TOWN OF ADDISON, TEXAS

ORDINANCE NO. 009-014

AN ORDINANCE OF THE TOWN OF ADDISON, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE TOWN BY AMENDING CHAPTER 82, UTILITIES, TO ADD A NEW SECTION 82-98 REGARDING THE CONSERVATION OF WATER AND PROTECTION OF WATER SUPPLIES; PROVIDING FOR EVALUATION OF THE CURRENT WATER USAGE OF THE TOWN; SETTING WATER SAVINGS GOALS FOR FIVE AND TEN YEARS; PROVIDING FOR THE SCHEDULING OF IMPLEMENTATION OF GOALS; PROVIDING FOR A METER TESTING PROGRAM; PROVIDING FOR THE ESTABLISHMENT OF MEASURES TO CONTROL WATER LOSS; ESTABLISHING A WATER RATE STRUCTURE WHICH IS "NON-PROMOTIONAL"; PROVIDING A SAVINGS AND REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY, UPON CONVICTION, FOR ANY VIOLATION, NOT TO EXCEED THE SUM OF TWO THOUSAND AND NO/100 DOLLARS ($2,000.00) AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Town of Addison, Texas (the "City") is a home rule municipality pursuant to Article 11, Section 5 of the Texas Constitution and its Home Rule Charter; and

WHEREAS, the City Council finds that conservation of water and protection of water supplies are in the best interest of its citizens.

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

Section 1. **Amendment.** The Code of Ordinances of the Town of Addison, Texas (the "City") is hereby amended in the following particulars, and all other chapters, articles, sections, subsections, sentences, phrases and words of the said Code of Ordinances are not amended hereby:

A. Chapter 82, Utilities, of the Code of Ordinances is hereby amended by adding thereto a new Section 82-98 to read as follows:

Section 82-98. Water Conservation Plan.

The Town hereby adopts a water conservation plan for the purpose of setting water conservation goals and best management practices, all as contained in Exhibit "A" attached to the ordinance of the Town adopting this Section 82-98 (the same being Ordinance No. 009-014) and incorporated as if fully set forth herein.

The water conservation plan proposes a goal of reducing water consumption to a level of 290 gallons per capita per day by 2015 and 275 gallons per capita per day by 2020.

Section 2. **Water Conservation Plan.** There is attached as Exhibit "A" to this Ordinance and incorporated herein for all purposes the water conservation plan described in the amendment to the Code of Ordinances set forth in Section 1, above.

Section 3. **Savings.** This Ordinance shall be cumulative of all other ordinances of the City and shall not repeal any of the provisions of those ordinances except in those instances where the provisions of those ordinances are in direct conflict with the provisions of this Ordinance. Provided, however, that the repeal of such ordinances or parts of such ordinances shall not affect any right, property or claim which was or is vested in the Town of Addison, Texas, or any act done, or right accruing or accrued, or established, or any suit, action or proceeding had or commenced before the time when this Ordinance shall take effect; nor shall said repeals, amendments or changes effect any offense committed, or any penalty or forfeiture incurred, or any suit or prosecution pending at the time when this Ordinance shall take effect under any of the ordinances or sections thereof so repealed; and to that extent and for that purpose the provisions of such ordinances or parts of such ordinances shall be deemed to remain and continue in full force and effect.

Section 4. **Severability.** The provisions of this Ordinance are severable, and if any section or provision of this Ordinance or the application of any section or provision to any person, firm, corporation, entity, situation or circumstance is for any reason adjudged invalid or held unconstitutional by a court of competent jurisdiction, the same shall not affect the validity of any other section or provision of this Ordinance or the application of any other section or provision to any other person, firm, corporation, entity, situation or circumstance, and the City Council declares that it would have adopted the valid portions of this Ordinance adopted herein without the invalid parts and to this end the provisions of this Ordinance adopted herein shall remain in full force and effect.

Section 5. **Penalty.** It shall be unlawful for any person, firm, corporation, or other business entity to violate any provision of this Ordinance, and any person, firm, corporation, or other business entity violating or failing to comply with any provision hereof shall be fined, upon conviction, in an amount of not more than Two Thousand and No/100 Dollars ($2,000.00), and a separate offense shall be deemed committed each day during or on which a violation or failure occurs or continues. In addition to and cumulative of all other penalties, the Town of Addison shall have the right to seek injunctive relief (and any other available actions or relief) for any and all violations of this Ordinance.

Section 6. **Effective Date.** This Ordinance shall become effective from and after its passage and approval and its publication as may be required by law (including, without limitation, the City Charter, and the ordinances of the City).

PASSED AND APPROVED by the City Council of the Town of Addison, Texas this 28th day of April, 2009.

Joe Chow, Mayor

ATTEST:

By:_____
Lea Dunn, City Secretary

APPROVED AS TO FORM:

By:_____
John Hill, City Attorney

Exhibit "A"

Water Conservation Plan

I. Utility Profile

A. Population and Service Area Data

1. A copy of Addison's Certificate of Convenience and Necessity (CCN) is attached in this plan

2. Service area size (square miles):4.5 square miles

3. Current population of service area:13,409

4. Current population served by utility: a: water: 13,409
   b: wastewater:13,409

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

Year	Population
2008	15,300
2007	15, 250
2006	14,900
2005	14,450
2004	14,100

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

Year	Population
2010	17,100
2020	19,300
2030	22,400
2040	26,800
2050	29,000

7. List source(s)/method(s) for the calculation of current and projected population: Current and previous population was calculated based on previous budget documents. Future population was based upon NCTCOG projections, consultant studies and schedule of future economic development projects.

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 __X__ or Commercial _____

Treated water users:	Metered	Not-metered	Total
Residential-Single-Family	1670	0	1670

Residential-Multi-Family	165	0	165
Commercial	1016	0	1016
Industrial	10	0	10
Public	41	0	41
Other	609	0	609

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

Year	2008	2007	2006
Residential –Single-Family	6	10	1
Residential-Multi-Family	20	2	8
Commercial	21	8	17
Industrial	0	0	0
Public	0	0	0
Other	11	12	16

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.)	indicate Treated **OR** Raw
(1)	Hotel Inter-Continental	42,800	Treated by DWU
(2)	Post Apartment Homes	37,000	Treated by DWU
(3)	Greenhill School	33,800	Treated by DWU
(4)	Mary Kay Inc.	30,100	Treated by DWU
(5)	AZ Crowne, LP	27,800	Treated by DWU

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 _____
Treated Water X

Year	2004	2005	2006	2007	2008
January	122,296	117,795	155,494	110,085	109,840
February	111,985	102,311	118,168	105,461	101,313
March	130,053	127,052	132,650	136,855	110,085
April	152,340	146,570	161,428	127,043	114,567
May	176,376	165,052	185,473	136,049	135,670
June	163,281	193,352	232,129	140,331	178,042
July	199,186	231,670	251,469	149,410	226,249
August	218,511	230,254	259,001	192,594	208,093
September	200,716	225,642	210,389	171,485	171,402
October	172,282	218,486	190,974	167,599	165,534
November	122,439	176,072	150,288	143,550	123,289
December	115,195	140,492	119,367	109,840	98,498
Total	1,884,660	2,074,748	2,166,830	1,690,302	1,742,582

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 located at entry point from Dallas Water Utilities

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

Year	Residential	Commercial	Industrial	Wholesale	Other	Total Sold
2004	638,381	569,175	5,258	0	527,602	1,742,420
2005	351,375	574,738	4,328	0	631,076	1,863,522
2006	720,990	604,075	3,916	0	756,759	2,087,746
2007	601,201	566,501	2,997	0	454,208	1,626,914
2008	514,023	529,299	3,104	0	601,167	1,649,601

3. List previous five years records for water loss ratio

Year	Amount (gal.)
2004	124,340,343
2005	146,267,636
2006	80,845,070
2007	72,344,160
2008	66,000,000

4. List previous five years records for annual peak-to-average daily use

Year	Average MGD	Peak MGD	Ratio
2004	5,163,452	8,845,000	1.71
2005	5,684,241	8,918,000	1.57
2006	5,936,521	9,901,000	1.67
2007	4,630,964	8,437,000	1.82
2008	4,774,197	8,421,000	1.76

5. Total per capita water use for previous five years:

Year	Population	Total Diverted (or Treated Less Wholesale Sales (1,000 gal.)	Per Capita (gpcd)
2004	14,100	1,884,660	366.2
2005	14,450	2,074,748	393.4
2006	14,900	2,166,830	398.4
2007	15, 250	1,690,302	303.7
2008	15,300	1,742,582	312.0

6. Seasonal water use for the previous five years (**in gallons per person per day**):

Year	Population	Base Per Capita Use	Summer Per Capita Use
2004	14,100	275.4	457.8
2005	14,450	277.3	503.9
2006	14,900	293.1	553.8
2007	15,250	237.1	351.4
2008	15,300	224.9	444.7

B. Projected Water Demands

Project water supply requirements for at least the next ten years using population trends, historical water use, and economic growth, etc. Indicate sources of data and how projected water demands were determined.

Projected water use was determined by averaging the number of individuals anticipated to move to Addison in an individual year. After the projected population in a year was determined we multiplied the average per capita water use per individual. We then multiplied that number by 365 days a year and then added it to our current usage for the year 2008.

Year	Projected Water Use
2009	1,784,717,600
2010	1,826,853,200
2011	1,868,988,800
2012	1,911,124,400
2013	1,953,260,000
2014	1,995,395,600
2015	2,037,531,200
2016	2,079,666,800
2017	2,121,802,400
2018	2,163,938,000
2019	2,206,073,600

II. WATER SUPPLY SYSTEM

A. Water Supply Sources

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

	Source	Amount Available
Surface Water:	_____	_____MGD
Groundwater:	_____	_____MGD
Contracts:	Dallas Water Utilities	11 MGD
Other:	_____	_____MGD

B. Treatment and Distribution System

1. Design daily capacity of system: 26.8 MGD
2. Storage Capacity: Elevated 1.0 MGD, Ground 8.0 MGD
3. If surface water, do you recycle filter backwash to the head of the plant?
   Yes _____ No X.
4. Sketch of system layout is attached.

IV. WASTEWATER UTILITY SYSTEM

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s): NO TREATMENT PLANT MGD

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

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 TCEQ 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. N/A

B. Wastewater Data for Service Area

1. Percent of water service area served by wastewater system: N/A %

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

Year	N/A	N/A	N/A
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Total	N/A	N/A	N/A

V. Water Conservation Goals, Targets, Tracking and Cost Based Rate Structure

A. Water Conservation Goals

The Water conservation goals for the plan are consistent with regional goals and were developed assuming a year of average rainfall. Per capita goals of 290 gpcd and 270 gpcd are the targets for 2015 and 2020 respectively. The Best Management Practices (BMPs) already in place and proposed for future years are outlined in the next section of the plan.

B. Schedule for Implementing Water Conservation Plan to Achieve Targets and Goals

The Town of Addison will adhere to the following schedule; to achieve the targets and goals for water conservation:

- Calibrations of meters for all treated water deliveries are conducted annually
- The Town of Addison meter replacement program is as follows:
    - Meters will continue to be monitored for accuracy annually and replaced on a fifteen-year cycle
- 500 water audits are conducted annually
    - Real water losses are identified and corrected
    - Real water losses are minimized by replacement of deteriorating water mains and appurtenances, as is conducted by Town of Addison staff on an on-going basis
- The Town of Addison will mail out material developed by the staff, materials obtained from the Texas Water Development Board, Texas Commission on Environmental Quality or other sources semi-annually (once in the spring and once in the summer) to all customers
- The leak detection program described in the plan is currently in use by the Town of Addison, which reduces real water losses when unaccounted for water is above 6%
    - Inspections and soundings of all water main fittings and connections are conducted annually when water losses are above 6%
    - Intermittent night-flow measurements are conducted annually when water losses are above 6%
    - Pressure is controlled to just above the standard-of-service level by use of SCADA system
    - Pressure zones are operated based on the topography
    - Surges in pressure are limited by control valves
    - Nighttime pressure is reduced by control valves when feasible
- The Town of Addison adopted the 2006 International Plumbing Code, and all new construction or renovations in the city use water conserving fixtures

C. Tracking Targets and Goals

The staff shall track targets and goals by utilizing the following procedures:

- Logs shall be maintained for meter calibration, meter testing, and meter replacement programs
- Annual water audits shall be documented and kept in the Utility Department files
- Staff shall keep a record of the number of mail-outs distributed semi-annually
- Rates are tracked by means of ordinances adopted
- Logs shall be maintained for the utility's Leak Detection Program, including but not limited to the following:
    - Annual inspections and soundings of water main fittings and connections
    - Annual intermittent night-flow measurement

D. Water Rate Structure

Currently the Town has a water rate structure that is cost-based and which does not encourage the excessive use of water. Below is a copy of the current ordinance rate structure.

Sec. 82-77. Water rates. The customer classifications, minimum bills, and consumption charges shall be as follows:
(1) *Water minimum bills.* Minimum monthly bills shall be applied to all customers based upon customer classification and shall include an allowance for volume based upon water consumed as follows:

Customer Classification:	Minimum Monthly Bill	Volume Included (Gallons)
Single-Family Residential	$9.10	2,000
Multifamily Residential	35.75	15,000
Municipal/Schools	46.00	20,000
Commercial Large (meter size greater than or equal to two inches)	80.85	37,000
Commercial Small (meter size less than two inches)	11.15	3,000
Industrial Large (meter size greater than or equal to two inches)	169.00	80,000
Industrial Small (meter size less than two inches)	11.15	3,000
Hotel/Motel	169.00	80,000
Sprinkler Large (meter size greater than or equal to two inches)	115.70	27,000
Sprinkler Small (meter size less than two inches)	25.50	5,000
Fire Meters	21.40	8,000

(2) *Water volume rate.* All volume exceeds the amount allowed in the minimum bill shall be charged at a rate of $2.05 per 1,000 gallons of water consumed for all customer classifications, with the exceptions as noted in subsection (3) below.
(3) *Water conservation volume rate.* Single-family residential customers shall be charged a rate of $4.10 per 1,000 gallons of water for all water consumed in excess of 15,000 gallons. Sprinkler (large and small) customers shall be charged for all volume, which exceeds the amount allowed in the minimum bill, at a rate of $4.10 per 1,000 gallons of water consumed.

Public Utility Commission of Texas

By These Presents Be It Known To All That

CITY OF ADDISON

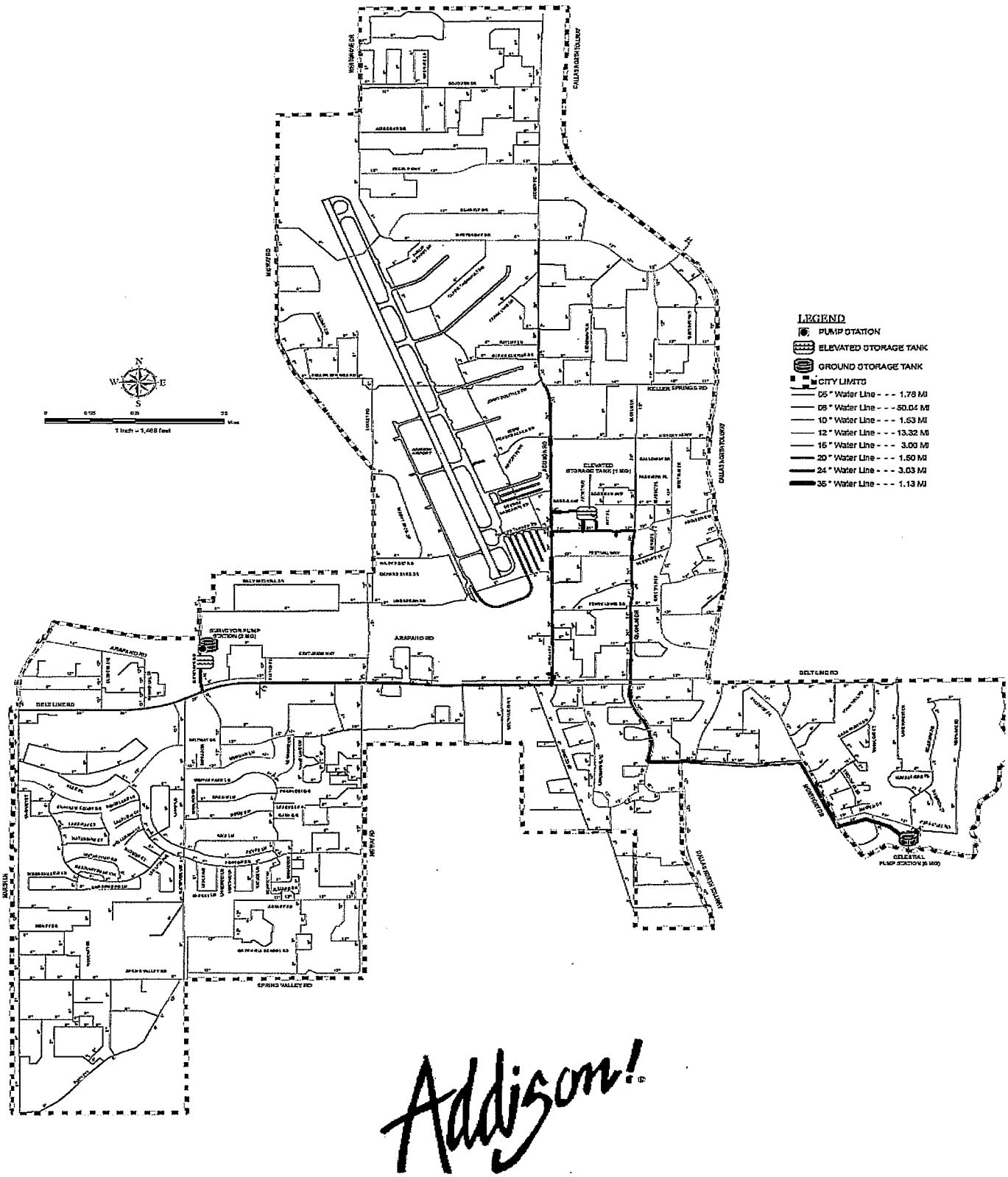
having duly applied for certification to provide water utility service for the convenience and necessity of the public, and it having been determined by this Commission that the public convenience and necessity would in fact be advanced by the provision of such service by this Applicant, is entitled to and is hereby granted this

Certificate of Convenience and Necessity

numbered 10062 , to provide water utility service to that service area or those service areas designated by final Order or Orders duly entered by this Commission, which Order or Orders are on file at the Commission offices in Austin, Texas; and are matters of official record available for public inspection; and be it known further that these presents do evidence the authority and the duty of this Grantee to provide such utility service in accordance with the laws of this State and the Rules of this Commission, subject only to any power and responsibility of this Commission to revoke or amend this Certificate in whole or in part upon a subsequent showing that the public convenience and necessity would be better served thereby.

Issued at Austin, Texas, this 1st day of November, 1979.

Philip F. Ricketts
SECRETARY OF THE COMMISSION



Addison!®

Water Distribution System
Water System ID 0570031

Updated on: October 2009
Created by: Addison GIS