

5B.10 Falls County Water Supply Plan

Table 5B.10-1 lists each water user group in Falls 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.10-1.
Falls County Surplus/(Shortage)**

| Water User Group | Surplus/(Shortage)¹ | | Comment |
|-------------------------|---------------------------------------|---------------------------|----------------------------------|
| | 2030 (acft/yr) | 2050 (acft/yr) | |
| City of Lott | 95 | 107 | Projected surplus |
| City of Marlin | 2,975 | 2,853 | Projected surplus-see plan below |
| City of Rosebud | 356 | 342 | Projected surplus |
| County-Other | 3,246 | 3,153 | Projected surplus |
| Manufacturing | 920 | 920 | Projected surplus |
| Steam-Electric | 0 | 0 | No Projected Needs |
| Mining | 705 | 707 | Projected surplus |
| Irrigation | 18,526 | 18,883 | Projected surplus |
| Livestock | 0 | 0 | No Projected Needs |

¹ From Tables 4-19 and 4-20, Section 4 – Comparison of Water Demands with Water Supplies to Determine Needs.

5B.10.1 City of Lott

The City of Lott obtains its water supply from the Central Texas Water Supply Corporation, which treats and delivers water from Lake Stillhouse Hollow. The City of Lott has contracted with Central Texas WSC for 184 acft/yr of supply which exceeds its 2050 water supply demand of 77 acft/yr. No change in water supply is recommended.

5B.10.2 City of Marlin**5B.10.2.2 Description of Supply**

The City of Marlin obtains its water supply from surface water from local reservoirs and the Brazos River. The City owns and operates two existing reservoirs, Marlin City Lake and New Marlin Reservoir, that impound runoff from Big Sandy Creek. The City also owns water rights that authorize diversion of 4,000 acft/yr from the Brazos River and have contracted with the Brazos River Authority for 1,200 acft/yr from the BRA system. Currently, the City utilizes surface water from the two existing reservoirs as its primary supply and diverts water from Brazos River only in an emergency, to supplement the supply in the two existing reservoirs.

5B.10.2.2 Water Supply Plan

In order to develop additional surface water supply and decrease the need for water from the Brazos River, the City of Marlin, Falls County, and the Natural Resource Conservation Service have been actively pursuing the implementation of a new reservoir, Brushy Creek Reservoir. The Brushy Creek Reservoir is part of the Big Creek Watershed Project. Brushy Creek Reservoir is proposed as a multi-purpose reservoir for water supply, flood control, and recreation. Water rights been granted and the project is currently in the land acquisition stage.

5B.10.2.3 Costs

- Cost Source: NRCS Reservoir Cost Estimate for Big Creek Watershed Project.
- Date to be Implemented: By Year 2005.
- Total Project Cost: \$5,834,824 (Brushy Creek Reservoir only).

Cost for this reservoir was developed by the NRCS in 1994 dollars. The cost was updated to 1999 dollars using the ENR CCI price index. Dam and reservoir operation and maintenance was estimated as 1.5 percent of the total reservoir project cost.

**Table 5B.10-2.
Recommended Plan Costs by Decade for the City of Marlin**

| <i>Plan Element</i> | <i>2000</i> | <i>2010</i> | <i>2020</i> | <i>2030</i> | <i>2040</i> | <i>2050</i> |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Brushy Creek Reservoir | | | | | | |
| Projected Shortage (acft/yr) | 0 | 0 | 0 | 0 | 0 | 0 |
| Supply From Plan Element (acft/yr) | - | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Annual Cost (\$/yr) | - | \$475,314 | \$475,314 | \$475,314 | \$475,314 | \$87,522 |
| Unit Cost (\$/acft) | - | \$238 | \$238 | \$238 | \$238 | \$44 |

5B.10.3 City of Rosebud

The City of Rosebud obtains its water supply from the Central Texas Water Supply Corporation, which treats and delivers water from Lake Belton. The City of Rosebud has contracted with Central Texas WSC for 600 acft/yr of supply which exceeds its 2050 water supply demand of 258 acft/yr. No change in water supply is recommended.

5B.10.4 County-Other

County-Other is projected to have a surplus of water through the year 2050 and no changes in water supply are recommended.

5B.10.5 Manufacturing

Manufacturing is projected to have a surplus of water through the year 2050 and no changes in water supply are recommended.

5B.10.6 Steam-Electric

No Steam-Electric demand exists nor is projected for the county.

5B.10.7 Mining

Mining is projected to have a surplus of water through the year 2050 and no changes in water supply are recommended.

5B.10.8 Irrigation

Irrigation is projected to have a surplus of water through the year 2050 and no changes in water supply are recommended. Additional supply may be available for Irrigation use through implementation of the Big Creek Watershed Project.

5B.10.9 Livestock

Livestock is projected to have a no additional need for water through the year 2050 and no changes in water supply are recommended. Additional supply may be available for Livestock use through implementation of the Big Creek Watershed Project.