

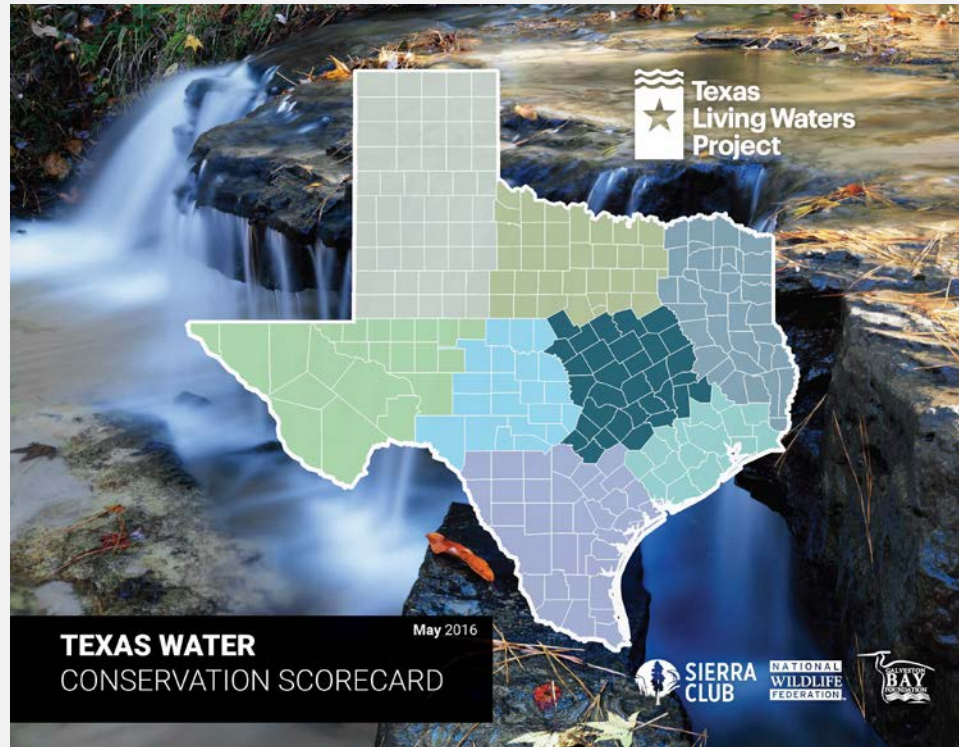
# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)



# Texas Water Conservation Scorecard

A tool for promoting conservation & efficiency in Texas



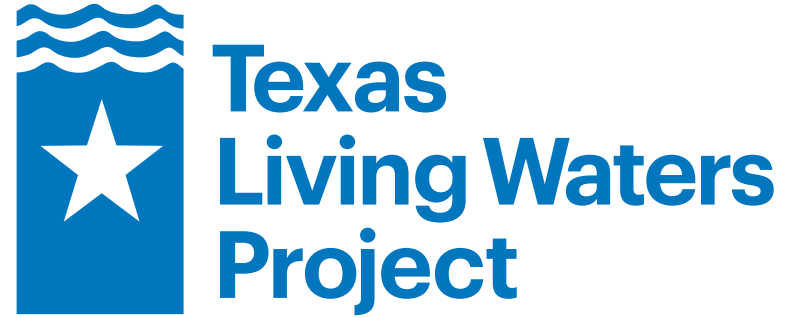
Jennifer Walker & Ruthie Redmond

Sierra Club, Lone Star Chapter

Water Smart Innovations - 2016



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otos courtesy Texas Parks and Wildlife Department

The Texas Living Waters Project is a joint effort of the Sierra Club, Lone Star Chapter, National Wildlife Federation and our regional partner, Galveston Bay Foundation.

Together, we work to transform the way Texas manages water to better protect our springs, rivers and estuaries in order to meet the water needs of both people and the environment.



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***Freshwater Inflows***



**GALVESTON BAY  
FOUNDATION**

# Our goals in creating the Texas Water Conservation Scorecard

WATER CONSERVATION IS A BIG DEAL IN TEXAS BECAUSE WATER IS A BIG DEAL IN TEXAS



The Scorecard asks:

- Are water utilities meeting the State’s legal requirements on conservation?
- Are these “municipal” water suppliers making their best efforts to reduce per capita water use, and thus saving water and money for Texans?

# Where did we get our data?

- Water Conservation Plan (WCP) and Water Conservation Plan Annual Report  
As of 2016, Texas Administrative Code (TAC) 31 Chapter 363 Subchapter A, Rule 363.15 requires the submission of a Water Conservation Plan (WCP) every 5 years and the Water Conservation Plan Annual Report to the TWDB every year for utilities meeting certain criteria.
- Utility Profile  
As of 2016, the TAC 31 Chapter 363 Subchapter A, Rule 363.15(b)(1)(A) requires a Utility Profile to be included in the above mentioned Water Conservation Plan for utilities meeting certain criteria.
- Water Loss Audit  
As of 2016, TAC 31 Chapter 358, Subchapter B, Rule 358.6 requires a Water Loss Audit to be performed and submitted to the TWDB annually for utilities meeting certain criteria.



# Our Data Sources

<b>Texas Water Development Board (TWDB) Submissions</b>	<b>Texas Municipal League (TML) Annual Water Survey</b>	<b>Water Utility Website</b>
WATER CONSERVATION PLAN (WCP)	WATER RATE INCREASE FOR MONTHLY USE OF 5,000 GALLONS VS. 10,000 GALLONS	RESTRICTIONS ON OUTDOOR WATERING USE
WCP ANNUAL REPORT		WATER CONSERVATION PLANS AND/OR WATER CONSERVATION INFO
WATER LOSS AUDIT		

# Texas Water Conservation Scorecard

## Evaluation Criteria

**Large Utilities:** serve a population of 100,000 or more

- Utility Evaluation – 10 criteria
- Highest possible score – 100
- Narrative detailing utility program details not reflected by criteria
- 35 Utilities Evaluated

**Medium Utilities:** serve population size of 25,000 - 100,000

- Utility Evaluation – 10 criteria
- Highest possible score – 100
- 91 Utilities Evaluated

**Small Utilities:** serve population size of 3,300 - 25,000

- Utility Evaluation – 6 criteria
- Highest possible score – 55
- 180 Utilities Evaluated



# Texas Water Conservation Scorecard



## UTILITY

	Water Audit Report (WAR) Submitted?	Annual Report (AR) Submitted?	WCP or Water Conservation Information Submitted?	Total Percent (%) Water Loss	Achieved 5-Yr Conservation Goal Set in 2009 WCP and Info Accessibility?	Number of Best Management Practices (BMPs) implemented? Set a Strong Conservation Goal in its 2014 WCP?	Outdoor Watering Schedule?	Conservation Pricing Signal?		
<b>City of Abilene</b> Overall Score: 60	Y	Y	Y	15	3	10	0	2	0	15
<b>Amarillo Municipal Water System</b> Overall Score: 49	Y	Y	Y	15	5	0	0	4	0	10
<b>City of Arlington</b> Overall Score: 70	Y	Y	Y	5	5	10	10	10	5	10
<b>City of Austin Water &amp; Wastewater</b> Overall Score: 90	Y	Y	Y	5	5	10	15	10	15	15
<b>City of Beaumont Water Utility Dept</b> Overall Score: 28	Y	Y	N	0	3	0	0	0	0	15
<b>Brownsville Public Utilities Board</b> Overall Score: 50	Y	Y	Y	10	3	10	0	2	0	10
<b>City of Carrollton</b> Overall Score: 74	Y	Y	Y	15	5	10	5	4	5	15
<b>City of Corpus Christi</b> Overall Score: 73	Y	Y	Y	10	5	10	10	8	0	15



## **No. 1- Did the utility submit its most-recent required Water Conservation Plan (WCP) to the State?**

- *Yes 5 points*
- *No 0 points*

The purpose of a Water Conservation Plan is to ensure water use efficiency within a water utility's operation. Submitting this plan is essential to a utility reducing the consumption of water, reducing the loss or waste of water, and improving or maintaining the efficiency in the use of water. This information is also helpful to TWDB in water resources planning.

*(all utilities evaluated)*



## **No. 2 - Did the utility submit its most recent Annual Report (on implementation of its Water Conservation Plan) to the State?**

- ***Yes 5 points***
- ***No 0 points***

The purpose of an Annual Report is to evaluate an entity's progress in implementing programs to achieve targets and goals in the water conservation plan. Submitting this report is essential to a utility reviewing conservation programs annually and evaluating program successes and needs. This information is also helpful to TWDB in water resources planning.

*(all utilities evaluated)*



## No. 3 - Did the Utility submit its most-recent annual Water Audit Report to the State?

- *Yes 5 points*
- *No 0 points*

The purpose of a Water Audit Report (also known as a Water Loss Audit) is to provide utilities with a standardized approach to auditing water loss. Preparing a Water Audit Report is essential to help a utility understand where and how much water is being lost from the distribution system. Submitting a Water Audit Report to TWDB is helpful to the agency in water resources planning and decisions about State financial assistance.

*(all utilities evaluated)*



## No. 4 - What was the Utility's most recent reported total percent water loss as stated in its Water Audit Report?

- *% Water Loss of less than or equal to 6.5% - 15 points*
- *% Water Loss of greater than 6.5% to 11% - 10 points*
- *% Water Loss of greater than 11% to 15.4% - 5 points*
- *% Water Loss greater than 15.4% - 0 points*

Each Water Audit Report has a number of metrics that might be used to describe a utility's water loss. We chose to use "unadjusted total water loss," which is presented as a percentage of the utility's total water pumped, as the metric for this evaluation. This metric is the one that the public most likely will see from time to time in the news media in reports about their utility's "water loss."

*(all utilities evaluated)*



## No. 5 - Does the Utility have a publicly accessible Water Conservation Plan (WCP) and/or other conservation information on their website?

- *Yes, Water Conservation Plan (WCP), 5 points*
- *Yes, Water Conservation Information Only, 3 points*
- *No, 0 points*

The WCP is a strategy or combination of strategies for reducing the consumption of water. Communication of the WCP and/or water conservation information on a utility or city website educates the public on current programs and how residents can become more engaged in conservation practices.

*(only large and medium utilities evaluated)*



## No. 6 - Did the utility achieve the 5-year goal for water use reduction stated in its most recent previous Water Conservation Plan (WCP)?

- *5-year water use reduction goal exceeded, 10 points*
- *5-year water use reduction goal reached, 5 points*
- *5-year water use reduction goal not achieved, 0 points*

Comparing a utility's 5-year water use goal set in its previous WCP to its actual water use submitted in its 2014 Annual Report provides feedback as to the utility's ability to meet a 5-year goal to reduce water use.

*(only large and medium utilities evaluated)*



**No. 7 - Has the utility already achieved a relatively low GPCD (gallons per capita per day) of water use? If not, what is the 5-yr goal for water use reduction in its most recent WCP?**

- Achieved a GPCD of 125 or less OR set an average annual reduction of more than 1.25%, 15 points*
- Achieved a GPCD of less than 140 but more than 125 OR set an average annual reduction of 0.85% to 1.25%, 10 points*
- Set an average annual reduction of 0.1% to less than 0.85%, 5 points*
- Set an average annual reduction of less than 0.1%, 0 points*

*(only large and medium utilities evaluated)*



## No. 8 - How many of the municipal water conservation BMPs presented in the state's BMP Guide did the utility report in its Annual Report (AR)?

- *Incorporated 15+ BMPs, 10 pts*
- *Incorporated 12-14 BMPs, 8 pts*
- *Incorporated 9-11 BMPs, 6 pts*
- *Incorporated 6-8 BMPs, 4 pts*
- *Incorporated 1-5 BMPs, 2 pts*
- *Incorporated no BMPs, 0 pts*

Best Management Practices (BMPs) are voluntary efficiency measures that are intended to save a quantifiable amount of water and can be implemented within a specified timeframe. Detailed information on over 20 municipal water conservation BMPs is available in the State's BMP Guide, which is accessible online at [www.savetexaswater.org](http://www.savetexaswater.org)

*(all utilities evaluated)*



## **No. 9 - Has the utility implemented mandatory outdoor watering schedules on an ongoing basis (not just as part of a drought contingency plan)?**

- Outdoor watering limited to no more than 1x per week, 15 points
- Outdoor watering limited to no more than 2x per week, 10 points
- Time of day outdoor watering schedule only, 5 points
- No outdoor watering schedule on ongoing basis, 0 points

*(only large and medium utilities evaluated)*

**No. 10 – Does the utility’s rate structure send a “water conservation pricing signal” to the utility’s SF Residential customers?** *Percent increase in water rate per 1,000 gallons with customer use of 5,000 gallons vs. 10,000 gallons.*

- Strong:  $\geq 40\%$  increase, 15 points
- Moderate:  $\geq 25\%$  and  $< 40\%$  increase, 10 points
- Slight:  $> 0$  and  $< 25\%$  increase, 5 points
- No signal: No Increase 0 points

*(all utilities evaluated)*





Texas  
Living Waters  
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May 2016

# TEXAS WATER CONSERVATION SCORECARD



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May 2016

Questions	Points
1. WCP or Water Conservation Information Submitted?	5
2. Annual Report (AR) Submitted?	5
3. Water Audit Report (WAR) Submitted?	5
4. Total Percent (%) Water Loss	5
5. WCP and Conservation Info Accessibility?	5
6. Achieved 5-Yr Conservation Goal Set in 2009 WCP?	10
7. Set a Strong Conservation Goal in Its 2014 WCP?	15
8. Number of Best Management Practices (BMPs) implemented?	10
9. Outdoor Watering Schedule?	15
10. Conservation Pricing Signal?	15

Austin has moved to the top ranks of Texas cities practicing water conservation in recent years. Austin dramatically decreased per capita water use from 2009 to 2014 through several initiatives, including a focused effort to reduce peak water demand in the summer. Austin has unfinished business such as curbing water loss, however, and Austin Water (the City utility) in its 2014 WCP set a target for per capita water use in "wet years" higher than what it already has demonstrated is achievable. Austin just moved to "head of the class" in limits on outdoor watering – adopting a permanent no-more-than-once-a-week outdoor watering restriction.

The City of Austin, located in Central Texas and the Region K water planning area, is known for its conservation-minded, yet rapidly growing population, now approaching one million. The City draws its water from the Highland Lakes on the Colorado River. Austin has its own water rights on the Colorado but also contracts with the Lower Colorado River Authority (LCRA) for water. Austin Water operates three water treatment plants to process this water for distribution. Among Austin's high volume water customers are "high-tech" companies (Samsung being the highest water user) and The University of Texas at Austin.

In its 2009 WCP Austin set a goal for 2014 of reducing total per capita water use from 170 GPCD to 156, but the City beat that goal, achieving 128 GPCD using an array of conservation strategies and benefitting from implementing no-more-than-once-a-week outdoor watering as part of its drought contingency plan during that period. In its 2014 WCP, however, Austin has retreated somewhat, setting a baseline of 162 GPCD in its latest WCP and a target of "reducing" from that baseline to 141 GPCD by 2019 if drought conditions do not occur. Austin does have an alternative goal of 124 GPCD by 2019 if the City remains in drought stage restrictions. However, the Austin City Council in early May 2016 adopted a permanent no-more-than-once-a-week outdoor watering restriction for households using automatic sprinkler systems (hose-end watering could be done on a second day). That may allow Austin to achieve the 124 GPCD goal.

The City of Austin's most recent water audit indicates a water loss of over 13%. The city is implementing a multi-year plan to reduce water loss, including a campaign to detect underground water leaks. Austin is also applying for state financial assistance for installation of an advanced water metering system.

Austin Water provides easily-accessed conservation information to its residents through both website and social media presence, and the utility promotes conservation through extensive advertising using multiple media. Additionally, Austin Water has a five-tiered rate structure that provides residents an incentive to conserve both money and water through judicious water use.

Over the years the City of Austin has benefitted from active citizen participation and input for its water conservation program, including citizen task forces that have developed detailed proposals for curbing water use. This effort has produced progressive conservation initiatives adopted by the City and its water utility, and it has brought greater citizen support for carrying out these initiatives.

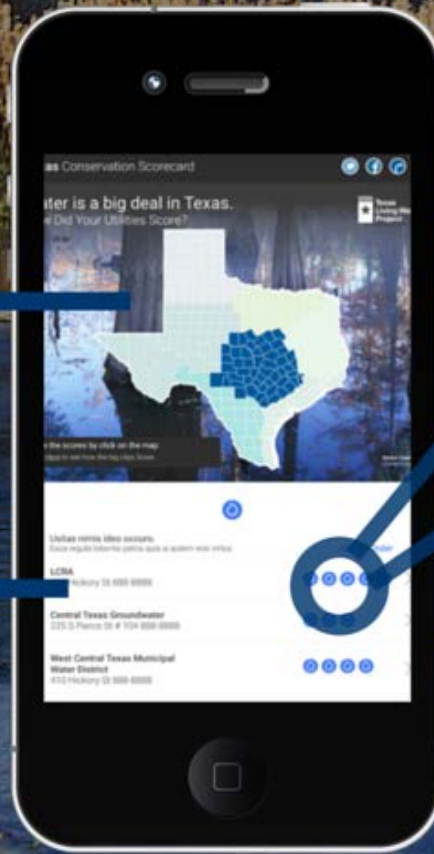


# THE TEXAS WATER CONSERVATION SCORECARD

1. Choose your location

2. Choose your utility & see their water conservation score

3. Save money,  
Save Texas rivers,  
Save water for the future



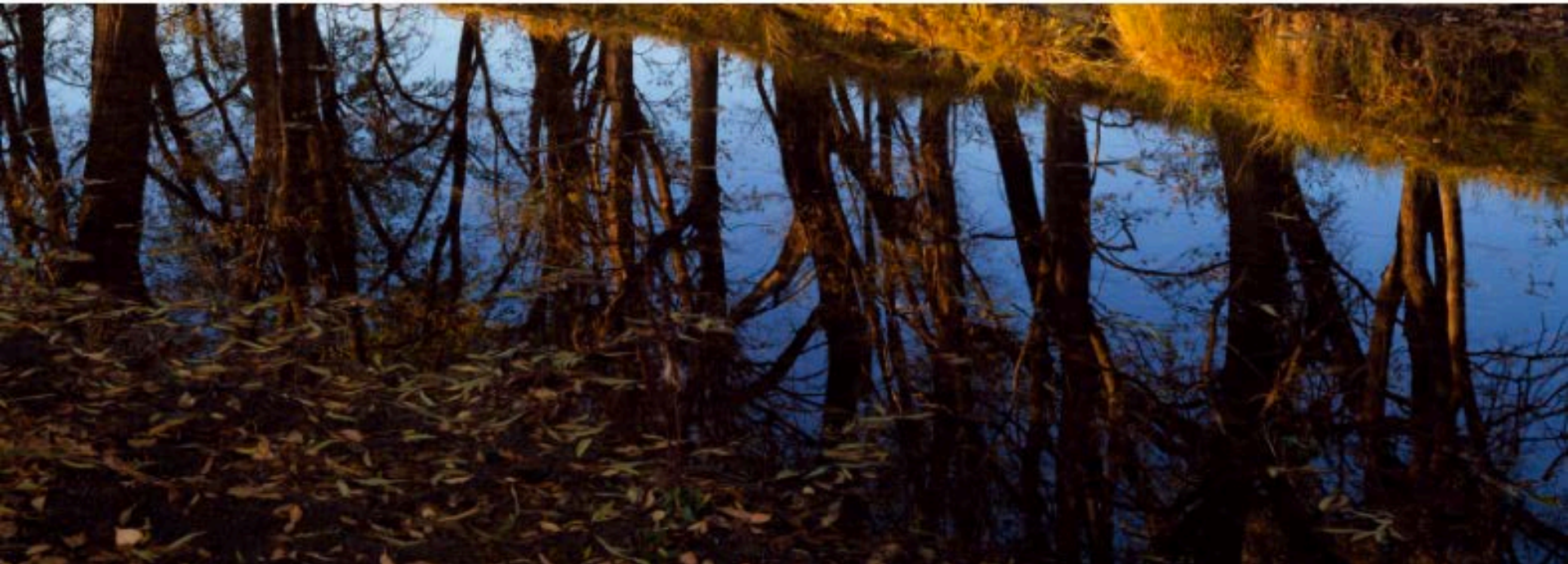
\*Water droplets represent Utility scores

[WWW.TEXASWATERCONSERVATIONSCORECARD.ORG](http://WWW.TEXASWATERCONSERVATIONSCORECARD.ORG)



**TEXAS WATER CONSERVATION SCORECARD: MEDIUM-SIZE UTILITIES (POPULATION BETWEEN 25,000 AND 100,000)**

UTILITY NAME	POPULATION	1. Water Conservation Plan Submitted	2. Annual Report Submitted	3. Water Audit Report Submitted	4. Total Percent Water Loss	5. WCP and/or Conservation Info Accessible Online	6. Achieved 5-year Conservation Goal Set in the 2009 WCP	7. Set a Strong Conservation Goal in the 2014 WCP	8. BMPs Implemented	9. Outdoor Watering Schedule	10. Conservation Pricing Signal	TOTAL SCORE (out of 100)
		5 POINTS	5 POINTS	5 POINTS	15 POINTS	5 POINTS	10 POINTS	15 POINTS	10 POINTS	15 POINTS	15 POINTS	
City of Temple	66,102	5	5	5	0	3	10	15	2	0	15	60
City of Texarkana	39,678	5	5	5	5	0	0	5	2	0	15	42
City of Texas City	46,510	5	5	0	0	0	10	10	2	0	10	42
City of The Colony	40,100	5	0	5	0	3	0	15	0	0	10	38
Travis County WCID 17	30,531	5	5	5	10	5	0	10	6	0	15	61
City of Victoria	66,339	5	5	5	15	5	0	5	2	0	10	52
City of Waxahachie	28,000	5	5	5	5	5	0	5	2	0	15	47
City of Weatherford	25,250	5	5	5	5	5	0	10	2	10	10	57
City of Weslaco	32,092	5	5	5	0	5	10	0	2	0	10	42
City of Wylie	39,000	5	5	0	0	5	10	15	0	0	15	55



## Appendix D

The following table shows the points assigned to each small utility on each of the [six](#) criteria used to compute the utility's overall score on water conservation efforts. A small retail water utility is here defined as one that has at least 3300 connections but serves a population of less than 25,000. At the top of the table is the maximum number of points that could be assigned to a small utility based on each of the six criteria. *Total possible score for any small utility is 55 points.*

TEXAS WATER CONSERVATION SCORECARD: SMALL-SIZE UTILITIES (POPULATION BELOW 25,000)								
UTILITY NAME	POPULATION	1. Water Conservation Plan Submitted	2. Annual Report Submitted	3. Water Audit Report Submitted	4. Total Percent Water Loss	8. BMPs Implemented	10. Conservation Pricing Signal	TOTAL SCORE (out of 55)
		5 POINTS	5 POINTS	5 POINTS	15 POINTS	10 POINTS	15 POINTS	
Acton MUD	20,400	5	5	5	10	2	10	37
Town of Addison	14,050	5	5	5	15	2	10	42
City of Alamo	14,800	5	5	5	5	2	5	27
City of Alice	19,685	5	5	5	0	2	10	27
City of Alvin	22,109	0	0	0	0	0	15	15
City of Andrews	11,088	5	5	5	0	0	10	25
City of Angleton	18,130	5	0	5	0	0	15	25
City of Aransas Pass	11,478	0	5	5	0	0	15	25
City of Athens	12,710	5	0	5	10	0	10	30
City of Azle	14,115	5	5	5	10	0	10	35
City of Bastrop	8,836	0	0	5	0	0	10	15
City of Bay City	20,258	0	5	5	0	2	10	22
City of Beeville	16,266	5	5	0	0	2	10	22
City of Bellaire	22,458	5	5	0	0	4	15	29
City of Bellmead	10,104	0	0	5	0	0	10	15
City of Belton	18,675	5	5	5	0	4	15	34
Benbrook Water Authority	21,360	5	5	5	0	4	15	34
Benton City WSC	13,452	5	0	5	5	0	15	30
City of Boerne	13,485	5	5	5	10	4	5	34
City of Bonham	10,538	5	5	5	10	2	10	37
Borger Municipal Water System	14,203	5	5	5	15	2	10	42
City of Brenham	14,237	5	5	0	0	2	15	27
City of Bridge City	10,332	5	5	0	0	2	15	27
Bridgestone MUD	16,557	5	5	5	10	2	10	37



# **Texas Water Conservation Scorecard Recommendations & Next Steps**

- Water Utilities
- Texas Water Development Board
- Texas Legislature



To view interactive website and/or download the  
Texas Water Conservation Scorecard

[www.texaswaterconservationscorecard.org](http://www.texaswaterconservationscorecard.org)

For more information about the Texas Living Waters Project

[www.texaslivingwaters.org](http://www.texaslivingwaters.org)

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