

Sardis-Lone Elm Water Supply Corporation

6681 West Highland Road

Midlothian, Texas 76065

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Conservation Plan

(Revised 4-2009)

Utility Summary:

Sardis-Lone Elm Water Supply (Sardis) is a member owned water supply corporation organized under chapter 67 of the Texas Water Code. Current water supplies are limited to groundwater from both the Trinity and Woodbine aquifers and total 5.4 million gallons per day of production capacity. A surface water connection is being negotiated which will provide an additional 1 million gallons per day. The member base of Sardis is primarily single family, residential homes. There are small amounts of multi-family units and rental properties as well as convenience stores and small businesses; however, the majority of the growth projected will continue to be residential in nature. There are currently 4,550 active accounts which require a minimum production capacity of 4 million gallons per day.

Water conservation is a priority at Sardis and the goals for the reduction of water use have been set to encourage conservation by the utility and the end user of the water. Continued growth will require increased production capacity yet new supplies of water are difficult to obtain. The most cost effective and environmentally responsible action to take is to utilize current water supplies in a responsible manner so as not to waste and deplete resources.

Conservation by the utility:

Sardis has implemented specific plans in order to account for and reduce water losses experienced by the utility. These measures include:

- Monthly water production/sales audits
- Meter change-out program
- Elimination of non-metered sales
- Leak detection
- System rehabilitation
- Water system “master” meters

Monthly water production/sales audits are performed in order to account for the water production. This is a process of combining all daily well production readings and then subtracting known losses, flushing losses, and water sales for the month in order to obtain the

monthly unaccounted for production total. Meters are placed at all entry points on the system where the water is produced and the meters are checked for accuracy semi-annually.

The meter change-out program enables the utility to systematically ensure the accuracy of the monthly purchased water by the end user. Since in August 2006, sixty six percent of the water meters on the system have been replaced with new meters. This trend will continue until all meters have been replaced. Specific triggers that will cause a meter to be replaced immediately are two million gallons being registered or a meter that has been in service for ten years.

The elimination of all non-metered sales is the process of requiring temporary construction meters for all water sales where the customer request the ability to temporarily utilize fire hydrants to deliver the needed water.

Leak detection is the process(s) used to locate and eliminate water leaks that do not readily present themselves. Thermal and/or aerial imaging has been, and will continue to be, utilized in order to locate sub-surface leaks. This process includes flying the water system with specially designed cameras that detect temperature differentials in the soil surrounding the water mains and services. Sonic leak detection is used frequently and is the process of placing sound detection equipment onto the service lines throughout the system and listening for abnormalities. If an abnormality is noticed, it is assumed that a leak is present on or near the service and work orders for repair are created. Water main audits primarily take place October through March of each year. This is the process of isolating sections of water mains and installing metered “jumpers” onto the line which allows the utility to determine if that particular section of line is leaking and if so, quantify the leak. When a section of line is determined to be leaking using this method, additional valves and/or sonic detection and leak correlating computers are used in order to further isolate the location of the leak for repair.

System rehabilitation is the process of identifying specific areas of the water system in need of replacement and then replacing and/or upgrading the water mains and services in that area.

Water system “master” meters are meters installed within the water system and register the flows in the water mains. Readings are taken from the master meters and compared to the sales in that particular area. This process enables the utility to identify which areas of the system to concentrate the leak detection operations.

Historical water losses for Sardis’ system are as follows:

2004 – 31% 2007 – 22% 2005 – 28% 2008 – 19% 2006 – 18%

Goals set for the reduction of water losses include a 5% reduction per year and maintaining a maximum water loss level of 8%.

Conservation by the consumer:

Conservation by the consumer is encouraged in the following ways:

- Conservation rate structure
- Education
- Irrigation assistance

A *conservation rate structure* has been implemented to help discourage the wasteful use of water. The current water use rates are as follows for a standard residential service:

Monthly minimum = \$12.00 (includes 2,000 gallons)

<u>Usage in gallons</u>	<u>Charge/1,000 gallons</u>
2,000-10,000	\$3.25
10,000-20,000	\$3.50
20,000-30,000	\$3.75
30,000-40,000	\$4.25
40,000-50,000	\$5.50
50,000-60,000	\$6.50
60,000-70,000	\$7.50
70,000-100,000	\$8.50
All above 100,000	\$9.50

Education, water rates, and watering tips along with Sardis’ “Drought Contingency Plan” can be obtained either from our website @ www.sardisloneelmwater.com or from our office located @ 6681 West Highland Road, Midlothian, Texas 76065.

Irrigation assistance refers to the free service provided by Sardis to its members where our employees will meet with the member, at the member’s request, and assist with the programming and adjusting of automatic irrigation systems. This allows the end user to be trained on how to adjust the system and calculate the future water usage.

Goals set for the reduction of water usage by the end user are referenced to the average per capita use as it relates to the summer usage compared to the winter usage. The five year period including 2004-2008 indicates an average increase in water sales of 197% during the summer months with an average use of 139 gallons per capita day (gpcd) in the non-summer months and 274 gpcd in the summer months. The five year goal for this average increase is 180% or 250 gpcd and the ten year goal is 170% or 236 gpcd.

Sardis-Lone Elm Water Supply Corporation

RESOLUTION NO. 09-006

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SARDIS-LONE ELM WATER SUPPLY CORPORATION ADOPTING A WATER CONSERVATION PLAN.

WHEREAS, the Board recognizes that the amount of water available to the SARDIS-LONE ELM WATER SUPPLY CORPORATION and its water utility members is limited and constitutes a precious natural resource;

WHEREAS, Section 13.146 of the Texas Water Code requires all public water supply systems in Texas that provides water service to 3,300 or more connections to submit a Water Conservation Plan to the Texas Water Development Board ; and

WHEREAS, as authorized under law, and in the best interests of the members of the SARDIS-LONE ELM WATER SUPPLY CORPORATION, the Board deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies;

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SARDIS-LONE ELM WATER SUPPLY CORPORATION:

SECTION 1. That the Water Conservation Plan attached hereto as Exhibit "A" and made part hereof for all purposes be, and the same is hereby, adopted as the official policy of the SARDIS-LONE ELM WATER SUPPLY CORPORATION

SECTION 2. That the General Manager is hereby directed to implement, administer, and enforce the Water Conservation Plan.

SECTION 3. That this resolution shall take effect immediately upon its passage.

DULY PASSED BY THE BOARD OF DIRECTORS OF THE SARDIS-LONE ELM WATER SUPPLY CORPORATION,
ON THIS 12th day of MAY, 2009.

President, Board of Directors

ATTESTED TO:

Secretary, Board of Directors