

Estimated Historical Groundwater Use And 2022 State Water Plan Datasets: Calhoun County Groundwater Conservation District

Texas Water Development Board
Groundwater Division
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GROUNDWATER MANAGEMENT PLAN DATA:

This package of water data reports (part 1 of a 2-part package of information) is being provided to groundwater conservation districts to help them meet the requirements for approval of their five-year groundwater management plan. Each report in the package addresses a specific numbered requirement in the Texas Water Development Board's groundwater management plan checklist. The checklist can be viewed and downloaded from this web address:

<https://www.twdb.texas.gov/groundwater/docs/GCD/GMPChecklist0113.pdf>

The five reports included in this part are:

1. Estimated Historical Groundwater Use (checklist item 2)
from the TWDB Historical Water Use Survey (WUS)
2. Projected Surface Water Supplies (checklist item 6)
3. Projected Water Demands (checklist item 7)
4. Projected Water Supply Needs (checklist item 8)
5. Projected Water Management Strategies (checklist item 9)
from the 2022 Texas State Water Plan (SWP)

Part 2 of the 2-part package is the groundwater availability model (GAM) report for the District (checklist items 3 through 5). The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov, (512) 936-0883.

DISCLAIMER:

The data presented in this report represents the most up-to-date WUS and 2022 SWP data available as of 1/10/2022. Although it does not happen frequently, either of these datasets are subject to change pending the availability of more accurate WUS data or an amendment to the 2022 SWP. District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The WUS dataset can be verified at this web address:

<https://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/>

The 2022 SWP dataset can be verified by contacting Sabrina Anderson (sabrina.anderson@twdb.texas.gov or 512-936-0886).

For additional questions regarding this data, please contact Stephen Allen (stephen.allen@twdb.texas.gov or 512-463-7317).

Estimated Historical Water Use

TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water historical use estimates are currently unavailable for calendar year 2020. TWDB staff anticipates the calculation and posting of these estimates at a later date.

CALHOUN COUNTY

All values are in acre-feet

Year	Source	Municipal	Manufacturing	Mining	Steam Electric	Irrigation	Livestock	Total
2019	GW	355	328	0	15	392	194	1,284
	SW	2,147	39,803	0	0	4,552	83	46,585
2018	GW	297	332	0	37	416	194	1,276
	SW	2,210	38,507	0	0	4,381	83	45,181
2017	GW	243	485	0	0	298	185	1,211
	SW	2,051	37,442	0	0	585	79	40,157
2016	GW	373	467	0	0	314	192	1,346
	SW	2,162	34,387	0	0	11,113	82	47,744
2015	GW	568	1,440	0	0	355	189	2,552
	SW	2,474	33,579	0	0	3,000	81	39,134
2014	GW	799	1,170	0	0	643	187	2,799
	SW	2,099	36,487	0	0	15,500	79	54,165
2013	GW	901	1,406	0	0	23	191	2,521
	SW	2,092	34,643	0	0	15,225	82	52,042
2012	GW	918	1,575	0	0	0	198	2,691
	SW	2,137	35,237	0	0	20,000	84	57,458
2011	GW	1,075	1,487	0	0	345	221	3,128
	SW	2,550	34,648	0	0	17,000	94	54,292
2010	GW	980	908	23	0	0	222	2,133
	SW	2,319	31,623	14	0	10,459	94	44,509
2009	GW	356	997	12	0	0	252	1,617
	SW	2,505	37,131	8	0	14,900	108	54,652
2008	GW	248	1,111	2	0	0	240	1,601
	SW	2,451	37,389	1	0	14,015	103	53,959
2007	GW	305	1	1,280	0	1,270	229	3,085
	SW	2,350	36,261	910	0	11,000	98	50,619
2006	GW	322	1	1,110	0	0	229	1,662
	SW	2,118	35,802	246	0	15,812	98	54,076
2005	GW	310	2	1,290	0	0	253	1,855
	SW	2,073	39,994	885	0	19,805	109	62,866
2004	GW	326	2	1,249	27	0	195	1,799
	SW	2,028	37,212	1,165	0	15,509	169	56,083

Projected Surface Water Supplies

TWDB 2022 State Water Plan Data

CALHOUN COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	Source Name	2020	2030	2040	2050	2060	2070
L	GUADALUPE-BLANCO RIVER AUTHORITY	LAVACA-GUADALUPE	CANYON LAKE/RESERVOIR	64	68	72	76	82	88
L	GUADALUPE-BLANCO RIVER AUTHORITY	LAVACA-GUADALUPE	GUADALUPE RUN-OF-RIVER	174	184	194	208	224	240
L	LIVESTOCK, CALHOUN	LAVACA-GUADALUPE	LAVACA-GUADALUPE LIVESTOCK LOCAL SUPPLY	92	92	92	92	92	92
L	LIVESTOCK, CALHOUN	SAN ANTONIO-NUECES	SAN ANTONIO-NUECES LIVESTOCK LOCAL SUPPLY	16	16	16	16	16	16
L	MANUFACTURING, CALHOUN	COLORADO-LAVACA	GUADALUPE RUN-OF-RIVER	17,055	17,046	17,038	17,027	17,013	17,000
L	MANUFACTURING, CALHOUN	COLORADO-LAVACA	TEXANA LAKE/RESERVOIR	18,874	18,874	18,874	18,874	18,874	18,874
L	MANUFACTURING, CALHOUN	LAVACA-GUADALUPE	CANYON LAKE/RESERVOIR	1,534	1,534	1,534	1,534	1,534	1,534
L	MANUFACTURING, CALHOUN	LAVACA-GUADALUPE	GUADALUPE RUN-OF-RIVER	10,776	10,771	10,765	10,758	10,750	10,741
L	MANUFACTURING, CALHOUN	LAVACA-GUADALUPE	TEXANA LAKE/RESERVOIR	11,926	11,926	11,926	11,926	11,926	11,926
L	POINT COMFORT	COLORADO-LAVACA	TEXANA LAKE/RESERVOIR	178	178	178	178	178	178
L	PORT LAVACA	LAVACA-GUADALUPE	GUADALUPE RUN-OF-RIVER	4,480	4,480	4,480	4,480	4,480	4,480
L	PORT OCONNOR MUD	LAVACA-GUADALUPE	GUADALUPE RUN-OF-RIVER	1,120	1,120	1,120	1,120	1,120	1,120
Sum of Projected Surface Water Supplies (acre-feet)				66,289	66,289	66,289	66,289	66,289	66,289

Projected Water Demands

TWDB 2022 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

CALHOUN COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
L	COUNTY-OTHER, CALHOUN	COLORADO-LAVACA	48	52	57	61	66	71
L	COUNTY-OTHER, CALHOUN	LAVACA-GUADALUPE	310	333	365	398	429	459
L	COUNTY-OTHER, CALHOUN	SAN ANTONIO-NUECES	5	5	6	6	6	7
L	GUADALUPE-BLANCO RIVER AUTHORITY	LAVACA-GUADALUPE	238	252	266	284	306	328
L	IRRIGATION, CALHOUN	COLORADO-LAVACA	760	760	760	760	760	760
L	IRRIGATION, CALHOUN	LAVACA-GUADALUPE	15,079	15,079	15,079	15,079	15,079	15,079
L	LIVESTOCK, CALHOUN	COLORADO-LAVACA	56	56	56	56	56	56
L	LIVESTOCK, CALHOUN	GUADALUPE	2	2	2	2	2	2
L	LIVESTOCK, CALHOUN	LAVACA-GUADALUPE	219	219	219	219	219	219
L	LIVESTOCK, CALHOUN	SAN ANTONIO-NUECES	13	13	13	13	13	13
L	MANUFACTURING, CALHOUN	COLORADO-LAVACA	28,268	32,159	32,159	32,159	32,159	32,159
L	MANUFACTURING, CALHOUN	LAVACA-GUADALUPE	17,862	20,320	20,320	20,320	20,320	20,320
L	MINING, CALHOUN	COLORADO-LAVACA	26	27	21	15	9	6
L	MINING, CALHOUN	LAVACA-GUADALUPE	26	28	20	15	10	6
L	POINT COMFORT	COLORADO-LAVACA	87	92	98	106	115	123
L	PORT LAVACA	LAVACA-GUADALUPE	1,986	2,144	2,306	2,482	2,678	2,871
L	PORT OCONNOR MUD	LAVACA-GUADALUPE	110	116	123	131	141	151
L	SEADRIFT	LAVACA-GUADALUPE	256	277	299	323	349	374
Sum of Projected Water Demands (acre-feet)			65,351	71,934	72,169	72,429	72,717	73,004

Projected Water Supply Needs

TWDB 2022 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

CALHOUN COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
L	COUNTY-OTHER, CALHOUN	COLORADO-LAVACA	105	101	72	35	87	82
L	COUNTY-OTHER, CALHOUN	LAVACA-GUADALUPE	32	9	0	0	-87	-117
L	COUNTY-OTHER, CALHOUN	SAN ANTONIO-NUECES	0	0	0	0	-1	-2
L	GUADALUPE-BLANCO RIVER AUTHORITY	LAVACA-GUADALUPE	0	0	0	0	0	0
L	IRRIGATION, CALHOUN	COLORADO-LAVACA	-60	-60	-60	-60	-60	-60
L	IRRIGATION, CALHOUN	LAVACA-GUADALUPE	-14,028	-14,028	-14,028	-14,028	-14,028	-14,028
L	LIVESTOCK, CALHOUN	COLORADO-LAVACA	66	66	66	66	66	66
L	LIVESTOCK, CALHOUN	GUADALUPE	0	0	0	0	0	0
L	LIVESTOCK, CALHOUN	LAVACA-GUADALUPE	41	41	41	41	41	41
L	LIVESTOCK, CALHOUN	SAN ANTONIO-NUECES	3	3	3	3	3	3
L	MANUFACTURING, CALHOUN	COLORADO-LAVACA	7,861	3,961	3,953	3,942	3,928	3,915
L	MANUFACTURING, CALHOUN	LAVACA-GUADALUPE	6,374	3,911	3,905	3,898	3,890	3,881
L	MINING, CALHOUN	COLORADO-LAVACA	0	0	0	0	2	0
L	MINING, CALHOUN	LAVACA-GUADALUPE	0	0	0	0	0	0
L	POINT COMFORT	COLORADO-LAVACA	91	86	80	72	63	55
L	PORT LAVACA	LAVACA-GUADALUPE	2,494	2,336	2,174	1,998	1,802	1,609
L	PORT OCONNOR MUD	LAVACA-GUADALUPE	1,120	1,120	1,120	1,120	1,120	1,120
L	SEADRIFT	LAVACA-GUADALUPE	0	0	0	0	0	0
Sum of Projected Water Supply Needs (acre-feet)			-14,088	-14,088	-14,088	-14,088	-14,176	-14,207

Projected Water Management Strategies

TWDB 2022 State Water Plan Data

CALHOUN COUNTY

WUG, Basin (RWPG)

All values are in acre-feet

Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
COUNTY-OTHER, CALHOUN, COLORADO-LAVACA (L)							
LOCAL GULF COAST AQUIFER DEVELOPMENT	GULF COAST AQUIFER SYSTEM [CALHOUN]	0	0	0	0	54	54
		0	0	0	0	54	54
COUNTY-OTHER, CALHOUN, LAVACA-GUADALUPE (L)							
LOCAL GULF COAST AQUIFER DEVELOPMENT	GULF COAST AQUIFER SYSTEM [CALHOUN]	0	0	0	0	357	356
		0	0	0	0	357	356
COUNTY-OTHER, CALHOUN, SAN ANTONIO-NUECES (L)							
LOCAL GULF COAST AQUIFER DEVELOPMENT	GULF COAST AQUIFER SYSTEM [CALHOUN]	0	0	0	0	1	2
		0	0	0	0	1	2
GUADALUPE-BLANCO RIVER AUTHORITY, LAVACA-GUADALUPE (L)							
FE - GBRA WESTERN CANYON EXPANSION	CANYON LAKE/RESERVOIR [RESERVOIR]	0	0	0	0	1,266	1,148
FE - HAYS COUNTY PIPELINE PROJECT	CANYON LAKE/RESERVOIR [RESERVOIR]	0	1,601	3,743	3,189	0	0
GBRA - MBWSP - SURFACE WATER W/ ASR	CARRIZO-WILCOX AQUIFER ASR [GONZALES]	0	13,631	13,236	12,805	10,806	6,287
GBRA LOWER BASIN STORAGE PROJECT	GBRA LOWER BASIN OFF-CHANNEL LAKE/RESERVOIR [RESERVOIR]	43,158	43,254	43,109	43,124	43,063	43,010
		43,158	58,486	60,088	59,118	55,135	50,445
SEADRIFT, LAVACA-GUADALUPE (L)							
MUNICIPAL WATER CONSERVATION	DEMAND REDUCTION [CALHOUN]	6	13	15	21	31	41
		6	13	15	21	31	41
Sum of Projected Water Management Strategies (acre-feet)		43,164	58,499	60,103	59,139	55,578	50,898