

5.21 Lampasas County Water Supply Plan

Table 5.21-1 lists each water user group in Lampasas County and their corresponding surplus or shortage in years 2040 and 2070. A brief summary of the water user groups and the plan for the selected water user are presented in the following subsections.

Table 5.21-1. Lampasas County Surplus/(Shortage)

Water User Group	Surplus/(Shortage) ¹		Comment
	2040 (acft/yr)	2070 (acft/yr)	
Copperas Cove			See Coryell County for Plan
City of Kempner	(6)	(5)	Projected shortage – see plan below
Kempner WSC ²	(1,076)	(1,868)	Projected shortage – see Chapter 5.38
City of Lampasas	(227)	(505)	Projected shortage – see plan below
City of Lometa	0	0	Demand equals supply
County-Other	102	150	Projected surplus
Manufacturing	0	0	Demand equals supply
Steam-Electric	0	0	Demand equals supply
Mining	(216)	(288)	Projected shortage – see plan below
Irrigation	(211)	(200)	Projected shortage – see plan below
Livestock	0	0	Demand equals supply

1 – From Tables C-41 and C-42, Appendix C – Comparison of Water Demands with Water Supplies to Determine Needs.

2 – Balance includes totals in Brazos G and Region C

5.21.1 City of Kempner

Description of Supply

The City of Kempner obtains its water supply from surface water from Kempner WSC. Shortages are projected for Kempner in 2020.

Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water management strategy is recommended for Kempner WSC.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Annual Cost: maximum of \$4,607 in 2030
- Unit Cost: \$470/acft

Table 5.21-2. Recommended Plan Costs by Decade for City of Kempner

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(7)	(10)	(6)	(6)	(5)	(5)
Conservation						
Supply From Plan Element (acft/yr)	7	10	6	6	5	5
Annual Cost (\$/yr)	\$3,222	\$4,607	\$3,024	\$2,630	\$2,180	\$2,393
<i>Projected Surplus/(Shortage) after Conservation</i>	0	0	0	0	0	0

5.21.2 Kempner WSC

Kempner WSC has service area in portions of Coryell, Bell, Lampasas and Burnet (Region K) Counties. The WSC receives surface water supplies from the Brazos River Authority out of Lake Stillhouse Hollow. Kempner WSC sells supplies to the cities of Kempner, Copperas Cove, Lampasas, as well as to Salado WSC and Lampasas County-Mining. Shortages are projected for Kempner WSC in 2020. Refer to Chapter 5.38 for the WSC’s plan as a Wholesale Water Provider.

5.21.3 City of Lampasas

Description of Supply

The City of Lampasas has contracted for water supply from BRA and Kempner WSC. Its treated water supply is limited to its contract with Kempner WSC at 1,281 acft/yr. The City also has additional run of river rights. The City provides supply for Lampasas County-Manufacturing demands. Shortages are projected beginning in 2040.

Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water management strategies are recommended to meet water needs for the City of Lampasas.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Annual Cost: maximum of \$12,485 in 2030
- Unit Cost: \$470/acft

- b. Increase treatment contract with Kempner WSC to deliver BRA contracted supplies
 - Cost Source: Volume II, Chapter 12
 - Date to be Implemented: 2040
 - Project Cost: Existing Infrastructure assumed specific
 - Unit Cost: \$500/acft

Table 5.21-3. Recommended Plan Costs by Decade for City of Lampasas

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(49)	(148)	(227)	(318)	(414)	(505)
Conservation						
Supply From Plan Element (acft/yr)	27	—	—	—	—	—
Annual Cost (\$/yr)	\$12,485	—	—	—	—	—
<i>Projected Surplus/(Shortage) after Conservation</i>	(22)	(148)	(227)	(318)	(414)	(505)
Increase treated water contract Kempner WSC						
Supply From Plan Element (acft/yr)	22	148	227	318	414	505
Annual Cost (\$/yr)	\$11,000	\$74,000	\$113,500	\$159,000	\$207,000	\$252,500
Unit Cost (\$/yr)	\$500	\$500	\$500	\$500	\$500	\$500

5.21.4 City of Lometa

Description of Supply

The City of Lometa water system is owned by the Lower Colorado River Authority, and is supplied water from the LCRA Highland Lakes System. A portion of the population in the city limits relies on exempt groundwater pumping from the Ellenburger Aquifer. The city has a sufficient quantity of water supply to meet its projected needs through the year 2070. No shortage is projected for the City of Lometa.

Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water management strategy is recommended for the City of Lometa.

- a. Conservation
 - Cost Source: Volume II, Chapter 2
 - Date to be Implemented: 2020
 - Annual Cost: maximum of \$13,712 in 2070
 - Unit Cost: \$470/acft

Table 5.21-4. Recommended Plan Costs by Decade for the City of Lometa

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	0	0	0	0	0	0
Conservation						
Supply From Plan Element (acft/yr)	7	21	26	27	28	29
Annual Cost (\$/yr)	\$3,346	\$9,951	\$12,418	\$12,705	\$13,186	\$13,712
<i>Projected Surplus/(Shortage) after Conservation</i>	7	21	26	27	28	29

5.21.5 County-Other

Entities included in Lampasas County-Other obtain water supply from the Trinity Aquifer and Marble Falls Aquifer. Surpluses are projected through 2070 and no changes in water supply are recommended. Conservation was considered; however, the entity’s current per capita use rate is below the selected target rate of 140 gpcd.

5.21.6 Manufacturing

Lampasas County Manufacturing obtains its water supply the City of Lampasas and run-of-river rights. Based on the available surface water supply, Lampasas County Manufacturing is projected to have adequate supplies through year 2070, and no changes in water supply are recommended.

5.21.7 Steam-Electric

No Steam-Electric demand is projected for Lampasas County.

5.21.8 Mining

Description of Supply

Lampasas County Mining currently obtains its water supply from Kempner WSC. Mining is projected to have shortages starting in 2020.

Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water management strategies are recommended for Lampasas County-Mining.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Annual Cost: not determined



b. Groundwater Development – Trinity Aquifer

- Cost Source: Volume II, Chapter 12
- Date to be Implemented: 2020
- Project Cost: \$2,219,000
- Unit Cost: \$204,252

Table 5.21-5. Recommended Plan Costs by Decade for Lampasas County – Mining

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(173)	(196)	(216)	(236)	(261)	(288)
Conservation						
Supply From Plan Element (acft/yr)	6	11	17	18	20	22
Annual Cost (\$/yr)	ND	ND	ND	ND	ND	ND
<i>Projected Surplus/(Shortage) after Conservation (acft/yr)</i>	(167)	(185)	(199)	(218)	(241)	(266)
Groundwater Development – Trinity Aquifer						
Supply From Plan Element (acft/yr)	185	185	225	225	275	275
Annual Cost (\$/yr)	\$204,252	\$204,252	\$18,252	\$18,252	\$18,252	\$18,252
Unit Cost (\$/acft)	\$743	\$743	\$66	\$66	\$66	\$66

ND – Not determined. Costs to implement industrial conservation technologies will vary based on each location.

5.21.9 Irrigation

Description of Supply

Lampasas County Irrigation is supplied by the Trinity and Marble Falls Aquifers and run of the river water rights. Irrigation is projected to have shortages beginning in 2020.

Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water management strategies are recommended to meet water needs for Lampasas County-Irrigation.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Annual Cost: \$230/acft

b. Groundwater Development – Trinity Aquifer

- Cost Source: Volume II, Chapter 12
- Date to be Implemented: 2020
- Project Cost: \$3,049,000
- Unit Cost: Max of \$887/ acft(2020)

Table 5.21-6. Recommended Plan Costs by Decade for Lampasas County – Irrigation

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(221)	(216)	(211)	(206)	(204)	(200)
Conservation						
Supply From Plan Element (acft/yr)	12	19	26	26	26	26
Annual Cost (\$/yr)	\$2,670	\$4,393	\$6,070	\$5,989	\$5,957	\$5,893
<i>Projected Surplus/(Shortage) after Conservation (acft/yr)</i>	(209)	(197)	(184)	(180)	(178)	(174)
Groundwater Development – Trinity Aquifer						
Supply From Plan Element (acft/yr)	210	210	210	210	210	210
Annual Cost (\$/yr)	\$278,636	\$278,636	\$22,636	\$22,636	\$22,636	\$22,636
Unit Cost (\$/acft)	\$1,327	\$1,327	\$108	\$108	\$108	\$108

5.21.10 Livestock

Livestock water supply is projected to meet demands through 2070 and no changes in water supply are recommended.