5B.14 Haskell County Water Supply Plan

Table 5B.14-1 lists each water user group in Haskell 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. In addition, long-term considerations are provided for some entities with projected surpluses. Haskell County, through its County Commissioner's Court, has submitted a series of resolutions supporting a variety of regional water supply planning and development initiatives. The specific resolutions are included at the end of Volume 1. The recommended plan described below either includes specific proposed projects mentioned in the resolutions, or are generally consistent with them.

Table 5B.14-1.
Haskell County Surplus/(Shortage)

Water User Group	Surplus/(Shortage)[1]		Comment
	2030 (acft/yr)	2050 (acft/yr)	
City of Haskell	(526)	(538)	Projected shortage – see plan below
City of Rule	4	3	Projected surplus
City of Stamford[P]	0	0	Supply equals demand
County-Other	2,412	1,974	Projected surplus
Manufacturing	0	0	No demand or supply
Steam-Electric	(1,709)	(1,825)	Projected shortage – see plan below
Mining	86	97	Projected surplus
Irrigation	2,652	3,811	Projected surplus
Livestock	0	0	Supply equals demand

[1] From Tables 4-27 and 4-28, Section 4 – Comparison of Water Demands with Water Supplies to Determine Needs.
[P] Indicates city is in multiple counties. Projections shown are for Haskell County portion only.

5B.14.1 The City of Haskell

5B.14.1.1 Description of Supply

Surface water supplies are obtained from local sources and Lake Millers Creek. The City of Haskell surface water supply is limited due to an expiring contract with North Central Texas MWD in 2010.

5B.14.1.2 Options Considered

Table 5B.14-2 lists the water management strategies, report section references discussing the strategy, total project cost, and unit costs that were considered for meeting the City of Haskell's shortages.

Table 5B.14-2.
Water Management Strategies Considered for the City of Haskell

Option	Yield (acft/yr)	Approximate Cost[1]	
		Total	Unit ($/acft)
Extend existing contracts	504	$327,600/yr	$650[2]
Wastewater Reuse (Section 5A.3)	107	$432,124	$326
Breckenridge Reservoir (Section 5A.14.1)	20,000	$171,462,000	$629[3]
Seymour Aquifer Development in Jones County (Section 5A.12)	11,100	$31,895,000	$278
No Action	-	$22,325,000[4]	$42,443[4]

[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. Operation and maintenance of existing facilities is not included.
[2] Estimated wholesale rate for treated water.
[3] Raw water cost in the reservoir.
[4] Economic impact of not meeting shortage (i.e., "no action" alternative) in 2030 as estimated by TWDB.

5B.14.1.3 Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water supply plan is recommended to meet the projected 2030 shortage of the City of Haskell:

- Extend existing contract, if possible, to supply an additional 504 acft/yr
- Wastewater Reuse to supply at least an additional 22 acft/yr

For the long-term period beyond 2030, the following strategies are recommended for consideration:

- Voluntary Redistribution from Stamford

The Breckenridge Reservoir has been recommended for the long-term needs of the West Central Texas Municipal Water District, as described in Section 5B.38. The project is much too large to be pursued by any individual municipality, but if it is pursued by the WCTMWD, then the source should be considered by local entities.

5B.14.1.4 Costs

Costs of the Recommended Plan for the City of Haskell.

a. Extension of existing contract:
   - Cost Source: Estimated wholesale rate of $650/acft for treated water
   - Date to be Implemented: before 2010
   - Total Annual Cost: $327,600
b. Wastewater Reuse
   - Cost Source: Section 5A.3
   - Date to be Implemented: before 2010
   - Total Project Cost: $432,000

Table 5B.14-3.
Recommended Plan Costs by Decade for City of Haskell

	2000	*2010*	*2020*	*2030*	*2040*	*2050*
Projected Surplus/(Shortage) (acft/yr)	(45)	(31)	(527)	(526)	(525)	(538)
Extension of Existing Contract						
Supply from Plan Elements (acft/yr)	0	504	504	504	504	504
Annual Costs ($/yr)	0	$327,600	$327,600	$327,600	$327,600	$327,600
Unit costs ($/acft)	0	$650	$650	$650	$650	$650
Wastewater Reuse						
Supply from Plan Element (acft/yr)	0	107	107	107	107	107
Annual Cost ($/yr)	$0	$35,000	$35,000	$35,000	$3,500	$3,500
Unit Cost ($/acft)	$0	$326	$326	$326	$32	$32
Total New Supply (acft/yr)	0	611	611	611	611	611

5B.14.2 The City of Rule

5B.14.2.1 Description of Supply

The City of Rule uses surface water from local sources and Lake Millers Creek. However, the surface water supply is limited due to an expiring contract with North Central

Texas MWD in 2019. The city also uses groundwater from the Seymour Aquifer. No shortages are projected.

5B.14.2.2 Options Considered

Table 5B.14-4 lists the water management strategies, report section references discussing the strategy, total project cost, and unit costs that were considered for meeting the City of Rule's shortages.

Table 5B.14-4.
Water Management Strategies Considered for the City of Rule

Option	Yield (acft/yr)	Approximate Cost[1]	
		Total	Unit ($/acft)
Extend existing contracts	30	$19,500/yr	$650[2]
Breckenridge Reservoir (Section 5A.14.1)	20,000	$171,462,000	$629[3]

[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. Operation and maintenance of existing facilities is not included.
[2] Estimated wholesale rate for treated water.
[3] Raw water cost in the reservoir.
[4] Economic Impact of not meeting shortage (i.e., "no action" alternative) in 2030 as estimated by TWDB.

5B.14.2.3 Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water supply plan is recommended to meet the projected 2030 shortage of the City of Rule:

- Extend existing contract, if possible, to supply an additional 30 acft/yr

The Breckenridge Reservoir has been recommended for the long-term needs of West Central Texas Municipal Water District, as described in Section 5B.38. The project is much too large to be pursued by any individual municipality, but if it is pursued by the WCTMWD, then the source should be considered by local entities.

5B.14.2.4 Costs

Costs of the Recommended Plan for the City of Rule.

a. Extension of existing contract:
   - Cost Source: Estimated wholesale of $650/acft for treated water

- Date to be Implemented: 2010
- Total Annual Cost: $19,500

5B.14.3 The City of Stamford

The City of Stamford is primarily in Jones County and its proposed plan is described in Section 5B.18.

5B.14.4 County-Other Category

The water supply entities for County-Other show a projected surplus and no changes in water supply are recommended.

5B.14.5 Manufacturing

No Manufacturing demand exists or is projected for the county.

5B.14.6 Steam-Electric

5B.14.6.1 Description of Supply

Steam-Electric water supply is obtained from Lake Stamford to provide cooling for the West Texas Utilities plant.

5B.14.6.2 Options Considered

Table 5B.14-5 lists the water management strategies, report section references discussing the strategy, total project cost, and unit costs that were considered for meeting the Steam-Electric sector's shortages.

Table 5B.14-5.
Water Management Strategies Considered for Haskell County Steam-Electric

Option	Yield (acft/yr)	Approximate Cost	
		Total	Unit ($/acft)
California Creek diversion (raw water) (Section 5A.7.2)	3,750	$6,300,000	$171
Breckenridge Reservoir (Section 5A.14.1)	20,000	$171,462,000	$629
No Action	-	$8,035,000[1]	$4,701[1]

[1] Economic impact of not meeting shortage (i.e., "no action" alternative) in 2030 as estimated by TWDB.

5B.14.6.3 Water Supply Plan

Working within the planning criteria established by the Brazos G RWPG and TWDB, the following water supply plan is recommended to meet the projected 2030 shortage of the Steam-Electric sector:

- California Creek diversion to supply an additional 1,875 acft/yr, which is half of the yield increase and the other half is allocated to Stamford municipal supply.

The Breckenridge Reservoir has been recommended for the long-term needs of the West Central Texas Municipal Water District, as described in Section 5B.38. The project is much too large to be pursued by any individual municipality, but if it is pursued by the WCTMWD, then the source should be considered by local entities.

5B.14.6.4 Costs

Costs of the Recommended Plan for the Steam-Electric sector.

a. California Creek diversion:
   - Cost Source: Section 5A.7.2
   - Date to be Implemented: 2001
   - Total Project Cost: $6,300,000
   - Total Annual Cost: $171/acft

Table 5B.14-6.
Recommended Plan Costs by Decade for Steam-Electric

Plan Element	2000	2010	2020	2030	2040	2050
Projected Shortage (acft/yr)	0	(933)	(1651)	(1709)	(1767)	(1825)
Supply from Plan Elements (acft/yr)	0	1,875	1,875	1,875	1,875	1,875
Annual Cost ($/yr)	0	$320,000	$320,000	$320,000	$320,000	$320,000
Unit Cost ($/acft)[1]	0	$171	$171	$171	$35	$35

[1] Unit cost is for full utilization of capacity. Operation and maintenance of existing facilities is not included.

5B.14.7 Mining

The water supply entities for Mining show a projected surplus and no changes in water supply are recommended.

5B.14.8 Irrigation

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

5B.14.9 Livestock

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