

5B.21 Lampasas County Water Supply Plan

Table 5B.21-1 lists each water user group in Lampasas County and their corresponding surplus or shortage in years 2030 and 2050. For each water user group with a projected shortage, a water supply plan has been developed and is presented in the following subsections. Water supply plans are also presented for some entities that need pumping/conveyance facilities to utilize their existing water resources, or to become a regional provider.

**Table 5B.21-1.
Lampasas County Surplus/(Shortage)**

| Water User Group | Surplus/(Shortage) ¹ | | Comment |
|------------------|---------------------------------|-------------------|-------------------------------------|
| | 2030 (acft/yr) | 2050 (acft/yr) | |
| City of Lampasas | (544) | (1,501) | Projected shortage – see plan below |
| City of Lometa | 333 | 325 | Projected surplus |
| County-Other | 2,435 | 2,204 | Projected surplus |
| Manufacturing | (108) | (128) | Projected shortage – see plan below |
| Steam-Electric | 0 | 0 | No Projected Need |
| Mining | 963 | 953 | Projected surplus |
| Irrigation | 1,354 | 1,358 | Projected surplus |
| Livestock | 1,259 | 1,259 | No Projected Need |

¹ From Tables 4-41 and 4-42, Section 4 – Comparison of Water Demands with Water Supplies to Determine Needs.

5B.21.1 City of Lampasas

5B.21.1.1 Description of Supply

The City of Lampasas is supplied water by Central Texas WSC through Kempner WSC transmission facilities, with water from Stillhouse Hollow Reservoir. Current total capacity of delivery systems from Central Texas WSC and Kempner WSC is limited to 2,000 acft/yr.

5B.21.1.2 Options Considered

The City of Lampasas has a shortage of 544 acft per year in 2030, which is about 21 percent of demand. Table 5B.21-2 lists the water management strategies, references to the report section detailing the strategy, total project cost, and unit costs that were considered for meeting the City of Lampasas shortage.

**Table 5B.21-2.
Water Management Strategies Considered for the City of Lampasas**

| Option | Yield (acft/yr) | Approximate Cost ¹ | |
|--|--------------------|-------------------------------|--------------------|
| | | Total | Unit (\$/acft) |
| Additional Water Conservation (Section 5A.2) | 127 | \$70,000/year | \$574 ² |
| Increase conveyance capacity by Kempner WSC to supply all of Lampasas contracted supply from Stillhouse Hollow Reservoir | 1,500 | \$5,797,000 | \$304 |
| Wastewater Reuse (Section 5A.3) | 350 | \$1,413,000 | \$326 |
| No Action | - | \$33,491,000* | \$61,565* |

¹ Unless otherwise noted, costs are Total Project Cost and Unit Cost (\$/acft per year) for treated water delivered to the water supply entity or entities. Unit cost is for full utilization of project capacity.
² Source of Cost Estimate: Section 5A.2.
* Economic impact of not meeting shortage (i.e., "no action") in 2030 as estimated by TWDB.

5B.21.1.3 Water Supply Plan

The following plan meets the planning criteria established by the Brazos G RWPG.

- Increase conveyance capacity by Kempner WSC
- Wastewater Reuse for non-potable water needs

5B.21.1.4 Costs

Costs of the Recommended Plan for the City of Lampasas.

a. Increased supply from Central Texas WSC and Kempner WSC:

Previous analysis has indicated that the current delivery system (30-in., 27-in., 24-in, 20-in., and 18-in. diameter transmission pipelines) could deliver contracted water quantities by increasing pressure and delivery velocities. This would increase operating costs and possibly require a booster station improvement. Existing facilities may or may not be the end of their useful life at the time additional delivery capacity is needed. Therefore, the cost of replacement facilities are shown in the water plan, but they may not be actually needed.

- Cost Source: Cost Estimate for replacing or paralleling existing section of pipe.
- Date to be Implemented: 2015
- Total Project Cost: \$5,797,000
- Annual Cost: \$456,000

The Cost Estimate includes: Replacing or paralleling existing 24-in. dia. transmission pipeline with approximately 42,500 feet of 30-in. dia. transmission pipeline and

approximately 7,000 feet of 36-in. dia. transmission pipeline. The cost estimate also includes increasing booster station capacity and increased pumping energy costs.

b. Water Reuse System:

- Cost Source: Section 5A.3
- Date to be Implemented: 2020
- Total Project Cost: \$1,413,000
- Annual Cost: \$114,000

**Table 5B.21-3.
Recommended Plan Costs by Decade for the City of Lampasas**

| <i>Plan Element</i> | <i>2000</i> | <i>2010</i> | <i>2020</i> | <i>2030</i> | <i>2040</i> | <i>2050</i> |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Infrastructure Expansion | | | | | | |
| Projected Shortage (acft/yr) | 122 | 126 | (185) | (544) | (977) | (1,501) |
| Supply From Plan Element (acft/yr) | -- | -- | 1,500 | 1,500 | 1,500 | 1,500 |
| Annual Cost (\$/yr) | -- | -- | \$456,000 | \$456,000 | \$456,000 | \$456,000 |
| Unit Cost (\$/acft) | -- | -- | \$304 | \$304 | \$304 | \$304 |
| Wastewater Reuse | | | | | | |
| Supply From Plan Element (acft/yr) | -- | -- | 350 | 350 | 350 | 350 |
| Annual Cost (\$/yr) | -- | -- | \$114,000 | \$114,000 | \$114,000 | \$11,400 |
| Unit Cost (\$/acft) | -- | -- | \$326 | \$326 | \$326 | \$32 |

5B.21.2 City of Lometa

5B.21.2.1 Description of Supply

City of Lometa is supplied water by Lometa WSC, which recently was acquired by the Lower Colorado River Authority. The LCRA has contracted to supply water from the Colorado River to Lometa and is in the process of building new facilities to supply the area. No change is recommended in the water supply situation.

5B.21.3 County-Other

No shortage is projected for Lampasas County-Other entities and no changes in water supply are recommended.

5B.21.4 Manufacturing

Water supply for Manufacturing in Lampasas County is obtained by purchase from a city or water supply corporation or from private wells operated by the manufacturing entity. New manufacturing facilities would be expected to locate where existing water supplies are available, such as near a city or within the service area of an existing water supply corporation. County-Other has available supply to meet Manufacturing shortages and Lampasas will have sufficient supply once they implement the recommended water plan.

5B.21.5 Steam-Electric

No Steam-Electric demand exists or is projected for Lampasas County.

5B.21.6 Mining

No shortages are projected for Lampasas County Mining and no changes in water supply are recommended.

5B.21.7 Irrigation

No shortages are projected for Irrigation and no changes in water supply are recommended.

5B.21.8 Livestock

No shortages are projected for Livestock and no changes in water supply are recommended.