Smith County Water Supply Planning Information & Resources

This document summarizes key water supply planning information for Smith County and highlights planning and drought resources available from the Texas Water Development Board (TWDB). This document was developed to support regional water planning group outreach efforts aimed at improving engagement with small and rural entities.



All water utilities in the state are strongly encouraged to participate in the regional water planning process and utilize TWDB resources to ensure sufficient water supplies are available for all Texans in times of drought.

Definitions of common regional water planning terms and acronyms are available at this link.

Future Water Supply Plans

Regional Water Planning

Regional water planning groups are responsible for developing regional water plans every five years based on conditions that the region would face under a recurrence of a historical drought of record. The results of the regional water plans are included in the state water plan and inform state financial assistance and surface water right permitting decisions. The 2026 regional water plans are currently under development and due to the TWDB in October 2025.

Smith County is partially located in the North East Texas (D) Regional Water Planning Area (Figure 1) and the East Texas (I) Regional Water Planning Area (Figure 2).

North East Texas (D) Regional Water Planning

Region D encompasses all or parts of 19 counties in northeast Texas. To get involved in Region D water planning, visit https://rwrd.org/region-d/ or contact the Riverbend Water Resources District at kyledooley@rwrd.org, 903-831-0091.

East Texas (I) Regional Water Planning

Region I encompasses all or parts of 20 counties in east Texas. To get involved in Region I water planning, visit https://www.etexwaterplan.org/ or contact the City of Nacogdoches at regioniwater@gmail.com, 936-559-2607.

2021 Regional Water Plans

The 2021 North East Texas (D) Regional Water Plan and 2021 East Texas (I) Regional Water Plan are available online at http://www.twdb.texas.gov/waterplanning/rwp/plans/2021/index.asp.

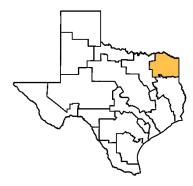


Figure I – North East Texas (D) Regional Water Planning Area

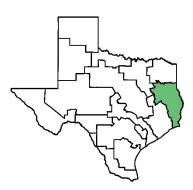


Figure 2 – East Texas (I) Regional Water Planning Area

The following highlights from the 2021 regional water plans are included in Attachment 1

- Table A1 summarizes current water supply sources, 2020 and 2070 water supply needs, and recommended water management strategies for water user groups in Smith County.
- Table A2 provides additional context on the severity of the identified water supply needs by expressing the needs as a percentage of each water user group's total demand. The larger the percent of an entity's total demand, the more severe a potential shortage may be.
- Table A3 presents unmet needs that remain even if all the recommended strategies in the plan were implemented.

Water Providers in Smith County

Municipal Water User Groups

Public water systems provide potable water for public use and have at least 15 service connections or serve at least 25 individuals at least 60 days out of the year. Public water systems that provide more than 100 acre-feet of water per year for municipal use are considered municipal water user groups and are individually planned for in the regional water planning process. Note that some municipal water user groups include more than one public water system. Table I lists the Smith County municipal water user groups for the 2026 regional water plans and associated public water systems that are located in the county.

Table 1. Smith County municipal water user groups and associated public water systems

Water User Group	Associated Public Water Systems(s)
Arp	CITY OF ARP (TX2120001) ^R
Ben Wheeler WSC*	BEN WHEELER WSC (TX2340006) ^R
Bullard*	CITY OF BULLARD (TX2120006) ^R
Carroll WSC*	CARROLL WSC WELL 3 (TX2120007) ^R ; CARROLL WSC WELL 4 (TX2120103)
Crystal Systems Texas	CRYSTAL SYSTEMS (TX2120015)
Dean WSC	DEAN WSC (TX2120009)
East Texas MUD	EAST TEXAS MUD OF SMITH COUNTY (TX2120005)R
Emerald Bay MUD	EMERALD BAY MUD (TX2120105)R
Jackson WSC	JACKSON WSC (TX2120016)
Liberty City WSC*	LIBERTY CITY WSC (TX0920016)R
Liberty Utilities Silverleaf Water*	BIG EDDY (TX2120037)
Lindale	CITY OF LINDALE (TX2120002) ^R
Lindale Rural WSC	LINDALE RURAL WSC (TX2120017); LINDALE RURAL WSC DC (TX2120011) ^R
Overton*	CITY OF OVERTON (TX2010002) ^R
Pine Ridge WSC*	PINE RIDGE WSC SOUTH (TX2120019) ^R
R P M WSC*	R P M WSC (TX2340016) ^{R**}
Sand Flat WSC	SAND FLAT WSC (TX2120020) ^R
Southern Utilities*	SOUTHERN UTILITIES (TX2120063)
Star Mountain WSC	STAR MOUNTAIN WSC (TX2120021) ^R

Water User Group	Associated Public Water Systems(s)				
Starrville-Friendship WSC*	STARRVILLE-FRIENDSHIP WSC (TX2120012)R				
Troup*	CITY OF TROUP (TX2120003)R				
Tyler	CITY OF TYLER (TX2120004)				
Walnut Grove WSC*	WALNUT GROVE WSC (TX2120024)				
West Gregg SUD*	WEST GREGG SUD (TX0920022) ^R				
Whitehouse	CITY OF WHITEHOUSE (TX2120025)R				
Winona	CITY OF WINONA (TX2120026) ^R				
Wright City WSC*	WRIGHT CITY WSC 1 (TX2120027) ^R ; WRIGHT CITY WSC 2 (TX2120099) ^R				

^R Public water system meets the definition of a rural political subdivision as defined in Texas Water Code 15.001(14).

County-Other Water Systems

County-other water systems are a subset of public water systems that provide on average less than 100 acrefeet of water per year for municipal use. For TWDB planning purposes, the following systems will be grouped together and planned for under the County-Other, Smith water user group category in the 2026 regional water plans:

- COMMUNITY WATER CO MONTGOMERY GARDEN (TX2120008)
- EAST LAKE WOODS (TX2120097)**
- ENCHANTED LAKES WATER SYSTEM (TX2120045)**
- GARDEN VALLEY RESORT (TX2120081)**
- HEIGHTS WATER (TX2120051)**
- LAKEWAY HARBOR SUBDIVISION (TX2120064)
- MOUNT SYLVAN WATER SYSTEM (TX2120034)**

- PINE TRAIL SHORES (TX2120035)
- SOUTHPARK MOBILE HOME ESTATES (TX2120062)
- STALLION LAKE RANCH (TX2120104)**
- STARRVILLE WSC (TX2120100)^R
- THE RESERVE (TX2120107)**
- TWIN OAKS RANCH (TX2120056)**
- WWWW WATER SYSTEM (TX2120077)**

^{*} Water user group is split by more than one county. Public water systems associated with the water user group and located in Smith County are shown.

^{**} Current records show that the public water system did not submit a water use survey response in 2023.

^R Public water system meets the definition of a rural political subdivision as defined in Texas Water Code 15.001(14).

^{**} Current records show that the public water system did not submit a water use survey response in 2023.

Status of Water Systems and Supply

This section highlights potentially vulnerable water systems in Smith County that serve a population of 7,500 or less and rely on a single water source and systems that have recently reported having 180 days or less of available supply.

Entities that are identified as 7,500 / sole source

The following entities were identified in the 2021 regional water plans as having a 2010 population less than 7,500 and relying on a sole source for their water supply regardless of whether that water is provided by a wholesale water provider. These entities are highlighted since they may be more vulnerable in times of drought or in the event of a loss of water supply.

- Algonquin Water Resources of Texas*
- Arp
- Ben Wheeler WSC*
- Bullard*
- Carroll WSC
- Dean WSC
- Emerald Bay MUD
- Jackson WSC
- Lindale
- Pine Ridge WSC*
- Sand Flat WSC
- Star Mountain WSC
- Troup*
- Winona
- Wright City WSC*

The 2021 regional water plans present potential emergency response options for entities with populations less than 7,500 that rely on a sole source and county-other water user groups in the region. Emergency response options could potentially include addition of a local groundwater well, trucking in water, importing supply from a nearby entity, or utilizing existing emergency interconnects. For the temporary emergency response options identified for entities in Smith County, see Chapter 7 of the 2021 North East Texas (D) Regional Water Plan and 2021 East Texas (I) Regional Water Plan.

180-day Priority List occurrences

Retail public utilities are required by the Texas Commission on Environmental Quality (TCEQ) to report when the utility is reasonably certain that its water supply will be available for less than 180 days. Between January 2016 and November 2023, the following public water systems in Smith County reported to TCEQ as having approximately 180 days or less of water supply remaining:

• Crystal Systems (TX2120015)

^{*} Water user group is split by more than one county.

Key TWDB Resources for Water Planning & Drought

Interactive State Water Plan

The online Interactive State Water Plan provides access to detailed planning data presented at varying geographic levels, through maps, tables, and additional graphics. Users can customize what they see, for example, by selecting data associated with a specific water use category or from a specific planning decade. The displayed data is also downloadable in a spreadsheet format.

To explore detailed planning data for Smith County in the Interactive State Water Plan, visit https://texasstatewaterplan.org/.

Texas Water Service Boundary Viewer

The Texas Water Service Boundary Viewer (TWSBV) is a public water system service area mapping application that strives to provide the most up-to-date and best data available on the service areas for all community public water systems within Texas. The TWSBV also provides links to supplemental public water system information, including system specific data from the Drinking Water Watch (maintained by the TCEQ) as well as water use survey information.

The application is used to collect accurate retail water service boundaries to better estimate and project utility population and rural population not served by a system for the regional and state water plans.





Water systems are encouraged to use the application to verify that their service area boundaries on file are accurate and update them if changes have occurred. Information for editors (utilities) is available at: http://bit.ly/ServiceBoundaryEditor.

The public can view water system areas on file at https://www2.twdb.texas.gov/apps/WaterServiceBoundaries.

Water Use Survey

The TWDB is legislatively directed to provide planning and financial assistance for the development and management of water resources in Texas. This activity is dependent upon the accuracy and completeness of the information that water users provide in the annual Water Use Survey.

The TWDB annually collects and maintains information concerning current state water use in various reports accessible here: https://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates



TWDB Water Loss Resources

Reducing water loss offers utilities the ability to increase their water use efficiency, improve their financial status, and assist with long-term water sustainability. Currently, all retail public water systems with more than 3,300 connections or a financial obligation to TWDB are required to annually complete and submit a Water Loss Audit. All other retail public water suppliers are required to submit a water loss audit to the TWDB every five years. Water loss audits are required to be submitted by an individual trained in water loss auditing.

Water loss audits help determine the appropriate actions for water loss control but, only if the water loss audit data is validated. Starting in 2025, a Water Loss Audit is required to be validated if the utility has an existing financial obligation to TWDB or is applying financial assistance from TWDB. Visit the TWDB Water Loss Audit Validation webpage for more information.

TWDB staff are available to provide water loss audit assistance and work with utility staff to better understand how water loss audits can benefit their utility. For more information on leak detection, how to collect and report accurate data, and data validation, visit https://www.twdb.texas.gov/conservation/municipal/waterloss/.

TWDB Drought Resources

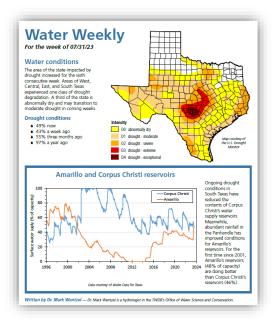
The TWDB offers a variety of resources to assist Texans with drought response and preparedness on the TWDB Drought Resources webpage, including

<u>Water Data for Texas</u>: Water Data for Texas provides information on reservoir storage levels, lake evaporation and precipitation, and water levels at the automated groundwater level wells among other types of information.

<u>Drought Dashboard</u>: The TWDB's drought dashboard provides information on conditions across the state, including rainfall, temperature, streamflow, and soil moisture as well as various drought indices and U.S. Drought Monitor status.

Water Weekly: Water weekly provides a weekly summary of drought conditions across the state.

<u>Texas Water Conditions Report</u>: Report provides a monthly summary of the state's drought and water conditions.



TWDB Financial Assistance Programs

The TWDB offers a variety of cost-effective loan and grant programs that provide for the planning, acquisition, design, and construction of water related infrastructure and other water quality improvements. <u>Urgent need funding is available through the Drinking Water State Revolving Fund</u> to assists communities with addressing unforeseen situations that require immediate attention to protect public health and safety.

For more information about TWDB financial assistance programs, visit http://www.twdb.texas.gov/financial/, or contact TWDB at 512-463-0991, Financial_Assistance@twdb.texas.gov.

Texas Division of Emergency Management (TDEM)

The TDEM coordinates the state emergency management program, which is intended to ensure the state and its local governments respond to and recover from emergencies and disasters and implement plans and programs to help prevent or lessen the impact of emergencies and disasters. The chief of TDEM is the state drought manager and is responsible for managing and coordinating the drought response component of the state water plan. For more information, visit https://www.tdem.texas.gov/ or contact 512-424-2208.

Texas Commission on Environmental Quality (TCEQ)

The TCEQ provides hands-on assistance to communities responding to drought, consults with public water systems about implementing drought contingency plans, tracks public drinking water systems under water-use restrictions, actively manages water in Watermaster Programs, answers the public drought-information hot line: 800-447-2827, and offers drought information on its website: https://www.tceq.texas.gov/response/drought.

In the event of a drinking water emergency, contact your <u>TCEQ regional office</u>. For after-hours emergencies, call 1-888-777-3186.

Attachment I -2021 Regional Water Plan Summary Tables

Table A1. Smith County planning summary

	y pianning summary	2020	2070	
		2020 Water Need	2070 Water Need	
	Cumant Matan Suzzlu			Recommended Water
Maton I Ison Chaup	Current Water Supply Sources	(acre-	(acre-	Management Strategies
Water User Group	Sources	feet/year)	feet/year)	Management Strategies
Algonquin Water Resources of Texas*	Coming Mileon Aquifor	0	0	None
Resources of Texas	Carrizo-Wilcox Aquifer	U	U	
A	Coming Mileon Aquifor	0	0	Municipal conservation;
Arp Ben Wheeler WSC*	Carrizo-Wilcox Aquifer Carrizo-Wilcox Aquifer	0	0	New major reservoir None
pell vylleeler vy3C	Carrizo-vviicox Aquilei	U	0	Municipal conservation;
Bullard*	Carrizo-Wilcox Aquifer	141	1,182	Other surface water
Carroll WSC	Carrizo-Wilcox Aquifer	0	0	None
Carroll VV3C		U	U	None
	Carrizo-Wilcox Aquifer; Gladewater			
	Lake/Reservoir;			
	Palestine			
	Lake/Reservoir; Queen			
	City Aquifer; Tyler			
County-Other, Smith	Lake/Reservoir	0	0	None
County-Other, Similar	Lake/Reservoii	<u> </u>	•	Groundwater wells and
				other; Municipal
Crystal Systems				conservation; Other
Texas	Carrizo-Wilcox Aquifer	0	816	surface water
Dean WSC	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
Emerald Bay MUD	Carrizo-Wilcox Aquifer	0	0	None
	Bellwood			
	Lake/Reservoir;			
	Carrizo-Wilcox Aquifer;			
	Neches Run-of-River;			
	Palestine			
	Lake/Reservoir; Queen			
Irrigation, Smith	City Aquifer	0	0	None
Jackson WSC	Carrizo-Wilcox Aquifer	0	0	New major reservoir
Liberty City WSC*	Carrizo-Wilcox Aquifer	0	0	None
				Groundwater wells and
				other; Municipal
				conservation; Other
Lindale	Carrizo-Wilcox Aquifer	70	1,833	surface water
Lindale Rural WSC	Carrizo-Wilcox Aquifer	0	0	None
	Neches Livestock Local			
	Supply; Queen City			
Livestock, Smith	Aquifer	0	0	None
	Carrizo-Wilcox Aquifer;			
	Other Aquifer; Palestine			
	Lake/Reservoir; Queen			
	City Aquifer; Tyler		_	
Manufacturing, Smith	Lake/Reservoir	0	84	Other surface water

		2020	2070	
		Water Need	Water Need	
	Current Water Supply	(acre-	(acre-	Recommended Water
Water User Group	Sources	feet/year)	feet/year)	Management Strategies
	Carrizo-Wilcox Aquifer;	, ,	, ,	3
	Other Aquifer; Queen			
Mining, Smith	City Aquifer	0	0	Other surface water
<u> </u>				Groundwater wells and
				other; Municipal
Overton*	Carrizo-Wilcox Aquifer	70	416	conservation
Pine Ridge WSC*	Carrizo-Wilcox Aquifer	0	0	None
_	Carrizo-Wilcox Aquifer;			Groundwater wells and
R P M WSC*	Queen City Aquifer	0	217	other
Sand Flat WSC	Carrizo-Wilcox Aquifer	0	0	None
	Carrizo-Wilcox Aquifer;			Groundwater wells and
Smith County MUD I	Queen City Aquifer	0	609	other
	Carrizo-Wilcox Aquifer;			
	Palestine			
	Lake/Reservoir; Tyler			
Southern Utilities*	Lake/Reservoir	71	98	Municipal conservation
				Groundwater wells and
Star Mountain WSC	Carrizo-Wilcox Aquifer	20	148	other
Starrville-Friendship				Groundwater wells and
WSC*	Carrizo-Wilcox Aquifer	0	37	other
				Municipal conservation;
Troup*	Carrizo-Wilcox Aquifer	0	0	New major reservoir
	Carrizo-Wilcox Aquifer;			
	Palestine			
	Lake/Reservoir; Tyler		_	
Tyler	Lake/Reservoir	0	0	Municipal conservation
	Carrizo-Wilcox Aquifer;			
	Jacksonville			
	Lake/Reservoir;			
	Palestine			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Lake/Reservoir; Tyler	•	_	
Walnut Grove WSC	Lake/Reservoir	0	0	None
West Gregg SUD*	Carrizo-Wilcox Aquifer	0	0	None
	Carrizo-Wilcox Aquifer;			
	Palestine			Naw majan masamisir
Whitehouse	Lake/Reservoir; Tyler Lake/Reservoir	0	257	New major reservoir; Other surface water
vviliteriouse	Lake/Neservoir	U	257	Groundwater wells and
Minone	Camiza Wileau Aguifea	0	81	other
Winona	Carrizo-Wilcox Aquifer	U	Ø1	
\\/\night City \\/\C*	Camiza Wileau Aguifea	0	120	Groundwater wells and
Wright City WSC*	Carrizo-Wilcox Aquifer	0	120	other

^{*} Water user group is split by more than one county. Table presents the water user group's total summary data for all related counties.

Table A2. Smith County projected needs of every water user group, as a share of total demand (percent)

Water User Group	2020	2030	2040	2050	2060	2070
Algonquin Water Resources of Texas*	-	-	-	-	-	-
Arp	-	-	-	-	-	-
Ben Wheeler WSC*	•	-	•	•	-	-
Bullard*	19	36	47	55	61	66
Carroll WSC	-	-	-	-	-	-
County-Other, Smith	•	-	•	•	-	-
Crystal Systems Texas	-	-	-	7	19	30
Dean WSC	-	-	-	-	-	-
Emerald Bay MUD	-	-	-	-	-	-
Irrigation, Smith	-	-	-	-	-	-
Jackson WSC	-	-	-	-	-	-
Liberty City WSC*	-	-	-	-	-	-
Lindale	5	23	35	44	52	60
Lindale Rural WSC	-	-	-	-	-	-
Livestock, Smith	•	-	•	•	-	-
Manufacturing, Smith	-	3	3	3	3	3
Mining, Smith	-	-	-	-	-	-
Overton*	12	20	26	33	39	44
Pine Ridge WSC*	-	-	-	-	-	_
R P M WSC*	-	9	19	28	34	39
Sand Flat WSC	•	-	•	•	-	-
Smith County MUD I	•	-	I	13	24	35
Southern Utilities*	1	- 1	- 1	1	- 1	1
Star Mountain WSC	9	15	22	29	35	41
Starrville-Friendship WSC*	•	-	•	•	- 1	10
Troup*	•	-	-	-	-	-
Tyler	•	-	•	•	-	-
Walnut Grove WSC	•	-	•	•	-	-
West Gregg SUD*	-	-	-	-	-	-
Whitehouse	-	-	-	-	2	12
Winona	-	-	-	- 11	22	32
Wright City WSC*	-	-	-	5	13	20

 $^{^{*}}$ Water user group is split by more than one county. Table presents the water user group's total data for all related counties.

Color graded scale of needs as a share of demand from 0 (green) to 100 percent (red). **Bold** indicates needs are 100 percent met by implementation of the plan.

Table A3. Smith County unmet needs (acre-feet per year)

Water User Group	2020	2030	2040	2050	2060	2070
Bullard*	130	0	0	0	0	0
Overton*	62	0	0	0	0	0

^{*} Water user group is split by more than one county. Table presents the water user group's total unmet needs for all related counties.



Texas Water Development Board 1700 North Congress Avenue, Austin, Texas 78701 512-463-7847

www.twdb.texas.gov