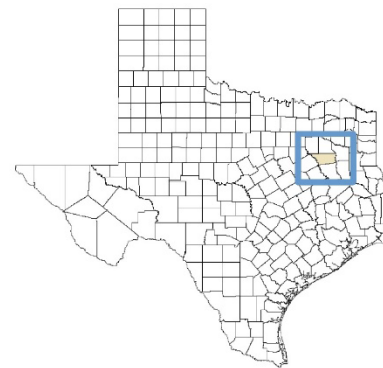


Henderson County Water Supply Planning Information & Resources



This document summarizes key water supply planning information for Henderson 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.

Henderson County is partially located in the Region C Regional Water Planning Area (Figure 1) and the East Texas (I) Regional Water Planning Area (Figure 2).

Region C Regional Water Planning

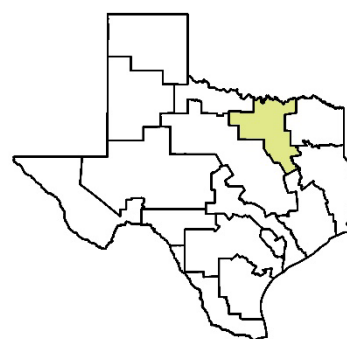
Region C encompasses all or parts of 16 counties in north Texas. To get involved in Region C water planning, visit <https://regioncwater.org/> or contact the Trinity River Authority at longas@trinityra.org, 817-467-4343.

East Texas (I) Regional Water Planning

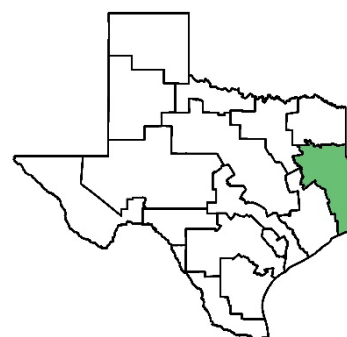
Region I encompasses all or parts of 20 counties in east Texas. To get involved in Region I water planning, visit <https://www.etexwaterplan.org/> or contact the City of Nacogdoches at regioniwater@gmail.com, 936-559-2607.

2021 Regional Water Plans

The 2021 Region C 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 1 – Region C
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 I

- Table A1 summarizes current water supply sources, 2020 and 2070 water supply needs, and recommended water management strategies for water user groups in Henderson 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 Henderson 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 Henderson County municipal water user groups for the 2026 regional water plans and associated public water systems that are located in the county.

Table I. Henderson County municipal water user groups and associated public water systems

Water User Group	Associated Public Water Systems(s)
Athens	CITY OF ATHENS (TX1070005) ^R
B B S WSC*	B B S WSC (TX0010015) ^{R**}
Berryville*	CITY OF BERRYVILLE (TX1070205) ^R
Bethel Ash WSC*	BETHEL ASH WSC BETHEL PLANT (TX1070034) ^R ; BETHEL ASH WSC DOUGLAS PLANT (TX1070238) ^R ; BETHEL ASH WSC HALL PLANT (TX1070239) ^R ; BETHEL ASH WSC HAWN PLANT (TX1070248) ^R ; BETHEL ASH WSC LAKE PLANT (TX1070258); BETHEL ASH WSC LOWE PLANT (TX1070240) ^R ; BETHEL ASH WSC MCATEE PLANT (TX1070241) ^R ; BETHEL ASH WSC MURPHY PLANT (TX1070242) ^R ; BETHEL ASH WSC OTT PLANT (TX1070255); BETHEL ASH WSC WALTON PLANT (TX1070243) ^R ; BETHEL ASH WSC WATER EDGE PLANT (TX1070251) ^R
Brownsboro	CITY OF BROWNSBORO (TX1070003) ^R
Brushy Creek WSC*	BRUSHY CREEK WSC (TX0010036) ^R
Chandler	CITY OF CHANDLER (TX1070006) ^{R**}
Crescent Heights WSC	CRESCENT HEIGHTS WSC (TX1070016) ^R
Dogwood Estates Water	LAKESHORE UTILITY (TX1070043) ^{**}
East Cedar Creek FWSD	EAST CEDAR CREEK FWSD B A MCKAY (TX1070019) ^R ; EAST CEDAR CREEK FWSD BROOKSHIRE (TX1070167) ^R
Edom WSC*	EDOM WSC (TX2340009) ^R
Eustace	CITY OF EUSTACE (TX1070020) ^R

Water User Group	Associated Public Water Systems(s)
Frankston*	CITY OF FRANKSTON DOWNTOWN PLANT (TX0010002) ^R
Leagueville WSC	LEAGUEVILLE WSC (TX1070025) ^R
Log Cabin	CITY OF LOG CABIN (TX1070121) ^{R**}
Mabank*	CITY OF MABANK (TX1290005) ^R
Malakoff	CITY OF MALAKOFF (TX1070002) ^R
Moore Station WSC	MOORE STATION WSC (TX1070055) ^R
Murchison	CITY OF MURCHISON (TX1070027) ^{R**}
R P M WSC*	R P M WSC (TX2340016) ^{R**}
Trinidad	CITY OF TRINIDAD (TX1070004) ^R
Virginia Hill WSC	VIRGINIA HILL WSC (TX1070200) ^R
West Cedar Creek MUD*	WEST CEDAR CREEK MUD (TX1070190) ^R

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

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

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

County-Other Water Systems

County-other water systems are a subset of public water systems that provide on average less than 100 acre-feet 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, Henderson water user group category in the 2026 regional water plans:

- ATHENS WATER SYSTEM COOP (TX1070235)**
- BEACHWOOD ESTATES & NORTH TRINIDAD (TX1070069)
- BRIARWOOD HARBOR (TX1070220)
- C R C WSC (TX1070228)^{R**}
- CANEY COVE WATER SYSTEM (TX1070038)
- CAPE TRANQUILITY SYSTEM (TX1070176)**
- CAROLYNN ESTATES (TX1070106)
- CARRIZO WATER CORP FOREST GROVE (TX1070074)**
- CEDARVIEW ESTATES (TX1070144)**
- CHEROKEE SHORES WATER SUPPLY (TX1070206)
- CITY OF STAR HARBOR (TX1070150)^R
- CLEAR CREEK RESORT WATER SYSTEM (TX1070007)**
- DAL HIGH WATER SYSTEM (TX1070159)
- DIXIE ISLE WATER SYSTEM (TX1070041)**
- ESQUIRE ESTATES II (TX1070215)**
- FLAT CREEK COVE PROPERTY OWNERS ASSOCIAT (TX1070155)
- HIDDEN ACRES WATER SYSTEM (TX1070202)
- HIGH POINT WATER CO (TX1070233)**
- HIGHSAW (TX1070124)
- LAKE PALESTINE WATER (TX1070198)**
- LAKE UTILITY CO (TX1070059)**
- LAKE VIEW MGMT & DEVELOPMENT DIST LONG C (TX1070254)
- LAKE VISTA VILLAGE (TX1070181)**

- LAKEWOOD WATER EAST (TX1070009)
- LAKEWOOD WATER WEST (TX1070052)
- LOLLIPOP WATER WORKS (TX1070039)
- OAKWOOD SUBDIVISION WATER SYSTEM (TX1070217)
- PAYNE SPRINGS WSC (TX1070119)^R
- PHOENIX WATER WORKS (TX1070211)**
- POINT LA VISTA (TX1070207)**
- POINT ROYAL WSC (TX1070151)
- POYNOR COMMUNITY WSC (TX1070234)^{R**}
- SAFARI WATER SYSTEM (TX1070247)**
- STAY A WHILE RV PARK (TX1070249)**
- THREE COMMUNITY WSC (TX1070071)^{R**}
- WESTWOOD BEACH (TX1070085)

^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 Henderson 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.

- B B S WSC*
- Berryville
- Brownsboro
- Brushy Creek WSC*
- Chandler
- Crescent Heights WSC
- Dogwood Estates Water
- Edom WSC*
- Eustace
- Frankston*
- Leagueville WSC
- Moore Station WSC
- Murchison
- Trinidad

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

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 Henderson County, see [Chapter 7](#) of the 2021 Region C 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

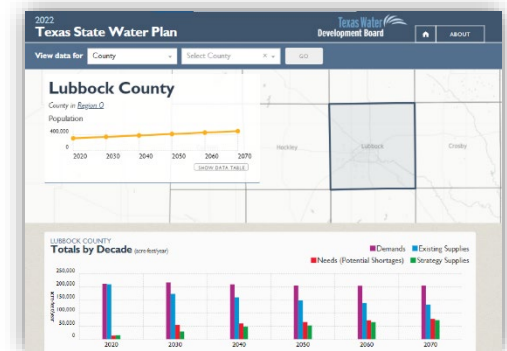
2016 and November 2023, no public water systems in Henderson County reported having approximately 180 days or less of water supply remaining.

Key TWDB Resources for Water Planning & Drought

Interactive State Water Plan

The online [Interactive State Water Plan](https://texasstatewaterplan.org/) 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.

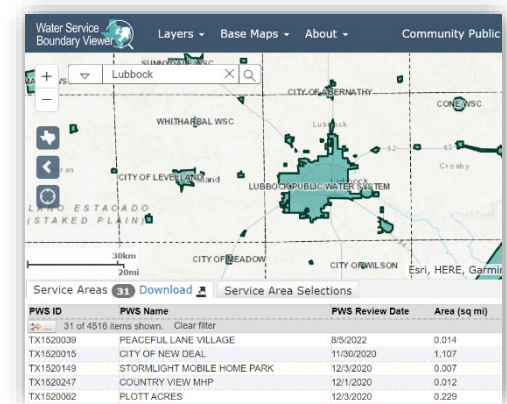
To explore detailed planning data for Henderson County in the Interactive State Water Plan, visit <https://texasstatewaterplan.org/>.



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.



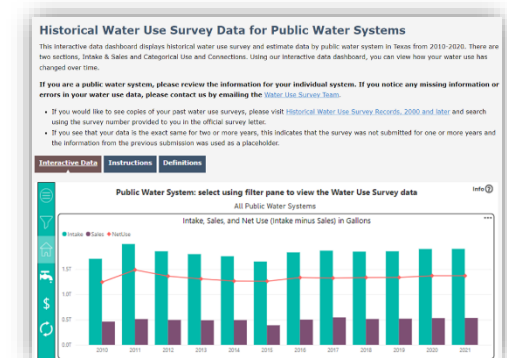
Water systems are encouraged to use the application to verify that their service area boundaries on file are accurate and update them if changes have occurred. Information for editors (utilities) is available at: <http://bit.ly/ServiceBoundaryEditor>.

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

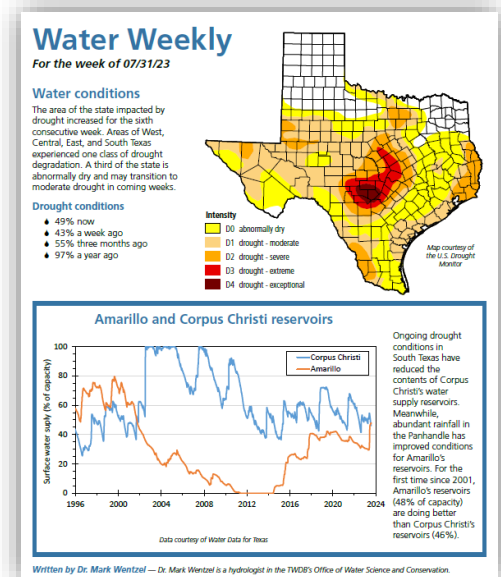
The TWDB offers a variety of resources to assist Texans with drought response and preparedness on the [TWDB Drought Resources webpage](#), including

[Water Data for Texas](#): 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.

[Drought Dashboard](#): 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.

[Texas Water Conditions Report](#): 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. [Urgent need funding is available through the Drinking Water State Revolving Fund](#) to assist 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 [TCEQ regional office](#). For after-hours emergencies, call 1-888-777-3186.

Attachment I – 2021 Regional Water Plan Summary Tables

Table A1. Henderson County planning summary

Water User Group	Current Water Supply Sources	2020 Water Need (acre-feet/year)	2070 Water Need (acre-feet/year)	Recommended Water Management Strategies
Athens	Athens Lake/Reservoir; Carrizo-Wilcox Aquifer	7	3,963	Groundwater wells and other; Indirect reuse; Municipal conservation
B B S WSC*	Carrizo-Wilcox Aquifer	0	0	None
Berryville	Carrizo-Wilcox Aquifer	0	0	None
Bethel Ash WSC*	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
Brownsboro	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
Brushy Creek WSC*	Carrizo-Wilcox Aquifer	0	0	None
Chandler	Carrizo-Wilcox Aquifer	0	118	Groundwater wells and other; Municipal conservation; Other surface water
County-Other, Henderson	Carrizo-Wilcox Aquifer; Other Aquifer; TRWD Lake/Reservoir System	0	24	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; Municipal conservation; New major reservoir; Other surface water
Crescent Heights WSC	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
Dogwood Estates Water	Carrizo-Wilcox Aquifer	0	151	Groundwater wells and other; Municipal conservation
East Cedar Creek FWSD	TRWD Lake/Reservoir System	196	1,133	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; Municipal conservation; New major reservoir; Other surface water
Edom WSC*	Carrizo-Wilcox Aquifer	13	64	Groundwater wells and other
Eustace	Carrizo-Wilcox Aquifer	0	156	Groundwater wells and other; Municipal conservation
Frankston*	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
Irrigation, Henderson	Athens Lake/Reservoir; Carrizo-Wilcox Aquifer; Direct Reuse; Palestine Lake/Reservoir; Queen City Aquifer; Trinity Run-of-River	0	50	Groundwater wells and other; Indirect reuse
Leagueville WSC	Carrizo-Wilcox Aquifer	0	0	None

Water User Group	Current Water Supply Sources	2020 Water Need (acre-feet/year)	2070 Water Need (acre-feet/year)	Recommended Water Management Strategies
Livestock, Henderson	Athens Lake/Reservoir; Carrizo-Wilcox Aquifer; Neches Livestock Local Supply; Queen City Aquifer; Trinity Livestock Local Supply	403	403	Groundwater wells and other; Indirect reuse
Mabank*	TRWD Lake/Reservoir System	706	4,735	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; Municipal conservation; New major reservoir; Other surface water
Malakoff	Carrizo-Wilcox Aquifer; TRWD Lake/Reservoir System	0	26	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; Municipal conservation; New major reservoir; Other surface water
Manufacturing, Henderson	Athens Lake/Reservoir; Carrizo-Wilcox Aquifer	0	0	None
Mining, Henderson	Carrizo-Wilcox Aquifer; Other Aquifer; TRWD Lake/Reservoir System	10	30	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; New major reservoir; Other surface water
Moore Station WSC	Carrizo-Wilcox Aquifer	0	111	Groundwater wells and other
Murchison	Carrizo-Wilcox Aquifer	0	0	None
R P M WSC*	Carrizo-Wilcox Aquifer; Queen City Aquifer	0	217	Groundwater wells and other
Steam-Electric Power, Henderson	Trinidad Lake/Reservoir; TRWD Lake/Reservoir System	0	263	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; New major reservoir; Other surface water
Trinidad	Trinidad City Lake/Reservoir	0	0	Municipal conservation
Virginia Hill WSC	Carrizo-Wilcox Aquifer	0	0	Municipal conservation
West Cedar Creek MUD*	TRWD Lake/Reservoir System	0	862	Aquifer storage and recovery; Groundwater wells and other; Indirect reuse; Municipal conservation; New major reservoir; Other surface water

* 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. Henderson County projected needs of every water user group, as a share of total demand (percent)

Water User Group	2020	2030	2040	2050	2060	2070
Athens	-	-	-	1	22	41
B B S WSC*	-	-	-	-	-	-
Berryville	-	-	-	-	-	-
Bethel Ash WSC*	-	-	-	-	-	-
Brownsboro	-	-	-	-	-	-
Brushy Creek WSC*	-	-	-	-	-	-
Chandler	-	-	-	-	-	10
County-Other, Henderson	-	2	5	4	-	7
Crescent Heights WSC	-	-	-	-	-	-
Dogwood Estates Water	-	-	3	10	29	44
East Cedar Creek FWSD	15	23	31	38	44	50
Edom WSC*	9	13	16	21	26	32
Eustace	-	-	-	22	40	50
Frankston*	-	-	-	-	-	-
Irrigation, Henderson	-	-	-	-	3	6
Leagueville WSC	-	-	-	-	-	-
Livestock, Henderson	18	18	18	18	18	18
Mabank*	36	41	45	59	70	79
Malakoff	-	1	2	3	5	8
Manufacturing, Henderson	-	-	-	-	-	-
Mining, Henderson	2	6	4	5	6	6
Moore Station WSC	-	-	-	-	14	32
Murchison	-	-	-	-	-	-
R P M WSC*	-	9	19	28	34	39
Steam-Electric Power, Henderson	-	2	4	5	6	7
Trinidad	-	-	-	-	-	-
Virginia Hill WSC	-	-	-	-	-	-
West Cedar Creek MUD*	-	12	22	30	35	40

* 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. Henderson County unmet needs (acre-feet per year)

Water User Group	2020	2030	2040	2050	2060	2070
Mining, Henderson	10	0	0	0	0	0



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