Memo

Date:	March 3, 2024
Project:	2026 Llano Estacado (Region O) Regional Water Plan
To:	Texas Water Development Board
From:	Paula Jo Lemonds, PE, PG, Grady Reed, and Zach Stein, PE - HDR, on behalf of the Llano Estacado (Region O) Regional Water Planning Group
Subject:	2026 Regional Water Plan Technical Memorandum

Introduction

The Llano Estacado Regional Water Planning Group (LERWPG) submits this technical memorandum to fulfill the Texas Water Development Board (TWDB) requirements for the 2026 Regional Water Plan (RWP) development.¹ This memorandum documents the LERWPG's preliminary analysis of water demand projections, water availability, existing water supplies, and water needs, and presents potentially feasible water management strategies.

At a regular meeting of the LERWPG on February 21, 2024, and during a 14-day public comment period prior to the meeting, the LERWPG received no public comments.

1.0 TWDB DB27 Reports

The TWDB's regional water plan development guidance,² describes the State Water Planning Database (DB27) as the tool that "will synthesize regions' data and provide summary reports that shall be incorporated into the Technical Memorandum, initially prepared plan (IPP), and final adopted regional water plan (RWP)." The TWDB guidance document further states that regional water planning groups (RWPGs) will complete and submit to the TWDB, via the DB27 interface, all data generated or updated during the current cycle of planning, in accordance with TWDB specifications, prior to submitting the technical memorandum and IPP.

The following required TWDB DB27 reports are submitted with this technical memorandum:

- 2026 Region O Water User Group (WUG) Population,
- 2026 Region O Water User Group (WUG) Demand,
- 2026 Region O Source Total Availability,
- 2026 Region O Water User Group (WUG) Existing Water Supply,
- 2026 Region O Water User Group (WUG) Needs or Surplus,
- 2026 Region O Regional Water Plan (RWP) Water User Group (WUG) Data Comparison to 2021 RWP, and
- 2026 Region O Regional Water Plan (RWP) Source Availability Comparison to 2021 RWP.

¹ TWDB, 2023. Second Amended General Guidelines for Development of the 2026 Regional Water Plans.

² Ibid.



Data entered into DB27 is rounded to the nearest whole number to avoid cumulative data errors.

1.1 Water User Group Population

The TWDB DB27 WUG population projection report presenting population projections by WUG, county, and river basin is included in Appendix A.

1.2 Water User Group Water Demand Reports

The TWDB DB27 water demand report presenting water demand projections by WUG, county, and river basin is included in Appendix B.

1.3 Source Water Availability Report

The TWDB DB27 source water availability report presenting water availability by source is included in Appendix C.

1.4 Water User Group Existing Water Supplies Report

The TWDB DB27 existing water supplies report presenting existing water supplies by WUG, county, and river basin is included in Appendix D.

1.5 Water User Group Identified Water Needs/Surpluses Report

The TWDB DB27 identified water needs/surpluses report presenting identified water needs by WUG, county, and river basin is included in Appendix E.

1.6 Water User Group Data Comparison to 2021 RWP Report

The TWDB DB27 WUG data comparison report, presenting availability, supply, demands, and needs compared to the 2021 RWP report, is included in Appendix F.

1.7 Source Availability Comparison to 2021 RWP Report

The TWDB DB27 comparison of availability, supply, demands, and needs to 2021 RWP report, presenting sources at an aggregated level and WUG supplies, demands, and needs at a county level, is included in Appendix G.

2.0 Surface Water Availability

The LERWPG met on November 30, 2023, and discussed the process to determine the amount of surface water available from existing water rights and future water management strategies. During this meeting, the LERWPG discussed specific variations from the standard TWDB guidance that will be employed to develop the 2026 Llano Estacado Regional Water Plan (LERWP).

The guidance provided by the TWDB in the base scope of work for the Sixth Cycle of Regional Water Planning requires the use of the Run 3 (full authorization) version of Water Availability Models (WAMs) maintained by the Texas Commission on Environmental Quality (TCEQ). The TCEQ uses these river-basin-scale models to evaluate legal water available to applications for new or amended water rights, and as such, the models include some aspects that are not appropriate for water planning. This section includes model modification assumptions and yields used in developing the 2026 LERWP.



2.1 Summary of Water Availability Models

This section describes information regarding the WAM simulations used in determining surface water availability. The model input and output files used to date are submitted with this memorandum as an electronic appendix, Appendix H.

The LERWPG used the following WAMs to determine the water availability of existing surface water sources in the Llano Estacado planning area:

- TCEQ Brazos River Basin and San Jacinto Coastal Basin WAM (Brazos WAM) Period of record of 1940-2018
- 2. TCEQ Red River Basin WAM (Red River WAM) Period of record of 1948-2018

Hydrologic Variances

In a letter dated December 12, 2023, the LERWPG requested that the TWDB allow specific variations from the base TCEQ WAMs for analyses that determine surface water available to existing rights. In a letter dated February 16, 2024, the TWDB approved the variances as described in this section. Appendix I includes both the hydrologic variance request from the LERWPG and the subsequent approval letter from the TWDB.

For Lake Alan Henry analyses, the LERWPG received approval from the TWDB to conduct analyses using a 2-year safe yield in the evaluation of existing and strategy supply.

For determining the firm yield of water supplies in the Canadian River Basin that support LERWPG WUGs, specifically Lake Meredith, the LERWPG received approval from the TWDB to use yield values developed by the Panhandle Regional Water Planning Group, using the TCEQ Canadian River Basin WAM.

2.2 Sedimentation Rates and Area-Capacity Rating Curves

This section provides the assumed reservoir sediment accumulation rates and describes the methodology used for calculating 2030 and 2080 area-capacity rating curves. The LERWPG used the 2030 and 2080 reservoir rating curves developed by TWDB³ in the region's surface water availability modeling, unless otherwise noted in Table 1. Also, the LERWPG included Possum Kingdom Reservoir 2030 and 2080 area-capacity rating curves in the Brazos WAM simulations, even though the reservoir is not a Llano Estacado region supply source, since the senior priority of the reservoir's water right influences water availability of upstream sources in the planning area. Table 1 summarizes assumed sedimentation rates.

https://www.twdb.texas.gov/surfacewater/data/WAMRatingCurve/index.asp, accessed February 5, 2024.



Table 1. Summary of Sedimentation Rates for Region O Existing Supply Reservoirs

Reservoir	Sedimentation Rate (acre-feet/year)	Notes
Lake Alan Henry	231	Rate published in TWDB 2017 Lake Alan Henry Volumetric and Sediment Survey Report and used in 2021 RWP. Several surface areas in TWDB rating curves were adjusted to correct apparent errors.
White River Reservoir	270	Rate based on differences in TWDB 2030 and 2080 rating curves. Several surface areas in TWDB rating curves were adjusted to correct apparent errors.
Possum Kingdom Reservoir	472	Rate based on differences in TWDB 2030 and 2080 rating curves.
Mackenzie Reservoir		No TWDB rating curves or completed reservoir surveys are available. Therefore, the area-capacity rating curve in the TCEQ WAM was assumed for 2030 and 2080. This methodology is consistent with the 2021 RWP.

2.3 Versions and Dates of WAM Simulations

This section lists the versions and dates of WAM simulations completed to calculate available surface water supply for the region. Table 2 summarizes WAM details and Table 3 summarizes the yield simulations completed.

Brazos River Basin

For Brazos River Basin supply calculations, the LEWRPG used the unmodified Brazos WAM version, dated October 1, 2023 (TCEQ Run 3, including updated sediment conditions), to determine 2030 and 2080 surface water supplies. No return flows were included in the WAM simulations.

Red River Basin

For Red River Basin WAM simulations, the LEWRPG used the unmodified Red River WAM version, dated October 1, 2023, to determine 2030 and 2080 surface water supplies.

Dates of WAM Simulations

HDR staff ran the yield simulations on February 5, 2024, and February 7, 2024.



Table 2. Summary of WAM Details

River Basin	Model	Model Period of Record	Version Date	Date of Model Run	Modifications	Input/Output Files
Brazos	Modified TCEQ WAM	1940-2018	October 1, 2023	February 5, 2024	2030 and 2080 area-volume rating curves for Region O supply reservoirs and Possum Kingdome Reservoir	TCEQ WAM input files were used and were not modified unless noted. WAM output of monthly timeseries of storage, diversions, and available flow were used to determine availability.
Red	Unmodified TCEQ WAM	1948-2018	October 1, 2023	February 7, 2024	None	TCEQ WAM input files were used and were not modified unless noted. WAM output of monthly timeseries of storage, diversions, and available flow were used to determine availability.

Table 3. Summary of WAM simulations completed to date

River Basin	Model	Reservoir / Water Body	Firm that Performed Model Run	Date of Model Run	Decade and Type of Yield	Yield (acre- feet/year)
Brazos	Modified Brazos WAM	Lake Alan	HDR	February 5,	2030 Firm	18,800
		Henry	HUK	2024	2080 Firm	16,500
		Lake Alan HDR Henry	HDD	February 5,	2030 2-Yr Safe	11,300
			וטול	2024	2080 2-Yr Safe	9,800
		White River	HDR	February 5, 2024	2030 and 2080 Firm	0
		Brazos Run of River	HDR	February 5, 2024	2030 and 2080 Firm	0
Red	Unmodified Red WAM	Mackenzie	HDR	February 7, 2024	2030 and 2080 Firm	2,900
	Unmodified Red WAM	Red Run of River	HDR	February 7, 2024	2030 and 2080 Firm	118



3.0 Groundwater Availability

The LERWPG uses the established modeled available groundwater (MAG) values for the Regional Water Planning Area (RWPA) in development of the 2026 LERWP.

3.1 Non-Modeled Available Groundwater Availability

MAG reports for the Llano Estacado RWPA do not include availabilities for "Other Aquifer." Therefore, to calculate estimated availability, or non-MAG availability, for the "Other Aquifer" designation in the 2026 LERWP, the LERWPG used a methodology that includes the following assumptions.

- Groundwater availability is determined based upon historical groundwater pumpage reports available from the TWDB.
- Historical pumpage is reported for river basin portions of each county by aquifer for the time period 2012 through 2021.
- Groundwater availability for "Other Aquifer" and other non-MAG portions of aquifers is generally set to be equal to historical pumpage from each aquifer over the time period from 2012 through 2021.

Table 4 summarizes groundwater availability methodology by county and aquifer.

Table 4. Summary of groundwater availability methodology by county and aquifer

County	Aquifer	Groundwater Availability Methodology
Bailey	Edwards-Trinity High Plains (ETHP)	MAG
	Dockum	MAG
Briscoe	ETHP	MAG
	Dockum	MAG
	Seymour	MAG
	Other	Non-MAG
Castro	ETHP	MAG
	Dockum	MAG
Cochran	ETHP	MAG
	Dockum	MAG
Crosby	ETHP	MAG
	Dockum	MAG
	Other	Non-MAG
Dawson	ETHP	MAG
	Dockum	MAG
Deaf Smith	ETHP	MAG
	Dockum	MAG



County	Aquifer	Groundwater Availability Methodology
Dickens	Ogallala	Non-MAG
	Dockum	Non-MAG
	Other	Non-MAG
Floyd	ETHP	MAG
	Dockum	MAG
	Other	Non-MAG
Gaines	ETHP	MAG
	Dockum	MAG
Garza	ETHP	MAG
	Dockum	MAG
	Other	Non-MAG
Hale	ETHP	MAG
	Dockum	MAG
Hockley	ETHP	MAG
	Dockum	MAG
Lamb	ETHP	MAG
	Dockum	MAG
Lubbock	ETHP	MAG
	Dockum	MAG
Lynn	ETHP	MAG
	Dockum	MAG
Motley	Ogallala	MAG
	Dockum	MAG
	Seymour	MAG
	Other	Non-MAG
Parmer	ETHP	MAG
	Dockum	MAG
Swisher	ETHP	MAG
	Dockum	MAG
Terry	ETHP	MAG
Yoakum	ETHP	MAG

4.0 Identification of Potentially Feasible Water Management Strategies

TWDB rules require that the process for identifying potentially feasible water management strategies (WMSs) be documented at a public meeting.⁴ On November 30, 2023, the LERWPG formally considered the following process for identifying, evaluating, and selecting WMSs.

- 1. Potentially include strategies identified in previous plans.
 - a. Potentially include recommended and alternative strategies from 2021.
 - b. Potentially include strategies evaluated, but not recommended in 2021.
 - c. Potentially include strategies evaluated in previous Plans that were not moved forward.
- Identify draft needs and develop additional ideas to meet those needs.
- 3. Maintain ongoing communication from local interests through the regional water planning process.

Then, determine an initial list of potentially feasible strategies. Include additional WMSs if local interests request them and the planning schedule and budget allow for the addition.

5.0 Potentially Feasible Water Management Strategies

Table 5 lists all potentially feasible WMSs identified by the LERWPG to date.

Table 5. Potentially feasible WMSs identified by the LERWPG to date

#	Potentially Feasible Water Management Strategies
1	Municipal water conservation
2	Non-municipal water conservation
3	Reclaimed wastewater supplies and reuse
4	Local groundwater development
5	Water loss reduction
6	Groundwater desalination
7	Lake Alan Henry Water District Water Supply
8	Bailey County Well Field capacity maintenance
9	Jim Bertram Lake 7
10	Lake Alan Henry Phase 2
11	North Fork scalping operation
12	South Lubbock well field

⁴ 31 Texas Administrative Code (TAC) §357.21(g)(2))



#	Potentially Feasible Water Management Strategies
13	Potable reuse
14	Wolfforth Canadian River Municipal Water Authority (CRMWA) lease from Slaton
15	Direct potable reuse to North Water Treatment Plant
16	Direct potable reuse to South Water Treatment Plant
17	North Fork diversion at Country Road (CR) 7300
18	North Fork diversion to Lake Alan Henry pump station
19	Post Reservoir
20	Reclaimed water to aquifer storage and recovery
21	South Fork discharge
22	Transportation of water between counties of surplus and need
23	Brackish well field in Lubbock area
24	CRMWA aquifer storage and recovery
25	CRMWA II (Roberts County Wellfield)
26	Chloride control project
27	City of Plainview CRMWA Aquifer Storage and Recovery (ASR)
28	City of Plainview Reuse
29	Enhanced recharge project
30	Playa enhanced recharge project

6.0 Analysis of Infeasible Water Management Strategies and/or Projects

In accordance with the Texas Water Code (§16.053(h)(10)), a strategy or project is considered infeasible if:

"...the proposed sponsor of the water management strategy or project has not taken an affirmative vote or other action to make expenditures necessary to construct or file applications for permits required in connection with the implementation of the water management strategy or project under federal or state law on a schedule that is consistent with the completion of the implementation of the water management strategy or project by the time the water management strategy or project is projected by the regional water plan or the state water plan to be needed."

At minimum, RWPGs must review the status of recommended strategies and projects that were listed with an online decade of 2020 in the 2021 RWP. In accordance with contract guidance for the 2021 RWPs, recommended strategies and projects with an online decade of 2020 were required to be online and delivering water by January 5, 2023.

For example, if any such WMSs and water management strategy projects (WMSPs) were not implemented by this date, and the project sponsor has not taken any affirmative steps toward



implementation, the 2021 RWP must be amended to remove or revise the WMSs or WMSPs to make them feasible.

Affirmative steps by sponsor may include, but are not limited to:

- 1. spending money on the strategy or project,
- 2. voting to spend money on the strategy or project, or
- 3. applying for a federal or state permit for the strategy or project.

LEWRPG's review of infeasible WMSs and/or WMSPs included the following.

- December 2022 LERWPG meeting:
 - Request by City of Lubbock to acknowledge that Lake 8 is no longer considered a feasible WMS. Lake 8 was not a recommended WMS in the 2021 RWP but was designated a unique reservoir site in 2007 by Senate Bill 3.
 - Approved by LERWPG
- February 2023 LERWPG meeting:
 - Reviewed recommended WMSPs associated with an online decade of 2020.
- August 2023 LERWPG meeting:
 - Presentation by Kevin Smith, TWDB
 - Reviewed recommended WMSPs associated with an online decade of 2020.

WMSs and WMSPs within Llano Estacado RWPA that were analyzed include the following.

- Mining: Crosby, Dawson, Hale, Lamb, Lubbock, Lynn, Terry, Yoakum
- Manufacturing: Deaf Smith, Gaines, Hale, Lubbock
- Aggregated conservation municipal, agricultural, industrial

The TWDB recognizes information may be difficult to obtain or may not be available for some WUG categories. Other WMSs and WMSPs were determined to be making affirmative steps toward implementation. No infeasible WMSs or WMSPs were identified.

7.0 Interregional Coordination to Date

To date, the LERWPG has primarily coordinated with other planning regions through technical consultants, who coordinated data and shared information that is reported to the planning groups. The LERWPG has coordinated with adjacent RWPGs, including Regions A, B, F, and G. Additional coordination has been accomplished through the participation of LEWRPG members as liaisons with adjacent planning groups. Also, two LERWPG members serve as members of the Panhandle Regional (Region A) Water Planning Group, and one LERWPG member actively serves on the Interregional Planning Council.



8.0 Summary of Public Comments

To comply with the TWDB Regional Water Planning Rules⁵, the LERWPG accepted written comments from the public for a period of 14 days prior to, and at the February 21, 2024, meeting where the LERWPG considered this technical memorandum for approval. No public comments were received at the meeting or during the official 14-day comment period.

⁵ 31 TAC Section 357.21(g)(2).



Appendix A. TWDB DB27 Report – 2026 RWP WUG Population

	WUG Population					
	2030	2040	2050	2060	2070	2080
Bailey County Total	6,996	7,153	7,155	7,179	7,204	7,230
Bailey County / Brazos Basin Total	6,996	7,153	7,155	7,179	7,204	7,230
Muleshoe	5,096	5,230	5,351	5,525	5,764	6,094
County-Other	1,900	1,923	1,804	1,654	1,440	1,136
Briscoe County Total	1,301	1,203	1,134	1,054	971	885
Briscoe County / Red Basin Total	1,301	1,203	1,134	1,054	971	885
Quitaque	302	278	258	238	217	197
Silverton	549	508	478	442	407	371
County-Other	450	417	398	374	347	317
Castro County Total	7,198	7,024	6,799	6,625	6,444	6,255
Castro County / Brazos Basin Total	5,968	5,828	5,653	5,518	5,385	5,257
Dimmitt	3,737	3,692	3,628	3,591	3,559	3,535
Hart Municipal Water System	746	712	683	655	642	648
County-Other	1,485	1,424	1,342	1,272	1,184	1,074
Castro County / Red Basin Total	1,230	1,196	1,146	1,107	1,059	998
Nazareth	259	265	269	276	285	297
County-Other	971	931	877	831	774	701
Cochran County Total	2,384	2,233	2,082	1,942	1,796	1,644
Cochran County / Brazos Basin Total	2,181	2,043	1,907	1,782	1,651	1,514
Morton PWS	1,470	1,377	1,285	1,198	1,110	1,017
Whiteface	284	266	254	246	235	224
County-Other	427	400	368	338	306	273
Cochran County / Colorado Basin Total	203	190	175	160	145	130
County-Other	203	190	175	160	145	130
Crosby County Total	4,762	4,433	4,037	3,663	3,273	2,867
Crosby County / Brazos Basin Total	4,753	4,424	4,029	3,656	3,267	2,862
Crosbyton	1,427	1,332	1,219	1,113	1,002	890
Lorenzo	886	825	752	683	612	537
Ralls	1,521	1,417	1,291	1,171	1,047	918
County-Other	919	850	767	689	606	517

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	WUG Population						
	2030	2040	2050	2060	2070	2080	
Crosby County / Red Basin Total	9	9	8	7	6	5	
County-Other	9	9	8	7	6	5	
Dawson County Total	12,342	12,302	12,210	12,024	11,830	11,628	
Dawson County / Brazos Basin Total	111	110	109	109	106	103	
ODonnell	94	93	92	92	89	86	
County-Other	17	17	17	17	17	17	
Dawson County / Colorado Basin Total	12,231	12,192	12,101	11,915	11,724	11,525	
Lamesa	7,721	7,666	7,569	7,400	7,220	7,024	
County-Other	4,510	4,526	4,532	4,515	4,504	4,501	
Deaf Smith County Total	19,367	19,492	19,289	18,823	18,337	17,831	
Deaf Smith County / Canadian Basin Total	7	7	6	5	3	1	
County-Other	7	7	6	5	3	1	
Deaf Smith County / Red Basin Total	19,360	19,485	19,283	18,818	18,334	17,830	
Hereford	15,164	15,591	15,903	16,145	16,523	17,113	
County-Other	4,196	3,894	3,380	2,673	1,811	717	
Dickens County Total	1,592	1,483	1,328	1,181	1,028	869	
Dickens County / Brazos Basin Total	1,404	1,308	1,171	1,042	907	767	
Spur	745	695	622	554	482	407	
County-Other	659	613	549	488	425	360	
Dickens County / Red Basin Total	188	175	157	139	121	102	
Red River Authority of Texas*	5	5	5	4	3	2	
County-Other	183	170	152	135	118	100	
Floyd County Total	5,043	4,758	4,470	4,212	3,943	3,663	
Floyd County / Brazos Basin Total	4,644	4,390	4,136	3,909	3,675	3,435	
Floydada	2,419	2,331	2,258	2,200	2,154	2,122	
Lockney	1,402	1,299	1,188	1,084	969	841	
County-Other	823	760	690	625	552	472	
Floyd County / Red Basin Total	399	368	334	303	268	228	
County-Other	399	368	334	303	268	228	

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	WUG Population						
	2030	2040	2050	2060	2070	2080	
Gaines County Total	25,154	30,014	34,831	39,552	44,611	50,032	
Gaines County / Colorado Basin Total	25,154	30,014	34,831	39,552	44,611	50,032	
Seagraves	1,849	1,654	1,468	1,263	1,090	944	
Seminole	7,157	7,647	8,093	8,378	8,716	9,101	
County-Other	16,148	20,713	25,270	29,911	34,805	39,987	
Garza County Total	5,660	5,501	5,250	4,905	4,546	4,172	
Garza County / Brazos Basin Total	5,660	5,501	5,250	4,905	4,546	4,172	
Post	4,543	4,409	4,217	3,961	3,695	3,419	
County-Other	1,117	1,092	1,033	944	851	753	
Hale County Total	33,015	32,465	31,253	29,960	29,000	28,102	
Hale County / Brazos Basin Total	33,012	32,463	31,252	29,959	28,999	28,102	
Abernathy	2,355	2,549	2,750	2,971	3,267	3,688	
Hale Center	1,876	1,834	1,752	1,666	1,572	1,471	
Petersburg Municipal Water System	926	905	866	823	777	726	
Plainview	22,403	22,403	22,403	22,403	21,395	20,347	
Seth Ward WSC	1,482	1,451	1,386	1,317	1,244	1,162	
County-Other	3,970	3,321	2,095	779	744	708	
Hale County / Red Basin Total	3	2	1	1	1	0	
County-Other	3	2	1	1	1	0	
Hockley County Total	21,758	21,831	21,558	21,281	20,992	20,691	
Hockley County / Brazos Basin Total	20,303	20,409	20,211	20,006	19,799	19,591	
Anton	820	808	796	785	778	779	
Levelland	12,404	12,510	12,452	12,386	12,327	12,278	
County-Other	7,079	7,091	6,963	6,835	6,694	6,534	
Hockley County / Colorado Basin Total	1,455	1,422	1,347	1,275	1,193	1,100	
Sundown	1,195	1,162	1,091	1,024	947	860	
County-Other	260	260	256	251	246	240	
Lamb County Total	12,846	12,761	12,522	12,265	11,997	11,718	
Lamb County / Brazos Basin Total	12,846	12,761	12,522	12,265	11,997	11,718	
Amherst	653	654	650	647	644	645	
Earth	842	813	788	769	761	768	
Littlefield	5,558	5,447	5,368	5,328	5,359	5,489	
Olton	1,904	1,837	1,782	1,740	1,723	1,737	

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	WUG Population						
	2030	2040	2050	2060	2070	2080	
Sudan	883	903	927	957	997	1,051	
County-Other	3,006	3,107	3,007	2,824	2,513	2,028	
Lubbock County Total	361,834	401,911	442,502	494,185	549,570	608,921	
Lubbock County / Brazos Basin Total	361,834	401,911	442,502	494,185	549,570	608,921	
Abernathy	779	805	832	860	891	926	
Idalou	2,130	2,047	1,971	1,874	1,784	1,698	
Lubbock	300,165	333,391	367,043	409,890	455,805	505,009	
New Deal	602	565	531	493	459	426	
Ransom Canyon	1,048	1,121	1,196	1,288	1,386	1,493	
Shallowater	3,294	3,688	4,086	4,596	5,142	5,727	
Slaton	5,665	5,396	5,146	4,849	4,571	4,311	
Wolfforth	16,487	25,847	31,863	34,157	35,898	36,975	
County-Other	31,664	29,051	29,834	36,178	43,634	52,356	
Lynn County Total	5,500	5,387	5,278	5,114	4,943	4,765	
Lynn County / Brazos Basin Total	5,466	5,354	5,246	5,083	4,913	4,736	
ODonnell	571	559	547	531	512	493	
Tahoka Public Water System	2,268	2,223	2,180	2,114	2,046	1,975	
County-Other	2,627	2,572	2,519	2,438	2,355	2,268	
Lynn County / Colorado Basin Total	34	33	32	31	30	29	
County-Other	34	33	32	31	30	29	
Motley County Total	985	911	856	850	844	838	
Motley County / Red Basin Total	985	911	856	850	844	838	
Matador	471	436	410	407	404	401	
Red River Authority of Texas*	8	6	6	6	6	6	
County-Other	506	469	440	437	434	431	
Parmer County Total	9,809	9,721	9,471	9,210	8,938	8,655	
Parmer County / Brazos Basin Total	4,828	4,596	4,232	3,855	3,426	2,929	
Bovina	1,466	1,331	1,134	931	693	409	
Farwell	1,546	1,698	1,858	2,035	2,247	2,511	
County-Other	1,816	1,567	1,240	889	486	9	
Parmer County / Red Basin Total	4,981	5,125	5,239	5,355	5,512	5,726	
Friona	4,261	4,504	4,747	5,003	5,319	5,722	

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			WUG Po	pulation		
	2030	2040	2050	2060	2070	2080
County-Other	720	621	492	352	193	4
Swisher County Total	6,687	6,458	6,172	5,924	5,666	5,397
Swisher County / Brazos Basin Total	315	309	303	297	291	285
County-Other	315	309	303	297	291	285
Swisher County / Red Basin Total	6,372	6,149	5,869	5,627	5,375	5,112
Нарру*	488	473	454	437	419	401
Tulia	3,779	3,610	3,392	3,205	3,011	2,805
County-Other	2,105	2,066	2,023	1,985	1,945	1,906
Terry County Total	11,908	12,074	12,061	12,013	11,963	11,911
Terry County / Brazos Basin Total	43	43	41	38	34	30
County-Other	43	43	41	38	34	30
Terry County / Colorado Basin Total	11,865	12,031	12,020	11,975	11,929	11,881
Brownfield	8,861	9,026	9,158	9,336	9,548	9,802
County-Other	3,004	3,005	2,862	2,639	2,381	2,079
Yoakum County Total	7,906	8,271	8,596	8,861	9,137	9,424
Yoakum County / Colorado Basin Total	7,906	8,271	8,596	8,861	9,137	9,424
Denver City	5,034	5,265	5,470	5,646	5,828	6,020
Plains	1,341	1,424	1,488	1,482	1,468	1,445
County-Other	1,531	1,582	1,638	1,733	1,841	1,959
Region O Population Total	564,047	607,386	648,854	700,823	757,033	817,498

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.



Appendix B. TWDB DB27 Report – 2026 RWP WUG Demand

	WUG Demand (acre-feet per year)							
	2030	2040	2050	2060	2070	2080		
Bailey County Total	61,881	51,628	41,582	31,453	28,719	27,523		
Bailey County / Brazos Basin Total	61,881	51,628	41,582	31,453	28,719	27,523		
Muleshoe	1,013	1,036	1,060	1,094	1,141	1,207		
County-Other	227	228	214	196	171	135		
Livestock	2,471	2,829	2,854	2,790	2,730	2,673		
Irrigation	58,170	47,535	37,454	27,373	24,677	23,508		
Briscoe County Total	18,427	14,545	11,221	7,894	6,781	6,037		
Briscoe County / Red Basin Total	18,427	14,545	11,221	7,894	6,781	6,037		
Quitaque	75	68	63	59	53	48		
Silverton	91	84	79	73	67	61		
County-Other	141	131	125	117	109	99		
Livestock	299	307	316	325	333	337		
Irrigation	17,821	13,955	10,638	7,320	6,219	5,492		
Castro County Total	263,171	211,436	123,677	35,681	22,912	16,054		
Castro County / Brazos Basin Total	170,901	137,223	80,167	22,967	14,665	10,205		
Dimmitt	831	819	804	796	789	784		
Hart Municipal Water System	106	101	97	93	91	92		
County-Other	210	201	189	179	167	151		
Livestock	5,587	6,237	6,316	6,242	6,177	6,117		
Irrigation	164,167	129,865	72,761	15,657	7,441	3,061		
Castro County / Red Basin Total	92,270	74,213	43,510	12,714	8,247	5,849		
Nazareth	98	100	101	104	107	112		
County-Other	138	131	123	117	109	99		
Manufacturing	67	69	72	75	78	81		
Livestock	3,571	3,986	4,036	3,988	3,947	3,909		
Irrigation	88,396	69,927	39,178	8,430	4,006	1,648		
Cochran County Total	82,029	70,038	58,893	47,749	42,782	39,148		
Cochran County / Brazos Basin Total	55,752	47,589	40,003	32,418	29,033	26,554		
Morton PWS	317	296	276	257	238	218		
Whiteface	66	61	59	57	54	52		
County-Other	158	147	136	125	113	101		
Livestock	38	39	40	41	41	42		
Irrigation	55,173	47,046	39,492	31,938	28,587	26,141		

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		wuo	6 Demand (ac	re-feet per ye	ar)	
	2030	2040	2050	2060	2070	2080
Cochran County / Colorado Basin Total	26,277	22,449	18,890	15,331	13,749	12,594
County-Other	75	70	64	59	53	48
Mining	166	166	166	166	166	166
Livestock	72	74	75	76	78	78
Irrigation	25,964	22,139	18,585	15,030	13,452	12,302
Crosby County Total	61,656	61,637	50,348	39,064	31,731	27,124
Crosby County / Brazos Basin Total	59,268	59,249	48,406	37,567	30,523	26,097
Crosbyton	218	203	185	169	152	135
Lorenzo	159	148	135	122	110	96
Ralls	222	206	188	170	152	133
County-Other	105	97	87	78	69	58
Manufacturing	1	1	1	1	1	1
Mining	483	509	535	563	589	613
Livestock	174	179	184	188	193	195
Irrigation	57,906	57,906	47,091	36,276	29,257	24,866
Crosby County / Red Basin Total	2,388	2,388	1,942	1,497	1,208	1,027
County-Other	1	1	1	1	1	1
Livestock	1	1	1	1	1	1
Irrigation	2,386	2,386	1,940	1,495	1,206	1,025
Dawson County Total	74,494	74,562	74,580	74,637	67,560	64,240
Dawson County / Brazos Basin Total	916	915	915	915	867	821
ODonnell	13	12	12	12	12	11
County-Other	2	2	2	2	2	2
Livestock	1	1	1	1	1	1
Irrigation	900	900	900	900	852	807
Dawson County / Colorado Basin Total	73,578	73,647	73,665	73,722	66,693	63,419
Lamesa	1,739	1,722	1,700	1,662	1,622	1,578
County-Other	540	539	539	537	536	536
Mining	5,927	6,013	6,051	6,146	2,616	2,657
Livestock	63	64	66	68	70	71
Irrigation	65,309	65,309	65,309	65,309	61,849	58,577

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		WU	G Demand (ad	cre-feet per ye	ear)	
	2030	2040	2050	2060	2070	2080
Deaf Smith County Total	156,926	126,664	90,374	53,871	45,411	40,285
Deaf Smith County / Canadian Basin Total	1,391	1,077	711	345	258	205
County-Other	1	1	1	1	0	0
Irrigation	1,390	1,076	710	344	258	205
Deaf Smith County / Red Basin Total	155,535	125,587	89,663	53,526	45,153	40,080
Hereford	3,352	3,436	3,504	3,558	3,641	3,771
County-Other	477	440	381	301	205	81
Manufacturing	1,498	1,553	1,610	1,670	1,732	1,796
Livestock	12,678	13,612	13,861	13,929	14,013	14,105
Irrigation	137,530	106,546	70,307	34,068	25,562	20,327
Dickens County Total	8,171	8,163	8,151	8,140	8,127	8,106
Dickens County / Brazos Basin Total	4,752	4,742	4,728	4,715	4,701	4,682
Spur	125	116	104	93	81	68
County-Other	86	79	71	63	55	47
Livestock	240	246	252	258	264	266
Irrigation	4,301	4,301	4,301	4,301	4,301	4,301
Dickens County / Red Basin Total	3,419	3,421	3,423	3,425	3,426	3,424
Red River Authority of Texas*	1	1	1	1	1	0
County-Other	24	22	20	18	15	13
Livestock	148	152	156	160	164	165
Irrigation	3,246	3,246	3,246	3,246	3,246	3,246
Floyd County Total	94,588	75,627	59,046	42,471	37,527	34,252
Floyd County / Brazos Basin Total	35,203	28,362	22,379	16,403	14,614	13,420
Floydada	418	401	389	379	371	365
Lockney	186	171	157	143	128	111
County-Other	95	88	79	72	63	54
Mining	9	9	9	10	10	10
Livestock	1,155	1,168	1,181	1,195	1,210	1,216
Irrigation	33,340	26,525	20,564	14,604	12,832	11,664
Floyd County / Red Basin Total	59,385	47,265	36,667	26,068	22,913	20,832
County-Other	46	42	39	35	31	26
Livestock	67	68	69	70	70	71

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		wue	Demand (ac	re-feet per ye	ar)	
	2030	2040	2050	2060	2070	2080
Irrigation	59,272	47,155	36,559	25,963	22,812	20,735
Gaines County Total	279,263	254,364	200,522	146,635	136,590	131,134
Gaines County / Colorado Basin Total	279,263	254,364	200,522	146,635	136,590	131,134
Seagraves	297	264	235	202	174	151
Seminole	2,336	2,491	2,637	2,730	2,840	2,965
County-Other	1,883	2,403	2,931	3,469	4,037	4,638
Manufacturing	515	534	554	574	595	617
Mining	1,870	1,870	1,870	1,870	22	22
Livestock	143	146	148	151	154	156
Irrigation	272,219	246,656	192,147	137,639	128,768	122,585
Garza County Total	10,784	10,763	10,736	10,697	10,656	10,610
Garza County / Brazos Basin Total	10,784	10,763	10,736	10,697	10,656	10,610
Post	576	556	532	500	466	431
County-Other	136	132	125	114	103	91
Mining	19	19	19	19	19	19
Livestock	154	157	161	165	169	170
Irrigation	9,899	9,899	9,899	9,899	9,899	9,899
Hale County Total	218,881	189,302	111,753	34,097	27,094	22,876
Hale County / Brazos Basin Total	216,785	187,504	110,730	33,848	26,913	22,735
Abernathy	547	590	637	688	757	854
Hale Center	226	219	210	199	188	176
Petersburg Municipal Water System	234	228	218	207	196	183
Plainview	4,075	4,060	4,060	4,060	3,877	3,687
Seth Ward WSC	100	98	94	89	84	79
County-Other	496	412	260	97	92	88
Manufacturing	731	758	786	815	845	876
Mining	1	1	1	1	1	1
Steam Electric Power	29	29	29	29	29	29
Livestock	2,674	3,040	3,049	2,961	2,878	2,796
Irrigation	207,672	178,069	101,386	24,702	17,966	13,966
Hale County / Red Basin Total	2,096	1,798	1,023	249	181	141
County-Other	0	0	0	0	0	0
Irrigation	2,096	1,798	1,023	249	181	141
			_,020			

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		WU	G Demand (ac	re-feet per ye	ear)	
	2030	2040	2050	2060	2070	2080
Hockley County Total	116,818	87,856	72,067	56,281	52,187	49,710
Hockley County / Brazos Basin Total	108,619	81,697	67,033	52,370	48,584	46,305
Anton	103	101	100	98	97	97
Levelland	1,990	1,998	1,988	1,978	1,968	1,961
County-Other	835	831	817	802	785	767
Manufacturing	1,232	1,278	1,325	1,374	1,425	1,478
Mining	69	69	69	69	69	69
Livestock	135	138	140	143	146	147
Irrigation	104,255	77,282	62,594	47,906	44,094	41,786
Hockley County / Colorado Basin Total	8,199	6,159	5,034	3,911	3,603	3,405
Sundown	319	309	290	273	252	229
County-Other	313	31	30	29	29	28
Livestock	2	2	30	3	3	3
Irrigation	7,847	5,817	4,711	3,606	3,319	3,145
irrigation	7,047	3,817	4,711	3,000	3,319	3,143
Lamb County Total	181,446	152,713	94,071	35,265	31,267	29,837
Lamb County / Brazos Basin Total	181,446	152,713	94,071	35,265	31,267	29,837
Amherst	81	80	80	80	79	79
Earth	143	137	133	130	129	130
Littlefield	805	785	774	768	773	791
Olton	387	372	361	353	349	352
Sudan	208	212	218	225	234	247
County-Other	422	434	420	394	351	283
Manufacturing	398	413	428	444	460	477
Steam Electric Power	5,789	3,000	3,000	3,000	3,000	3,000
Livestock	4,467	5,111	5,157	5,041	4,934	4,833
Irrigation	168,746	142,169	83,500	24,830	20,958	19,645
Lubbock County Total	199,536	194,158	179,090	165,730	172,288	180,111
Lubbock County / Brazos Basin Total	199,536	194,158	179,090	165,730	172,288	180,111
Abernathy	181	186	193	199	206	214
Idalou	373	357	344	327	311	296
Lubbock	52,502	58,086	63,949	71,414	79,414	87,986
New Deal	76	71	66	62	57	53
Ransom Canyon	296	316	337	363	391	421
Shallowater	482	537	595	669	749	834
Slaton	661	626	597	563	531	500

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		wue	Demand (acı	re-feet per ye	ar)	
	2030	2040	2050	2060	2070	2080
Wolfforth	2,692	4,207	5,186	5,559	5,843	6,018
County-Other	3,988	3,641	3,739	4,534	5,469	6,562
Manufacturing	1,174	1,217	1,262	1,309	1,357	1,407
Mining	19	19	19	20	20	20
Steam Electric Power	2,909	2,000	2,000	2,000	2,000	2,000
Livestock	823	830	837	844	851	853
Irrigation	133,360	122,065	99,966	77,867	75,089	72,947
Lynn County Total	73,640	73,624	73,431	73,230	70,591	68,747
Lynn County / Brazos Basin Total	68,532	68,516	68,335	68,147	65,692	63,975
ODonnell	76	74	73	71	68	65
Tahoka Public Water System	371	363	356	345	334	322
County-Other	293	285	279	271	261	252
Mining	15	15	15	15	15	15
Livestock	62	64	65	66	68	69
Irrigation	67,715	67,715	67,547	67,379	64,946	63,252
Lynn County / Colorado Basin Total	5,108	5,108	5,096	5,083	4,899	4,772
County-Other	4	4	4	3	3	3
Livestock	7	7	8	8	8	8
Irrigation	5,097	5,097	5,084	5,072	4,888	4,761
Motley County Total	9,527	9,515	9,508	9,513	9,520	9,520
Motley County / Red Basin Total	9,527	9,515	9,508	9,513	9,520	9,520
Matador	162	150	141	140	139	138
Red River Authority of Texas*	2	1	1	1	1	1
County-Other	88	82	77	76	76	75
Livestock	277	284	291	298	306	308
Irrigation	8,998	8,998	8,998	8,998	8,998	8,998
Parmer County Total	150,703	133,258	82,966	32,438	26,911	23,315
Parmer County / Brazos Basin Total	117,510	103,367	63,030	22,526	18,012	15,031
Bovina	257	232	198	162	121	71
Farwell	397	435	476	521	575	643
County-Other	347	297	236	168	92	1
Livestock	5,440	6,116	6,181	6,083	5,994	5,913
Irrigation	111,069	96,287	55,939	15,592	11,230	8,403

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		wuo	G Demand (ac	re-feet per ye	ar)	
	2030	2040	2050	2060	2070	2080
Parmer County / Red Basin Total	33,193	29,891	19,936	9,912	8,899	8,284
Friona	752	791	834	879	935	1,005
County-Other	137	118	93	67	37	1
Manufacturing	2,184	2,265	2,349	2,436	2,526	2,619
Livestock	2,353	2,646	2,675	2,632	2,594	2,558
Irrigation	27,767	24,071	13,985	3,898	2,807	2,101
Swisher County Total	68,354	56,327	41,773	27,228	22,700	19,697
Swisher County / Brazos Basin Total	11,663	9,492	6,867	4,241	3,419	2,872
County-Other	40	39	38	37	37	36
Livestock	29	30	31	31	32	33
Irrigation	11,594	9,423	6,798	4,173	3,350	2,803
Swisher County / Red Basin Total	56,691	46,835	34,906	22,987	19,281	16,825
Нарру*	72	70	67	64	62	59
Tulia	653	622	584	552	519	483
County-Other	267	261	255	251	245	240
Livestock	2,882	2,956	3,033	3,112	3,193	3,271
Irrigation	52,817	42,926	30,967	19,008	15,262	12,772
Terry County Total	105,390	89,571	89,584	89,562	87,580	85,257
Terry County / Brazos Basin Total	5,191	4,408	4,409	4,408	4,307	4,192
County-Other	5	5	5	5	4	4
Manufacturing	14	15	15	16	16	17
Livestock	68	78	79	77	75	73
Irrigation	5,104	4,310	4,310	4,310	4,212	4,098
Terry County / Colorado Basin Total	100,199	85,163	85,175	85,154	83,273	81,065
Brownfield	1,383	1,403	1,423	1,451	1,484	1,523
County-Other	358	356	339	312	282	246
Manufacturing	16	16	17	17	18	18
Mining	101	101	101	101	101	101
Livestock	812	933	941	919	899	874
Irrigation	97,529	82,354	82,354	82,354	80,489	78,303
Yoakum County Total	109,334	94,132	71,315	47,985	44,231	41,795
Yoakum County / Colorado Basin Total	109,334	94,132	71,315	47,985	44,231	41,795
Denver City	1,390	1,450	1,506	1,555	1,605	1,658

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	WUG Demand (acre-feet per year)								
	2030	2040	2050	2060	2070	2080			
Plains	340	360	376	375	371	366			
County-Other	180	185	191	203	215	229			
Mining	746	746	746	746	746	746			
Steam Electric Power	1,596	1,596	1,596	1,100	1,100	1,100			
Livestock	107	110	113	116	119	121			
Irrigation	104,975	89,685	66,787	43,890	40,075	37,575			
Region O Demand Total	2,345,019	2,039,883	1,554,688	1,069,621	983,165	935,378			

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by more than one planning region.



Appendix C. TWDB DB27 Report – 2026 RWP Source Availability

					Source	Availability ((acre-feet p	er year)	
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080
Groundwater Source	Availability Tot	:al		2,054,463	1,577,282	1,297,703	1,136,666	1,041,774	982,358
Blaine Aquifer	Dickens	Red	Fresh	0	0	0	0	0	0
Blaine Aquifer	Motley	Red	Fresh	0	0	0	0	0	0
Dockum Aquifer	Bailey	Brazos	Fresh	949	949	949	949	949	949
Dockum Aquifer	Briscoe	Red	Fresh	0	0	0	0	0	0
Dockum Aquifer	Castro	Brazos	Fresh	0	0	0	0	0	0
Dockum Aquifer	Castro	Red	Fresh	484	484	484	484	484	484
Dockum Aquifer	Cochran	Brazos	Fresh	118	118	118	118	118	118
Dockum Aquifer	Cochran	Colorado	Fresh	988	988	988	988	988	988
Dockum Aquifer	Crosby	Brazos	Fresh	4,393	4,393	4,393	4,393	4,393	4,393
Dockum Aquifer	Crosby	Red	Fresh	0	0	0	0	0	0
Dockum Aquifer	Dawson	Brazos	Fresh	0	0	0	0	0	0
Dockum Aquifer	Dawson	Colorado	Fresh	640	640	640	640	640	640
Dockum Aquifer	Deaf Smith	Canadian	Fresh	0	0	0	0	0	0
Dockum Aquifer	Deaf Smith	Red	Fresh	5,013	5,013	5,013	5,013	5,013	5,013
Dockum Aquifer	Dickens	Brazos	Fresh	104	104	104	104	104	104
Dockum Aquifer	Dickens	Red	Fresh	36	36	36	36	36	36
Dockum Aquifer	Floyd	Brazos	Fresh	3,389	3,389	3,389	3,389	3,389	3,389
Dockum Aquifer	Floyd	Red	Fresh	285	285	285	285	285	285
Dockum Aquifer	Gaines	Colorado	Fresh	880	880	880	880	880	880
Dockum Aquifer	Garza	Brazos	Brackish	1,038	1,038	1,038	1,038	1,038	1,038
Dockum Aquifer	Garza	Colorado	Fresh	0	0	0	0	0	0

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

					Source	Availability ((acre-feet p	er year)	
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080
Dockum Aquifer	Hale	Brazos	Fresh	1,244	1,244	1,244	1,244	1,244	1,244
Dockum Aquifer	Hale	Red	Fresh	33	33	33	33	33	33
Dockum Aquifer	Hockley	Brazos	Fresh	1,013	1,013	1,013	1,013	1,013	1,013
Dockum Aquifer	Hockley	Colorado	Fresh	191	191	191	191	191	191
Dockum Aquifer	Lamb	Brazos	Fresh	1,051	1,051	1,051	1,051	1,051	1,051
Dockum Aquifer	Lubbock	Brazos	Fresh	1,236	1,236	1,236	1,236	1,236	1,236
Dockum Aquifer	Lynn	Brazos	Fresh	901	901	901	901	901	901
Dockum Aquifer	Lynn	Colorado	Fresh	138	138	138	138	138	138
Dockum Aquifer	Motley	Red	Fresh	93	92	92	92	92	92
Dockum Aquifer	Parmer	Brazos	Fresh	3,590	3,590	3,590	2,585	2,571	2,565
Dockum Aquifer	Parmer	Red	Fresh	2,617	2,617	2,617	2,617	2,617	2,617
Dockum Aquifer	Swisher	Brazos	Fresh	29	29	29	29	29	29
Dockum Aquifer	Swisher	Red	Fresh	1,767	1,767	1,767	1,767	1,767	1,767
Dockum Aquifer	Terry	Brazos	Fresh	0	0	0	0	0	0
Dockum Aquifer	Terry	Colorado	Fresh	0	0	0	0	0	0
Dockum Aquifer	Yoakum	Colorado	Fresh	0	0	0	0	0	0
Ogallala and Edwards- Trinity-High Plains Aquifers	Bailey	Brazos	Fresh	65,138	50,725	42,532	37,743	34,724	32,675
Ogallala and Edwards- Trinity-High Plains Aquifers	Briscoe	Red	Fresh	17,859	12,598	9,600	7,844	6,743	6,016
Ogallala and Edwards- Trinity-High Plains Aquifers	Castro	Brazos	Fresh	106,971	71,565	40,493	24,591	17,282	13,530
Ogallala and Edwards- Trinity-High Plains Aquifers	Castro	Red	Fresh	72,957	47,509	29,706	19,740	14,409	11,423

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

					Source	Availability (acre-feet pe	er year)	
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080
Ogallala and Edwards- Trinity-High Plains Aquifers	Cochran	Brazos	Fresh	20,220	18,297	17,034	16,204	15,655	15,283
Ogallala and Edwards- Trinity-High Plains Aquifers	Cochran	Colorado	Fresh	53,771	43,798	37,231	32,357	27,977	24,753
Ogallala and Edwards- Trinity-High Plains Aquifers	Crosby	Brazos	Fresh	105,148	72,526	50,976	38,890	31,952	27,655
Ogallala and Edwards- Trinity-High Plains Aquifers	Crosby	Red	Fresh	2,917	2,776	2,549	2,149	1,779	1,504
Ogallala and Edwards- Trinity-High Plains Aquifers	Dawson	Brazos	Fresh	1,390	1,294	1,230	1,187	1,156	1,134
Ogallala and Edwards- Trinity-High Plains Aquifers	Dawson	Colorado	Fresh	119,946	97,296	82,962	74,261	69,106	65,811
Ogallala and Edwards- Trinity-High Plains Aquifers	Deaf Smith	Canadian	Fresh	0	0	0	0	0	0
Ogallala and Edwards- Trinity-High Plains Aquifers	Deaf Smith	Red	Fresh	135,383	95,875	70,425	55,841	47,249	41,961
Ogallala and Edwards- Trinity-High Plains Aquifers	Floyd	Brazos	Fresh	73,465	45,024	32,571	24,708	20,244	17,492
Ogallala and Edwards- Trinity-High Plains Aquifers	Floyd	Red	Fresh	20,488	20,063	19,734	19,447	18,988	18,495
Ogallala and Edwards- Trinity-High Plains Aquifers	Gaines	Colorado	Fresh	205,486	177,777	159,523	147,028	138,157	131,974
Ogallala and Edwards- Trinity-High Plains Aquifers	Garza	Brazos	Fresh	13,508	12,402	11,717	11,263	10,948	10,721
Ogallala and Edwards- Trinity-High Plains Aquifers	Garza	Colorado	Fresh	0	0	0	0	0	0
Ogallala and Edwards- Trinity-High Plains Aquifers	Hale	Brazos	Fresh	116,240	74,782	53,039	40,940	34,150	30,172

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

					Source A	per year)			
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080
Ogallala and Edwards- Trinity-High Plains Aquifers	Hale	Red	Fresh	375	326	259	202	158	126
Ogallala and Edwards- Trinity-High Plains Aquifers	Hockley	Brazos	Fresh	84,987	67,316	58,259	53,255	50,258	48,358
Ogallala and Edwards- Trinity-High Plains Aquifers	Hockley	Colorado	Fresh	26,800	14,469	8,147	5,726	4,624	4,042
Ogallala and Edwards- Trinity-High Plains Aquifers	Lamb	Brazos	Fresh	120,172	77,677	60,088	52,063	47,868	45,425
Ogallala and Edwards- Trinity-High Plains Aquifers	Lubbock	Brazos	Fresh	110,472	100,950	95,478	91,655	88,877	86,735
Ogallala and Edwards- Trinity-High Plains Aquifers	Lynn	Brazos	Fresh	82,425	76,194	71,817	68,689	66,499	64,962
Ogallala and Edwards- Trinity-High Plains Aquifers	Lynn	Colorado	Fresh	6,343	5,870	5,216	4,635	4,208	3,924
Ogallala and Edwards- Trinity-High Plains Aquifers	Parmer	Brazos	Fresh	51,129	37,132	28,030	22,549	19,129	16,878
Ogallala and Edwards- Trinity-High Plains Aquifers	Parmer	Red	Fresh	40,896	26,436	18,805	15,194	13,161	11,879
Ogallala and Edwards- Trinity-High Plains Aquifers	Swisher	Brazos	Fresh	11,508	6,845	4,598	3,421	2,759	2,360
Ogallala and Edwards- Trinity-High Plains Aquifers	Swisher	Red	Fresh	61,899	41,909	31,289	25,120	21,213	18,575
Ogallala and Edwards- Trinity-High Plains Aquifers	Terry	Brazos	Fresh	6,825	6,322	5,998	5,776	5,612	5,487
Ogallala and Edwards- Trinity-High Plains Aquifers	Terry	Colorado	Fresh	128,053	101,860	90,192	84,201	80,731	78,556
Ogallala and Edwards- Trinity-High Plains Aquifers	Yoakum	Colorado	Fresh	90,983	70,810	59,346	53,002	49,187	46,687

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

				Source Availability (acre-feet per year)							
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080		
Ogallala Aquifer	Dickens	Brazos	Fresh	5,089	5,089	5,089	5,089	5,089	5,020		
Ogallala Aquifer	Dickens	Red	Fresh	0	0	0	0	0	0		
Ogallala Aquifer	Motley	Red	Fresh	409	409	409	409	409	409		
Other Aquifer	Briscoe	Red	Fresh	6,000	6,000	6,000	6,000	6,000	6,000		
Other Aquifer	Crosby	Brazos	Brackish	9,000	9,000	9,000	9,000	9,000	9,000		
Other Aquifer	Dickens	Brazos	Brackish	6,000	6,000	6,000	6,000	6,000	6,000		
Other Aquifer	Dickens	Red	Brackish	4,000	4,000	4,000	4,000	4,000	4,000		
Other Aquifer	Floyd	Red	Fresh	16,000	16,000	16,000	16,000	16,000	16,000		
Other Aquifer	Garza	Brazos	Fresh	2,000	2,000	2,000	2,000	2,000	2,000		
Other Aquifer	Motley	Red	Brackish	13,000	13,000	13,000	13,000	13,000	13,000		
Seymour Aquifer	Briscoe	Red	Brackish	312	312	312	312	312	312		
Seymour Aquifer	Motley	Red	Fresh	6,679	4,830	4,830	3,961	3,961	4,830		

Reuse Source Availability Total				48,945	51,353	53,806	55,497	56,998	58,252
Direct Reuse	Bailey	Brazos	Fresh	825	825	825	825	825	825
Direct Reuse	Castro	Brazos	Fresh	4,031	4,031	4,031	4,031	4,031	4,031
Direct Reuse	Cochran	Brazos	Fresh	267	267	267	267	267	267
Direct Reuse	Cochran	Colorado	Fresh	27	27	27	27	27	27
Direct Reuse	Crosby	Brazos	Fresh	583	583	583	583	583	583
Direct Reuse	Deaf Smith	Red	Fresh	2,810	2,810	2,810	2,810	2,810	2,810
Direct Reuse	Floyd	Brazos	Fresh	449	449	449	449	449	449
Direct Reuse	Hale	Brazos	Fresh	5,477	5,477	5,477	5,477	5,477	5,477
Direct Reuse	Hockley	Brazos	Fresh	1,359	1,359	1,359	1,359	1,359	1,359

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

				Source Availability (acre-feet per year)					
Source Name	County	Basin	Salinity*	2030	2040	2050	2060	2070	2080
Direct Reuse	Hockley	Colorado	Fresh	162	162	162	162	162	162
Direct Reuse	Lamb	Brazos	Fresh	7,199	7,199	7,199	7,199	7,199	7,199
Direct Reuse	Lubbock	Brazos	Fresh	22,523	24,931	27,384	29,075	30,576	31,830
Direct Reuse	Lynn	Brazos	Fresh	346	346	346	346	346	346
Direct Reuse	Parmer	Brazos	Fresh	401	401	401	401	401	401
Direct Reuse	Parmer	Red	Fresh	2,486	2,486	2,486	2,486	2,486	2,486

Surface Water Source	e Water Source Availability Total			14,318	14,018	13,718	13,418	13,118	12,818
Alan Henry Lake/Reservoir	Reservoir**	Brazos	Fresh	11,300	11,000	10,700	10,400	10,100	9,800
Brazos Run-of-River	Crosby	Brazos	Fresh	0	0	0	0	0	0
Brazos Run-of-River	Dickens	Brazos	Fresh	0	0	0	0	0	0
Brazos Run-of-River	Garza	Brazos	Fresh	0	0	0	0	0	0
Brazos Run-of-River	Lubbock	Brazos	Fresh	0	0	0	0	0	0
Brazos Run-of-River	Lynn	Brazos	Fresh	0	0	0	0	0	0
Mackenzie Lake/Reservoir	Reservoir**	Red	Fresh	2,900	2,900	2,900	2,900	2,900	2,900
Red Run-of-River	Briscoe	Red	Fresh	96	96	96	96	96	96
Red Run-of-River	Floyd	Red	Fresh	18	18	18	18	18	18
Red Run-of-River	Motley	Red	Fresh	4	4	4	4	4	4
Red Run-of-River	Parmer	Red	Fresh	0	0	0	0	0	0
White River Lake/Reservoir	Reservoir**	Brazos	Fresh	0	0	0	0	0	0

Region O Source Availability Tota	2,117,726	1,642,653	1,365,227	1,205,581	1,111,890	1,053,428
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^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

^{*} Salinity field indicates whether the source availability is considered 'fresh' (less than 1,000 mg/L), 'brackish' (1,000 to 10,000 mg/L), 'saline' (10,001 mg/L to 34,999 mg/L), or 'seawater' (35,000 mg/L or greater). Sources can also be labeled as 'fresh/brackish' or 'brackish/saline', if a combination of the salinity types is appropriate.

^{**} Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.



Appendix D. TWDB DB27 Report – 2026 RWP WUG Existing Water Supply

DRAFT Region O Water User Group (WUG) Existing Water Supply

	Source		Existing Supply (acre-feet per year)						
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080	
Bailey County WUG Total		63,463	49,221	41,275	33,511	30,815	29,646		
Bailey County / Braz	zos Basin V	VUG Total	63,463	49,221	41,275	33,511	30,815	29,646	
Muleshoe	О	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	3,056	3,056	3,056	3,056	3,056	3,056	
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	228	228	228	228	228	228	
Livestock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	2,854	2,854	2,854	2,854	2,854	2,854	
Irrigation	0	Direct Reuse	825	825	825	825	825	825	
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	56,500	42,258	34,312	26,548	23,852	22,683	
Briscoe County WU	18,800	14,934	11,617	8,299	7,198	6,471			
Briscoe County / Re		UG Total	18,800	14,934	11,617	8,299	7,198	6,471	
Quitaque	О	Ogallala and Edwards- Trinity-High Plains Aquifers Briscoe County	318	318	318	318	318	318	
Silverton	0	Mackenzie Lake/Reservoir	128	128	128	128	128	128	
County-Other	0	Other Aquifer Briscoe County	176	176	176	176	176	176	
County-Other	0	Red Run-of-River	20	20	20	20	20	20	
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Briscoe County	99	99	99	99	99	99	
Livestock	0	Other Aquifer Briscoe County	238	238	238	238	238	238	
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Briscoe County	12,743	8,877	5,560	2,242	1,141	414	
Irrigation	0	Other Aquifer Briscoe County	4,690	4,690	4,690	4,690	4,690	4,690	
Irrigation	0	Red Run-of-River	76	76	76	76	76	76	
Irrigation	0	Seymour Aquifer Briscoe County	312	312	312	312	312	312	

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Castro County WUG	3 Total		184,383	123,529	74,654	39,902	27,262	21,494
Castro County / Bra	azos Basin \	WUG Total	111,001	75,595	44,523	26,665	18,449	15,039
Dimmitt	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	3,923	3,923	3,923	3,923	3,923	3,923
Hart Municipal Water System	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	559	559	559	559	559	559
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	210	210	210	210	210	210
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	6,316	6,316	6,316	6,316	6,316	6,316
Irrigation	0	Direct Reuse	4,031	4,031	4,031	4,031	4,031	4,031
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	95,962	60,556	29,484	11,626	3,410	0
Castro County / Re	d Basin WU	IG Total	73,382	47,934	30,131	13,237	8,813	6,455
Nazareth	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	552	552	552	552	552	552
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	138	138	138	138	138	138
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	81	81	81	81	81	81
Livestock	0	Dockum Aquifer Castro County	425	425	425	425	425	425
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	3,611	3,611	3,611	3,611	3,611	3,611
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Castro County	68,575	43,127	25,324	8,430	4,006	1,648

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Cochran County WU	G Total		46,770	41,022	36,205	31,820	29,693	28,171
Cochran County / Bi	razos Basir	WUG Total	20,487	18,564	17,301	16,471	15,922	15,550
Morton PWS	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	598	598	598	598	598	598
Whiteface	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	314	314	314	314	314	314
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	158	158	158	158	158	158
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	42	42	42	42	42	42
Irrigation	0	Direct Reuse	267	267	267	267	267	267
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	19,108	17,185	15,922	15,092	14,543	14,171
Cochran County / Co	olorado Ba	sin WUG Total	26,283	22,458	18,904	15,349	13,771	12,621
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	75	75	75	75	75	75
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	166	166	166	166	166	166
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	78	78	78	78	78	78
Irrigation	0	Direct Reuse	27	27	27	27	27	27
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Cochran County	25,937	22,112	18,558	15,003	13,425	12,275
Crosby County WUG	i Total		62,730	62,730	51,469	40,209	32,901	28,329
Crosby County / Bra	zos Basin	WUG Total	60,342	60,342	49,527	38,712	31,693	27,302
Crosbyton	О	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	382	382	382	382	382	382
Lorenzo	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	904	904	904	904	904	904

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Ralls	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	233	233	233	233	233	233
County-Other	0	Dockum Aquifer Crosby County	1	1	1	1	1	1
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	106	106	106	106	106	106
County-Other	0	Other Aquifer Crosby County	1	1	1	1	1	1
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	1	1	1	1	1	1
Mining	О	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	613	613	613	613	613	613
Livestock	0	Dockum Aquifer Crosby County	84	84	84	84	84	84
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	56	56	56	56	56	56
Livestock	0	Other Aquifer Crosby County	55	55	55	55	55	55
Irrigation	0	Brazos Run-of-River	0	0	0	0	0	0
Irrigation	0	Direct Reuse	583	583	583	583	583	583
Irrigation	О	Dockum Aquifer Crosby County	3,600	3,600	3,600	3,600	3,600	3,600
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	45,318	45,318	34,503	23,688	16,669	12,278
Irrigation	0	Other Aquifer Crosby County	8,405	8,405	8,405	8,405	8,405	8,405
Crosby County / Red	d Basin Wl	JG Total	2,388	2,388	1,942	1,497	1,208	1,027
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	1	1	1	1	1	1
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	1	1	1	1	1	1

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existin	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	2,386	2,386	1,940	1,495	1,206	1,025
Dawson County WU	IG Total		74,980	74,881	74,794	74,716	70,632	67,218
Dawson County / B	razos Basir	WUG Total	934	931	930	930	881	835
ODonnell	А	Meredith Lake/Reservoir	4	3	3	3	3	3
ODonnell	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	17	17	17	17	17	17
ODonnell	А	Ogallala Aquifer Roberts County	10	8	7	7	6	5
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	2	2	2	2	2	2
Livestock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	1	1	1	1	1	1
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	900	900	900	900	852	807
Dawson County / Co	olorado Ba	sin WUG Total	74,046	73,950	73,864	73,786	69,751	66,383
Lamesa	Α	Meredith Lake/Reservoir	345	219	310	306	303	300
Lamesa	О	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	723	723	723	723	723	723
Lamesa	А	Ogallala Aquifer Roberts County	912	942	765	691	614	607
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	540	540	540	540	540	540
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	6,146	6,146	6,146	6,146	6,146	6,146
Livestock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	71	71	71	71	71	71
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	65,309	65,309	65,309	65,309	61,354	57,996

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Deaf Smith County V	VUG Total		141,517	102,059	76,609	57,207	48,701	43,466
Deaf Smith County /	Canadian	Basin WUG Total	2	2	2	2	2	2
County-Other	0	Dockum Aquifer Deaf Smith County	2	2	2	2	2	2
Irrigation		No water supply associated with WUG	0	0	0	0	0	0
Deaf Smith County /	Red Basir	n WUG Total	141,515	102,057	76,607	57,205	48,699	43,464
Hereford	0	Dockum Aquifer Deaf Smith County	3,422	3,422	3,422	3,422	3,422	3,422
Hereford	О	Ogallala and Edwards- Trinity-High Plains Aquifers Deaf Smith County	3,337	3,337	3,337	3,337	3,337	3,337
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Deaf Smith County	477	477	477	477	477	477
Manufacturing	О	Ogallala and Edwards- Trinity-High Plains Aquifers Deaf Smith County	1,796	1,796	1,796	1,796	1,796	1,796
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Deaf Smith County	14,105	14,105	14,105	14,105	14,105	14,105
Irrigation	0	Direct Reuse	2,810	2,810	2,810	2,810	2,810	2,810
Irrigation	О	Ogallala and Edwards- Trinity-High Plains Aquifers Deaf Smith County	115,568	76,110	50,660	31,258	22,752	17,517
Dickens County WU	G Total		10,049	10,049	10,049	10,049	10,049	10,048
Dickens County / Bra		WUG Total	6,173	6,173	6,173	6,173	6,173	6,173
Spur	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	224	224	224	224	224	224
County-Other	0	Ogallala Aquifer Dickens County	9	9	9	9	9	9
County-Other	0	Other Aquifer Dickens County	99	99	99	99	99	99

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	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Livestock	0	Dockum Aquifer Dickens County	35	35	35	35	35	35
Livestock	0	Ogallala Aquifer Dickens County	36	36	36	36	36	36
Livestock	0	Other Aquifer Dickens County	230	230	230	230	230	230
Irrigation	0	Brazos Run-of-River	0	0	0	0	0	0
Irrigation	0	Dockum Aquifer Dickens County	22	22	22	22	22	22
Irrigation	0	Other Aquifer Dickens County	5,518	5,518	5,518	5,518	5,518	5,518
Dickens County / Red	ickens County / Red Basin WUG Total		3,876	3,876	3,876	3,876	3,876	3,875
Red River Authority of Texas*	0	Other Aquifer Dickens County	1	1	1	1	1	0
Red River Authority of Texas*	В	Red Indirect Reuse	0	0	0	0	0	0
Red River Authority of Texas*	В	Seymour Aquifer Hardeman County	0	0	0	0	0	0
Red River Authority of Texas*	В	Trinity Aquifer Montague County	0	0	0	0	0	0
County-Other	0	Other Aquifer Dickens County	24	24	24	24	24	24
Livestock	0	Dockum Aquifer Dickens County	24	24	24	24	24	24
Livestock	0	Other Aquifer Dickens County	150	150	150	150	150	150
Irrigation	0	Dockum Aquifer Dickens County	12	12	12	12	12	12
Irrigation	0	Other Aquifer Dickens County	3,665	3,665	3,665	3,665	3,665	3,665
Floyd County WUG T	Floyd County WUG Total		73,106	65,866	59,576	44,500	39,577	36,332
Floyd County / Brazo	s Basin W	/UG Total	37,156	30,341	24,380	18,420	16,648	15,480
Floydada	0	Mackenzie Lake/Reservoir	155	155	155	155	155	155
Floydada	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	1,801	1,801	1,801	1,801	1,801	1,801
Lockney	0	Mackenzie Lake/Reservoir	75	75	75	75	75	75

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	Source		Existing Supply (acre-feet per year)					
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Lockney	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	464	464	464	464	464	464
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	95	95	95	95	95	95
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	10	10	10	10	10	10
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	1,216	1,216	1,216	1,216	1,216	1,216
Irrigation	0	Direct Reuse	449	449	449	449	449	449
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	32,891	26,076	20,115	14,155	12,383	11,215
Floyd County / Red Basin WUG Total			35,950	35,525	35,196	26,080	22,929	20,852
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	46	46	46	46	46	46
Livestock	0	Dockum Aquifer Floyd County	20	20	20	20	20	20
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	31	31	31	31	31	31
Livestock	0	Other Aquifer Floyd County	20	20	20	20	20	20
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Floyd County	20,411	19,986	19,657	10,541	7,390	5,313
Irrigation	0	Other Aquifer Floyd County	15,404	15,404	15,404	15,404	15,404	15,404
Irrigation	0	Red Run-of-River	18	18	18	18	18	18
Gaines County WUG Total		201,143	173,359	154,850	142,150	133,148	126,842	
Gaines County / Col	Gaines County / Colorado Basin WUG Total		201,143	173,359	154,850	142,150	133,148	126,842
Seagraves	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	969	969	969	969	969	969

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	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Seminole	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	1,797	1,797	1,797	1,797	1,797	1,797
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	4,638	4,638	4,638	4,638	4,638	4,638
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	617	617	617	617	617	617
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	2,100	2,100	2,100	2,100	2,100	2,100
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	156	156	156	156	156	156
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Gaines County	190,866	163,082	144,573	131,873	122,871	116,565
Garza County WUG Total			11,116	11,116	11,116	11,116	11,116	11,116
Garza County / Braz		/UG Total	11,116	11,116	11,116	11,116	11,116	11,116
Post	0	Brazos Run-of-River	0	0	0	0	0	0
Post	0	Ogallala and Edwards- Trinity-High Plains Aquifers Crosby County	658	658	658	658	658	658
Post	А	Ogallala Aquifer Roberts County	192	192	192	192	192	192
County-Other	0	Alan Henry Lake/Reservoir	25	25	25	25	25	25
County-Other	0	Dockum Aquifer Garza County	31	31	31	31	31	31
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Garza County	122	122	122	122	122	122
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Garza County	19	19	19	19	19	19
Livestock	0	Dockum Aquifer Garza County	100	100	100	100	100	100
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Garza County	50	50	50	50	50	50
Livestock	0	Other Aquifer Garza County	20	20	20	20	20	20

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	Source		Existing Supply (acre-feet per year)						
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080	
Irrigation	0	Dockum Aquifer Garza County	234	234	234	234	234	234	
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Garza County	8,255	8,255	8,255	8,255	8,255	8,255	
Irrigation	0	Other Aquifer Garza County	1,410	1,410	1,410	1,410	1,410	1,410	
Hale County WUG T	otal		123,819	82,253	60,406	40,695	33,853	29,691	
Hale County / Brazo		UG Total	123,444	81,927	60,147	40,493	33,695	29,565	
Abernathy	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	1,379	1,355	1,326	1,288	1,267	1,241	
Hale Center	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	956	956	956	956	956	956	
Petersburg Municipal Water System	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	594	594	594	594	594	594	
Plainview	Α	Meredith Lake/Reservoir	306	246	624	675	712	678	
Plainview	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	6,206	6,206	6,206	6,206	6,206	6,206	
Plainview	А	Ogallala Aquifer Roberts County	1,901	1,926	1,540	1,521	1,443	1,373	
Seth Ward WSC	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	100	100	100	100	100	100	
County-Other	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	496	496	496	496	496	496	
Manufacturing	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	876	876	876	876	876	876	
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	1	1	1	1	1	1	
Steam Electric Power	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	29	29	29	29	29	29	
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	3,049	3,049	3,049	3,049	3,049	3,049	

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	Source			Existin	g Supply (ad	re-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Irrigation	0	Direct Reuse	5,477	5,477	5,477	5,477	5,477	5,477
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	102,074	60,616	38,873	19,225	12,489	8,489
Hale County / Red I	Basin WUG	Total	375	326	259	202	158	126
County-Other	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	1	1	1	1	1	1
Irrigation	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	374	325	258	201	157	125
Hockley County WL	JG Total		96,936	77,058	66,731	60,294	56,081	53,587
Hockley County / B	razos Basin	WUG Total	88,195	70,347	61,126	55,794	51,868	49,548
Anton	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	835	835	835	835	835	835
Levelland	А	Meredith Lake/Reservoir	302	200	427	418	412	408
Levelland	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	3,164	3,164	3,164	3,164	3,164	3,164
Levelland	А	Ogallala Aquifer Roberts County	1,528	1,445	1,054	942	834	826
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	835	835	835	835	835	835
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	1,478	1,478	1,478	1,478	1,478	1,478
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	69	69	69	69	69	69
Livestock	0	Dockum Aquifer Hockley County	28	28	28	28	28	28
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	119	119	119	119	119	119
Irrigation	0	Direct Reuse	1,359	1,359	1,359	1,359	1,359	1,359
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	78,478	60,815	51,758	46,547	42,735	40,427

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	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Hockley County / Co	olorado Ba	sin WUG Total	8,741	6,711	5,605	4,500	4,213	4,039
Sundown	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	860	860	860	860	860	860
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	31	31	31	31	31	31
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	3	3	3	3	3	3
Irrigation	0	Direct Reuse	162	162	162	162	162	162
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Hockley County	7,685	5,655	4,549	3,444	3,157	2,983
Lamb County WUG Total			124,871	82,547	65,205	38,984	35,112	33,799
Lamb County / Braz	os Basin W	/UG Total	124,871	82,547	65,205	38,984	35,112	33,799
Amherst	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	234	234	234	234	234	234
Earth	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	690	690	690	690	690	690
Littlefield	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	2,378	2,378	2,378	2,378	2,378	2,378
Olton	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	1,352	1,352	1,352	1,352	1,352	1,352
Sudan	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	419	419	419	419	419	419
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	447	447	447	447	447	447
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	477	477	477	477	477	477
Steam Electric Power	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	5,789	3,000	3,000	3,000	3,000	3,000

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	Source			Existin	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	5,157	5,157	5,157	5,157	5,157	5,157
Irrigation	0	Direct Reuse	7,199	7,199	7,199	7,199	7,199	7,199
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	100,729	61,194	43,852	17,631	13,759	12,446
Lubbock County Wl	JG Total		183,018	166,416	156,271	143,055	135,066	132,443
Lubbock County / B	razos Basiı	n WUG Total	183,018	166,416	156,271	143,055	135,066	132,443
Abernathy	О	Ogallala and Edwards- Trinity-High Plains Aquifers Hale County	479	503	532	570	591	617
Idalou	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	1,306	1,306	1,306	1,306	1,306	1,306
Lubbock	0	Alan Henry Lake/Reservoir	10,930	10,630	10,330	10,030	9,382	9,082
Lubbock	Α	Meredith Lake/Reservoir	11,964	12,885	10,106	9,927	9,830	9,770
Lubbock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	1,906	1,457	1,007	557	0	0
Lubbock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	2,156	1,706	1,257	807	0	0
Lubbock	А	Ogallala Aquifer Roberts County	25,227	25,227	24,584	22,046	19,571	19,449
New Deal	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	333	333	333	333	333	333
New Deal	А	Ogallala Aquifer Roberts County	50	50	50	50	50	50
Ransom Canyon	0	Alan Henry Lake/Reservoir	143	143	143	143	293	293
Ransom Canyon	0	Brazos Run-of-River	0	0	0	0	0	0
Ransom Canyon	0	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	142	142	142	142	0	0
Ransom Canyon	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	142	142	142	142	0	0
Ransom Canyon	А	Ogallala Aquifer Roberts County	142	142	142	142	142	142

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	Source			Existin	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Shallowater	0	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	250	250	250	250	0	0
Shallowater	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	416	416	416	416	416	416
Slaton	А	Meredith Lake/Reservoir	192	113	148	137	128	120
Slaton	А	Ogallala Aquifer Roberts County	265	238	122	66	17	0
Wolfforth	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	1,180	1,180	1,180	1,180	1,180	1,180
County-Other	0	Alan Henry Lake/Reservoir	202	202	202	202	400	400
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Bailey County	202	202	202	202	0	0
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lamb County	202	202	202	202	0	0
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	6,000	6,000	6,000	6,000	6,000	6,000
County-Other	А	Ogallala Aquifer Roberts County	200	200	200	200	200	200
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	1,407	1,407	1,407	1,407	1,407	1,407
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	20	20	20	20	20	20
Steam Electric Power	0	Direct Reuse	10,080	10,080	10,080	7,840	7,840	7,840
Steam Electric Power	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	18	18	18	18	18	18
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	853	853	853	853	853	853
Irrigation	0	Direct Reuse	8,960	2,240	2,240	2,240	2,240	2,240
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lubbock County	97,651	88,129	82,657	75,627	72,849	70,707

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	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Lynn County WUG T	otal		74,119	74,077	73,864	73,209	70,325	68,344
Lynn County / Brazo	s Basin W	UG Total	69,010	68,968	68,768	68,574	66,117	64,420
ODonnell	А	Meredith Lake/Reservoir	22	19	18	17	16	15
ODonnell	О	Ogallala and Edwards- Trinity-High Plains Aquifers Dawson County	98	98	98	98	98	98
ODonnell	А	Ogallala Aquifer Roberts County	58	51	45	38	33	32
Tahoka Public Water System	А	Meredith Lake/Reservoir	82	73	70	69	68	68
Tahoka Public Water System	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	441	441	441	441	441	441
Tahoka Public Water System	А	Ogallala Aquifer Roberts County	217	194	172	155	138	137
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	293	293	293	293	293	293
Mining	О	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	15	15	15	15	15	15
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	69	69	69	69	69	69
Irrigation	0	Brazos Run-of-River	0	0	0	0	0	0
Irrigation	0	Direct Reuse	346	346	346	346	346	346
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	67,369	67,369	67,201	67,033	64,600	62,906
Lynn County / Color	ado Basin	WUG Total	5,109	5,109	5,096	4,635	4,208	3,924
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	4	4	4	4	4	4
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	8	8	8	8	8	8
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Lynn County	5,097	5,097	5,084	4,623	4,196	3,912

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	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Motley County WUG	Total		13,117	13,116	13,116	13,116	13,116	13,116
Motley County / Rec	l Basin W	JG Total	13,117	13,116	13,116	13,116	13,116	13,116
Matador	0	Other Aquifer Motley County	192	192	192	192	192	192
Matador	0	Seymour Aquifer Motley County	582	582	582	582	582	582
Red River Authority of Texas*	0	Other Aquifer Motley County	2	1	1	1	1	1
Red River Authority of Texas*	В	Red Indirect Reuse	0	0	0	0	0	0
Red River Authority of Texas*	В	Seymour Aquifer Hardeman County	0	0	0	0	0	0
Red River Authority of Texas*	В	Trinity Aquifer Montague County	0	0	0	0	0	0
County-Other	0	Other Aquifer Motley County	75	75	75	75	75	75
County-Other	0	Seymour Aquifer Motley County	35	35	35	35	35	35
Livestock	0	Dockum Aquifer Motley County	60	60	60	60	60	60
Livestock	0	Ogallala Aquifer Motley County	19	19	19	19	19	19
Livestock	0	Other Aquifer Motley County	296	296	296	296	296	296
Irrigation	0	Dockum Aquifer Motley County	30	30	30	30	30	30
Irrigation	0	Other Aquifer Motley County	11,739	11,739	11,739	11,739	11,739	11,739
Irrigation	0	Red Run-of-River	4	4	4	4	4	4
Irrigation	0	Seymour Aquifer Motley County	83	83	83	83	83	83
Parmer County WUG	i Total		85,172	65,061	48,291	32,723	28,212	25,640
Parmer County / Brazos Basin WUG Total		49,811	35,814	26,712	21,231	17,811	15,560	
Bovina	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	571	571	571	571	571	571
Farwell	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	858	858	858	858	858	858

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	Source			Existir	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	347	347	347	347	347	347
Livestock	0	Dockum Aquifer Parmer County	900	900	900	900	900	900
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	5,281	5,281	5,281	5,281	5,281	5,281
Irrigation	0	Direct Reuse	401	401	401	401	401	401
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	41,453	27,456	18,354	12,873	9,453	7,202
Parmer County / Red	armer County / Red Basin WUG Total		35,361	29,247	21,579	11,492	10,401	10,080
Friona	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	2,163	2,163	2,163	2,163	2,163	2,163
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	137	137	137	137	137	137
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	2,619	2,619	2,619	2,619	2,619	2,619
Livestock	0	Dockum Aquifer Parmer County	325	325	325	325	325	325
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	2,350	2,350	2,350	2,350	2,350	2,350
Irrigation	0	Direct Reuse	2,486	2,486	2,486	2,486	2,486	2,486
Irrigation	О	Ogallala and Edwards- Trinity-High Plains Aquifers Parmer County	25,281	19,167	11,499	1,412	321	0
Irrigation	0	Red Run-of-River	0	0	0	0	0	0
Swisher County WU	G Total		70,143	50,504	37,636	28,244	23,835	20,944
Swisher County / Bra	azos Basin	WUG Total	11,508	6,845	4,598	3,421	2,759	2,360
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	40	40	40	40	40	40
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	33	33	33	33	33	33

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	11,435	6,772	4,525	3,348	2,686	2,287
Swisher County / Ro	ed Basin W	'UG Total	58,635	43,659	33,038	24,823	21,076	18,584
Нарру*	0	Dockum Aquifer Swisher County	476	475	474	473	472	470
Tulia	0	Dockum Aquifer Swisher County	1,065	1,065	1,065	1,065	1,065	1,065
Tulia	0	Mackenzie Lake/Reservoir	210	210	210	210	210	210
Tulia	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	529	529	529	529	529	529
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	267	267	267	267	267	267
Livestock	О	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	3,271	3,271	3,271	3,271	3,271	3,271
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Swisher County	52,817	37,842	27,222	19,008	15,262	12,772
Terry County WUG	Total		106,036	89,972	89,896	89,643	86,027	83,770
Terry County / Braz		/UG Total	5,205	4,411	4,411	4,411	4,313	4,199
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	5	5	5	5	5	5
Manufacturing	О	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	17	17	17	17	17	17
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	79	79	79	79	79	79
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	5,104	4,310	4,310	4,310	4,212	4,098
Ferry County / Colorado Basin WUG Total			100,831	85,561	85,485	85,232	81,714	79,571
Brownfield	A	Meredith Lake/Reservoir	344	218			325	336
RLOMULIEIQ	Α	ivieredith Lake/Reservoir	344	218	312	317	325	336

^{*}A single asterisk next to a WUG's name denotes that the WUG is split by two or more planning regions.

	Source			Existi	ng Supply (a	cre-feet per	year)	
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Brownfield	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	632	632	632	632	632	632
Brownfield	А	Ogallala Aquifer Roberts County	908	939	769	715	659	680
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	358	358	358	358	358	358
Manufacturing	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	18	18	18	18	18	18
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	101	101	101	101	101	101
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	941	941	941	941	941	941
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Terry County	97,529	82,354	82,354	82,150	78,680	76,505
Yoakum County W	JG Total		90,982	70,809	59,345	52,537	48,722	46,222
Yoakum County / C	olorado Ba	sin WUG Total	90,982	70,809	59,345	52,537	48,722	46,222
Denver City	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	5,313	5,313	5,313	5,313	5,313	5,313
Plains	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	1,138	1,138	1,138	1,138	1,138	1,138
County-Other	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	229	229	229	229	229	229
Mining	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	746	746	746	746	746	746
Steam Electric Power	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	1,596	1,596	1,596	1,100	1,100	1,100
Livestock	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	121	121	121	121	121	121

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	Source		Existing Supply (acre-feet per year)					
WUG Name	Region	Source Description	2030	2040	2050	2060	2070	2080
Irrigation	0	Ogallala and Edwards- Trinity-High Plains Aquifers Yoakum County	81,839	61,666	50,202	43,890	40,075	37,575
Region O WUG Existing Water Supply Total			1,856,270	1,500,579	1,272,975	1,065,979	971,441	916,689

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Appendix E. TWDB DB27 Report – 2026 RWP WUG Needs/Surplus

WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Needs/Surplus report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Surplus volumes are shown as positive values, and needs are shown as negative values in parentheses.

			,	Water Supply	y Needs or Su	rplus (acre-fe	et per year)	
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Muleshoe	Bailey	Brazos	2,043	2,020	1,996	1,962	1,915	1,849
County-Other	Bailey	Brazos	1	0	14	32	57	93
Livestock	Bailey	Brazos	383	25	0	64	124	181
Irrigation	Bailey	Brazos	(845)	(4,452)	(2,317)	0	0	0
Quitaque	Briscoe	Red	243	250	255	259	265	270
Silverton	Briscoe	Red	37	44	49	55	61	67
County-Other	Briscoe	Red	55	65	71	79	87	97
Livestock	Briscoe	Red	38	30	21	12	4	0
Irrigation	Briscoe	Red	0	0	0	0	0	0
Dimmitt	Castro	Brazos	3,092	3,104	3,119	3,127	3,134	3,139
Hart Municipal Water System	Castro	Brazos	453	458	462	466	468	467
County-Other	Castro	Brazos	0	9	21	31	43	59
Livestock	Castro	Brazos	729	79	0	74	139	199
Irrigation	Castro	Brazos	(64,174)	(65,278)	(39,246)	0	0	970
Nazareth	Castro	Red	454	452	451	448	445	440
County-Other	Castro	Red	0	7	15	21	29	39
Manufacturing	Castro	Red	14	12	9	6	3	0
Livestock	Castro	Red	465	50	0	48	89	127
Irrigation	Castro	Red	(19,821)	(26,800)	(13,854)	0	0	0
Morton PWS	Cochran	Brazos	281	302	322	341	360	380
Whiteface	Cochran	Brazos	248	253	255	257	260	262
County-Other	Cochran	Brazos	0	11	22	33	45	57
Livestock	Cochran	Brazos	4	3	2	1	1	0
Irrigation	Cochran	Brazos	(35,798)	(29,594)	(23,303)	(16,579)	(13,777)	(11,703)
County-Other	Cochran	Colorado	0	5	11	16	22	27
Mining	Cochran	Colorado	0	0	0	0	0	0
Livestock	Cochran	Colorado	6	4	3	2	0	0
Irrigation	Cochran	Colorado	0	0	0	0	0	0
Crosbyton	Crosby	Brazos	164	179	197	213	230	247
Lorenzo	Crosby	Brazos	745	756	769	782	794	808
Ralls	Crosby	Brazos	11	27	45	63	81	100
County-Other	Crosby	Brazos	3	11	21	30	39	50
Manufacturing	Crosby	Brazos	0	0	0	0	0	0

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			,	Water Supply	Needs or Sur	plus (acre-fee	t per year)	
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Mining	Crosby	Brazos	130	104	78	50	24	0
Livestock	Crosby	Brazos	21	16	11	7	2	0
Irrigation	Crosby	Brazos	0	0	0	0	0	0
County-Other	Crosby	Red	0	0	0	0	0	0
Livestock	Crosby	Red	0	0	0	0	0	0
Irrigation	Crosby	Red	0	0	0	0	0	0
ODonnell	Dawson	Brazos	18	16	15	15	14	14
County-Other	Dawson	Brazos	0	0	0	0	0	0
Livestock	Dawson	Brazos	0	0	0	0	0	0
Irrigation	Dawson	Brazos	0	0	0	0	0	0
Lamesa	Dawson	Colorado	241	162	98	58	18	52
County-Other	Dawson	Colorado	0	1	1	3	4	4
Mining	Dawson	Colorado	219	133	95	0	3,530	3,489
Livestock	Dawson	Colorado	8	7	5	3	1	0
Irrigation	Dawson	Colorado	0	0	0	0	(495)	(581)
County-Other	Deaf Smith	Canadian	1	1	1	1	2	2
Irrigation	Deaf Smith	Canadian	(1,390)	(1,076)	(710)	(344)	(258)	(205)
Hereford	Deaf Smith	Red	3,407	3,323	3,255	3,201	3,118	2,988
County-Other	Deaf Smith	Red	0	37	96	176	272	396
Manufacturing	Deaf Smith	Red	298	243	186	126	64	0
Livestock	Deaf Smith	Red	1,427	493	244	176	92	0
Irrigation	Deaf Smith	Red	(19,152)	(27,626)	(16,837)	0	0	0
Spur	Dickens	Brazos	99	108	120	131	143	156
County-Other	Dickens	Brazos	22	29	37	45	53	61
Livestock	Dickens	Brazos	61	55	49	43	37	35
Irrigation	Dickens	Brazos	1,239	1,239	1,239	1,239	1,239	1,239
Red River Authority of Texas*	Dickens	Red	0	0	0	0	0	0
County-Other	Dickens	Red	0	2	4	6	9	11
Livestock	Dickens	Red	26	22	18	14	10	9
Irrigation	Dickens	Red	431	431	431	431	431	431
Floydada	Floyd	Brazos	1,538	1,555	1,567	1,577	1,585	1,591
Lockney	Floyd	Brazos	353	368	382	396	411	428
County-Other	Floyd	Brazos	0	7	16	23	32	41
Mining	Floyd	Brazos	1	1	1	0	0	0
Livestock	Floyd	Brazos	61	48	35	21	6	0
Irrigation	Floyd	Brazos	0	0	0	0	0	0
County-Other	Floyd	Red	0	4	7	11	15	20

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				Water Supply	Needs or Su	rplus (acre-fe	et per year)	
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Livestock	Floyd	Red	4	3	2	1	1	0
Irrigation	Floyd	Red	(23,439)	(11,747)	(1,480)	0	0	0
Seagraves	Gaines	Colorado	672	705	734	767	795	818
Seminole	Gaines	Colorado	(539)	(694)	(840)	(933)	(1,043)	(1,168)
County-Other	Gaines	Colorado	2,755	2,235	1,707	1,169	601	0
Manufacturing	Gaines	Colorado	102	83	63	43	22	0
Mining	Gaines	Colorado	230	230	230	230	2,078	2,078
Livestock	Gaines	Colorado	13	10	8	5	2	0
Irrigation	Gaines	Colorado	(81,353)	(83,574)	(47,574)	(5,766)	(5,897)	(6,020)
Post	Garza	Brazos	274	294	318	350	384	419
County-Other	Garza	Brazos	42	46	53	64	75	87
Mining	Garza	Brazos	0	0	0	0	0	0
Livestock	Garza	Brazos	16	13	9	5	1	0
Irrigation	Garza	Brazos	0	0	0	0	0	0
Abernathy	Hale	Brazos	832	765	689	600	510	387
Hale Center	Hale	Brazos	730	737	746	757	768	780
Petersburg Municipal Water System	Hale	Brazos	360	366	376	387	398	411
Plainview	Hale	Brazos	4,338	4,318	4,310	4,342	4,484	4,570
Seth Ward WSC	Hale	Brazos	0	2	6	11	16	21
County-Other	Hale	Brazos	0	84	236	399	404	408
Manufacturing	Hale	Brazos	145	118	90	61	31	0
Mining	Hale	Brazos	0	0	0	0	0	0
Steam Electric Power	Hale	Brazos	0	0	0	0	0	0
Livestock	Hale	Brazos	375	9	0	88	171	253
Irrigation	Hale	Brazos	(100,121)	(111,976)	(57,036)	0	0	0
County-Other	Hale	Red	1	1	1	1	1	1
Irrigation	Hale	Red	(1,722)	(1,473)	(765)	(48)	(24)	(16)
Anton	Hockley	Brazos	732	734	735	737	738	738
Levelland	Hockley	Brazos	3,004	2,811	2,657	2,546	2,442	2,437
County-Other	Hockley	Brazos	0	4	18	33	50	68
Manufacturing	Hockley	Brazos	246	200	153	104	53	0
Mining	Hockley	Brazos	0	0	0	0	0	0
Livestock	Hockley	Brazos	12	9	7	4	1	0
Irrigation	Hockley	Brazos	(24,418)	(15,108)	(9,477)	0	0	0
Sundown	Hockley	Colorado	541	551	570	587	608	631

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				Water Supply	y Needs or Su	or Surplus (acre-feet per year)						
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080				
County-Other	Hockley	Colorado	0	0	1	2	2	3				
Livestock	Hockley	Colorado	1	1	0	0	0	0				
Irrigation	Hockley	Colorado	0	0	0	0	0	0				
Amherst	Lamb	Brazos	153	154	154	154	155	155				
Earth	Lamb	Brazos	547	553	557	560	561	560				
Littlefield	Lamb	Brazos	1,573	1,593	1,604	1,610	1,605	1,587				
Olton	Lamb	Brazos	965	980	991	999	1,003	1,000				
Sudan	Lamb	Brazos	211	207	201	194	185	172				
County-Other	Lamb	Brazos	25	13	27	53	96	164				
Manufacturing	Lamb	Brazos	79	64	49	33	17	0				
Steam Electric Power	Lamb	Brazos	0	0	0	0	0	0				
Livestock	Lamb	Brazos	690	46	0	116	223	324				
Irrigation	Lamb	Brazos	(60,818)	(73,776)	(32,449)	0	0	0				
Abernathy	Lubbock	Brazos	298	317	339	371	385	403				
Idalou	Lubbock	Brazos	933	949	962	979	995	1,010				
Lubbock	Lubbock	Brazos	(319)	(6,181)	(16,665)	(28,047)	(40,631)	(49,685)				
New Deal	Lubbock	Brazos	307	312	317	321	326	330				
Ransom Canyon	Lubbock	Brazos	273	253	232	206	44	14				
Shallowater	Lubbock	Brazos	184	129	71	(3)	(333)	(418)				
Slaton	Lubbock	Brazos	(204)	(275)	(327)	(360)	(386)	(380)				
Wolfforth	Lubbock	Brazos	(1,512)	(3,027)	(4,006)	(4,379)	(4,663)	(4,838)				
County-Other	Lubbock	Brazos	2,818	3,165	3,067	2,272	1,131	38				
Manufacturing	Lubbock	Brazos	233	190	145	98	50	0				
Mining	Lubbock	Brazos	1	1	1	0	0	0				
Steam Electric Power	Lubbock	Brazos	7,189	8,098	8,098	5,858	5,858	5,858				
Livestock	Lubbock	Brazos	30	23	16	9	2	0				
Irrigation	Lubbock	Brazos	(26,749)	(31,696)	(15,069)	0	0	0				
ODonnell	Lynn	Brazos	102	94	88	82	79	80				
Tahoka Public Water System	Lynn	Brazos	369	345	327	320	313	324				
County-Other	Lynn	Brazos	0	8	14	22	32	41				
Mining	Lynn	Brazos	0	0	0	0	0	0				
Livestock	Lynn	Brazos	7	5	4	3	1	0				
Irrigation	Lynn	Brazos	0	0	0	0	0	0				
County-Other	Lynn	Colorado	0	0	0	1	1	1				
Livestock	Lynn	Colorado	1	1	0	0	0	0				

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				Water Suppl	y Needs or Su	rplus (acre-fe	et per year)	
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Irrigation	Lynn	Colorado	0	0	0	(449)	(692)	(849)
Matador	Motley	Red	612	624	633	634	635	636
Red River Authority of Texas*	Motley	Red	0	0	0	0	0	0
County-Other	Motley	Red	22	28	33	34	34	35
Livestock	Motley	Red	98	91	84	77	69	67
Irrigation	Motley	Red	2,858	2,858	2,858	2,858	2,858	2,858
Bovina	Parmer	Brazos	314	339	373	409	450	500
Farwell	Parmer	Brazos	461	423	382	337	283	215
County-Other	Parmer	Brazos	0	50	111	179	255	346
Livestock	Parmer	Brazos	741	65	0	98	187	268
Irrigation	Parmer	Brazos	(69,215)	(68,430)	(37,184)	(2,318)	(1,376)	(800)
Friona	Parmer	Red	1,411	1,372	1,329	1,284	1,228	1,158
County-Other	Parmer	Red	0	19	44	70	100	136
Manufacturing	Parmer	Red	435	354	270	183	93	0
Livestock	Parmer	Red	322	29	0	43	81	117
Irrigation	Parmer	Red	0	(2,418)	0	0	0	385
County-Other	Swisher	Brazos	0	1	2	3	3	4
Livestock	Swisher	Brazos	4	3	2	2	1	0
Irrigation	Swisher	Brazos	(159)	(2,651)	(2,273)	(825)	(664)	(516)
Нарру*	Swisher	Red	404	405	407	409	410	411
Tulia	Swisher	Red	1,151	1,182	1,220	1,252	1,285	1,321
County-Other	Swisher	Red	0	6	12	16	22	27
Livestock	Swisher	Red	389	315	238	159	78	0
Irrigation	Swisher	Red	0	(5,084)	(3,745)	0	0	0
County-Other	Terry	Brazos	0	0	0	0	1	1
Manufacturing	Terry	Brazos	3	2	2	1	1	0
Livestock	Terry	Brazos	11	1	0	2	4	6
Irrigation	Terry	Brazos	0	0	0	0	0	0
Brownfield	Terry	Colorado	501	386	290	213	132	125
County-Other	Terry	Colorado	0	2	19	46	76	112
Manufacturing	Terry	Colorado	2	2	1	1	0	0
Mining	Terry	Colorado	0	0	0	0	0	0
Livestock	Terry	Colorado	129	8	0	22	42	67
Irrigation	Terry	Colorado	0	0	0	(204)	(1,809)	(1,798)
Denver City	Yoakum	Colorado	3,923	3,863	3,807	3,758	3,708	3,655
Plains	Yoakum	Colorado	798	778	762	763	767	772
County-Other	Yoakum	Colorado	49	44	38	26	14	0

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			Water Supply Needs or Surplus (acre-feet per year)					
WUG Name	County	Basin	2030	2040	2050	2060	2070	2080
Mining	Yoakum	Colorado	0	0	0	0	0	0
Steam Electric Power	Yoakum	Colorado	0	0	0	0	0	0
Livestock	Yoakum	Colorado	14	11	8	5	2	0
Irrigation	Yoakum	Colorado	(23,136)	(28,019)	(16,585)	0	0	0

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Appendix F. TWDB DB27 Report – 2026 RWP WUG Data Comparison to 2021 RWP

	2030	Planning Dec	ade*	2070	Planning Dec	ade*
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Bailey County Municipal WUG Type						
Existing WUG supply total	3,467	3,284	-5.3%	3,467	3,284	-5.3%
Projected demand total	1,579	1,240	-21.5%	2,198	1,312	-40.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Bailey County Livestock WUG Type						
Existing WUG supply total	3,077	2,854	-7.2%	3,077	2,854	-7.2%
Projected demand total	2,821	2,471	-12.4%	3,958	2,730	-31.0%
Water supply needs total**	0	0	0.0%	881	0	-100.0%
Bailey County Irrigation WUG Type						
Existing WUG supply total	42,438	57,325	35.1%	9,946	24,677	148.1%
Projected demand total	88,108	58,170	-34.0%	55,616	24,677	-55.6%
Water supply needs total**	45,670	845	-98.1%	45,670	0	-100.0%
Briscoe County Municipal WUG Type						
Existing WUG supply total	665	642	-3.5%	665	642	-3.5%
Projected demand total	384	307	-20.1%	375	229	-38.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Briscoe County Livestock WUG Type						
Existing WUG supply total	353	337	-4.5%	353	337	-4.5%
Projected demand total	300	299	-0.3%	352	333	-5.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Briscoe County Irrigation WUG Type						
Existing WUG supply total	22,183	17,821	-19.7%	10,997	6,219	-43.4%
Projected demand total	26,417	17,821	-32.5%	15,231	6,219	-59.2%
Water supply needs total**	4,234	0	-100.0%	4,234	0	-100.0%
Castro County Municipal WUG Type						
Existing WUG supply total	5,494	5,382	-2.0%	5,494	5,382	-2.0%

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^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	1,870	1,383	-26.0%	2,156	1,263	-41.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Castro County Manufacturing WUG Type						
Existing WUG supply total	95	81	-14.7%	95	81	-14.7%
Projected demand total	66	67	1.5%	66	78	18.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Castro County Livestock WUG Type						
Existing WUG supply total	11,339	10,352	-8.7%	11,339	10,352	-8.7%
Projected demand total	7,589	9,158	20.7%	10,261	10,124	-1.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Castro County Irrigation WUG Type						
Existing WUG supply total	171,998	168,568	-2.0%	15,033	11,447	-23.9%
Projected demand total	379,863	252,563	-33.5%	222,898	11,447	-94.9%
Water supply needs total**	207,865	83,995	-59.6%	207,865	0	-100.0%
Cochran County Municipal WUG Type						
Existing WUG supply total	1,294	1,145	-11.5%	1,294	1,145	-11.5%
Projected demand total	942	616	-34.6%	972	458	-52.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Cochran County Mining WUG Type						
Existing WUG supply total	312	166	-46.8%	312	166	-46.8%
Projected demand total	208	166	-20.2%	81	166	104.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Cochran County Livestock WUG Type						
Existing WUG supply total	674	120	-82.2%	674	120	-82.2%
Projected demand total	106	110	3.8%	118	119	0.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030	Planning Dec	ade*	2070	Planning Dec	ade*
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Cochran County Irrigation WUG Type						
Existing WUG supply total	70,098	45,339	-35.3%	40,689	28,262	-30.5%
Projected demand total	99,449	81,137	-18.4%	62,972	42,039	-33.2%
Water supply needs total**	47,340	35,798	-24.4%	28,190	13,777	-51.1%
Crosby County Municipal WUG Type						
Existing WUG supply total	1,707	1,628	-4.6%	1,707	1,628	-4.6%
Projected demand total	1,035	705	-31.9%	1,250	484	-61.3%
Water supply needs total**	89	0	-100.0%	146	0	-100.0%
Crosby County Manufacturing WUG Type						
Existing WUG supply total	3	1	-66.7%	3	1	-66.7%
Projected demand total	3	1	-66.7%	3	1	-66.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Crosby County Mining WUG Type						
Existing WUG supply total	1,183	613	-48.2%	1,183	613	-48.2%
Projected demand total	980	483	-50.7%	568	589	3.7%
Water supply needs total**	363	0	-100.0%	210	0	-100.0%
Crosby County Livestock WUG Type						
Existing WUG supply total	211	196	-7.1%	211	196	-7.1%
Projected demand total	179	175	-2.2%	209	194	-7.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Crosby County Irrigation WUG Type						
Existing WUG supply total	119,683	60,292	-49.6%	39,393	30,463	-22.7%
Projected demand total	107,583	60,292	-44.0%	67,695	30,463	-55.0%
Water supply needs total**	1,246	0	-100.0%	28,302	0	-100.0%
Dawson County Municipal WUG Type						
Existing WUG supply total	3,100	2,553	-17.6%	3,183	2,208	-30.6%

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	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	2,918	2,294	-21.4%	3,148	2,172	-31.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dawson County Mining WUG Type						
Existing WUG supply total	266	6,146	2210.5%	266	6,146	2210.5%
Projected demand total	1,812	5,927	227.1%	1,812	2,616	44.4%
Water supply needs total**	1,546	0	-100.0%	1,546	0	-100.0%
Dawson County Livestock WUG Type						
Existing WUG supply total	201	72	-64.2%	201	72	-64.2%
Projected demand total	55	64	16.4%	65	71	9.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dawson County Irrigation WUG Type						
Existing WUG supply total	119,749	66,209	-44.7%	66,200	62,206	-6.0%
Projected demand total	106,312	66,209	-37.7%	79,443	62,701	-21.1%
Water supply needs total**	0	0	0.0%	13,519	495	-96.3%
Deaf Smith County Municipal WUG Type						
Existing WUG supply total	7,747	7,238	-6.6%	7,747	7,238	-6.6%
Projected demand total	5,005	3,830	-23.5%	7,727	3,846	-50.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Deaf Smith County Manufacturing WUG Type						
Existing WUG supply total	4	1,796	44800.0%	4	1,796	44800.0%
Projected demand total	1,107	1,498	35.3%	1,107	1,732	56.5%
Water supply needs total**	1,103	0	-100.0%	1,103	0	-100.0%
Deaf Smith County Livestock WUG Type						
Existing WUG supply total	12,089	14,105	16.7%	12,089	14,105	16.7%
Projected demand total	12,157	12,678	4.3%	15,604	14,013	-10.2%
Water supply needs total**	122	0	-100.0%	3,515	0	-100.0%

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	2030 Planning Decade*			2070	Planning Dec	ade*
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Deaf Smith County Irrigation WUG Type						
Existing WUG supply total	122,247	118,378	-3.2%	30,550	25,562	-16.3%
Projected demand total	210,016	138,920	-33.9%	118,219	25,820	-78.2%
Water supply needs total**	87,769	20,542	-76.6%	87,669	258	-99.7%
Dickens County Municipal WUG Type						
Existing WUG supply total	417	357	-14.4%	421	357	-15.2%
Projected demand total	325	236	-27.4%	319	152	-52.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dickens County Mining WUG Type						
Existing WUG supply total	29	0	-100.0%	29	0	-100.0%
Projected demand total	12	0	-100.0%	12	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dickens County Livestock WUG Type						
Existing WUG supply total	487	475	-2.5%	487	475	-2.5%
Projected demand total	406	388	-4.4%	475	428	-9.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Dickens County Irrigation WUG Type						
Existing WUG supply total	10,376	9,217	-11.2%	10,376	9,217	-11.2%
Projected demand total	9,039	7,547	-16.5%	9,039	7,547	-16.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Floyd County Municipal WUG Type						
Existing WUG supply total	2,790	2,636	-5.5%	2,790	2,636	-5.5%
Projected demand total	1,053	745	-29.2%	1,145	593	-48.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Floyd County Mining WUG Type						
Existing WUG supply total	492	10	-98.0%	492	10	-98.0%

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	2030 Planning Decade*			2070	Planning Dec	ade*
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	492	9	-98.2%	485	10	-97.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Floyd County Livestock WUG Type						
Existing WUG supply total	1,639	1,287	-21.5%	1,639	1,287	-21.5%
Projected demand total	1,189	1,222	2.8%	1,268	1,280	0.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Floyd County Irrigation WUG Type						
Existing WUG supply total	105,650	69,173	-34.5%	53,048	35,644	-32.8%
Projected demand total	128,837	92,612	-28.1%	76,235	35,644	-53.2%
Water supply needs total**	42,645	23,439	-45.0%	23,187	0	-100.0%
Gaines County Municipal WUG Type						
Existing WUG supply total	4,516	7,404	64.0%	4,516	7,404	64.0%
Projected demand total	4,764	4,516	-5.2%	7,811	7,051	-9.7%
Water supply needs total**	784	539	-31.3%	3,758	1,043	-72.2%
Gaines County Manufacturing WUG Type						
Existing WUG supply total	544	617	13.4%	544	617	13.4%
Projected demand total	1,587	515	-67.5%	1,587	595	-62.5%
Water supply needs total**	1,043	0	-100.0%	1,043	0	-100.0%
Gaines County Mining WUG Type						
Existing WUG supply total	7,729	2,100	-72.8%	7,729	2,100	-72.8%
Projected demand total	2,400	1,870	-22.1%	776	22	-97.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Gaines County Livestock WUG Type						
Existing WUG supply total	203	156	-23.2%	203	156	-23.2%
Projected demand total	126	143	13.5%	137	154	12.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030	Planning Dec	ade*	2070	Planning Dec	ade*
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Gaines County Irrigation WUG Type						
Existing WUG supply total	195,378	190,866	-2.3%	115,334	122,871	6.5%
Projected demand total	362,482	272,219	-24.9%	282,438	128,768	-54.4%
Water supply needs total**	167,104	81,353	-51.3%	167,104	5,897	-96.5%
Garza County Municipal WUG Type						
Existing WUG supply total	1,135	1,028	-9.4%	1,135	1,028	-9.4%
Projected demand total	955	712	-25.4%	1,097	569	-48.1%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Garza County Manufacturing WUG Type						
Existing WUG supply total	2	0	-100.0%	2	0	-100.0%
Projected demand total	2	0	-100.0%	2	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Garza County Mining WUG Type						
Existing WUG supply total	544	19	-96.5%	544	19	-96.5%
Projected demand total	544	19	-96.5%	164	19	-88.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Garza County Livestock WUG Type						
Existing WUG supply total	184	170	-7.6%	184	170	-7.6%
Projected demand total	155	154	-0.6%	181	169	-6.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Garza County Irrigation WUG Type						
Existing WUG supply total	14,620	9,899	-32.3%	11,827	9,899	-16.3%
Projected demand total	10,353	9,899	-4.4%	10,353	9,899	-4.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Hale County Municipal WUG Type						
Existing WUG supply total	12,855	11,939	-7.1%	12,425	11,775	-5.2%

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	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	6,859	5,678	-17.2%	6,934	5,194	-25.1%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Hale County Manufacturing WUG Type						
Existing WUG supply total	1,416	876	-38.1%	1,416	876	-38.1%
Projected demand total	5,076	731	-85.6%	5,076	845	-83.4%
Water supply needs total**	3,660	0	-100.0%	3,660	0	-100.0%
Hale County Mining WUG Type						
Existing WUG supply total	215	1	-99.5%	215	1	-99.5%
Projected demand total	1,152	1	-99.9%	662	1	-99.8%
Water supply needs total**	937	0	-100.0%	447	0	-100.0%
Hale County Steam Electric Power WUG Type						
Existing WUG supply total	31	29	-6.5%	31	29	-6.5%
Projected demand total	31	29	-6.5%	31	29	-6.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Hale County Livestock WUG Type						
Existing WUG supply total	4,098	3,049	-25.6%	4,098	3,049	-25.6%
Projected demand total	3,111	2,674	-14.0%	4,098	2,878	-29.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Hale County Irrigation WUG Type						
Existing WUG supply total	98,777	107,925	9.3%	15,803	18,123	14.7%
Projected demand total	310,542	209,768	-32.5%	227,568	18,147	-92.0%
Water supply needs total**	211,765	101,843	-51.9%	211,765	24	-100.0%
Hockley County Municipal WUG Type						
Existing WUG supply total	7,975	7,555	-5.3%	7,688	6,971	-9.3%
Projected demand total	4,064	3,278	-19.3%	4,397	3,131	-28.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%

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^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade* 20			2070	070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)	
Hockley County Manufacturing WUG Type							
Existing WUG supply total	700	1,478	111.1%	700	1,478	111.1%	
Projected demand total	691	1,232	78.3%	691	1,425	106.2%	
Water supply needs total**	0	0	0.0%	0	0	0.0%	
Hockley County Mining WUG Type							
Existing WUG supply total	1,547	69	-95.5%	1,547	69	-95.5%	
Projected demand total	18	69	283.3%	15	69	360.0%	
Water supply needs total**	0	0	0.0%	0	0	0.0%	
Hockley County Livestock WUG Type							
Existing WUG supply total	408	150	-63.2%	408	150	-63.2%	
Projected demand total	138	137	-0.7%	157	149	-5.1%	
Water supply needs total**	0	0	0.0%	0	0	0.0%	
Hockley County Irrigation WUG Type							
Existing WUG supply total	93,617	87,684	-6.3%	46,493	47,413	2.0%	
Projected demand total	131,866	112,102	-15.0%	73,589	47,413	-35.6%	
Water supply needs total**	43,079	24,418	-43.3%	27,096	0	-100.0%	
Lamb County Municipal WUG Type							
Existing WUG supply total	5,648	5,520	-2.3%	5,648	5,520	-2.3%	
Projected demand total	2,412	2,046	-15.2%	2,453	1,915	-21.9%	
Water supply needs total**	0	0	0.0%	0	0	0.0%	
Lamb County Manufacturing WUG Type							
Existing WUG supply total	1,000	477	-52.3%	1,000	477	-52.3%	
Projected demand total	940	398	-57.7%	940	460	-51.1%	
Water supply needs total**	0	0	0.0%	0	0	0.0%	
Lamb County Mining WUG Type							
Existing WUG supply total	108	0	-100.0%	108	0	-100.0%	

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	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	579	0	-100.0%	333	0	-100.0%
Water supply needs total**	471	0	-100.0%	225	0	-100.0%
Lamb County Steam Electric Power WUG Type						
Existing WUG supply total	15,666	5,789	-63.0%	15,666	3,000	-80.9%
Projected demand total	13,450	5,789	-57.0%	13,450	3,000	-77.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Lamb County Livestock WUG Type						
Existing WUG supply total	5,225	5,157	-1.3%	5,225	5,157	-1.3%
Projected demand total	4,529	4,467	-1.4%	6,271	4,934	-21.3%
Water supply needs total**	0	0	0.0%	1,046	0	-100.0%
Lamb County Irrigation WUG Type						
Existing WUG supply total	72,680	107,928	48.5%	7,414	20,958	182.7%
Projected demand total	259,451	168,746	-35.0%	194,185	20,958	-89.2%
Water supply needs total**	186,771	60,818	-67.4%	186,771	0	-100.0%
Lubbock County Municipal WUG Type						
Existing WUG supply total	55,962	64,029	14.4%	48,914	49,839	1.9%
Projected demand total	58,186	61,251	5.3%	79,048	92,971	17.6%
Water supply needs total**	8,472	2,035	-76.0%	32,736	46,013	40.6%
Lubbock County Manufacturing WUG Type						
Existing WUG supply total	335	1,407	320.0%	335	1,407	320.0%
Projected demand total	1,011	1,174	16.1%	1,011	1,357	34.2%
Water supply needs total**	676	0	-100.0%	676	0	-100.0%
Lubbock County Mining WUG Type						
Existing WUG supply total	982	20	-98.0%	982	20	-98.0%
Projected demand total	6,425	19	-99.7%	4,314	20	-99.5%
Water supply needs total**	5,443	0	-100.0%	3,332	0	-100.0%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*		2070 Planning Decade*		ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Lubbock County Steam Electric Power WUG Type	е					
Existing WUG supply total	10,098	10,098	0.0%	7,858	7,858	0.0%
Projected demand total	5,694	2,909	-48.9%	5,694	2,000	-64.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Lubbock County Livestock WUG Type						
Existing WUG supply total	1,290	853	-33.9%	1,290	853	-33.9%
Projected demand total	1,138	823	-27.7%	1,287	851	-33.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Lubbock County Irrigation WUG Type						
Existing WUG supply total	104,602	106,611	1.9%	73,196	75,089	2.6%
Projected demand total	144,866	133,360	-7.9%	114,260	75,089	-34.3%
Water supply needs total**	40,264	26,749	-33.6%	41,064	0	-100.0%
Lynn County Municipal WUG Type						
Existing WUG supply total	1,412	1,215	-14.0%	1,304	1,091	-16.3%
Projected demand total	907	744	-18.0%	934	666	-28.7%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Lynn County Mining WUG Type						
Existing WUG supply total	542	15	-97.2%	542	15	-97.2%
Projected demand total	1,327	15	-98.9%	660	15	-97.7%
Water supply needs total**	785	0	-100.0%	165	0	-100.0%
Lynn County Livestock WUG Type						
Existing WUG supply total	167	77	-53.9%	167	77	-53.9%
Projected demand total	68	69	1.5%	79	76	-3.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Lynn County Irrigation WUG Type						
Existing WUG supply total	93,961	72,812	-22.5%	69,647	69,142	-0.7%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	88,921	72,812	-18.1%	88,921	69,834	-21.5%
Water supply needs total**	0	0	0.0%	19,274	692	-96.4%
Motley County Municipal WUG Type						
Existing WUG supply total	902	886	-1.8%	904	885	-2.1%
Projected demand total	321	252	-21.5%	317	216	-31.9%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Motley County Mining WUG Type						
Existing WUG supply total	244	0	-100.0%	244	0	-100.0%
Projected demand total	213	0	-100.0%	161	0	-100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Motley County Livestock WUG Type						
Existing WUG supply total	375	375	0.0%	375	375	0.0%
Projected demand total	290	277	-4.5%	340	306	-10.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Motley County Irrigation WUG Type						
Existing WUG supply total	12,107	11,856	-2.1%	12,106	11,856	-2.1%
Projected demand total	9,426	8,998	-4.5%	9,426	8,998	-4.5%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parmer County Municipal WUG Type						
Existing WUG supply total	4,538	4,076	-10.2%	4,538	4,076	-10.2%
Projected demand total	2,405	1,890	-21.4%	3,188	1,760	-44.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parmer County Manufacturing WUG Type						
Existing WUG supply total	1,866	2,619	40.4%	1,866	2,619	40.4%
Projected demand total	1,841	2,184	18.6%	1,841	2,526	37.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Parmer County Livestock WUG Type						
Existing WUG supply total	11,329	8,856	-21.8%	11,329	8,856	-21.8%
Projected demand total	8,318	7,793	-6.3%	11,276	8,588	-23.8%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Parmer County Irrigation WUG Type						
Existing WUG supply total	77,477	69,621	-10.1%	16,915	12,661	-25.1%
Projected demand total	239,225	138,836	-42.0%	177,802	14,037	-92.1%
Water supply needs total**	161,748	69,215	-57.2%	160,887	1,376	-99.1%
Swisher County Municipal WUG Type						
Existing WUG supply total	2,726	2,587	-5.1%	2,721	2,583	-5.1%
Projected demand total	1,342	1,032	-23.1%	1,405	863	-38.6%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Swisher County Livestock WUG Type						
Existing WUG supply total	6,089	3,304	-45.7%	5,767	3,304	-42.7%
Projected demand total	2,864	2,911	1.6%	3,469	3,225	-7.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Swisher County Irrigation WUG Type						
Existing WUG supply total	64,574	64,252	-0.5%	16,040	17,948	11.9%
Projected demand total	135,396	64,411	-52.4%	86,540	18,612	-78.5%
Water supply needs total**	70,822	159	-99.8%	70,500	664	-99.1%
Terry County Municipal WUG Type						
Existing WUG supply total	2,457	2,247	-8.5%	2,258	1,979	-12.4%
Projected demand total	2,109	1,746	-17.2%	2,480	1,770	-28.6%
Water supply needs total**	0	0	0.0%	291	0	-100.0%
Terry County Manufacturing WUG Type						
Existing WUG supply total	17	35	105.9%	17	35	105.9%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*		2070	Planning Dec	ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Projected demand total	17	30	76.5%	17	34	100.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Terry County Mining WUG Type						
Existing WUG supply total	140	101	-27.9%	140	101	-27.9%
Projected demand total	525	101	-80.8%	206	101	-51.0%
Water supply needs total**	388	0	-100.0%	91	0	-100.0%
Terry County Livestock WUG Type						
Existing WUG supply total	590	1,020	72.9%	590	1,020	72.9%
Projected demand total	461	880	90.9%	586	974	66.2%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Terry County Irrigation WUG Type						
Existing WUG supply total	130,202	102,633	-21.2%	82,784	82,892	0.1%
Projected demand total	172,785	102,633	-40.6%	125,527	84,701	-32.5%
Water supply needs total**	42,583	0	-100.0%	42,743	1,809	-95.8%
Yoakum County Municipal WUG Type						
Existing WUG supply total	6,850	6,680	-2.5%	6,850	6,680	-2.5%
Projected demand total	2,352	1,910	-18.8%	3,319	2,191	-34.0%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Yoakum County Mining WUG Type						
Existing WUG supply total	764	746	-2.4%	764	746	-2.4%
Projected demand total	1,334	746	-44.1%	641	746	16.4%
Water supply needs total**	570	0	-100.0%	0	0	0.0%
Yoakum County Steam Electric Power WUG Type	•					
Existing WUG supply total	2,000	1,596	-20.2%	2,000	1,100	-45.0%
Projected demand total	1,910	1,596	-16.4%	1,910	1,100	-42.4%
Water supply needs total**	0	0	0.0%	0	0	0.0%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.

	2030 Planning Decade*			2070 Planning Decade*		
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Yoakum County Livestock WUG Type						
Existing WUG supply total	191	121	-36.6%	191	121	-36.6%
Projected demand total	96	107	11.5%	113	119	5.3%
Water supply needs total**	0	0	0.0%	0	0	0.0%
Yoakum County Irrigation WUG Type	Yoakum County Irrigation WUG Type					
Existing WUG supply total	82,507	81,839	-0.8%	38,495	40,075	4.1%
Projected demand total	161,693	104,975	-35.1%	117,681	40,075	-65.9%
Water supply needs total**	79,186	23,136	-70.8%	79,186	0	-100.0%
Region O Total						
Existing WUG supply total	2,067,674	1,856,270	-10.2%	1,014,486	971,441	-4.2%
Projected demand total	3,381,960	2,345,019	-30.7%	2,452,931	983,165	-59.9%
Water supply needs total**	1,466,543	554,884	-62.2%	1,499,897	72,048	-95.2%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs

^{**}WUG supplies and projected demands are entered for each of a WUG's region-county-basin divisions. The needs shown in the WUG Data Comparison to 2021 RWP report are calculated by first deducting the WUG split's projected demand from its total existing water supply volume. If the WUG split has a greater existing supply volume than projected demand in any given decade, this amount is considered a surplus volume. Before aggregating the difference between supplies and demands to the WUG county and category level, calculated surpluses are updated to zero so that only the WUGs with needs in the decade are included with the water supply needs totals.



Appendix G. TWDB DB27 Report – 2026 RWP Source Data Comparison to 2021 RWP

DRAFT Region O 2026 Regional Water Plan (RWP) Source Availability Comparison to 2021 RWP

	2030 Planning Decade*		2070 Planning Decade*		ade*	
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Bailey County						
Groundwater availability total	68,140	66,087	-3.0%	35,648	35,673	0.1%
Reuse availability total	825	825	0.0%	825	825	0.0%
Briscoe County						
Groundwater availability total	23,950	24,171	0.9%	12,764	13,055	2.3%
Surface Water availability total	96	96	0.0%	96	96	0.0%
Castro County						
Groundwater availability total	184,895	180,412	-2.4%	27,930	32,175	15.2%
Reuse availability total	4,031	4,031	0.0%	4,031	4,031	0.0%
Cochran County						
Groundwater availability total	80,124	75,097	-6.3%	43,647	44,738	2.5%
Reuse availability total	294	294	0.0%	294	294	0.0%
Crosby County						
Groundwater availability total	124,438	121,458	-2.4%	44,148	47,124	6.7%
Reuse availability total	583	583	0.0%	583	583	0.0%
Dawson County						
Groundwater availability total	123,476	121,976	-1.2%	69,927	70,902	1.4%
Deaf Smith County						
Groundwater availability total	141,804	140,396	-1.0%	50,007	52,262	4.5%
Reuse availability total	2,810	2,810	0.0%	2,810	2,810	0.0%
Dickens County						
Groundwater availability total	11,500	15,229	32.4%	11,500	15,229	32.4%
Floyd County						
Groundwater availability total	113,365	113,627	0.2%	60,763	58,906	-3.1%
Reuse availability total	449	449	0.0%	449	449	0.0%
Surface Water availability total	18	18	0.0%	18	18	0.0%
Gaines County						
Groundwater availability total	218,338	206,366	-5.5%	138,294	139,037	0.5%
Garza County						
Groundwater availability total	16,559	16,546	-0.1%	13,766	13,986	1.6%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs.

^{**}Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

DRAFT Region O 2026 Regional Water Plan (RWP) Source Availability Comparison to 2021 RWP

	2030 Planning Decade*		2070 Planning Decade*			
	2021 RWP	2026 RWP	Difference (%)	2021 RWP	2026 RWP	Difference (%)
Hale County						
Groundwater availability total	116,049	117,892	1.6%	33,075	35,585	7.6%
Reuse availability total	5,477	5,477	0.0%	5,477	5,477	0.0%
Hockley County						
Groundwater availability total	112,944	112,991	0.0%	54,667	56,086	2.6%
Reuse availability total	1,521	1,521	0.0%	1,521	1,521	0.0%
Lamb County						
Groundwater availability total	113,005	121,223	7.3%	47,739	48,919	2.5%
Reuse availability total	7,199	7,199	0.0%	7,199	7,199	0.0%
Lubbock County						
Groundwater availability total	122,490	111,708	-8.8%	91,884	90,113	-1.9%
Reuse availability total	24,931	22,523	-9.7%	31,830	30,576	-3.9%
Lynn County						
Groundwater availability total	97,063	89,807	-7.5%	72,552	71,746	-1.1%
Reuse availability total	346	346	0.0%	346	346	0.0%
Motley County						
Groundwater availability total	20,181	20,181	0.0%	17,462	17,462	0.0%
Surface Water availability total	4	4	0.0%	4	4	0.0%
Parmer County						
Groundwater availability total	96,548	98,232	1.7%	35,125	37,478	6.7%
Reuse availability total	2,887	2,887	0.0%	2,887	2,887	0.0%
Reservoir** County						
Surface Water availability total	25,470	14,200	-44.2%	23,630	13,000	-45.0%
Swisher County						
Groundwater availability total	73,215	75,203	2.7%	24,359	25,768	5.8%
Terry County						
Groundwater availability total	132,777	134,878	1.6%	85,519	86,343	1.0%
Yoakum County						
Groundwater availability total	92,952	90,983	-2.1%	48,940	49,187	0.5%
Region O Total						
Groundwater availability total	2,083,813	2,054,463	-1.4%	1,019,716	1,041,774	2.2%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs.

^{**}Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.

DRAFT Region O 2026 Regional Water Plan (RWP) Source Availability Comparison to 2021 RWP

Reuse availability total	51,353	48,945	-4.7%	58,252	56,998	-2.2%
Surface Water availability total	25,588	14,318	-44.0%	23,748	13,118	-44.8%

^{*}The 2030 and 2070 planning decades are used in this comparison because they represent the earliest and latest planning decades in both the 2021 and 2026 RWPs.

^{**}Since reservoir sources can exist across multiple counties, the county field value, 'reservoir' is applied to all reservoir sources.



Appendix H. WAM input and output files

(electronic submittal)



Appendix I. Region O Hydrologic Variance Information



December 12, 2023

Jeff Walker
Executive Administrator
Texas Water Development Board
PO Box 13231
Austin, TX 78711

The Llano Estacado Regional Water Planning Group (LERWPG) met on November 30, 2023, and discussed the process to determine the amount of surface water available from existing water rights and future water management strategies. During this meeting, the LERWPG discussed specific deviations from the standard Texas Water Development Board (TWDB) guidance that will be employed to develop the 2026 Llano Estacado Regional Water Plan.

As you know, the guidance provided by the TWDB in the base scope of work for the Sixth Cycle of Regional Water Planning requires the use of the Run 3 (full authorization) version of Water Availability Models (WAMs) maintained by the Texas Commission on Environmental Quality (TCEQ). These river-basin-scale models are used by the TCEQ for evaluating legal water available to applications for new or amended water rights, and as such, include some aspects that are not appropriate for water planning.

The LERWPG requests that the TWDB allow specific variations from the base TCEQ WAMs for analyses that determine surface water available to existing rights.

- Brazos WAM. The LERWPG requests permission to conduct analyses using the TCEQ Brazos River Basin WAM as modified by the Brazos G Regional Water Planning Group (Brazos G WAM) for determining surface water reliabilities for the sake of inter-regional consistency. This model includes limited return flows for its reliability evaluations.
- Canadian WAM. Also, to promote inter-regional consistency, the LERWPG requests
 permission to use yield values developed by the Panhandle Regional Water Planning
 Group using the TCEQ Canadian River Basin WAM for determining firm yield in that basin
 for water supplies supporting LERWPG Water User Groups (WUGs), specifically Lake
 Meredith.
- Colorado WAM. The LERWPG requests permission to use surface water reliability values developed by the Region F Regional Water Planning Group using the TCEQ Colorado River Basin WAM for determining reliability and yield in that basin for water supplies supporting LERWPG Water User Groups (WUGs) to promote inter-regional consistency.
- 4. Red River WAM. The LERWPG requests permission to use surface water reliability values developed by the Panhandle Regional Water Planning Group using the TCEQ Red River Basin WAM for determining reliability and yield in that basin for water supplies supporting Region O Water User Groups (WUGs), specifically Mackenzie Reservoir.



5. Utilize the same water supply model for strategy evaluations as is used to determine supplies available to existing water rights.

TWDB guidance requires that evaluations of new water management strategies utilize a strict application of the TCEQ Run 3 WAM. The rationale for this guidance is to ensure that the supply from a water management strategy is consistent with what might be permitted by the TCEQ. However, TCEQ considers more information than a simple application of the WAM when making water right permitting decisions. Additionally, many water management strategies utilize or are intended to supplement existing supplies, and therefore should be evaluated consistent with the existing supplies they are intended to supplement. The existing supply and the supplementing water management strategy need to be evaluated consistently. Furthermore, the same aspects of the Run 3 WAM that limit its usefulness for determining supplies available to existing rights also limit its ability to determine supplies to new water management strategies. The TCEQ Run 3 WAM is a legal permitting tool that has only limited utility for water supply planning. The LERWPG requests that the Brazos G WAM be utilized to evaluate water management strategies instead of the base TCEQ Run 3 WAM.

The benefit to this methodology is that it will provide a consistent basis of evaluation between existing supplies and new water management strategies.

6. Lake Alan Henry Analysis. The LERWPG requests permission to conduct analyses using the Brazos G WAM with a 2-year safe yield operation of Lake Alan Henry. The City of Lubbock currently operates the reservoir using a 2-year safe yield. Using this Lake Alan Henry yield would best reflect actual operations in water management strategy evaluations for the City of Lubbock.

The LERWPG thanks the TWDB for considering these alternative technical approaches for determining surface water supplies to existing water rights and new water management strategies. We welcome any questions you may have regarding this hydrologic variance request for surface water supplies.

Please direct any questions to the LERWPG technical consultant, Paula Jo Lemonds, HDR, at paula.lemonds@hdrinc.com or (512) 912-5127.

Sincerely,

Mark Kirkpatrick, Vice Chairman

Llano Estacado Regional Water Planning Group - Region O

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules¹ require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4 – 10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: 0

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

Brazos River Basin Entire and Lake Alan Henry

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

Brazos WAM. The LERWPG requests permission to conduct analyses using the TCEQ Brazos River Basin WAM as modified by the Brazos G Regional Water Planning Group (Brazos G WAM) for determining surface water reliabilities for the sake of inter-regional consistency. This model includes limited return flows for its reliability evaluations.

Utilize the same water supply model for strategy evaluations as is used to determine supplies available to existing water rights. TWDB guidance requires that evaluations of new water management strategies utilize a strict application of the TCEQ Run 3 WAM. The rationale for this guidance is to ensure that the supply from a water management strategy is consistent with what might be permitted by the TCEQ. However, TCEQ considers more information than a simple application of the WAM when making water right permitting decisions. Additionally,

¹ 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

many water management strategies utilize or are intended to supplement existing supplies, and therefore should be evaluated consistent with the existing supplies they are intended to supplement. The existing supply and the supplementing water management strategy need to be evaluated consistently. Furthermore, the same aspects of the Run 3 WAM that limit its usefulness for determining supplies available to existing rights also limit its ability to determine supplies to new water management strategies. The TCEQ Run 3 WAM is a legal permitting tool that has only limited utility for water supply planning. The LERWPG requests that the Brazos G WAM be utilized to evaluate water management strategies instead of the base TCEQ Run 3 WAM.

Lake Alan Henry Analysis. The LERWPG requests permission to conduct analyses using the Brazos G WAM with a 2-year safe yield operation of Lake Alan Henry. The City of Lubbock currently operates the reservoir using a 2-year safe yield. Using this Lake Alan Henry yield would best reflect actual operations in water management strategy evaluations for the City of Lubbock.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

Yes

Previous cycle. Additional request to use for strategy evaluation and Lake Alan Henry analysis.

4. Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.

No

Choose an item.

Click or tap here to enter text.

5. Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.

Yes

Existing and Strategy Supply

The City of Lubbock currently operates the reservoir using a 2-year safe yield. Using this Lake Alan Henry yield would best reflect actual operations in water management strategy evaluations for the City of Lubbock.

6. Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.

No

Choose an item.

Click or tap here to enter text.

7. Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.

No

Choose an item.

Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation², system or reservoir operations, or special operational procedures into the WAM.

No

Choose an item.

Click or tap here to enter text.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

Yes

Existing and Strategy Supply

² Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

The Brazos WAM includes limited return flows for its reliability evaluations.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

Unknown

Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

n/a

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules¹ require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4-10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: 0

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

Canadian River Basin. Entire and Lake Meredith

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

Canadian WAM. Also, to promote inter-regional consistency, the LERWPG requests permission to use yield values developed by the Panhandle Regional Water Planning Group using the TCEQ Canadian River Basin WAM for determining firm yield in that basin for water supplies supporting LERWPG Water User Groups (WUGs), specifically Lake Meredith.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

Yes

Previous cycle. No difference.

¹ 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

4.	Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.
	No
	Choose an item.
	Click or tap here to enter text.
5.	Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.
	No
	Choose an item.
	Click or tap here to enter text.
6.	Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations
	No
	Choose an item.
	Click or tap here to enter text.
7.	Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.
	No
	Choose an item.
	Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified

WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation², system or reservoir operations, or special operational procedures into the WAM.

No

Choose an item.

Click or tap here to enter text.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

No

Choose an item.

Click or tap here to enter text.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

Unknown

Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

n/a

² Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules¹ require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4-10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: 0

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

Colorado River Basin Entire

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

Colorado WAM. The LERWPG requests permission to use surface water reliability values developed by the Region F Regional Water Planning Group using the TCEQ Colorado River Basin WAM for determining reliability and yield in that basin for water supplies supporting LERWPG Water User Groups (WUGs) to promote inter-regional consistency.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

Yes

Previous cycle. No difference.

¹ 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

4.	Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.
	No
	Choose an item.
	Click or tap here to enter text.
5.	Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.
	No
	Choose an item.
	Click or tap here to enter text.
6.	Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.
	No
	Choose an item.
	Click or tap here to enter text.
7.	Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.
	No
	Choose an item.
	Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified

WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation², system or reservoir operations, or special operational procedures into the WAM.

No

Choose an item.

Click or tap here to enter text.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

No

Choose an item.

Click or tap here to enter text.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

Unknown

Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

n/a

² Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.

Surface Water Hydrologic Variance Request Checklist

Texas Water Development Board (TWDB) rules¹ require that regional water planning groups (RWPG) use most current Water Availability Models (WAM) from the Texas Commission on Environmental Quality (TCEQ) and assume full utilization of existing water rights and no return flows for surface water supply analysis. Additionally, evaluation of existing stored surface water available during Drought of Record conditions must be based on Firm Yield using anticipated sedimentation rates. However, the TWDB rules also allow, and **we encourage**, RWPGs to use more representative, water availability modeling assumptions; better site-specific information; or justified operational procedures other than Firm Yield with written approval (via a Hydrologic Variance) from the Executive Administrator in order to better represent and therefore prepare for expected drought conditions.

RWPGs must use this checklist, which is intended to save time and reduce effort, to request a Hydrologic Variance for estimating the availability of surface water sources. For Questions 4-10, please indicate whether the requested variance is for determining Existing Supply, Strategy Supply, or both. Please complete a separate checklist for each river basin in which variances are being requested.

Water Planning Region: 0

1. Which major river basin does the request apply to? Please specify if the request only applies part of the basin or only to certain reservoirs.

Red River Basin Entire and Mackenzie Reservoir

2. Please give a brief, bulleted, description of the requested hydrologic variances including how the alternative availability assumptions vary from rule requirements, how the modifications will affect the associated annual availability volume(s) in the regional water plan, and why the variance is necessary or provides a better basis for planning. You must provide more-detailed descriptions in the subsequent checklist questions. Attach any available documentation supporting the request.

Red River WAM. The LERWPG requests permission to use surface water reliability values developed by the Panhandle Regional Water Planning Group using the TCEQ Red River Basin WAM for determining reliability and yield in that basin for water supplies supporting Region O Water User Groups (WUGs), specifically Mackenzie Reservoir.

3. Was this request submitted in a previous planning cycle? If yes, please indicate which cycle and note how it is different, if at all, from the previous request?

Yes

Previous cycle. No difference.

¹ 31 Texas Administrative Code (TAC) §§ 357.10(14) and 357.32(c)

4.	Are you requesting to extend the period of record beyond the current applicable WAM hydrologic period? If yes, please describe the proposed methodology. Indicate whether you believe there is a new drought of record in the basin.
	No
	Choose an item.
	Click or tap here to enter text.
5.	Are you requesting to use a reservoir safe yield? If yes, please describe in detail how the safe yield would be calculated and defined, which reservoir(s) it would apply to, and why the modification is needed or preferrable for drought planning purposes.
	No
	Choose an item.
	Click or tap here to enter text.
6.	Are you requesting to use a reservoir yield other than firm yield or safe yield? If yes, please describe, in a bulleted list, each modification requested including how the alternative yield was calculated, which reservoir(s) it applies to, and why the modification is needed or preferrable for drought planning purposes. Examples of alternative reservoir yield analyses may include using an alternative reservoir level, conditional reliability, or other special reservoir operations.
	No
	Choose an item.
	Click or tap here to enter text.
7.	Are you requesting to use a different model (such as a RiverWare or Excel-based models) than RUN 3 of the applicable TCEQ WAM? If yes, please describe the model being considered including how it incorporates water rights and prior appropriation and how it is more conservative than RUN 3 of the applicable TCEQ WAM.
	No
	Choose an item.
	Click or tap here to enter text.

8. Are you requesting to use a modified TCEQ WAM? If yes, please describe in a bulleted list all modifications in detail including all specific changes to the WAM and whether the modified

WAM is more conservative than the TCEQ WAM RUN 3. Examples of WAM modifications may include adding subordination agreements, contracts, updated water rights, modified spring flows, updated lake evaporation, updated sedimentation², system or reservoir operations, or special operational procedures into the WAM.

No

Choose an item.

Click or tap here to enter text.

9. Are you requesting to include return flows in the modeling? If yes, are you doing so to model an indirect reuse water management strategy (WMS)? Please provide complete details regarding the proposed methodology for determining reuse WMS availability.

No

Choose an item.

Click or tap here to enter text.

10. Are any of the requested Hydrologic Variances also planned to be used by another region for the same basin? If yes, please indicate the other Region. Please indicate if unknown.

Unknown

Click or tap here to enter text.

11. Please describe any other variance requests not captured on this checklist or add any other information regarding the variance requests on this checklist.

n/a

² Updating anticipated sedimentation rates does not require a hydrologic variance under 31 TAC § 357.10(14). The Technical Memorandum will require providing details regarding the sedimentation methodology utilized. Please consider providing that information with this request.



P.O. Box 13231, 1700 N. Congress Ave. Austin, TX 78711-3231, www.twdb.texas.gov Phone (512) 463-7847, Fax (512) 475-2053

February 16, 2024

Mark Kirkpatrick Vice Chairman Llano Estacado (Region O) Regional Water Planning Group c/o South Plains Association of Governments 1323 58th Street Lubbock, TX 79412

Dear Vice Chairman Kirkpatrick:

I have reviewed your request dated January 10, 2024, for approval of alternative water supply assumptions to be used in determining existing and future surface water availability. This letter confirms that the TWDB approves the following assumptions that require a variance:

- 1. Conduct analysis using the TCEQ Brazos River Basin WAM as modified by the Brazos G RWPG (Brazos G WAM) for both existing water supply and strategy supply evaluation, as approved by the TWDB for Region G.
- 2. Use limited return flows, as included in the Brazos G WAM, for the evaluation of existing and strategy supplies.
- 3. Use yield values developed by the Panhandle RWPG using the TCEQ Canadian River Basin WAM for determining firm yield of water supplies in the Canadian Basin that support Region O Water User Groups (WUGs), specifically Lake Meredith.
- 4. Use a two-year safe yield for Lake Alan Henry in the evaluation of existing and strategy supply.

Although the TWDB approves the use of a two-year safe yield for developing estimates of Lake Alan Henry, the firm yield must still be reported to TWDB in the online planning database and plan documents.

While the use of these modified conditions may be reasonable for planning purposes, WAM RUN3 would be utilized by the Texas Commission on Environmental Quality for analyzing permit applications. It is acceptable to use the modified conditions for WMS supply evaluations only if the yield produced is more conservative (less) for surface water appropriations than WAM RUN3.

While the TWDB authorizes these modifications to evaluate existing and future water supplies for development of the 2026 Region O RWP, it is the responsibility of the RWPG to

Mr. Mark Kirkpatrick February 16, 2024 Page 2

ensure that the resulting estimates of water availability are reasonable for drought planning purposes and will reflect conditions expected in the event of actual drought conditions; and in all other regards will be evaluated in accordance with the most recent version of regional water planning contract Exhibit C, *General Guidelines for Development of the 2026 Regional Water Plans.*

Please do not hesitate to contact John Maurer of our Regional Water Planning staff at (512) 475-1613 or john.maurer@twdb.texas.gov if you have any questions.

Sincerely,

Matt Nelson Deputy Executive Administrator

c: Kelly Davila, South Plains Association of Governments
Paula Jo Lemonds, HDR
Dr. Ken Rainwater, Region O Secretary-Treasurer
John Maurer, Water Supply Planning
Sarah Lee, Water Supply Planning
Nelun Fernando, Ph.D., Surface Water
Simone Kiel, Freese & Nichols, Inc. (Region A Consultant)
Tony Smith, Carollo Engineers, (Region G Consultant)