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# Estimated Historical Water Use And 2017 State Water Plan Datasets: Medina County Groundwater Conservation District

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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:

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

The five reports included in this part are:

1. Estimated Historical Water 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 2017 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 2017 SWP data available as of 11/3/2020. 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 2017 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:

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

The 2017 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 2018. TWDB staff anticipates the calculation and posting of these estimates at a later date.

### MEDINA COUNTY

All values are in acre-feet

Year	Source	Municipal	Manufacturing	Mining	Steam Electric	Irrigation	Livestock	Total
2017	GW	9,775	9	47	0	32,368	924	43,123
	SW	74	0	0	0	20,795	103	20,972
2016	GW	9,127	10	7	0	29,540	774	39,458
	SW	80	0	0	0	16,758	86	16,924
2015	GW	9,567	11	11	0	22,879	761	33,229
	SW	99	0	0	0	15,052	85	15,236
2014	GW	9,714	9	11	0	48,632	748	59,114
	SW	106	0	0	0	0	83	189
2013	GW	9,762	10	14	0	41,317	741	51,844
	SW	119	0	0	0	0	83	202
2012	GW	10,049	63	7	0	44,818	705	55,642
	SW	178	0	0	0	16,301	78	16,557
2011	GW	10,364	56	0	0	60,046	1,486	71,952
	SW	81	0	0	0	39,074	166	39,321
2010	GW	8,750	36	763	0	33,903	1,470	44,922
	SW	75	0	825	0	15,103	163	16,166
2009	GW	8,974	83	735	0	50,266	925	60,983
	SW	83	0	794	0	31,510	103	32,490
2008	GW	9,103	23	707	0	36,694	897	47,424
	SW	0	0	763	0	32,806	100	33,669
2007	GW	8,270	20	0	0	13,415	1,168	22,873
	SW	0	0	0	0	10,802	130	10,932
2006	GW	9,402	19	0	0	53,784	1,143	64,348
	SW	0	0	0	0	16,500	127	16,627
2005	GW	8,671	37	0	0	33,450	1,107	43,265
	SW	0	0	0	0	16,500	123	16,623
2004	GW	7,771	33	0	0	34,945	95	42,844
	SW	0	0	0	0	16,467	1,163	17,630
2003	GW	7,917	8	0	0	29,900	100	37,925
	SW	0	0	0	0	24,192	1,228	25,420
2002	GW	8,158	8	0	0	59,830	96	68,092
	SW	0	0	0	0	16,246	1,179	17,425



# Projected Surface Water Supplies

## TWDB 2017 State Water Plan Data

### MEDINA COUNTY

All values are in acre-feet

<b>RWPG</b>	<b>WUG</b>	<b>WUG Basin</b>	<b>Source Name</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>
L	LIVESTOCK, MEDINA	NUECES	NUECES LIVESTOCK LOCAL SUPPLY	519	519	519	519	519	519
L	LIVESTOCK, MEDINA	SAN ANTONIO	SAN ANTONIO LIVESTOCK LOCAL SUPPLY	63	63	63	63	63	63
L	SAN ANTONIO	SAN ANTONIO	CANYON LAKE/RESERVOIR	0	0	0	0	0	0
L	SAN ANTONIO	SAN ANTONIO	GUADALUPE RUN-OF-RIVER	0	0	0	0	0	0
L	SAN ANTONIO WATER SYSTEM	SAN ANTONIO	GUADALUPE RUN-OF-RIVER	0	0	0	0	0	0
L	SAN ANTONIO WATER SYSTEM	SAN ANTONIO	SAN ANTONIO RUN-OF-RIVER	49	64	73	79	84	87
<b>Sum of Projected Surface Water Supplies (acre-feet)</b>				<b>631</b>	<b>646</b>	<b>655</b>	<b>661</b>	<b>666</b>	<b>669</b>

# Projected Water Demands

## TWDB 2017 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.

### MEDINA COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
L	BENTON CITY WSC	NUECES	558	653	735	809	878	939
L	CASTROVILLE	SAN ANTONIO	794	787	780	778	781	784
L	COUNTY-OTHER, MEDINA	NUECES	1,232	1,258	1,327	1,386	1,441	1,484
L	COUNTY-OTHER, MEDINA	SAN ANTONIO	25	53	32	23	21	27
L	DEVINE	NUECES	668	678	687	701	719	736
L	EAST MEDINA COUNTY SUD	NUECES	690	758	819	877	936	990
L	EAST MEDINA COUNTY SUD	SAN ANTONIO	63	69	74	79	85	90
L	HONDO	NUECES	2,053	2,210	2,346	2,473	2,598	2,710
L	IRRIGATION, MEDINA	NUECES	49,596	47,529	45,550	43,653	41,836	40,232
L	IRRIGATION, MEDINA	SAN ANTONIO	7,868	7,541	7,226	6,926	6,637	6,383
L	LACOSTE	SAN ANTONIO	127	137	145	154	164	173
L	LIVESTOCK, MEDINA	NUECES	1,042	1,042	1,042	1,042	1,042	1,042
L	LIVESTOCK, MEDINA	SAN ANTONIO	123	123	123	123	123	123
L	LYTLE	NUECES	114	138	158	176	194	209
L	MANUFACTURING, MEDINA	NUECES	41	44	48	51	55	60
L	MANUFACTURING, MEDINA	SAN ANTONIO	7	8	8	9	10	10
L	MINING, MEDINA	NUECES	1,388	1,543	1,673	1,805	1,972	2,154
L	MINING, MEDINA	SAN ANTONIO	463	514	558	602	657	718
L	NATALIA	NUECES	281	309	333	356	379	400
L	SAN ANTONIO	SAN ANTONIO	9	12	16	19	21	24
L	SAN ANTONIO WATER SYSTEM	SAN ANTONIO	369	540	681	806	922	1,023
L	YANCEY WSC	NUECES	130	144	155	166	176	186
L	YANCEY WSC	SAN ANTONIO	530	583	631	674	717	755
<b>Sum of Projected Water Demands (acre-feet)</b>			<b>68,171</b>	<b>66,673</b>	<b>65,147</b>	<b>63,688</b>	<b>62,364</b>	<b>61,252</b>

# Projected Water Supply Needs

## TWDB 2017 State Water Plan Data

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

### MEDINA COUNTY

All values are in acre-feet

RWPG	WUG	WUG Basin	2020	2030	2040	2050	2060	2070
L	BENTON CITY WSC	NUECES	338	267	196	124	55	-9
L	CASTROVILLE	SAN ANTONIO	-224	-217	-210	-208	-211	-214
L	COUNTY-OTHER, MEDINA	NUECES	500	472	403	344	289	246
L	COUNTY-OTHER, MEDINA	SAN ANTONIO	764	736	757	766	768	762
L	DEVINE	NUECES	88	77	68	54	36	19
L	EAST MEDINA COUNTY SUD	NUECES	235	168	107	50	-10	-64
L	EAST MEDINA COUNTY SUD	SAN ANTONIO	22	15	10	4	-1	-6
L	HONDO	NUECES	-523	-680	-816	-943	-1,068	-1,180
L	IRRIGATION, MEDINA	NUECES	-29,816	-27,758	-25,779	-23,882	-22,065	-20,461
L	IRRIGATION, MEDINA	SAN ANTONIO	-1,713	-1,386	-1,071	-771	-482	-228
L	LACOSTE	SAN ANTONIO	-10	-20	-28	-37	-47	-56
L	LIVESTOCK, MEDINA	NUECES	0	0	0	0	0	0
L	LIVESTOCK, MEDINA	SAN ANTONIO	0	0	0	0	0	0
L	LYTLE	NUECES	-34	-53	-71	-88	-106	-121
L	MANUFACTURING, MEDINA	NUECES	1,898	1,895	1,891	1,888	1,884	1,879
L	MANUFACTURING, MEDINA	SAN ANTONIO	8	7	7	6	5	5
L	MINING, MEDINA	NUECES	0	0	0	0	0	0
L	MINING, MEDINA	SAN ANTONIO	0	0	50	50	50	50
L	NATALIA	NUECES	-101	-129	-153	-176	-199	-220
L	SAN ANTONIO	SAN ANTONIO	-3	-4	-5	-8	-9	-12
L	SAN ANTONIO WATER SYSTEM	SAN ANTONIO	-58	-185	-293	-386	-479	-565
L	YANCEY WSC	NUECES	-6	-19	-30	-41	-51	-61
L	YANCEY WSC	SAN ANTONIO	-22	-76	-124	-167	-210	-248
<b>Sum of Projected Water Supply Needs (acre-feet)</b>			<b>-32,510</b>	<b>-30,527</b>	<b>-28,580</b>	<b>-26,707</b>	<b>-24,938</b>	<b>-23,445</b>

# Projected Water Management Strategies

## TWDB 2017 State Water Plan Data

### MEDINA COUNTY

WUG, Basin (RWPG)

All values are in acre-feet

Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
<b>BENTON CITY WSC, NUECES (L)</b>							
LOCAL CARRIZO AQUIFER DEVELOPMENT	CARRIZO-WILCOX AQUIFER [ATASCOSA]	0	0	0	0	0	29
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	20
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>
<b>CASTROVILLE, SAN ANTONIO (L)</b>							
DROUGHT MANAGEMENT - CASTROVILLE	DEMAND REDUCTION [MEDINA]	40	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	224	217	210	208	211	214
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	225	225	225	225	225	225
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	44	104	159	214	268	319
		<b>533</b>	<b>546</b>	<b>594</b>	<b>647</b>	<b>704</b>	<b>758</b>
<b>COUNTY-OTHER, MEDINA, NUECES (L)</b>							
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	27
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>
<b>COUNTY-OTHER, MEDINA, SAN ANTONIO (L)</b>							
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	0
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DEVINE, NUECES (L)</b>							
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	4
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>EAST MEDINA COUNTY SUD, NUECES (L)</b>							
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	0	0	0	0	10	64
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	0	0	0	0	69	69
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>133</b>
<b>EAST MEDINA COUNTY SUD, SAN ANTONIO (L)</b>							
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	0	0	0	0	1	6



# Projected Water Management Strategies

## TWDB 2017 State Water Plan Data

### WUG, Basin (RWPG)

All values are in acre-feet

Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	0	0	0	0	6	6
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>12</b>

### HONDO, NUECES (L)

DROUGHT MANAGEMENT - HONDO	DEMAND REDUCTION [MEDINA]	103	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	523	680	816	943	1,068	1,180
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	87	258	446	593	669	747
		<b>713</b>	<b>938</b>	<b>1,262</b>	<b>1,536</b>	<b>1,737</b>	<b>1,927</b>

### IRRIGATION, MEDINA, NUECES (L)

IRRIGATION WATER CONSERVATION	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	0
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### IRRIGATION, MEDINA, SAN ANTONIO (L)

IRRIGATION WATER CONSERVATION	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	0
		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### LACOSTE, SAN ANTONIO (L)

DROUGHT MANAGEMENT - LA COSTE	DEMAND REDUCTION [MEDINA]	6	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	10	20	28	37	47	56
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	60	60	60	60	60	60
		<b>76</b>	<b>80</b>	<b>88</b>	<b>97</b>	<b>107</b>	<b>116</b>

### LYTLE, NUECES (L)

DROUGHT MANAGEMENT - LYTLE	DEMAND REDUCTION [MEDINA]	2	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [BEXAR]	34	53	71	88	106	121
MUNICIPAL WATER CONSERVATION (SUBURBAN)	DEMAND REDUCTION [MEDINA]	4	14	26	31	38	45
		<b>40</b>	<b>67</b>	<b>97</b>	<b>119</b>	<b>144</b>	<b>166</b>

### NATALIA, NUECES (L)

DROUGHT MANAGEMENT - NATALIA	DEMAND REDUCTION [MEDINA]	14	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	101	129	153	176	199	220

# Projected Water Management Strategies

## TWDB 2017 State Water Plan Data

### WUG, Basin (RWPG)

All values are in acre-feet

Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	225	225	225	225	225	225
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	8	22	26	32	42	54
		<b>348</b>	<b>376</b>	<b>404</b>	<b>433</b>	<b>466</b>	<b>499</b>

### SAN ANTONIO, SAN ANTONIO (L)

BRACKISH WILCOX GROUNDWATER FOR SAWS	CARRIZO-WILCOX AQUIFER [BEXAR]	0	0	0	0	0	0
DIRECT RECYCLED WATER PROGRAMS - SAWS	DIRECT REUSE [BEXAR]	0	0	0	1	2	3
DROUGHT MANAGEMENT - SAWS	DEMAND REDUCTION [MEDINA]	1	2	3	4	4	5
EAHCP FOR SAWS	EDWARDS-BFZ AQUIFER [BEXAR]	0	0	0	0	0	0
EXPANDED LOCAL CARRIZO FOR SAWS	CARRIZO-WILCOX AQUIFER [BEXAR]	0	0	0	0	0	0
MUNICIPAL WATER CONSERVATION (URBAN) - SAN ANTONIO	DEMAND REDUCTION [MEDINA]	1	0	0	1	2	3
SAWS SEAWATER DESALINATION	GULF OF MEXICO [GULF OF MEXICO]	0	0	1	1	2	3
VISTA RIDGE PROJECT	CARRIZO-WILCOX AQUIFER [BURLESON]	1	2	2	2	2	2
		<b>3</b>	<b>4</b>	<b>6</b>	<b>9</b>	<b>12</b>	<b>16</b>

### SAN ANTONIO WATER SYSTEM, SAN ANTONIO (L)

MUNICIPAL WATER CONSERVATION (SUBURBAN) - SAWS	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	15
REGIONAL CARRIZO FOR SSLGC PROJECT EXPANSION	CARRIZO-WILCOX AQUIFER [GONZALES]	16	74	0	0	0	0
SAWS SEAWATER DESALINATION	GULF OF MEXICO [GULF OF MEXICO]	0	0	103	112	118	122
VISTA RIDGE PROJECT	CARRIZO-WILCOX AQUIFER [BURLESON]	42	111	190	274	361	444
		<b>58</b>	<b>185</b>	<b>293</b>	<b>386</b>	<b>479</b>	<b>581</b>

### YANCEY WSC, NUECES (L)

DROUGHT MANAGEMENT - YANCEY WSC	DEMAND REDUCTION [MEDINA]	7	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	6	19	30	41	51	61
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	61	61	61	61	61	61
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	2
		<b>74</b>	<b>80</b>	<b>91</b>	<b>102</b>	<b>112</b>	<b>124</b>

# Projected Water Management Strategies

## TWDB 2017 State Water Plan Data

**WUG, Basin (RWPG)**

All values are in acre-feet

Water Management Strategy	Source Name [Origin]	2020	2030	2040	2050	2060	2070
<b>YANCEY WSC, SAN ANTONIO (L)</b>							
DROUGHT MANAGEMENT - YANCEY WSC	DEMAND REDUCTION [MEDINA]	26	0	0	0	0	0
EDWARDS TRANSFERS	EDWARDS-BFZ AQUIFER [MEDINA]	22	76	124	167	210	248
LOCAL LEONA GRAVEL AQUIFER DEVELOPMENT	LEONA GRAVEL AQUIFER [MEDINA]	249	249	249	249	249	249
MUNICIPAL WATER CONSERVATION (RURAL)	DEMAND REDUCTION [MEDINA]	0	0	0	0	0	9
<b>Sum of Projected Water Management Strategies (acre-feet)</b>		<b>297</b>	<b>325</b>	<b>373</b>	<b>416</b>	<b>459</b>	<b>506</b>
		<b>2,142</b>	<b>2,601</b>	<b>3,208</b>	<b>3,745</b>	<b>4,306</b>	<b>4,918</b>