# **Hidalgo County** Water Supply Planning Information & Resources

This document summarizes key water supply planning information for Hidalgo 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.



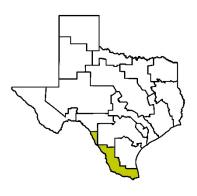
All water utilities in the state are strongly encouraged to participate in the regional water planning process and utilize TWDB resources to ensure sufficient water supplies are available for all Texans in times of drought.

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

### Future Water Supply Plans

### Rio Grande (M) Regional Water Planning

Hidalgo County is located in the Rio Grande (M) Regional Water Planning Area, which encompasses eight counties within the middle and lower Rio Grande Valley (Figure 1). The Rio Grande (M) Regional Water Planning Group is responsible for developing a regional water plan 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 plan are included in the state water plan and inform state financial assistance and surface water right permitting decisions. The 2026 plan is currently under development and due to the TWDB in October 2025.



Public involvement is a key component to regional water planning. To ensure your water needs are accurately reflected in the 2026 plan, get involved in Region M water planning by visiting <a href="http://www.riograndewaterplan.org/">http://www.riograndewaterplan.org/</a> or contact the Lower Rio Grande Valley Development Council at <a href="mailto:vramos@lrgvdc.org">vramos@lrgvdc.org</a>, 956-682-3481.

Figure I - Rio Grande (M) Regional Water Planning Area

### 2021 Rio Grande (M) Regional Water Plan

The 2021 Rio Grande (M) Regional Water Plan is available at http://www.twdb.texas.gov/waterplanning/rwp/plans/2021/index.asp.

The following highlights from the plan 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 Hidalgo 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 Hidalgo 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 Hidalgo County municipal water user groups for the 2026 regional water plan and associated public water systems that are located in the county.

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

Water User Group	Associated Public Water Systems(s)
Agua SUD*	AGUA SUD (TX1080022)
Alamo	CITY OF ALAMO (TX1080001)
Donna	CITY OF DONNA (TX1080002)
Edcouch	CITY OF EDCOUCH (TX1080003)R
Edinburg	CITY OF EDINBURG (TX1080004)
Elsa	CITY OF ELSA (TX1080005) <sup>R</sup>
Hidalgo	CITY OF HIDALGO (TX1080021)
Hidalgo County MUD I	HIDALGO COUNTY MUD I (TX1080088)
La Joya	CITY OF LA JOYA (TX1080213)R
La Villa	CITY OF LA VILLA (TX1080023)R
McAllen	MCALLEN PUBLIC UTILITY (TX1080006)
Mercedes	CITY OF MERCEDES (TX1080007)
Military Highway WSC*	MILITARY HWY WSC PROGRESO (TX1080234); MILITARY HWY WSC WESLACO (TX1080235)
Mission	CITY OF MISSION (TX1080008)
North Alamo WSC*	NORTH ALAMO WSC (TX1080029)
Pharr	CITY OF PHARR (TX1080009)
San Juan	CITY OF SAN JUAN (TX1080010)
Sharyland WSC	SHARYLAND WSC (TX1080033)
Weslaco	CITY OF WESLACO (TX1080011)

<sup>&</sup>lt;sup>R</sup> Public water system meets the definition of a rural political subdivision as defined in <u>Texas Water Code 15.001(14)</u>.

### **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, Hidalgo water user group category in the 2026 regional water plan:

LLANO GRANDE LAKE PARK EAST (TX1080034)\*\*

<sup>\*</sup> Water user group is split by more than one county. Public water systems associated with the water user group and located in Hidalgo County are shown.

- LLANO GRANDE LAKE PARK WEST (TX1080236)\*\*\*
- QUIET VILLAGE II (TX1080221)
- TRAILS END MOBILE HOME PARK (TX1080223)\*\*\*

### Status of Water Systems and Supply

This section highlights potentially vulnerable water systems in Hidalgo 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 Rio Grande (M) Regional Water Plan 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.

- Edcouch
- Elsa
- Hidalgo County MUD I
- La Joya
- La Villa

The 2021 Rio Grande (M) Regional Water Plan presents 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 Hidalgo County, see <a href="Chapter 7">Chapter 7</a> of the 2021 Rio Grande (M) 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 Hidalgo County reported to TCEQ as having approximately 180 days or less of water supply remaining:

• City of Elsa (TX1080005)

<sup>\*\*</sup> Current records show that the public water system did not submit a water use survey response in 2023.

### 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 Hidalgo County in the Interactive State Water Plan, visit <a href="https://texasstatewaterplan.org/">https://texasstatewaterplan.org/</a>.

### **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: <a href="http://bit.ly/ServiceBoundaryEditor">http://bit.ly/ServiceBoundaryEditor</a>.

The public can view water system areas on file at <a href="https://www2.twdb.texas.gov/apps/WaterServiceBoundaries">https://www2.twdb.texas.gov/apps/WaterServiceBoundaries</a>.

#### 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: <a href="https://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates">https://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates</a>



### **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 <a href="Water Loss Audit">Water Loss Audit</a>. 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 <a href="trained">trained</a> 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 <a href="https://www.twdb.texas.gov/conservation/municipal/waterloss/">https://www.twdb.texas.gov/conservation/municipal/waterloss/</a>.

### **TWDB Drought Resources**

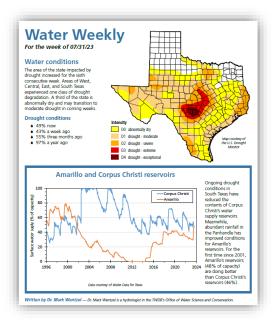
The TWDB offers a variety of resources to assist Texans with drought response and preparedness on the TWDB Drought Resources webpage, including

<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 <a href="http://www.twdb.texas.gov/financial/">http://www.twdb.texas.gov/financial/</a>, or contact TWDB at 512-463-0991, <a href="mailto:Financial\_Assistance@twdb.texas.gov">Financial\_Assistance@twdb.texas.gov</a>.

### 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 <a href="https://www.tdem.texas.gov/">https://www.tdem.texas.gov/</a> 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: <a href="https://www.tceq.texas.gov/response/drought">https://www.tceq.texas.gov/response/drought</a>.

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 Rio Grande (M) Regional Water Plan Summary Tables

Table A1. Hidalgo County planning summary

i able Al. midaigo	County planning summary		2272	
		2020	2070	
		Water Need	Water Need	
Water User	Current Water Supply	(acre-	(acre-	Recommended Water
Group	Sources	feet/year)	feet/year)	Management Strategies
				Direct potable reuse;
				Drought management;
	Amistad-Falcon			Municipal conservation;
Agua SUD*	Lake/Reservoir System	0	6,881	Other surface water
<u> </u>	,		·	Drought management;
				Groundwater desalination;
	Amistad-Falcon			Groundwater wells and
	Lake/Reservoir System;			other; Municipal
	Gulf Coast Aquifer			conservation; Other surface
Alamo	System	1,014	4,570	water
Alaino	Amistad-Falcon	1,011	1,570	Water
	Lake/Reservoir System;			
County Othon	,			Municipal concernations
County-Other,	Gulf Coast Aquifer	604	4712	Municipal conservation;
Hidalgo	System	60 <del>4</del>	4,713	Other surface water
				Drought management;
_	Amistad-Falcon			Municipal conservation;
Donna	Lake/Reservoir System	0	2,249	Other surface water
				Drought management;
	Amistad-Falcon			Groundwater wells and
Edcouch	Lake/Reservoir System	81	413	other; Municipal conservation
				Drought management;
				Municipal conservation;
	Amistad-Falcon			Other direct reuse; Other
Edinburg	Lake/Reservoir System	6,835	23,152	surface water
				Drought management;
	Amistad-Falcon			Municipal conservation;
Elsa	Lake/Reservoir System	264	1,116	Other surface water
	,		·	Drought management;
	Amistad-Falcon			Groundwater wells and
	Lake/Reservoir System;			other; Municipal
	Gulf Coast Aquifer			conservation; Other surface
Hidalgo	System	104	2,004	water
0-		1.0.	_,,,,,	Drought management;
Hidalgo County	Amistad-Falcon			Municipal conservation;
MUD I	Lake/Reservoir System	212	624	Other surface water
11001	Amistad-Falcon	Z1Z	027	Curci surface water
	Lake/Reservoir System;			
Irrigation	Gulf Coast Aquifer			Agricultural consorration:
Irrigation,	•	410,396	300,204	Agricultural conservation;
Hidalgo	System	710,376	300,204	Other strategies
	A			Drought management;
	Amistad-Falcon	207	004	Municipal conservation;
La Joya	Lake/Reservoir System	287	986	Other surface water
	1			Drought management;
	Amistad-Falcon			Municipal conservation;
La Villa	Lake/Reservoir System	41	334	Other surface water

		2020	2070	
		Water Need	Water Need	
Water User	Current Water Supply	(acre-	(acre-	Recommended Water
Group	Sources	feet/year)	feet/year)	Management Strategies
Group	Amistad-Falcon	icca year y	icca year y	Tranagement our attegres
	Lake/Reservoir System;			
Livestock,	Gulf Coast Aquifer			
Hidalgo	System	0	0	None
Tildaigo	Amistad-Falcon		<u> </u>	TAGILE
	Lake/Reservoir System;			
Manufacturing,	Gulf Coast Aquifer			
Hidalgo	System	0	0	Industrial conservation
i ildaigo	System	0	0	Direct potable reuse;
	Amistad-Falcon			Drought management;
	Lake/Reservoir System;			Groundwater desalination;
	Direct Reuse; Gulf Coast			Municipal conservation;
McAllen	Aquifer System	2,872	49,705	Other surface water
i icalieli	Amistad-Falcon	2,072	77,703	Outer surface water
	Lake/Reservoir System;			Drought management;
	Gulf Coast Aquifer			Municipal conservation;
Mercedes	System	0	1,637	Other surface water
Mercedes	Amistad-Falcon	0	1,637	Other surface water
				Drought managements
Military Llighway	Lake/Reservoir System;			Drought management;
Military Highway WSC*	Gulf Coast Aquifer	0	5,169	Municipal conservation; Other surface water
VV3C.	System Amistad-Falcon	0	3,167	Other surface water
	Lake/Reservoir System;			
	Gulf Coast Aquifer			
Mining, Hidalgo	System	911	4,503	Industrial conservation
rilling, rildaigo	System	711	7,505	Direct potable reuse;
				Drought management;
				Groundwater desalination;
	Amistad-Falcon			Municipal conservation;
Mission	Lake/Reservoir System	8,514	31,446	Other surface water
1 11331011	Amistad-Falcon	0,517	31,770	Drought management;
	Lake/Reservoir System;			Groundwater desalination;
North Alamo	Gulf Coast Aquifer			Municipal conservation;
WSC*	System	5,809	36,112	Other surface water
1130	Amistad-Falcon	3,007	30,112	Direct potable reuse;
	Lake/Reservoir System;			Drought management;
	Direct Reuse; Gulf Coast			Municipal conservation;
Pharr	Aquifer System	0	9,165	Other surface water
1 1141 1	, requirer oystern		7,103	Direct potable reuse;
	Amistad-Falcon			Drought management;
	Lake/Reservoir System;			Groundwater desalination;
	Gulf Coast Aquifer			Municipal conservation;
San Juan	System	0	5,459	Other surface water
Jan juan	Jacon Landson	<del>-</del>	3, 137	Drought management;
				Groundwater desalination;
	Amistad-Falcon			Municipal conservation;
Sharyland WSC	Lake/Reservoir System	0	13,965	Other surface water
Silai yiailu **3C	Lakerneser von System		13,703	Outer surface water

		2020	2070	
		Water Need	Water Need	
Water User	Current Water Supply	(acre-	(acre-	Recommended Water
Group	Sources	feet/year)	feet/year)	Management Strategies
	Amistad-Falcon			
	Lake/Reservoir System;			
Steam-Electric	Direct Reuse; Gulf Coast			Industrial conservation;
Power, Hidalgo	Aquifer System	1,792	1,503	Other direct reuse
				Direct potable reuse;
				Drought management;
				Groundwater wells and
	Amistad-Falcon			other; Municipal
	Lake/Reservoir System;			conservation; Other surface
Weslaco	Direct Reuse	1,519	10,758	water

 $<sup>^*</sup>$  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. Hidalgo County projected needs of every water user group, as a share of total demand (percent)

Water User Group	2020	2030	2040	2050	2060	2070
Agua SUD*	-	4	19	30	38	45
Alamo	31	43	52	58	63	67
County-Other, Hidalgo	21	36	49	57	63	68
Donna	-	-	15	26	35	42
Edcouch	24	35	43	51	57	61
Edinburg	53	61	77	80	83	85
Elsa	32	42	51	57	62	66
Hidalgo	6	15	28	38	45	51
Hidalgo County MUD I	26	33	38	43	47	51
Irrigation, Hidalgo	60	58	57	55	54	52
La Joya	44	54	60	66	70	73
La Villa	15	29	39	47	54	59
Livestock, Hidalgo	-	-	-	-	-	-
Manufacturing, Hidalgo	-	-	-	-	-	-
McAllen	7	24	39	47	54	59
Mercedes	-	-	6	19	29	36
Military Highway WSC*	-	- 1	14	25	34	41
Mining, Hidalgo	32	47	54	60	65	70
Mission	42	53	60	66	70	73
North Alamo WSC*	21	34	44	51	57	62
Pharr	-	- 11	23	32	39	44
San Juan	-	17	30	39	47	52
Sharyland WSC	-	16	28	38	46	51

Water User Group	2020	2030	2040	2050	2060	2070
Steam-Electric Power, Hidalgo	16	14	13	13	13	13
Weslaco	20	34	44	52	58	62

<sup>\*</sup> 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. Hidalgo County unmet needs (acre-feet per year)

Water User Group	2020	2030	2040	2050	2060	2070
Irrigation, Hidalgo	382,983	358,081	340,754	321,333	301,468	283,177
Mining, Hidalgo	627	1,325	1,846	2,405	3,047	3,860
Steam-Electric Power, Hidalgo	25	449	349	349	349	349



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