

Part III

Water Conservation Plan

3.0 Requirement by House Bill 2277

This is Part III of the System Water Plan passed by the legislature in 2005 requiring all water supply systems develop a Water Conservation Plan.

3.1 Benefits of Water Conservation:

The objective of the Town of Taylor Water Conservation Plan is to achieve efficient use of water supply resources. The goal is to accomplish conservation through practices and measures that reduce per capita water consumption within the distribution system and water use by the customer. Meeting this objective will allow extending the use of available water supplies and existing infrastructure into the future.

It should be emphasized that the Taylor Water Utilities, conservation means using water wisely. A well-designed Water Conservation Plan will not deprive our community of essential water uses. Rather, it will provide a blueprint for more efficient water use. This approach could have the following benefits:

- Lower water bills for customers.
- Control of future water rates.
- Extended availability and improved protection of water resources.

3.2 Water Conservation Planning Elements:

Elements most critical to the development of a water conservation plan include indoor and outdoor conservation practices, landscaping practices, and plumbing retrofit installations. Other elements considered in preparing this water conservation plan are:

- Plan to meter all town government water use.
- A plan for public education and information.
- Plumbing code requirements.
- Plumbing retrofit requirements.
- A universal metering.
- Water audits and leak detection requirements.
- Plan Implementation.

These elements are placed in three implementation phases; (1) Change in immediate practices, (2) Education, and (3) Monitoring. These phases will be discussed later.

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3.3 Description of the Taylor Water System:

3.3.1 Ground Water Supply System:

The Town currently maintains five wells throughout the system, with one additional well to be added by the end of 2007. Rolling Hills Well (Well #1) (1977) and Pete's Well (Well #3) (1961) are the primary wells that produce ninety-five percent of the town's water system. They pump 600 gpm each. Center Street Well (Well #2) (1950) is stand-by well and produces 300 gpm. Sweetwater Well (2002) pumps 600 gpm and is used for the Sweetwater Ranch subdivision of 48 homes. Ellsworth Well's (1959) is not in commission but is measured. The Hole-in-the-Hill (Well #4) to be added next year will produce 1,000 gpm and utilizes a 500,000-gallon tank and will supplement the town's growth and provide for a better alternative should either of the primary wells develop problems.

3.3.2 Ground Storage:

Rolling Hills Well (Well #1) pumps water into two storage facilities, a 400,000-gallon tank and a 500,000-gallon tank. These tanks are equalized during operations. The Sweetwater Well uses a 100,000-gallon tank. Hole-in-the-Hill will utilize a 500,000-gallon tank. Pete's Well (Well #3) and the Center Street Well (Well #2) pump directly into the system.

3.4 IMMEDIATE CHANGE OF PRACTICE

3.4.1 Plumbing Code Requirements.

The Town of Taylor Council enacted an ordinance that adopts the International Plumbing Code (IPC) 2003 on October 25, 2006. Previously the town followed the Uniformed Plumbing Code (UPC) 1997. The town recognized the IPC code to be more in line with water conservation efforts.

3.4.2 Universal Metering.

The town recognizes that to determine amount of water loss it must meter all lines connected to the water main. Currently the Town of Taylor is proceeding with a plan to begin metering all town government connections to the water main. This project is expected to be completed by the end of 2007.

3.5 EDUCATION

3.5.1 Public Education and Information:

The Town will promote water conservation by informing the public about methods to conserve water and demonstrate ways to become contributors to the plan. This information will be published in May or June through either direct mail to water customers, or published in the Town newsletter and on the Town's website.

3.5.2 New Customer Program

Material describing water conservation tips is available to new customers when they apply for service. They will also be advised on how to determine if they have a leak.

3.5.3 Plumbing Retrofit Program

The Town encourages customers and owners of buildings that do not have water conserving plumbing devices to retrofit their old fixtures. The Retrofit Program shows customers that long term money and water savings can be accomplished by retrofitting old plumbing.

3.6 MONITORING

3.6.1 Ongoing Audit of Customer Usage

Individual metering is required on all single-family residential dwellings attached to the town water system. During meter reading each month, Public Works personnel watch for spikes in above average water usage and report them. Staff will contact the user to verify that this large usage is not due to a potential water leak. Staff also observes lower than normal water usage and ensures that it is not a pattern caused by a malfunctioning meter. If the metering is suspected of malfunctioning it will be tested and if needed replaced.

3.6.2 Leak Detection and Control of Unaccounted-for Water

The Town will conduct an internal audit each quarter to confirm that the water system is free from excessive leakage. This will be accomplished by comparing water pumped with amount of water billed on a quarterly basis. The plan will begin once all town government water usage is metered.

When loss of water is greater than 10% during any quarter, the comparison will be reviewed the following month if the source is unknown. If the loss again registers over 10% leak detection equipment will be used over that portion of the system to detect if there is a water leak.

3.6.3 Plan Implementation

The Assistant Town Manager will act as the Administrator of the Water Conservation Plan. The Administrator will oversee the execution and implementation of all elements of the plan. He/she will oversee record keeping for program verification.

- An Ordinance by the Town to implement the legal documents necessary to enact the Drought Preparedness Plan and this Water Conservation Plan.
- Enforcement of current Plumbing Code requirements to Use Water Conservation fixtures and devices.

3.7 Goals and Objectives:

The Town of Taylor continues to maintain its goals for water conservation.

- Determine amount of water loss and reduce this loss to less than five percent.
- Use internal programs to minimize water use.
- Continue and expand public education.

Once the Town of Taylor has better control of water loss, and the ability to determine water usage, the Administrator will attempt to define better monitoring and improve conservation measures.