

Projected Exempt Groundwater Use Estimates

Groundwater Management Area 9

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

Bandera County River Authority & Ground Water District

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	153	160	164	165	166	166	166
Other	7	8	8	9	9	9	9
Trinity	1,391	1,533	1,598	1,617	1,637	1,649	1,651
Total	1,551	1,701	1,770	1,791	1,812	1,824	1,826

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	65	72	76	77	78	78	78
Other	7	8	8	9	9	9	9
Trinity	1,296	1,438	1,503	1,522	1,542	1,554	1,556

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	88	88	88	88	88	88	88
Trinity	95	95	95	95	95	95	95

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

Barton Springs/Edwards Aquifer CD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	144	151	155	160	165	168	169
Trinity	266	280	290	301	311	319	320
Total	410	431	445	461	476	487	489

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	117	124	128	133	138	141	142
Trinity	238	252	262	273	283	291	292

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	27	27	27	27	27	27	27
Trinity	28	28	28	28	28	28	28

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

Blanco-Pedernales GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	267	295	310	320	327	331	331
Hickory	84	93	97	100	102	104	104
Marble Falls	7	8	9	9	9	9	9
Other	38	42	44	46	47	48	48
Trinity	618	683	718	742	758	768	769
Total	1,014	1,121	1,178	1,217	1,243	1,260	1,261

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	205	233	248	258	265	269	269
Hickory	62	71	75	78	80	82	82
Marble Falls	6	7	8	8	8	8	8
Other	33	37	39	41	42	43	43
Trinity	478	543	578	602	618	628	629

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	62	62	62	62	62	62	62
Hickory	22	22	22	22	22	22	22
Marble Falls	1	1	1	1	1	1	1
Other	5	5	5	5	5	5	5
Trinity	140	140	140	140	140	140	140

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

Comal Trinity GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,063	1,279	1,468	1,647	1,809	1,967	1,984

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,063	1,279	1,468	1,647	1,809	1,967	1,984

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

Cow Creek GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	43	48	54	60	66	73	73
Trinity	3,265	3,823	4,362	4,906	5,491	6,072	6,133
Total	3,308	3,871	4,416	4,966	5,557	6,145	6,206

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	28	33	39	45	51	58	58
Trinity	2,945	3,503	4,042	4,586	5,171	5,752	5,813

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	15	15	15	15	15	15	15
Trinity	320	320	320	320	320	320	320

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

Hays Trinity GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	3,716	4,433	4,750	5,267	5,784	6,301	6,818

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	3,144	3,582	4,019	4,457	4,894	5,332	5,769

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	572	651	731	810	890	969	1,049

Estimated Agricultural Exempt Use (by aquifer) *

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	TBD	TBD	TBD	TBD	TBD	TBD	TBD

* Hays Trinity GCD's enabling legislation exempts agricultural use. These estimates are not currently included in these estimates.
 Estimates derived using Hays-Trinity GCD input.
 Values are rounded to the nearest acre-foot.

**Projected Exempt Groundwater Use Estimates
Acre-feet per year**

Headwaters GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	1,180	1,368	1,562	1,761	1,979	2,197	2,220
Other	84	100	117	134	152	171	173
Trinity	1,551	1,844	2,145	2,455	2,794	3,134	3,170
Total	2,815	3,312	3,824	4,350	4,925	5,502	5,563

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	944	1,132	1,326	1,525	1,743	1,961	1,984
Other	81	97	114	131	149	168	170
Trinity	1,470	1,763	2,064	2,374	2,713	3,053	3,089

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	236	236	236	236	236	236	236
Other	3	3	3	3	3	3	3
Trinity	81	81	81	81	81	81	81

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

Values are rounded to the nearest acre-foot.

**Projected Exempt Groundwater Use Estimates
Acre-feet per year**

Medina County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,471	1,508	1,537	1,576	1,610	1,641	1,644

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	441	478	507	546	580	611	614

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,030	1,030	1,030	1,030	1,030	1,030	1,030

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**

Southwestern Travis County GCD

Total Estimated Exempt Use (by aquifer) *

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,437	1,494	1,553	1,614	1,678	1,745	1,814

Estimated Domestic Exempt Use (by aquifer) *

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,421	1,478	1,537	1,598	1,662	1,729	1,798

Estimated Livestock Exempt Use (by aquifer) *

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	16	16	16	16	16	16	16

* Southwestern Travis County GCD covers less than 21-percent of Travis County.

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

Values are rounded to the nearest acre-foot.

**Projected Exempt Groundwater Use Estimates
Acre-feet per year**

Trinity Glen Rose GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,686	1,847	1,995	2,159	2,316	2,462	2,477

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,613	1,774	1,922	2,086	2,243	2,389	2,404

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	73	73	73	73	73	73	73

Estimated Public Supply Exempt Use (by aquifer) *

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	TBD	TBD	TBD	TBD	TBD	TBD	TBD

* Trinity Glen Rose GCD’s enabling legislation exempts certain public supply wells (H.B. No. 2005, Section 16). These estimates are not currently included in these estimates.

* Trinity Glen Rose GCD covers about 24-percent of Bexar County.

Estimates derived using TWDB Water Use Survey data, TWDB population projections, TWDB water demand projections, and the TWDB Groundwater Database.

Values are rounded to the nearest acre-foot.