



5.40 Water Conservation Recommendations

Regional water planning guidelines require each regional water planning group to consider water conservation to meet projected shortages, although funding to implement such water conservation programs is limited. Conservation is shown as a recommended strategy for all water user groups with needs identified during the planning period. The Brazos G RWPG adopted the following water conservation recommendations for the 2016 Plan which are further described in Volume II, Section 2.

- Municipal water user groups with per capita rates exceeding 140 gallons per person per day (gpcd) were recommended to reduce per capita consumption by 1% annually through 2070 until a 140 gpcd rate is attained. This recommendation applies to all municipal water user groups with and without projected water supply needs (shortages). For Water User Groups (WUGs) in Williamson County, an additional advanced conservation goal of 120 gpcd by 2070 was recommended. Annual reduction rates ranging from 0.35% to 1.1% for Williamson County WUGs were applied to bring the gpcd of each WUG to 120 gpcd. Conservation can be achieved through a variety of best management practices, some of which are listed in Section 2.1.2. For municipal entities reporting real losses greater than 15% of water system input volume, an infrastructure replacement program to reduce water loss is summarized in Section 2.1.8.
- Irrigation water user groups with identified needs were recommended to reduce water use by 3% by 2020, 5% by 2030, and 7% from 2040-2070. A list of best management practices prepared by the Water Conservation Implementation Task Force that can be implemented to achieve these goals is included in Section 2.2.2.
- Manufacturing, steam-electric, and mining water user groups with identified needs were recommended to reduce water use by 3% by 2020, 5% by 2030, and 7% from 2040-2070. A list of best management practices prepared by the Water Conservation Implementation Task Force that can be implemented to achieve these goals is included in Section 2.3.2.
- Conservation recommendations were not made for livestock water user groups.

A summary was prepared of common water conservation best management practices (Table 5.40-1) and recommended 5- and 10-year water conservation targets (Table 5.40-2) obtained from local water conservation plans for entities located in Brazos G. The Brazos G RWPG suggests that water user groups in the region review the list and look to identify water user groups at a relevant size with similar water supply type and consider voluntary implementation of those best management practices, if applicable.

TCEQ has prepared model water conservation plans (WCPs) for municipal public water suppliers, wholesale providers, industrial and mining entities, and agricultural users to provide guidance and suggestions to entities with regard to the preparation of water conservation plans. Not all items in the model plan will apply to every system's situation, but the overall model plan can be used as a starting point for most entities. For water user groups wishing to develop a new WCP, Brazos G suggests considering best management practices from local water conservation plans for entities similar in size, as

discussed previously, in addition to the TCEQ Model WCPs. The TCEQ model water conservation plans can be found in on TCEQ's website at the following link:

https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserv.html

Table 5.40-1. Summary of Water Conservation BMPs in the Brazos G Area

Wholesale Water Provider	WCP Available	Date	Best Management Practices							
			Reduce Water Losses/ Unaccounted for Water/Leak Detection	Water Conservation Pricing/Seasonal or Inverted Block Rates	Reuse	Improve Meter Accuracy	Toilet Replacement/ Retrofit Programs	Public/School Education	Landscape Conservation/Xeriscape	Others
Aquilla WSD	Y	2014	√	√		√				√
Bellmead	Y	2010	√	√		√	√	√	√	
Belton	Y	2000	√	√		√		√		√
Bethesda WSC	Y	2009	√	√		√		√	√	√
Block House MUD	Y	2013	√		√	√	√	√	√	√
Blum	Y	2002	√	√		√		√	√	√
Brazos Valley GCD	Y	2012	√			√	√	√	√	√
Bryan	Y	2011	√	√	√	√	√	√	√	√
Buffalo Gap	Y	2010	√			√		√		
Clyde	Y	2010	√	√		√		√		√
Fort Hood	Y	2002	√		√	√	√	√	√	
Gatesville	Y	2000	√	√	√	√	√	√		
Georgetown	Y	2009	√	√	√	√		√	√	√
Harker Heights	Y	2011	√	√	√	√	√	√	√	√
Hico	Y	2013	√	√		√		√		√
Lampasas	Y	2001	√	√	√	√	√	√	√	√
LCRA	Y	2012	√	√		√	√	√	√	√
Manville WSC	Y	2011	√			√		√		
Mexia	Y	2002	√	√		√		√	√	√
Navasota	Y	1999	√			√		√		√
Ranger	Y	2012	√	√		√		√		√
Robinson	Y	2002		√		√	√	√	√	
Stamford	Y	2011	√	√		√	√	√		√



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Stephens Regional SUD	Y	2014	√	√		√		√		√
Vista Oaks MUD	Y	2012	√			√		√	√	√
West Central Texas MUD	Y	1999	√			√				√
Woodway	Y	2009	√			√	√	√	√	√

Table 5.40-2. Summary of 5- and 10-Year Water Conservation Goals in the Brazos G Area

Wholesale Water Provider	5-Year Goal		10-Year Goal	
	GPCD Target	General	GPCD Target	General
Aquilla WSD	151	Not available	150	Not available
Bellmead	118	Not available	113	Not available
Belton	—	Not available	—	5 to 10% reduction
Bethesda WSC	121	Not available	117	Not available
Block House MUD	—	2.5% per capita decrease	—	5% per capita decrease
Blum	NA	1%/year reduction in unaccounted water	—	1%/year reduction in unaccounted water
Brazos Valley GCD	—	Not available	—	Not available
Bryan	167	Not available	137	Not available
Buffalo Gap	51.8	Not available	46.8	Not available
Clyde	82	Not available	77	Not available
Fort Hood	—	Not available	—	Not available
Gatesville	—	Not available	—	Not available
Georgetown	190	12% water loss	180	10% water loss
Harker Heights	143	Reduce water loss to 12%	143	Reduce water loss to 10%
Hico	188	Residential GPCD of 140.20; GPCD reduction of 30; 16.2 % water loss	186	Residential GPCD of 138.94; Water loss GPCD reduction of 29; 15.5 % water loss

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Wholesale Water Provider	5-Year Goal		10-Year Goal	
	GPCD Target	General	GPCD Target	General
Lampasas	—	Not available	—	Not available
LCRA	104	2% decrease in water use	100	6% decrease in water use
Manville WSC	122	2 gpcd reduction in water loss	120	4 gpcd reduction in water loss
Mexia	—	Not available	—	Not available
Navasota	143	Not available	—	Not available
Ranger	137	33% water loss	110	20% water loss
Robinson	128.8	Not available	126.6	Not available
Stamford	154	Not available	152	Not available
Stephens Regional SUD	79.9	GPCD reduction of 13.2, or 21%	77.4	GPCD reduction of 11.7, or 19%
Vista Oaks MUD	—	Reduce GPCD by 3%	—	Reduce GPCD by 6%
West Central Texas MUD	—	Not available	—	Not available
Woodway	175.6	5% or 10.36 GPCD reduction	165.3	10% or 20.72 GPCD reduction