

Projected Exempt Groundwater Use Estimates

Groundwater Management Area 16

TWDB Estimates

May 2020

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Texas Water Development (TWDB) staff has developed draft projected estimates of rural domestic, livestock, mining, and rig supply exempt uses. These estimates are based on a comprehensive survey of groundwater wells in the TWDB Groundwater Database (GWDB), the TWDB Water Use Survey, the 2017 State Water Plan (SWP), the newest projected demand estimates for the upcoming 2021 SWP,, and population data from the Texas Demographic Center.

Note: Some categories of these estimates may not represent actual use from exempt wells since the GWDB does not include all wells in existence.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Bee GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,377	2,125	2,107	2,095	2,092	2,092	2,092
Other	193	194	192	190	190	190	190
Total	2,570	2,319	2,299	2,285	2,282	2,282	2,282

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,457	1,464	1,446	1,434	1,431	1,431	1,431
Other	186	187	185	183	183	183	183

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	920	661	661	661	661	661	661
Other	7	7	7	7	7	7	7

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Brush Country GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,261	2,310	2,379	2,459	2,531	2,600	2,607
Other	19	19	20	20	21	22	22
Total	2,280	2,329	2,399	2,479	2,552	2,622	2,629

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,187	1,236	1,305	1,385	1,457	1,526	1,533
Other	11	11	12	12	13	14	14

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,074	1,074	1,074	1,074	1,074	1,074	1,074
Other	8	8	8	8	8	8	8

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Corpus Christi ASRCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	37	38	38	38	38	39	39
Total	37	38	38	38	38	39	39

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	12	13	13	13	13	14	14

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	25	25	25	25	25	25	25

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Duval County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	829	837	843	851	858	865	865
Total	829	837	843	851	858	865	865

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	255	263	269	277	284	291	291

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	574	574	574	574	574	574	574

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Kenedy County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,365	2,461	2,566	2,693	2,823	2,959	2,973
Other	20	20	20	20	20	20	20
Total	2,385	2,481	2,586	2,713	2,843	2,979	2,993

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	769	865	970	1,097	1,227	1,363	1,377
Other	0	0	0	0	0	0	0

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,596	1,596	1,596	1,596	1,596	1,596	1,596
Other	20	20	20	20	20	20	20

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates Acre-feet per year

Live Oak UWCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	590	585	582	580	580	580	580
Other	16	15	15	15	15	15	15
Yegua-Jackson	618	691	684	556	385	270	261
Total	1,224	1,291	1,281	1,151	980	865	856

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	112	107	104	102	102	102	102
Other	4	3	3	3	3	3	3
Yegua-Jackson	4	3	3	3	3	3	3

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	478	478	478	478	478	478	478
Other	12	12	12	12	12	12	12
Yegua-Jackson	28	28	28	28	28	28	28

Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Yegua-Jackson	586	660	653	525	354	239	230

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

McMullen GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	99	97	97	97	96	96	96
Yegua-Jackson	2	2	2	2	2	2	2
Total	101	99	99	99	98	98	98

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	34	32	32	32	31	31	31

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	65	65	65	65	65	65	65
Yegua-Jackson	2	2	2	2	2	2	2

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Red Sands GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	34	34	35	36	37	38	38
Total	34	34	35	36	37	38	38

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	4	4	5	6	7	8	8

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	30	30	30	30	30	30	30

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

San Patricio County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	478	478	475	475	477	479	480
Total	478	478	475	475	477	479	480

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	280	280	277	277	279	281	282

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	198	198	198	198	198	198	198

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.

Projected Exempt Groundwater Use Estimates
Acre-feet per year

Starr County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,086	1,126	1,164	1,203	1,241	1,275	1,279
Other	140	150	159	169	178	186	187
Sparta	11	12	13	15	16	17	17
Yegua-Jackson	192	198	203	209	215	220	220
Total	1,429	1,486	1,539	1,596	1,650	1,698	1,703

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	376	416	454	493	531	565	569
Other	92	102	111	121	130	138	139
Sparta	11	12	13	15	16	17	17
Yegua-Jackson	56	62	67	73	79	84	84

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	710	710	710	710	710	710	710
Other	48	48	48	48	48	48	48

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.