

5.18 Jones County Water Supply Plan

Table 5.18-1 lists each water user group in Jones County and their corresponding surplus or shortage in years 2040 and 2070. For each water user group with a projected shortage, a water supply plan has been developed and is presented in the following subsections.

Table 5.18-1. Jones County Surplus/(Shortage)

Water User Group	Surplus/(Shortage) ¹		Comment
	2040 (acft/yr)	2070 (acft/yr)	
City of Abilene	9,115	11,314	See Taylor County
City of Anson	633	606	Projected surplus - see Chapter 5.38
City of Hamlin	320	287	Projected surplus
City of Hawley	0	0	Demand equals supply
Hawley WSC	160	136	Projected surplus
City of Stamford	315	249	Projected surplus - see Chapter 5.38
County-Other	57	37	Projected surplus
Manufacturing	44	44	Projected surplus
Steam-Electric	11,441	11,319	Projected surplus
Mining	(218)	(169)	Projected shortage – see plan below
Irrigation	(91)	139	Projected shortage – see plan below
Livestock	0	0	Demand equals supply

1 – From Tables C-35 and C-36, Appendix C – Comparison of Water Demands with Water Supplies to Determine Needs.

5.18.1 City of Anson

The recommended water supply plan for the City of Anson is included in Chapter 5.38 as a wholesale water provider.

5.18.2 City of Hamlin

Description of Supply

The City of Hamlin receives surface water supplies from the City of Anson and Lake Hamlin. No shortages are projected for the City of Hamlin.

Water Supply Plan

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

Conservation was considered but the current per capita use is below the targeted gpcd of 140.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Unit Cost: \$470/acft
- Annual Cost: maximum of \$27,260 in 2070

Table 5.18-2. Recommended Plan Costs by Decade for City of Hamlin

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	341	329	320	307	296	287
Conservation						
Supply From Plan Element (acft/yr)	14	43	57	57	58	58
Annual Cost (\$/yr)	\$6,580	\$20,210	\$26,790	\$26,790	\$27,260	\$27,260
<i>Projected Surplus/(Shortage) after Conservation</i>	355	372	377	364	354	346

5.18.3 City of Hawley

The City of Hawley is supplied with water from Hawley WSC. No shortages are projected 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.

5.18.4 Hawley WSC

Hawley WSC is located in multiple counties (Taylor, and Jones). The balance shown in Table 5.18-1 represents the cumulative totals for Hawley WSC. Hawley WSC is supplied with water from the City of Abilene and City of Anson. Hawley WSC provides supply to meet the current and projected demands for the City of Hawley. No shortages are projected for Hawley WSC through 2070 and no change in water supply is recommended. Conservation was considered; however, the entity’s current per capita use rate is below the selected target rate of 140 gpcd.

5.18.5 City of Stamford

The recommended water supply plan for the City of Stamford is included in Chapter 5.38 as a wholesale water provider.

5.18.6 County-Other

Entities in County-Other receive supplies through the City of Stamford and the Seymour Aquifer. County Other is projected to have a surplus of water through the year 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.

5.18.7 Manufacturing

There is no projected demand for Manufacturing in Jones County and no changes in water supply are recommended.

5.18.8 Steam-Electric

Supply for Jones County Steam-Electric can be met through a contract with the City of Abilene from Fort Phantom Hill Reservoir. No shortages are projected for Steam-Electric, and no changes in water supply are recommended.

5.18.9 Mining

Description of Supply

Jones County Mining obtains its water supply from run-of-the river water rights which are not reliable in the drought of record. Jones County Mining is projected to have a shortage between 2020 and 2070.

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 Jones County-Mining.

- a. Conservation
 - Cost Source: Volume II, Chapter 2
 - Date to be Implemented: 2030
 - Annual Cost: not determined
- b. Leave needs unmet
 - Cost Source: Cost of not meeting needs – see Appendix H
 - Date to be Implemented: 2020

Table 5.18-3. Recommended Plan Costs by Decade for Jones County – Mining

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(239)	(234)	(218)	(199)	(183)	(169)
Conservation						
Supply From Plan Element (acft/yr)	7	12	15	14	13	12
Annual Cost (\$/yr)	ND	ND	ND	ND	ND	ND
<i>Projected Surplus/(Shortage) after Conservation (acft/yr)</i>	(232)	(222)	(203)	(185)	(170)	(157)

Table 5.18-3. Recommended Plan Costs by Decade for Jones County – Mining

Plan Element	2020	2030	2040	2050	2060	2070
Leave Needs Unmet						
Supply From Plan Element (acft/yr)	232	222	203	185	170	157
Annual Cost (\$/yr)	—	—	—	—	—	—
Unit Cost (\$/yr)	—	—	—	—	—	—

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

5.18.10 Irrigation

Description of Supply

Jones County Irrigation is supplied by the Seymour Aquifer. Irrigation is projected to have a shortage of water beginning in 2020 through 2050.

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 Jones County-Mining.

a. Conservation

- Cost Source: Volume II, Chapter 2
- Date to be Implemented: 2020
- Annual Cost: \$42,090
- Unit Cost: \$230/acft

b. Leave needs unmet

New supplies for irrigation would be cost prohibitive to develop and most farms would switch to dry-land crops or allow fields to go fallow during a prolonged drought.

- Cost Source: Cost of not meeting needs – see Appendix H
- Date to be Implemented: 2020

Table 5.18-4. Recommended Plan Costs by Decade for Jones County – Irrigation

Plan Element	2020	2030	2040	2050	2060	2070
<i>Projected Surplus/(Shortage) (acft/yr)</i>	(260)	(174)	(91)	(10)	68	139
Conservation						
Supply From Plan Element (acft/yr)	86	139	189	183	—	—
Annual Cost (\$/yr)	\$19,780	\$31,970	\$43,470	\$42,090	—	—
<i>Projected Surplus/(Shortage) after Conservation (acft/yr)</i>	(173)	(34)	98	174	68	139



Table 5.18-4. Recommended Plan Costs by Decade for Jones County – Irrigation

Plan Element	2020	2030	2040	2050	2060	2070
Leave Needs Unmet						
Supply From Plan Element (acft/yr)	173	34	—	—	—	—
Annual Cost (\$/yr)	—	—	—	—	—	—
Unit Cost (\$/yr)	—	—	—	—	—	—

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

5.18.11 Livestock

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

This page intentionally left blank.