limit's a monthly minimum charge of $24.00, of which $5.00 if for Water System Rehab Fund, and $19.00 for the first 2,000 gallons of water consumed , plus a rate of consumption thereafter as follows:

Amount			Rate per 1,000 gallons
0	to	2,000	$0.00
2,001	to	5,000	$4.52
5,000	to	15,000	$4.67
15,001	to	25,000	$4.82
25,001	gallons and above		$4.97

Rates For Water Service Outside City Limits Residential
There shall be charged and collected from each residential consumer off water outside the City limit's a monthly minimum charge of $36.75, of which $7.50 is for Water System Rehab Fund, and $29.25 for the first 2,000 gallons of water consumed, plus a rate of consumption thereafter as follows:

Amount			Rate per 1,000 gallons
0	to	2,000	$0.00
2001	to	5,000	$4.52
5,001	to	15,000	$4.67
15,001	to	25,000	$4.82
25,001	gallons and above		$4.97

Rates For Water Service Inside City Limits Commercial
There shall be charged and collected from each commercial customer of water inside the City limit's a monthly minimum charge of $42.00, of which $15.00 is for Water System Rehab Fund, and $27.00 for the first 2,000 gallons of water consumed , plus a rate of consumption thereafter as

follows: Amount Rate per 1,000 gallons

0	to	2,000	$0.00
2001	to	5,000	$5.12
5,001	to	15,000	$5.02
15,001	to	25,000	$4.91
25,001	to	50,000	$4.67
50,001	to	500,000	$4.56
500,001	gallons and above		$4.25

Rates For Water Service Outside City Limits Commercial

There shall be charged and collected from each commercial consumer of water outside the City limit's a monthly minimum charge of $52.30, of which $20.00 is for Water System Rehab Fund, and $32.30 for the first 2,000 gallons of water consumed, plus a rate of consumption thereafter as follows: Amount Rate per 1,000 gallons

0	to	2,000	$0.00
2001	to	5,000	$5.12
5,001	to	15,000	$5.02
15,001	to	25,000	$4.91
25,001	to	50,000	$4.67
50,001	to	500,000	$4.56
500,001	gallons and above		$4.25

Water Meter Demand Charges

5/8" X ¾"	0.00 per month
1"	$8.00 per month
1 ½"	$15.00 per month
2"	$30.00 per month
3"	$100.00 per month
4"	$150.00 per month
6" and above	$300.00 per month

Sanitary Sewer Service Rates

Residential

A minimum flat rate of $18.00 for the first 5,000 gallons of water usage

Amount	Rate per 1,000 gallons
5,001 to 10,000	$3.75
10,001 and above	$1.75

Commercial
A minimum flat rate of $18.00 for the first 5,000 gallons of water usage

Amount	Rate per 1,000 gallons
5,000 to 250,000	$3.00
250,001 and above	$1.75

Debt Service Rates

Amount	Rate per 1,000 gallons
0 to 2000	$0
2001 and over	$2.10

ATTACHMENT F.
REGIONAL WATER PLANNING GROUP

4838 Spicewood Springs Road
Suite 204
Austin, TX 78759
512.342.6868

KSA ENGINEERS

8 February 2013

Texas Water Development Board
Regional Water Planning
1700 North Congress Avenue
P.O. Box 13231
Austin, TX 78711-3231

Via Mail

RE: **City of Castroville**
Water Conservation Plan

Lann Bookout:

The City of Marlin is amending their Water Conservation Plan section of the Water Conservation and Drought Contingency Plans. On behalf of the City of Marlin, KSA Engineers is hereby submitting the City of Marlin Water Conservation Plan in accordance with Texas Commission on Environmental Quality rules.

The Water Conservation Plan consist of the City of Marlin Utility Profile, 5-year and 10-year target goals for reduction in municipal use expressed in gallons per capita per day (gpcpd) including a schedule for implementing the plan to achieve the targeted reductions, a method of tracking the implementation and effectiveness, continuing educating the City on water conservation, description of the City water rate structure and enforcement procedures.

If you have any questions concerning the Water Conservation Plan, please contact Stuart W. Cowell, E.I.T. at KSA Engineers, Inc., or William McDonald – City Manager – City of Marlin. Thank you.

Sincerely,
KSA ENGINEERS, INC.

Stuart W. Cowell, E.I.T.
Design Engineer

Enclosure: Water Conservation Plan (with copy of cover letter)
Water Conservation and Drought Contingency Plans – September 2002
Ordinance 13-010
City of Marlin Utility Profile
2011 Brazos G Regional Water Plan
City of Marlin Water Rates

c: William McDonald, City Manager (w/ encl)
Brent Bassett, Project Engineer (w/o encl)
MAR-021\ Task 013 - Water Conservation Plan Update\2011\To Be Reviewed