

# **Projected Exempt Groundwater Use Estimates**

Jean Broce Perez

Revised August 2020

Prepared for the Texas Water Development Board, with cooperation  
from Texas Groundwater Conservation Districts



1700 N. Congress Ave.

Austin, TX 78711-3231

[www.twdb.texas.gov](http://www.twdb.texas.gov)

## **Exempt Groundwater Use Estimates**

Groundwater Management Area 1

TWDB Estimates

May 2020

Hemphill County UWCD .....	1
High Plains UWCD No. 1 .....	2
North Plains GCD.....	3
Panhandle GCD.....	4

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

#### Hemphill County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	2,859	2,746	2,635	2,332	2,371	2,467	2,453

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	212	215	217	220	222	225	225

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	936	960	986	1,014	1,043	1,073	1,076

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	925	705	498	293	89	27	24

##### Estimated Public Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	786	866	934	1,009	1,079	1,145	1,152

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

### High Plains UWCD No. 1

#### Total Estimated Exempt Use by aquifer

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	1,048	1,048	1,048	1,048	1,048	1,048	1,048
Ogallala	2,446	2,446	2,446	2,446	2,446	2,446	2,446
<b>Total</b>	<b>3,494</b>	<b>3,494</b>	<b>3,494</b>	<b>3,494</b>	<b>3,494</b>	<b>3,494</b>	<b>3,494</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	1,003	1,003	1,003	1,003	1,003	1,003	1,003
Ogallala	2,341	2,341	2,341	2,341	2,341	2,341	2,341

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	44	44	44	44	44	44	44
Ogallala	102	102	102	102	102	102	102

#### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	1	1	1	1	1	1	1
Ogallala	3	3	3	3	3	3	3

Estimates derived from High Plains UWCD No. 1.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### North Plains GCD

##### Total Estimated Exempt Use by aquifer

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	179	205	221	238	257	278	280
Ogallala	18,963	20,517	21,719	23,009	24,394	25,887	26,041
Rita Blanca	192	206	217	228	240	253	255
<b>Total</b>	<b>19,334</b>	<b>20,928</b>	<b>22,157</b>	<b>23,475</b>	<b>24,891</b>	<b>26,418</b>	<b>26,576</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	170	195	211	228	247	268	270
Ogallala	18,237	19,761	20,937	22,200	23,558	25,021	25,172
Rita Blanca	185	199	210	221	233	246	248

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	9	10	10	10	10	10	10
Ogallala	726	756	782	809	836	866	869
Rita Blanca	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

#### Panhandle GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	1	1	1	1	1	1	1
Dockum	233	257	268	279	292	304	306
Ogallala	5,378	5,721	5,797	5,908	6,141	6,460	6,494
Other	493	546	563	583	603	625	627
<b>Total</b>	<b>6,105</b>	<b>6,525</b>	<b>6,629</b>	<b>6,771</b>	<b>7,037</b>	<b>7,390</b>	<b>7,428</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	1	1	1	1	1	1	1
Dockum	19	20	21	22	24	25	26
Ogallala	1,264	1,349	1,446	1,565	1,695	1,836	1,851
Other	68	69	72	76	80	84	85

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	214	237	247	257	268	279	280
Ogallala	3,512	3,954	4,106	4,267	4,438	4,623	4,642
Other	425	477	491	507	523	541	542

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	602	418	245	76	8	1	1

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

Groundwater Management Area 2

TWDB Estimates

May 2020

Garza County UWCD .....	1
High Plains UWCD No.1 .....	2
Llano Estacado UWCD .....	3
Mesa UWCD .....	4
Permian Basin UWCD .....	5
Sandy Land UWCD .....	6
South Plains UWCD .....	7

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

### Garza County UWCD

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	44	46	47	49	51	52	53
Edwards-Trinity (High Plains)	2	2	2	2	2	2	2
Ogallala	46	46	48	49	52	54	54
Other	4	4	4	4	4	4	4
Pecos Valley	10	10	11	11	12	12	12
<b>Total</b>	<b>106</b>	<b>107</b>	<b>112</b>	<b>115</b>	<b>121</b>	<b>124</b>	<b>125</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	30	31	32	33	34	35	36
Ogallala	42	42	43	45	47	49	49
Other	4	4	4	4	4	4	4
Pecos Valley	10	10	11	11	12	12	12

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	14	15	15	16	17	17	17
Edwards-Trinity (High Plains)	2	2	2	2	2	2	2
Ogallala	4	4	4	5	5	5	5
Pecos Valley	10	10	11	11	12	12	12

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

### High Plains UWCD No.1

#### Total Estimated Exempt Use by aquifer

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	462	462	462	68	462	462	462
Ogallala	14,913	14,913	14,913	44,177	14,913	14,913	14,913
<b>Total</b>	<b>15,375</b>	<b>15,375</b>	<b>15,375</b>	<b>44,789</b>	<b>15,375</b>	<b>15,375</b>	<b>15,375</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	379	379	379	379	379	379	379
Ogallala	12,266	12,266	12,266	12,266	12,266	12,266	12,266

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	73	73	73	73	73	73	73
Ogallala	2,368	2,368	2,368	2,368	2,368	2,368	2,368

#### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	9	9	9	9	9	9	9
Ogallala	280	280	280	280	280	280	280

Estimates derived from High Plains UWCD No. 1.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Llano Estacado UWCD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Dockum	16	18	22	26	29	33	33
Edwards-Trinity (High Plains)	130	150	176	203	228	253	256
Ogallala	1,009	1,180	1,389	1,618	1,823	2,038	2,061
<b>Total</b>	<b>1,155</b>	<b>1,348</b>	<b>1,587</b>	<b>1,847</b>	<b>2,080</b>	<b>2,324</b>	<b>2,350</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Dockum	16	18	22	26	29	33	33
Edwards-Trinity (High Plains)	109	129	154	180	205	230	233
Ogallala	919	1,088	1,295	1,521	1,724	1,938	1,961

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards-Trinity (High Plains)	21	21	22	23	23	23	23
Ogallala	90	92	94	97	99	100	100

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

#### Mesa UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	4	4	4	4	4	4	4
Edwards-Trinity (High Plains)	5	5	6	6	6	6	6
Ogallala	386	395	409	416	432	444	445
<b>Total</b>	<b>395</b>	<b>404</b>	<b>419</b>	<b>426</b>	<b>442</b>	<b>454</b>	<b>455</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	2	2	2	2	2	2	2
Edwards-Trinity (High Plains)	2	2	2	2	2	2	2
Ogallala	344	350	363	367	381	392	393

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	2	2	2	2	2	2	2
Edwards-Trinity (High Plains)	3	3	3	3	4	4	4
Ogallala	42	44	46	49	51	52	52

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

#### Permian Basin UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	48	48	47	47	46	46	46
Edwards Trinity (Plateau)	120	123	125	128	131	132	132
Ogallala	1,375	1,414	1,436	1,451	1,473	1,492	1,494
Other	15	15	15	15	15	15	15
<b>Total</b>	<b>1,558</b>	<b>1,600</b>	<b>1,623</b>	<b>1,641</b>	<b>1,665</b>	<b>1,685</b>	<b>1,687</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	48	48	47	47	46	46	46
Edwards Trinity (Plateau)	65	65	65	65	65	65	65
Ogallala	1,340	1,378	1,398	1,412	1,432	1,450	1,452
Other	15	15	15	15	15	15	15

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards Trinity (Plateau)	55	58	60	63	66	67	67
Ogallala	35	36	38	39	41	42	42

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, TWDB Groundwater Database, and input from Permian Basin UWCD.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Sandy Land UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	14	15	16	18	19	20	20
Ogallala	696	761	815	877	947	1,005	1,012
<b>Total</b>	<b>710</b>	<b>776</b>	<b>831</b>	<b>895</b>	<b>966</b>	<b>1,025</b>	<b>1,032</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ogallala	332	362	388	421	460	498	501

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	14	15	16	18	19	20	20
Ogallala	364	400	426	456	487	508	510

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

#### South Plains UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	37	41	43	46	48	50	50
Ogallala	511	550	583	619	657	684	687
<b>Total</b>	<b>548</b>	<b>591</b>	<b>626</b>	<b>664</b>	<b>705</b>	<b>735</b>	<b>738</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	12	13	13	14	14	15	15
Ogallala	158	163	170	177	185	192	193

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (High Plains)	25	28	30	32	34	35	35
Ogallala	353	387	413	442	472	492	494

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

Groundwater Management Area 3

TWDB Estimates

May 2020

Middle Pecos GCD .....	1
Reeves County GCD .....	2

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

#### Middle Pecos GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	479	487	497	506	514	522	523
Other	23	23	23	23	23	23	23
Pecos Valley	613	632	655	675	695	713	715
<b>Total</b>	<b>1,115</b>	<b>1,142</b>	<b>1,175</b>	<b>1,204</b>	<b>1,232</b>	<b>1,258</b>	<b>1,261</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	153	161	171	179	188	196	197
Pecos Valley	357	375	399	419	438	457	459

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	326	326	326	326	326	326	326
Other	23	23	23	23	23	23	23
Pecos Valley	256	256	256	256	256	256	256

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

#### Reeves County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	2	2	2	2	2	2	2
Edwards-Trinity (Plateau)	1,541	1,545	1,498	1,283	1,076	918	905
Igneous	33	33	33	34	34	35	35
Other	143	146	148	151	153	155	155
Pecos Valley	1,617	1,624	1,580	1,368	1,164	1,008	995
<b>Total</b>	<b>3,336</b>	<b>3,350</b>	<b>3,261</b>	<b>2,838</b>	<b>2,429</b>	<b>2,118</b>	<b>2,092</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	128	132	136	140	143	146	146
Igneous	14	15	15	16	16	16	16
Other	86	88	91	93	96	97	98
Pecos Valley	228	235	241	249	255	260	260

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	2	2	2	2	2	2	2
Edwards-Trinity (Plateau)	152	152	152	152	152	152	152
Igneous	18	18	18	18	18	18	18
Other	58	58	58	58	58	58	58
Pecos Valley	129	129	129	129	129	129	129

##### Estimated Mining Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	1,260	1,260	1,210	990	780	620	606
Pecos Valley	1,260	1,260	1,210	990	780	620	606

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

Groundwater Management Area 4

TWDB Estimates

May 2020

Brewster County GCD .....	1
Culberson County GCD .....	2
Hudspeth County UWCD No. 1 .....	3
Jeff Davis County UWCD .....	4
Presidio County UWCD .....	5

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

#### Brewster County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	287	293	295	296	296	297	297
Edwards-Trinity (Plateau)	62	62	63	63	63	63	63
Igneous	117	119	120	120	120	120	120
Marathon	186	187	187	187	187	187	187
Other	289	292	294	294	294	294	294
<b>Total</b>	<b>941</b>	<b>953</b>	<b>959</b>	<b>960</b>	<b>960</b>	<b>961</b>	<b>961</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	276	282	285	286	285	286	286
Edwards-Trinity (Plateau)	39	39	40	40	40	40	40
Igneous	94	96	97	97	97	97	97
Marathon	47	48	48	49	48	49	49
Other	155	158	159	160	160	160	160

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	11	11	11	11	11	11	11
Edwards-Trinity (Plateau)	23	23	23	23	23	23	23
Igneous	23	23	23	23	23	23	23
Marathon	139	139	139	139	139	139	139
Other	134	134	134	134	134	134	134

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

#### Culberson County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Bone Spring-Victorio Peak	6	7	7	7	7	7	7
Capitan Reef Complex	30	30	30	30	30	30	30
Edwards-Trinity (Plateau)	24	24	24	24	24	24	24
Igneous	59	59	59	59	59	59	59
Other	168	169	169	170	170	171	171
West Texas Bolsons	6	7	7	7	7	7	7
<b>Total</b>	<b>287</b>	<b>289</b>	<b>289</b>	<b>290</b>	<b>290</b>	<b>291</b>	<b>291</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	3	4	4	4	4	4	4
Edwards-Trinity (Plateau)	2	2	2	2	2	2	2
Igneous	2	2	2	2	2	2	2
Other	3	3	3	3	3	3	3
West Texas Bolsons	20	21	21	22	22	23	23

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Bone Spring-Victorio Peak	3	3	3	3	3	3	3
Capitan Reef Complex	28	28	28	28	28	28	28
Igneous	22	22	22	22	22	22	22
Other	56	56	56	56	56	56	56
West Texas Bolsons	148	148	148	148	148	148	148

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

### Hudspeth County UWCD No. 1

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Bone Spring-Victorio Peak	410	419	420	422	423	423	423
Other	78	78	78	78	78	78	78
<b>Total</b>	<b>488</b>	<b>497</b>	<b>498</b>	<b>500</b>	<b>501</b>	<b>501</b>	<b>501</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Bone Spring-Victorio Peak	117	126	127	129	129	130	130

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Bone Spring-Victorio Peak	293	293	293	293	293	293	293
Other	78	78	78	78	78	78	78

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

#### Jeff Davis County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	3	3	3	3	3	3	3
Edwards-Trinity (Plateau)	5	5	5	5	5	5	5
Igneous	383	378	378	377	377	376	376
Other	15	14	14	14	14	14	14
West Texas Bolsons	72	72	72	71	71	71	71
<b>Total</b>	<b>478</b>	<b>472</b>	<b>472</b>	<b>470</b>	<b>470</b>	<b>469</b>	<b>469</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	3	3	3	3	3	3	3
Edwards-Trinity (Plateau)	5	5	5	5	5	5	5
Igneous	102	97	96	96	95	95	95
Other	15	14	14	14	14	14	14
West Texas Bolsons	13	12	12	12	12	12	12

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Igneous	281	281	281	281	281	281	281
West Texas Bolsons	59	59	59	59	59	59	59

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

### Presidio County UWCD

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Igneous	184	184	184	184	185	185	185
Other	33	33	33	33	33	34	34
West Texas Bolsons	91	92	92	92	93	93	93
<b>Total</b>	<b>306</b>	<b>307</b>	<b>308</b>	<b>309</b>	<b>310</b>	<b>310</b>	<b>310</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Igneous	4	4	4	4	5	5	5
Other	3	3	3	3	3	4	4
West Texas Bolsons	5	6	6	6	7	7	7

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Igneous	180	180	180	180	180	180	180
Other	30	30	30	30	30	30	30
West Texas Bolsons	86	86	86	86	86	86	86

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

Groundwater Management Area 6

TWDB Estimates

May 2020

Clear Fork GCD .....	1
Gateway GCD.....	2
Mesquite GCD .....	3
Rolling Plains GCD .....	4

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

#### Clear Fork GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	56	57	59	61	63	63	63
Other	233	232	231	231	231	231	231
Seymour	7	7	7	7	7	7	7
<b>Total</b>	<b>296</b>	<b>296</b>	<b>297</b>	<b>299</b>	<b>301</b>	<b>301</b>	<b>301</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	18	18	17	17	17	17	17
Other	22	21	20	20	20	20	20
Seymour	7	7	7	7	7	7	7

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	37	40	42	44	46	46	46
Other	211	211	211	211	211	211	211

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

#### Gateway GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	689	735	742	750	758	766	767
Dockum	35	36	38	39	41	41	41
Ogallala	6	6	6	7	7	7	7
Other	518	579	595	613	632	645	646
Seymour	138	145	147	149	151	152	152
<b>Total</b>	<b>1,386</b>	<b>1,501</b>	<b>1,528</b>	<b>1,558</b>	<b>1,589</b>	<b>1,611</b>	<b>1,613</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	16	16	16	16	17	17	17
Dockum	6	6	6	6	6	6	6
Ogallala	2	2	2	2	2	2	2
Other	62	62	61	61	62	62	63
Seymour	15	15	15	15	15	15	15

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	673	719	726	733	741	749	750
Dockum	29	30	32	33	35	35	35
Ogallala	4	4	4	4	5	5	5
Other	456	517	534	552	570	582	583
Seymour	123	131	132	134	136	137	137

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

#### Mesquite GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	132	167	174	181	189	197	197
Other	266	317	330	345	360	377	378
Seymour	8	9	10	10	10	11	11
<b>Total</b>	<b>406</b>	<b>493</b>	<b>514</b>	<b>536</b>	<b>559</b>	<b>585</b>	<b>586</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	2	2	2	2	2	2	2
Other	8	8	8	8	8	9	9
Seymour	1	1	1	1	1	1	1

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	130	165	172	179	187	195	195
Other	258	309	322	337	352	368	369
Seymour	7	8	9	9	9	10	10

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

#### Rolling Plains GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	204	204	204	204	204	204	204
Seymour	337	337	337	338	339	340	340
<b>Total</b>	<b>541</b>	<b>541</b>	<b>541</b>	<b>542</b>	<b>543</b>	<b>544</b>	<b>544</b>

##### Estimated Domestic Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	4	4	4	4	4	4	4
Seymour	31	31	31	32	32	33	33

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	120	120	120	120	120	120	120
Seymour	169	169	169	169	169	169	169

\* There is one Cross Timbers Aquifer domestic well in the district in the TWDB Groundwater Database. The volume of estimated exempt use was not significant enough to include in this report.

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

Groundwater Management Area 7

TWDB Estimates

May 2020

Coke County UWCD .....	1
Crockett County GCD .....	2
Glasscock GCD .....	3
Hickory UWCD No. 1 .....	4
Hill Country UWCD .....	5
Irion County WCD .....	6
Kimble County GCD .....	7
Kinney County GCD .....	8
Lipan-Kickapoo WCD .....	9
Lone Wolf GCD .....	10
Menard County UWCD .....	11
Middle Pecos GCD .....	12
Plateau UWC and Supply District .....	13
Real-Edwards C and R District .....	14
Santa Rita UWCD .....	15
Sterling County UWCD .....	16
Sutton County UWCD .....	17
Terrell County GCD .....	18
Uvalde County UWCD .....	19
Wes-Tex GCD .....	20

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

#### Coke County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	76	76	75	75	75	75	75
Other	214	212	210	210	210	210	210
<b>Total</b>	<b>290</b>	<b>288</b>	<b>285</b>	<b>285</b>	<b>285</b>	<b>285</b>	<b>285</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	11	11	10	10	10	10	10
Other	41	39	37	37	37	37	37

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	65	65	65	65	65	65	65
Other	173	173	173	173	173	173	173

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

#### Crockett County GCD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Dockum	2	2	2	2	2	2	2
Edwards-Trinity (Plateau)	629	635	636	636	637	637	637
Other	5	5	5	5	5	5	5
<b>Total</b>	<b>636</b>	<b>642</b>	<b>643</b>	<b>643</b>	<b>644</b>	<b>644</b>	<b>644</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Dockum	1	1	1	1	1	1	1
Edwards-Trinity (Plateau)	133	139	140	140	141	141	141
Other	2	2	2	2	2	2	2

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Dockum	1	1	1	1	1	1	1
Edwards-Trinity (Plateau)	496	496	496	496	496	496	496
Other	3	3	3	3	3	3	3

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

#### Glasscock GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	3,194	3,199	3,196	3,195	3,196	3,196	3,196
Ogallala	3,145	3,148	3,150	3,156	3,162	3,168	3,168
<b>Total</b>	<b>6,339</b>	<b>6,347</b>	<b>6,346</b>	<b>6,351</b>	<b>6,358</b>	<b>6,364</b>	<b>6,364</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	128	133	130	129	130	130	130
Ogallala	99	102	104	110	116	122	122

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	116	116	116	116	116	116	116
Ogallala	96	96	96	96	96	96	96

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	2,950	2,950	2,950	2,950	2,950	2,950	2,950

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

Values are rounded to the nearest acre-foot.



## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Hickory UWCD No. 1

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	1	1	1	1	1	1	1
Edwards-Trinity (Plateau)	73	72	72	72	72	72	72
Ellenburger-San Saba	433	432	432	431	432	432	432
Hickory	793	789	785	783	783	783	783
Marble Falls	16	16	16	16	16	16	16
Other	203	202	201	200	200	201	201
<b>Total</b>	<b>1,519</b>	<b>1,512</b>	<b>1,507</b>	<b>1,503</b>	<b>1,504</b>	<b>1,505</b>	<b>1,505</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	1	1	1	1	1	1	1
Edwards-Trinity (Plateau)	12	11	11	11	11	11	11
Ellenburger-San Saba	26	25	25	24	25	25	25
Hickory	89	85	81	79	79	79	79
Marble Falls	4	4	4	4	4	4	4
Other	23	22	21	20	20	21	21

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	61	61	61	61	61	61	61
Ellenburger-San Saba	407	407	407	407	407	407	407
Hickory	704	704	704	704	704	704	704
Marble Falls	12	12	12	12	12	12	12
Other	180	180	180	180	180	180	180

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

#### Hill Country UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	721	728	733	747	761	775	777
Ellenburger-San Saba	455	466	473	493	513	533	535
Hickory	160	163	166	172	179	185	186
Lipan	7	8	8	8	9	9	9
Marble Falls	7	8	8	8	9	9	9
Other	242	246	248	256	264	271	272
Trinity	557	570	579	605	630	655	658
<b>Total</b>	<b>2,149</b>	<b>2,189</b>	<b>2,215</b>	<b>2,289</b>	<b>2,365</b>	<b>2,437</b>	<b>2,446</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	235	242	247	261	275	289	291
Ellenburger-San Saba	335	346	353	373	393	413	415
Hickory	108	111	114	120	127	133	134
Lipan	7	8	8	8	9	9	9
Marble Falls	7	8	8	8	9	9	9
Other	127	131	133	141	149	156	157
Trinity	421	434	443	469	494	519	522

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	486	486	486	486	486	486	486
Ellenburger-San Saba	120	120	120	120	120	120	120
Hickory	52	52	52	52	52	52	52
Other	115	115	115	115	115	115	115
Trinity	136	136	136	136	136	136	136

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

#### Irion County WCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	11	12	13	14	14	15	15
Dockum	5,956	5,955	5,954	5,954	5,954	5,954	5,954
Edwards-Trinity (Plateau)	325	324	323	323	323	323	323
Lipan	19	20	21	22	22	23	23
Other	17	16	16	16	16	16	16
<b>Total</b>	<b>6,328</b>	<b>6,327</b>	<b>6,327</b>	<b>6,329</b>	<b>6,329</b>	<b>6,331</b>	<b>6,331</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	11	12	13	14	14	15	15
Dockum	3,009	3,008	3,007	3,007	3,007	3,007	3,007
Edwards-Trinity (Plateau)	62	61	60	60	60	60	60
Lipan	11	12	13	14	14	15	15
Other	7	6	6	6	6	6	6

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	263	263	263	263	263	263	263
Lipan	8	8	8	8	8	8	8
Other	10	10	10	10	10	10	10

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	2,947	2,947	2,947	2,947	2,947	2,947	2,947

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

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Kimble County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	387	380	383	384	385	385	385
Trinity	21	20	21	21	21	21	21
<b>Total</b>	<b>408</b>	<b>400</b>	<b>404</b>	<b>405</b>	<b>406</b>	<b>406</b>	<b>406</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	172	178	181	182	183	183	183
Trinity	15	15	16	16	16	16	16

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	215	202	202	202	202	202	202
Trinity	6	5	5	5	5	5	5

Estimates derived using 2010 Census Data, TWDB population projections, 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

#### Kinney County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	4	4	4	4	4	4	4
Edwards-Trinity (Plateau)	13	13	13	13	13	13	13
Other	11	11	11	11	11	11	11
<b>Total</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	2	2	2	2	2	2	2
Other	2	2	2	2	2	2	2

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	4	4	4	4	4	4	4
Edwards-Trinity (Plateau)	11	11	11	11	11	11	11
Other	9	9	9	9	9	9	9

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

#### Lipan-Kickapoo WCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	54	54	54	54	54	54	54
Edwards-Trinity (Plateau)	1,490	1,537	1,580	1,597	1,632	1,668	1,672
Lipan	1,114	1,207	1,261	1,318	1,378	1,443	1,449
Other	346	346	345	344	344	344	344
<b>Total</b>	<b>3,004</b>	<b>3,144</b>	<b>3,240</b>	<b>3,313</b>	<b>3,408</b>	<b>3,509</b>	<b>3,519</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	9	9	9	9	9	9	9
Edwards-Trinity (Plateau)	340	374	395	416	439	463	466
Lipan	880	973	1,027	1,084	1,144	1,209	1,215
Other	41	41	40	39	39	39	39

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	6	6	6	5	5	5	5
Edwards-Trinity (Plateau)	812	896	945	997	1,051	1,111	1,117
Lipan	418	461	487	514	542	573	576
Other	43	43	42	42	42	41	41

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	587	600	622	618	630	642	643

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

#### Lone Wolf GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	82	83	83	83	83	83	83
Other	18	18	18	18	18	18	18
<b>Total</b>	<b>100</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>101</b>	<b>101</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	6	7	7	7	7	7	7

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	76	76	76	76	76	76	76
Other	18	18	18	18	18	18	18

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

#### Menard County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	288	320	320	320	320	320	320
Ellenburger-San Saba	1	1	1	1	1	1	1
Other	18	20	20	20	20	20	20
<b>Total</b>	<b>307</b>	<b>341</b>	<b>341</b>	<b>341</b>	<b>341</b>	<b>341</b>	<b>341</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	47	47	47	47	47	47	47
Other	18	20	20	20	20	20	20

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	241	273	273	273	273	273	273
Ellenburger-San Saba	1	1	1	1	1	1	1
Other	8	10	10	10	10	10	10

Estimates derived using 2010 Census Data, TWDB population projections, 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

#### Middle Pecos GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	14	14	14	14	14	14	14
Edwards-Trinity (Plateau)	1,853	1,879	1,912	1,790	1,677	1,593	1,586
Other	807	808	808	658	519	409	399
Pecos Valley	14	14	14	14	14	14	14
Rustler	14	14	14	14	14	14	14
<b>Total</b>	<b>2,702</b>	<b>2,729</b>	<b>2,762</b>	<b>2,490</b>	<b>2,238</b>	<b>2,044</b>	<b>2,027</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	502	528	561	589	616	642	645
Other	8	9	9	9	10	10	10

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Capitan Reef Complex	14	14	14	14	14	14	14
Edwards-Trinity (Plateau)	581	581	581	581	581	581	581
Other	29	29	29	29	29	29	29
Pecos Valley	14	14	14	14	14	14	14
Rustler	14	14	14	14	14	14	14

##### Estimated Mining Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	770	770	770	620	480	370	360
Other	770	770	770	620	480	370	360

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

#### Plateau UWC and Supply District

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	152	154	155	156	156	157	157

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	67	69	70	71	71	72	72

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	85	85	85	85	85	85	85

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

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Real-Edwards C and R District

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	863	854	847	843	843	843	843
Other	11	11	10	10	10	10	10
<b>Total</b>	<b>874</b>	<b>865</b>	<b>857</b>	<b>853</b>	<b>853</b>	<b>853</b>	<b>853</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	202	193	186	182	182	182	182
Other	11	11	10	10	10	10	10

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	661	661	661	661	661	661	661

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

#### Santa Rita UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	204	211	214	217	220	221	222
Other	3	3	3	3	3	3	3
<b>Total</b>	<b>207</b>	<b>214</b>	<b>217</b>	<b>220</b>	<b>223</b>	<b>224</b>	<b>225</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	56	63	66	69	72	73	74

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	148	148	148	148	148	148	148
Other	3	3	3	3	3	3	3

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

#### Sterling County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	14	14	14	14	14	14	14
Edwards-Trinity (Plateau)	212	212	212	212	212	212	212
Lipan	6	6	6	7	7	8	8
Other	36	36	36	36	36	36	36
<b>Total</b>	<b>268</b>	<b>268</b>	<b>268</b>	<b>269</b>	<b>269</b>	<b>270</b>	<b>270</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	1	1	1	1	1	1	1
Edwards-Trinity (Plateau)	17	17	17	17	17	17	17
Lipan	6	6	6	7	7	8	8
Other	10	10	10	10	10	10	10

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	6	6	6	6	6	6	6
Edwards-Trinity (Plateau)	195	195	195	195	195	195	195
Other	26	26	26	26	26	26	26

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	7	7	7	7	7	7	7

Estimates derived using 2010 Census Data, TWDB population projections, 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

#### Sutton County UWCD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards-Trinity (Plateau)	588	634	676	722	767	825	885
<b>Total</b>	<b>588</b>	<b>634</b>	<b>676</b>	<b>722</b>	<b>767</b>	<b>825</b>	<b>885</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards-Trinity (Plateau)	273	287	294	302	305	317	335

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards-Trinity (Plateau)	315	347	382	420	462	508	560

Estimates derived using 2010 Census Data, TWDB population projections, 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

#### Terrell County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	2,195	2,195	2,195	2,194	2,194	2,194	2,194
Other	679	679	679	679	679	679	679
<b>Total</b>	<b>2,874</b>	<b>2,874</b>	<b>2,874</b>	<b>2,873</b>	<b>2,873</b>	<b>2,873</b>	<b>2,873</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	10	10	10	9	9	9	9

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	148	148	148	148	148	148	148

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	2,037	2,037	2,037	2,037	2,037	2,037	2,037
Other	679	679	679	679	679	679	679

\* Terrell County GCD Rules exempt wells that provide water for agricultural irrigation use that is drilled, completed, or equipped so that it is incapable of producing more than 25,000 gallons of groundwater a day.

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

#### Uvalde County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	1,034	1,037	1,039	1,042	1,047	1,052	1,053
Other	26	27	27	28	30	32	32
Trinity	1,086	1,090	1,093	1,099	1,108	1,116	1,117
<b>Total</b>	<b>2,146</b>	<b>2,154</b>	<b>2,159</b>	<b>2,169</b>	<b>2,185</b>	<b>2,200</b>	<b>2,202</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	77	80	82	85	90	95	96
Other	26	27	27	28	30	32	32
Trinity	129	133	136	142	151	159	160

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards-Trinity (Plateau)	957	957	957	957	957	957	957
Trinity	957	957	957	957	957	957	957

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

#### Wes-Tex GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	2	2	2	2	2	2	2
Dockum	40	40	40	40	40	40	40
Edwards-Trinity (Plateau)	127	127	128	128	129	129	129
Ogallala	2	2	2	2	2	2	2
Other	21	21	21	21	21	21	21
<b>Total</b>	<b>192</b>	<b>192</b>	<b>193</b>	<b>193</b>	<b>194</b>	<b>194</b>	<b>194</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Dockum	22	22	23	24	25	25	25
Edwards-Trinity (Plateau)	10	10	11	11	12	12	12
Ogallala	2	2	2	2	2	2	2
Other	2	2	2	2	2	2	2

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Blaine	2	2	2	2	2	2	2
Dockum	40	40	40	40	40	40	40
Edwards-Trinity (Plateau)	117	117	117	177	117	117	117
Other	19	19	19	19	19	19	19

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

Groundwater Management Area 8

TWDB Estimates

May 2020

Central Texas GCD .....	1
Clearwater UWCD .....	2
Middle Trinity GCD .....	3
North Texas GCD .....	4
Northern Trinity GCD .....	6
Post Oak Savannah GCD .....	7
Prairielands GCD .....	8
Red River GCD .....	9
Saratoga UWCD .....	10
Southern Trinity GCD .....	11
Upper Trinity GCD .....	12

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

#### Central Texas GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	1,920	2,143	2,326	2,533	2,713	2,874	2,891
Hickory	56	63	68	74	79	84	85
Marble Falls	56	63	68	74	79	84	85
Other	169	189	205	223	239	253	255
Trinity	509	568	616	671	719	761	766
<b>Total</b>	<b>1,920</b>	<b>2,143</b>	<b>2,326</b>	<b>2,533</b>	<b>2,713</b>	<b>2,874</b>	<b>2,891</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	1,329	1,552	1,735	1,942	2,122	2,283	2,300
Hickory	39	46	51	57	62	67	68
Marble Falls	39	46	51	57	62	67	68
Other	117	137	153	171	187	201	203
Trinity	352	411	459	514	562	604	609

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	591	591	591	591	591	591	591
Hickory	17	17	17	17	17	17	17
Marble Falls	17	17	17	17	17	17	17
Other	52	52	52	52	52	52	52
Trinity	157	157	157	157	157	157	157

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

#### Clearwater UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	362	398	438	482	530	583	641
Other	790	807	824	842	860	878	897
Trinity	841	905	976	1,053	1,138	1,231	1,333
<b>Total</b>	<b>1,993</b>	<b>2,110</b>	<b>2,238</b>	<b>2,377</b>	<b>2,527</b>	<b>2,692</b>	<b>2,871</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	232	255	281	309	340	374	411
Other	328	338	348	358	369	380	392
Trinity	609	670	737	811	892	981	1,079

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	130	143	157	173	190	209	230
Other	462	469	476	483	490	498	505
Trinity	232	235	239	243	246	250	254

Estimates derived using Clearwater UWCD data.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Middle Trinity GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	3	3	3	4	4	4	4
Cross Timbers	255	255	255	255	256	256	256
Other	387	388	388	389	389	389	389
Trinity	4,619	4,791	4,923	5,068	5,233	5,391	5,407
<b>Total</b>	<b>5,264</b>	<b>5,437</b>	<b>5,569</b>	<b>5,716</b>	<b>5,882</b>	<b>6,040</b>	<b>6,056</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	3	3	3	4	4	4	4
Cross Timbers	8	8	8	8	9	9	9
Other	20	21	21	22	22	22	22
Trinity	2,282	2,454	2,586	2,731	2,896	3,054	3,070

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	247	247	247	247	247	247	247
Other	367	367	367	367	367	367	367
Trinity	2,337	2,337	2,337	2,337	2,337	2,337	2,337

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

#### North Texas GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	2,149	2,149	2,149	2,149	2,149	2,149	2,149
Woodbine	2,379	2,379	2,379	2,379	2,379	2,379	2,379
<b>Total</b>	<b>4,528</b>	<b>4,528</b>	<b>4,528</b>	<b>4,528</b>	<b>4,528</b>	<b>4,528</b>	<b>4,528</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	615	615	615	615	615	615	615
Woodbine	679	679	679	679	679	679	679

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	727	727	727	727	727	727	727
Woodbine	803	803	803	803	803	803	803

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	58	58	58	58	58	58	58
Woodbine	173	173	173	173	173	173	173

##### Estimated Irrigation Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	608	608	608	608	608	608	608
Woodbine	672	672	672	672	672	672	672

\* North Texas GCD rules include exemptions for wells used for agricultural irrigation, commercial, and public supply use.

Estimates derived using North Texas GCD input.

Values are rounded to the nearest acre-foot.

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

Estimated Commercial Exempt Use (by aquifer)							
<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Trinity	9	9	9	9	9	9	9
Woodbine	8	8	8	8	8	8	8

  

Estimated Public Water Supply Exempt Use (by aquifer)							
<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Trinity	111	111	111	111	111	111	111
Woodbine	122	122	122	122	122	122	122

---

\* North Texas GCD rules include exemptions for wells used for agricultural irrigation, commercial, and public supply use.  
 Estimates derived using North Texas GCD input.  
 Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Northern Trinity GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	27	27	27	27	27	27	27
Trinity	1,785	1,949	2,140	2,283	2,415	2,559	2,574
Woodbine	838	906	984	1,043	1,097	1,156	1,163
<b>Total</b>	<b>2,650</b>	<b>2,882</b>	<b>3,151</b>	<b>3,353</b>	<b>3,539</b>	<b>3,742</b>	<b>3,764</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1,677	1,841	2,032	2,175	2,307	2,451	2,466
Woodbine	689	757	835	894	948	1,007	1,014

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	24	24	24	24	24	24	24
Trinity	24	24	24	24	24	24	24
Woodbine	47	47	47	47	47	47	47

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	3	3	3	3	3	3	3
Trinity	84	84	84	84	84	84	84
Woodbine	102	102	102	102	102	102	102

\* Northern Trinity GCD rules include exemptions for wells used for agricultural irrigation use.

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**

**Post Oak Savannah GCD**

**Total Estimated Exempt Use (by aquifer)**

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	1,443	1,451	1,460	1,484	1,508	1,532	1,534

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	615	623	632	656	680	704	706

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	828	828	828	828	828	828	828

---

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

#### Prairielands GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	31	33	34	35	35	36	36
Other	75	78	79	81	82	85	85
Trinity	944	994	1,032	1,068	1,104	1,138	1,141
Woodbine	396	408	416	426	436	447	448
<b>Total</b>	<b>1,446</b>	<b>1,513</b>	<b>1,561</b>	<b>1,610</b>	<b>1,657</b>	<b>1,706</b>	<b>1,710</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	31	33	34	35	35	36	36
Other	40	43	44	46	47	50	50
Trinity	604	654	692	728	764	798	801
Woodbine	169	181	189	199	209	220	221

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	35	35	35	35	35	35	35
Trinity	325	325	325	325	325	325	325
Woodbine	215	215	215	215	215	215	215

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	15	15	15	15	15	15	15
Woodbine	12	12	12	12	12	12	12

\* Prairielands GCD Rules include exemptions for agricultural wells not capable of producing more than 36,000 gallons per day. According to the TWDB groundwater database, there are two irrigation wells that qualify for this exemption (state well #3246210 and #3240906).

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 River GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	144	144	144	144	144	144	144
Woodbine	2,161	2,161	2,161	2,161	2,161	2,161	2,161
<b>Total</b>	<b>2,305</b>	<b>2,305</b>	<b>2,305</b>	<b>2,305</b>	<b>2,305</b>	<b>2,305</b>	<b>2,305</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	63	63	63	63	63	63	63
Woodbine	950	950	950	950	950	950	950

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	51	51	51	51	51	51	51
Woodbine	770	770	770	770	770	770	770

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	2	2	2	2	2	2	2
Woodbine	30	30	30	30	30	30	30

##### Estimated Irrigation Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	1	1	1	1	1	1	1
Woodbine	7	7	7	7	7	7	7

##### Estimated Commercial Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	27	27	27	27	27	27	27
Woodbine	404	404	404	404	404	404	404

\* Red River GCD Rules additionally exempt commercial and agricultural use, including irrigation.

Estimates derived using Red River GCD input.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Saratoga UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	7	7	7	7	7	7	7
Ellenburger-San Saba	24	25	26	26	27	28	28
Marble Falls	9	9	9	9	9	9	9
Other	31	32	33	33	34	35	35
Trinity	278	287	294	302	309	316	316
<b>Total</b>	<b>349</b>	<b>360</b>	<b>369</b>	<b>377</b>	<b>386</b>	<b>395</b>	<b>395</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Ellenburger-San Saba	10	11	12	12	13	14	14
Marble Falls	2	2	2	2	2	2	2
Other	10	11	12	12	13	14	14
Trinity	107	116	123	131	138	145	145

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	7	7	7	7	7	7	7
Ellenburger-San Saba	14	14	14	14	14	14	14
Marble Falls	7	7	7	7	7	7	7
Other	21	21	21	21	21	21	21
Trinity	171	171	171	171	171	171	171

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

#### Southern Trinity GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	641	662	681	705	732	760	763
Trinity	568	591	612	637	667	697	701
<b>Total</b>	<b>1,209</b>	<b>1,253</b>	<b>1,293</b>	<b>1,342</b>	<b>1,399</b>	<b>1,457</b>	<b>1,464</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	438	459	478	502	529	557	560
Trinity	478	501	522	547	577	607	611

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	203	203	203	203	203	203	203
Trinity	90	90	90	90	90	90	90

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

#### Upper Trinity GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	2,950	3,080	3,210	3,341	3,471	3,601	3,731
Trinity	16,882	18,588	20,295	22,001	23,707	24,414	27,120
<b>Total</b>	<b>19,832</b>	<b>21,668</b>	<b>23,505</b>	<b>25,342</b>	<b>27,178</b>	<b>28,015</b>	<b>30,851</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	2,111	2,241	2,371	2,502	2,632	2,762	2,892
Trinity	9,988	11,694	13,401	15,107	16,813	18,520	20,226

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	242	242	242	242	242	242	242
Trinity	478	478	478	478	478	478	478

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Cross Timbers	597	597	597	597	597	597	597
Trinity	6,416	6,416	6,416	6,416	6,416	6,416	6,416

\* Upper Trinity GCD Rules additionally exempt agricultural use, including irrigation.

Estimates derived by Upper Trinity GCD.

Values are rounded to the nearest acre-foot.

# Projected Exempt Groundwater Use Estimates

Groundwater Management Area 9

TWDB Estimates

May 2020

Bandera County River Authority & Ground Water District.....	1
Barton Springs/Edwards Aquifer CD .....	2
Blanco-Pedernales GCD .....	3
Comal Trinity GCD .....	4
Cow Creek GCD .....	5
Hays Trinity GCD .....	6
Headwaters GCD.....	7
Medina County GCD .....	8
Southwestern Travis County GCD .....	9
Trinity Glen Rose GCD .....	10

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
<b>Total</b>	<b>1,551</b>	<b>1,701</b>	<b>1,770</b>	<b>1,791</b>	<b>1,812</b>	<b>1,824</b>	<b>1,826</b>

#### 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
<b>Total</b>	<b>410</b>	<b>431</b>	<b>445</b>	<b>461</b>	<b>476</b>	<b>487</b>	<b>489</b>

##### 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, 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

#### 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
<b>Total</b>	<b>1,014</b>	<b>1,121</b>	<b>1,178</b>	<b>1,217</b>	<b>1,243</b>	<b>1,260</b>	<b>1,261</b>

##### 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, 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**

**Comal Trinity GCD**

**Total Estimated Exempt Use (by aquifer)**

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Trinity	1,063	1,279	1,468	1,647	1,809	1,967	1,984
<b>Total</b>	<b>1,063</b>	<b>1,279</b>	<b>1,468</b>	<b>1,647</b>	<b>1,809</b>	<b>1,967</b>	<b>1,984</b>

**Estimated Domestic Exempt Use (by aquifer)**

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
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, 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

#### 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
<b>Total</b>	<b>3,308</b>	<b>3,871</b>	<b>4,416</b>	<b>4,966</b>	<b>5,557</b>	<b>6,145</b>	<b>6,206</b>

##### 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, 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

#### 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
<b>Total</b>	<b>3,716</b>	<b>4,433</b>	<b>4,750</b>	<b>5,267</b>	<b>5,784</b>	<b>6,301</b>	<b>6,818</b>

---

##### 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

---

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
<b>Total</b>	<b>2,815</b>	<b>3,312</b>	<b>3,824</b>	<b>4,350</b>	<b>4,925</b>	<b>5,502</b>	<b>5,563</b>

##### 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)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Trinity	1,471	1,508	1,537	1,576	1,610	1,641	1,644
<b>Total</b>	<b>1,471</b>	<b>1,508</b>	<b>1,537</b>	<b>1,576</b>	<b>1,610</b>	<b>1,641</b>	<b>1,644</b>

##### Estimated Domestic Exempt Use (by aquifer)

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

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
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, 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

#### 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	561	583	601	623	644	662	664
<b>Total</b>	<b>561</b>	<b>583</b>	<b>601</b>	<b>623</b>	<b>644</b>	<b>662</b>	<b>664</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	261	283	301	323	344	362	364

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Trinity	300	300	300	300	300	300	300

##### 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 draft estimates.

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.

# Projected Exempt Groundwater Use Estimates

Groundwater Management Area 10

TWDB Estimates

May 2020

Barton Springs/Edwards Aquifer CD .....	1
Comal Trinity GCD .....	2
Kinney County GCD .....	3
Medina County GCD .....	4
Plum Creek CD.....	5
Uvalde County UWCD.....	6

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

#### Barton Springs/Edwards Aquifer CD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	3,423	4,054	4,710	5,255	5,873	6,584	6,661
Other	569	662	757	825	882	947	954
Trinity	629	781	947	1,112	1,359	1,643	1,675
<b>Total</b>	<b>4,621</b>	<b>5,497</b>	<b>6,414</b>	<b>7,192</b>	<b>8,114</b>	<b>9,174</b>	<b>9,290</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	3,346	3,977	4,633	5,178	5,796	6,507	6,584
Other	560	653	748	816	873	938	945
Trinity	624	776	942	1,107	1,354	1,638	1,670

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	77	77	77	77	77	77	77
Other	9	9	9	9	9	9	9
Trinity	5	5	5	5	5	5	5

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
Other	34	43	52	61	70	79	80
Trinity	551	692	838	984	1,121	1,261	1,275
<b>Total</b>	<b>585</b>	<b>735</b>	<b>890</b>	<b>1,045</b>	<b>1,191</b>	<b>1,340</b>	<b>1,355</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	34	43	52	61	70	79	80
Trinity	551	692	838	984	1,121	1,261	1,275

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

#### Kinney County GCD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards (Balcones Fault Zone)	109	109	109	109	109	109	109
Edwards-Trinity (Plateau)	19	19	19	19	19	19	19
Other	84	84	84	84	84	84	84
<b>Total</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>	<b>212</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards (Balcones Fault Zone)	16	16	16	16	16	16	16
Edwards-Trinity (Plateau)	7	7	7	7	7	7	7
Other	10	10	10	10	10	10	10

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Edwards (Balcones Fault Zone)	93	93	93	93	93	93	93
Edwards-Trinity (Plateau)	12	12	12	12	12	12	12
Other	74	74	74	74	74	74	74

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

#### Medina County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	1,178	1,211	1,237	1,271	1,301	1,329	1,331
Trinity	293	297	301	305	309	313	313
<b>Total</b>	<b>1,471</b>	<b>1,508</b>	<b>1,538</b>	<b>1,576</b>	<b>1,610</b>	<b>1,642</b>	<b>1,644</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	390	423	449	483	513	541	543
Trinity	51	55	59	63	67	71	71

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	788	788	788	788	788	788	788
Trinity	242	242	242	242	242	242	242

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

#### Plum Creek CD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	178	223	272	322	400	490	500
Other	273	297	323	352	381	409	413
<b>Total</b>	<b>451</b>	<b>520</b>	<b>595</b>	<b>674</b>	<b>781</b>	<b>899</b>	<b>913</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	173	218	267	317	395	485	495
Other	144	168	194	223	252	280	284

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Edwards (Balcones Fault Zone)	5	5	5	5	5	5	5
Other	129	129	129	129	129	129	129

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**

**Uvalde County UWCD**

**Total Estimated Exempt Use (by aquifer)**

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	1,489	1,489	1,489	1,489	1,489	1,489	1,489

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	232	239	245	256	271	286	288

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Other	1,489	1,489	1,489	1,489	1,489	1,489	1,489

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**

Groundwater Management Area 11

TWDB Estimates

May 2020

Neches & Trinity Valleys GCD .....	1
Panola County GCD .....	2
Pineywoods GCD .....	3
Rusk County GCD .....	4

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

### Neches & Trinity Valleys GCD

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,692	1,716	1,761	1,831	2,010	2,233	2,257
Nacatoch	5	5	6	6	8	10	10
Other	545	552	565	585	635	699	706
Queen City	1,452	1,463	1,480	1,511	1,581	1,667	1,676
Sparta	306	307	309	313	319	326	327
<b>Total</b>	<b>4,000</b>	<b>4,043</b>	<b>4,121</b>	<b>4,246</b>	<b>4,553</b>	<b>4,935</b>	<b>4,976</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,474	1,498	1,543	1,613	1,792	2,015	2,039
Nacatoch	5	5	6	6	8	10	10
Other	427	434	447	467	517	581	588
Queen City	1,183	1,194	1,211	1,242	1,312	1,398	1,407
Sparta	290	291	293	297	303	310	311

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	217	217	217	217	217	217	217
Other	118	118	118	118	118	118	118
Queen City	265	265	265	265	265	265	265
Sparta	16	16	16	16	16	16	16

#### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1	1	1	1	1	1	1
Queen City	4	4	4	4	4	4	4

\* Neches & Trinity Valleys GCD (the District) rules include exemptions for wells used for agricultural use that are incapable of producing more than 36,000 gallons per day. According to the TWDB groundwater database, there are two irrigation wells that qualify for this exemption in the District (state well #3805703 and #3827705).

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

#### Panola County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,900	1,919	1,922	1,934	1,952	1,968	1,970

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,061	1,080	1,083	1,095	1,113	1,129	1,131

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	265	265	265	265	265	265	265

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	574	574	574	574	574	574	574

\* Panola County GCD Rules include exemptions for wells used for agricultural use that are incapable of producing more than 25,000 gallons per day and are on tracts of land less than 5 acres. There is not enough available information in the TWDB Groundwater Database to determine the number of wells that qualify for agricultural exempt use. The number reported here reflects all wells in the TWDB Groundwater Database classified as irrigation wells in the district.

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

#### Pineywoods GCD \*

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	857	903	952	1,010	1,078	1,168	1,178
Other	88	92	98	104	110	120	120
Queen City	312	329	346	367	391	425	428
Sparta	61	64	68	72	77	82	83
Yegua-Jackson	104	106	109	111	113	115	115
<b>Total</b>	<b>1,422</b>	<b>1,494</b>	<b>1,573</b>	<b>1,664</b>	<b>1,769</b>	<b>1,910</b>	<b>1,924</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	194	211	227	247	271	296	299
Other	23	25	27	29	31	34	34
Queen City	54	59	63	69	75	83	83
Sparta	44	47	51	55	60	65	66
Yegua-Jackson	35	37	40	42	44	46	46

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	663	692	725	763	807	872	879
Other	65	67	71	75	79	86	86
Queen City	258	270	283	298	316	342	345
Sparta	17	17	17	17	17	17	17
Yegua-Jackson	69	69	69	69	69	69	69

##### Estimated Agricultural Exempt Use (by aquifer) \*

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

\* Pineywoods GCD Rules include exemptions for wells used for agricultural use that are incapable of producing more than 25,000 gallons per day. There is not enough available information in the TWDB Groundwater Database to determine the number of wells that qualify for agricultural exempt use.

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

#### Rusk County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	3,552	4,413	4,388	4,373	4,386	4,487	4,497
Other	23	24	26	28	31	34	34
<b>Total</b>	<b>3,575</b>	<b>4,437</b>	<b>4,414</b>	<b>4,401</b>	<b>4,417</b>	<b>4,521</b>	<b>4,531</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	905	973	1,048	1,140	1,242	1,350	1,361
Other	23	24	26	28	31	34	34

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	332	337	343	349	355	355	355

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	2,315	3,103	2,997	2,884	2,789	2,782	2,781

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

Groundwater Management Area 12

TWDB Estimates

May 2020

Brazos Valley GCD.....	1
Fayette County GCD .....	3
Lost Pines GCD .....	4
Mid-East Texas GCD .....	5
Post Oak Savannah GCD.....	6

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

#### Brazos Valley GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	62	62	64	64	65	66	66
Carrizo-Wilcox	3,913	3,920	3,930	3,938	3,945	3,953	3,953
Gulf Coast	11	13	15	18	19	21	22
Other	122	137	154	172	182	198	199
Queen City	274	358	343	313	288	282	282
Sparta	893	1228	1162	1035	930	902	900
Yegua-Jackson	488	567	651	744	796	878	887
<b>Total</b>	<b>5,763</b>	<b>6,285</b>	<b>6,319</b>	<b>6,284</b>	<b>6,225</b>	<b>6,300</b>	<b>6,309</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	6	6	8	8	9	10	10
Carrizo-Wilcox	72	79	89	97	104	112	112
Gulf Coast	11	13	15	18	19	21	22
Other	78	93	110	128	138	154	155
Queen City	56	65	76	87	94	104	105
Sparta	173	207	243	283	305	340	344
Yegua-Jackson	398	477	561	654	706	788	797

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	56	56	56	56	56	56	56
Carrizo-Wilcox	395	395	395	395	395	395	395
Gulf Coast	0	0	0	0	0	0	0
Other	44	44	44	44	44	44	44
Queen City	61	61	61	61	61	61	61
Sparta	93	93	93	93	93	93	93
Yegua-Jackson	90	90	90	90	90	90	90

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

Values are rounded to the nearest acre-foot.

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

**Brazos Valley GCD (continued)**

Estimated Mining and Rig Supply Exempt Use (by aquifer)							
Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	3,446	3,446	3,446	3,446	3,446	3,446	3,446
Queen City	157	232	206	165	133	117	116
Sparta	627	928	826	659	532	469	463

---

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

Values are rounded to the nearest acre-foot.



# Projected Exempt Groundwater Use Estimates

## Acre-feet per year

### Fayette County GCD

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	38	38	38	38	38	38	38
Gulf Coast	44	44	44	44	44	44	44
Other	183	193	202	209	211	217	221
Queen City	6	7	7	7	8	8	8
Sparta	140	147	151	154	157	159	161
Yegua-Jackson	856	901	927	949	968	982	998
<b>Total</b>	<b>1,266</b>	<b>1,329</b>	<b>1,367</b>	<b>1,400</b>	<b>1,431</b>	<b>1,452</b>	<b>1,476</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	25	25	25	25	31	30	31
Other	123	133	142	149	151	157	161
Queen City	6	7	7	7	8	8	8
Sparta	61	68	71	75	78	80	82
Yegua-Jackson	404	449	475	497	516	530	546

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	38	38	38	38	38	38	38
Gulf Coast	19	19	19	19	19	19	19
Other	60	60	60	60	60	60	60
Sparta	79	79	79	79	79	79	79
Yegua-Jackson	452	452	452	452	452	452	452

Estimates derived from contracted work by Daniel B. Stephens and Associates for Fayette County GCD.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Lost Pines GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	229	247	270	303	347	406	413
Other	60	64	68	75	83	95	96
Queen City	98	102	107	113	121	132	133
Sparta	33	35	37	40	44	49	49
Yegua-Jackson	16	17	17	17	17	18	18
<b>Total</b>	<b>436</b>	<b>465</b>	<b>499</b>	<b>548</b>	<b>612</b>	<b>700</b>	<b>709</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	72	90	113	146	190	249	256
Other	14	18	22	29	37	49	50
Queen City	16	20	25	31	39	50	51
Sparta	8	10	12	15	19	24	24
Yegua-Jackson	2	3	3	3	3	4	4

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	123	123	123	123	123	123	123
Other	46	46	46	46	46	46	46
Queen City	82	82	82	82	82	82	82
Sparta	25	25	25	25	25	25	25
Yegua-Jackson	14	14	14	14	14	14	14

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	34	34	34	34	34	34	34

\* Lost Pines GCD Rules include exemptions for wells used for agricultural use that are incapable of producing more than 25,000 gallons per day. According to information in the TWDB groundwater database, there is one irrigation well that qualifies for this exemption in the District (state well #5839904).

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

#### Mid-East Texas GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	309	311	322	377	464	644	668
Carrizo-Wilcox	16	16	16	16	16	16	16
Gulf Coast	15	15	16	21	29	46	48
Other	103	105	109	116	126	143	145
Queen City	22	23	23	24	26	27	27
Sparta	54	56	58	60	63	66	67
Yegua-Jackson	36	37	38	40	42	44	44
<b>Total</b>	<b>555</b>	<b>563</b>	<b>582</b>	<b>654</b>	<b>766</b>	<b>986</b>	<b>1,015</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	227	229	240	295	382	562	586
Carrizo-Wilcox	4	4	4	4	4	4	4
Gulf Coast	15	15	16	21	29	46	48
Other	75	77	81	88	98	115	117
Queen City	18	19	19	20	22	23	23
Sparta	50	52	54	56	59	62	63
Yegua-Jackson	32	33	34	36	38	40	40

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	82	82	82	82	82	82	82
Carrizo-Wilcox	12	12	12	12	12	12	12
Other	28	28	28	28	28	28	28
Queen City	4	4	4	4	4	4	4
Sparta	4	4	4	4	4	4	4
Yegua-Jackson	4	4	4	4	4	4	4

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

#### Post Oak Savannah GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	14	14	14	14	14	14	14
Carrizo-Wilcox	465	469	473	483	494	504	505
Other	85	86	88	90	91	93	93
Queen City	236	239	242	248	252	255	256
Sparta	67	67	67	67	67	67	67
Yegua-Jackson	210	213	216	221	225	229	229
<b>Total</b>	<b>1,077</b>	<b>1,088</b>	<b>1,100</b>	<b>1,123</b>	<b>1,143</b>	<b>1,162</b>	<b>1,164</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	0	0	0	0	0	0	0
Carrizo-Wilcox	265	269	273	283	294	304	305
Other	51	52	54	56	57	59	59
Queen City	125	128	131	137	141	144	145
Sparta	0	0	0	0	0	0	0
Yegua-Jackson	119	122	125	130	134	138	138

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	14	14	14	14	14	14	14
Carrizo-Wilcox	200	200	200	200	200	200	200
Other	34	34	34	34	34	34	34
Queen City	111	111	111	111	111	111	111
Sparta	67	67	67	67	67	67	67
Yegua-Jackson	91	91	91	91	91	91	91

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

Groundwater Management Area 13

TWDB Estimates

May 2020

Evergreen UWCD.....	1
Gonzales County UWCD.....	2
Guadalupe County GCD.....	3
McMullen GCD.....	4
Medina County GCD .....	5
Plum Creek CD.....	6
Uvalde County UWCD.....	7
Wintergarden GCD.....	8

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

#### Evergreen UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	3,300	3,657	3,890	4,105	4,306	4,492	4,653
Queen City	1,390	1,563	1,664	1,758	1,846	1,925	2,017
Sparta	892	1,009	1,075	1,135	1,192	1,244	1,333
Yegua-Jackson	1,088	1,108	1,117	1,125	1,135	1,141	1,155
<b>Total</b>	<b>6,670</b>	<b>7,337</b>	<b>7,746</b>	<b>8,123</b>	<b>8,479</b>	<b>8,802</b>	<b>9,158</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,146	1,503	1,736	1,951	2,152	2,338	2,499
Queen City	429	602	703	797	885	964	1,056
Sparta	259	376	442	502	559	611	700
Yegua-Jackson	88	108	117	125	135	141	155

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,654	1,654	1,654	1,654	1,654	1,654	1,654
Queen City	461	461	461	461	461	461	461
Sparta	333	333	333	333	333	333	333
Yegua-Jackson	500	500	500	500	500	500	500

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	500	500	500	500	500	500	500
Queen City	500	500	500	500	500	500	500
Sparta	300	300	300	300	300	300	300
Yegua-Jackson	500	500	500	500	500	500	500

Estimates derived from Evergreen UWCD.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Gonzales County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	3,914	3,922	3,929	3,939	3,950	3,960	3,962
Gulf Coast	1	1	1	1	1	2	2
Other	630	631	633	635	638	641	641
Queen City	216	222	219	205	176	158	157
Sparta	296	303	291	258	194	153	150
Yegua-Jackson	547	562	539	473	343	263	257
<b>Total</b>	<b>5,604</b>	<b>5,641</b>	<b>5,612</b>	<b>5,511</b>	<b>5,302</b>	<b>5,177</b>	<b>5,169</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	76	84	91	101	112	122	124
Gulf Coast	1	1	1	1	1	2	2
Other	22	23	25	27	30	33	33
Queen City	39	42	46	49	53	56	56
Sparta	19	20	21	23	24	25	25
Yegua-Jackson	38	41	44	47	49	52	52

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	3,838	3,838	3,838	3,838	3,838	3,838	3,838
Other	608	608	608	608	608	608	608
Queen City	67	67	67	67	67	67	67
Sparta	58	58	58	58	58	58	58
Yegua-Jackson	71	71	71	71	71	71	71

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Queen City	110	113	106	89	56	35	34
Sparta	219	225	212	177	112	70	67
Yegua-Jackson	438	450	424	355	223	140	134

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

#### Guadalupe County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,387	1,582	1,724	1,869	2,027	2,186	2,203
Other	81	87	91	96	101	106	106
Total	<b>1,468</b>	<b>1,669</b>	<b>1,815</b>	<b>1,965</b>	<b>2,128</b>	<b>2,292</b>	<b>2,309</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	788	983	1,125	1,270	1,428	1,587	1,604
Other	24	30	34	39	44	49	49

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	599	599	599	599	599	599	599
Other	57	57	57	57	57	57	57

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
Carrizo-Wilcox	22	22	21	21	21	21	21
Other	10	10	10	10	10	10	10
Queen City	9	9	9	9	9	9	9
Yegua-Jackson	47	47	47	47	47	47	47
<b>Total</b>	<b>88</b>	<b>88</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>87</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	15	15	14	14	14	14	14
Other	3	3	3	3	3	3	3
Queen City	2	2	2	2	2	2	2

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	7	7	7	7	7	7	7
Other	7	7	7	7	7	7	7
Queen City	7	7	7	7	7	7	7
Yegua-Jackson	47	47	47	47	47	47	47

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

#### Medina County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	1,309	1,342	1,368	1,401	1,431	1,459	1,461
Other	161	166	170	174	179	182	183
<b>Total</b>	<b>1,470</b>	<b>1,508</b>	<b>1,538</b>	<b>1,575</b>	<b>1,610</b>	<b>1,641</b>	<b>1,644</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	386	419	445	478	508	536	538
Other	54	59	63	67	72	75	76

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	923	923	923	923	923	923	923
Other	107	107	107	107	107	107	107

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

#### Plum Creek CD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Carrizo-Wilcox	217	243	270	301	331	361	365
Other	16	17	18	19	20	21	22
Queen City	8	8	9	10	10	11	11
<b>Total</b>	<b>241</b>	<b>268</b>	<b>297</b>	<b>330</b>	<b>361</b>	<b>393</b>	<b>398</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Carrizo-Wilcox	152	178	205	236	266	296	300
Other	6	7	8	9	10	11	12
Queen City	3	3	4	5	5	6	6

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Carrizo-Wilcox	65	65	65	65	65	65	65
Other	10	10	10	10	10	10	10
Queen City	5	5	5	5	5	5	5

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

#### Uvalde County UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	100	102	105	110	116	123	123
Other	133	137	140	146	155	163	164
<b>Total</b>	<b>233</b>	<b>239</b>	<b>245</b>	<b>256</b>	<b>271</b>	<b>286</b>	<b>287</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	100	102	105	110	116	123	123
Other	133	137	140	146	155	163	164

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

#### Wintergarden GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	7,187	7,131	6,377	4,607	2,692	1,719	1,652
Other	106	109	110	113	115	117	118
Queen City	6	6	6	6	7	7	7
Sparta	99	100	102	104	106	107	107
Yegua-Jackson	22	22	22	22	23	23	23
<b>Total</b>	<b>7,420</b>	<b>7,368</b>	<b>6,617</b>	<b>4,852</b>	<b>2,943</b>	<b>1,973</b>	<b>1,907</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	93	99	104	111	117	123	123
Other	29	32	33	36	38	40	41
Queen City	1	1	1	1	2	2	2
Sparta	22	23	25	27	29	30	30
Yegua-Jackson	1	1	1	1	2	2	2

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	532	532	532	532	532	532	532
Other	77	77	77	77	77	77	77
Queen City	5	5	5	5	5	5	5
Sparta	77	77	77	77	77	77	77
Yegua-Jackson	21	21	21	21	21	21	21

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Carrizo-Wilcox	6,562	6,500	5,741	3,964	2,043	1,064	997

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

Groundwater Management Area 14

TWDB Estimates

May 2020

Bluebonnet GCD.....	1
Brazoria County GCD .....	2
Lone Star GCD .....	3
Lower Trinity GCD .....	4
Southeast Texas GCD .....	5

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

#### Bluebonnet GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	1,505	1,511	1,519	1,530	1,541	1,554	1,505
Gulf Coast	20,087	20,267	20,493	20,801	21,148	21,534	20,087
Other	422	424	426	429	433	437	422
Queen City	25	25	25	25	25	25	25
Yegua-Jackson	547	554	558	564	572	579	547
<b>Total</b>	<b>22,586</b>	<b>22,781</b>	<b>23,021</b>	<b>23,349</b>	<b>23,719</b>	<b>24,129</b>	<b>22,586</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	56	62	70	81	92	105	106
Gulf Coast	3,415	3,595	3,821	4,129	4,476	4,862	4,903
Other	54	56	58	61	65	69	70
Yegua-Jackson	233	240	244	250	258	265	266

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	185	185	185	185	185	185	185
Gulf Coast	1,296	1,296	1,296	1,296	1,296	1,296	1,296
Other	44	44	44	44	44	44	44
Queen City	25	25	25	25	25	25	25
Yegua-Jackson	210	210	210	210	210	210	210

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Brazos River Alluvium	1,264	1,264	1,264	1,264	1,264	1,264	1,264
Gulf Coast	15,376	15,376	15,376	15,376	15,376	15,376	15,376
Other	324	324	324	324	324	324	324
Yegua-Jackson	104	104	104	104	104	104	104

\* Bluebonnet GCD Rules include exemptions for agricultural wells.

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, the TWDB Groundwater Database, and 2018 TWDB Irrigation Estimates.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Brazoria County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	6,426	6,840	7,161	7,543	7,940	8,371	8,417
<b>Total</b>	<b>6,426</b>	<b>6,840</b>	<b>7,161</b>	<b>7,543</b>	<b>7,940</b>	<b>8,371</b>	<b>8,417</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,368	2,782	3,103	3,485	3,882	4,313	4,359

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	808	808	808	808	808	808	808

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	3,250	3,250	3,250	3,250	3,250	3,250	3,250

\* Brazoria County GCD Rules include exemptions for water wells used only for agriculture.

Estimates derived using Texas State Demographic Center Data, TWDB Water Use Survey data, TWDB water demand projections, the TWDB Groundwater Database, and 2018 TWDB Irrigation Estimates.

Values are rounded to the nearest acre-foot.



# Projected Exempt Groundwater Use Estimates Acre-feet per year

## Lone Star GCD

### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	8,060	10,007	12,203	14,899	18,360	22,545	23,014
Total	8,060	10,007	12,203	14,899	18,360	22,545	23,014

### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	7,550	9,497	11,693	14,389	17,850	22,035	22,504

### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	510	510	510	510	510	510	510

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

#### Lower Trinity GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,375	2,569	2,718	2,869	3,005	3,122	3,134
Other	8	9	9	10	10	11	11
Yegua-Jackson	84	89	92	97	102	107	108
<b>Total</b>	<b>2,467</b>	<b>2,667</b>	<b>2,819</b>	<b>2,976</b>	<b>3,117</b>	<b>3,240</b>	<b>3,253</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,259	2,453	2,602	2,753	2,889	3,006	3,018
Other	8	9	9	10	10	11	11
Yegua-Jackson	82	87	90	95	100	105	106

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	116	116	116	116	116	116	116
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

#### Southeast Texas GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	4,627	4,782	4,897	5,036	5,191	5,360	5,378
Yegua-Jackson	12	11	11	11	11	11	11
<b>Total</b>	4,639	4,793	4,908	5,047	5,202	5,371	5,389

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	3,640	3,787	3,934	4,105	4,293	4,479	4,498
Yegua-Jackson	12	11	11	11	11	11	11

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	860	860	860	860	860	860	860

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	127	135	103	71	38	21	20

\* Southeast Texas GCD Rules include exemptions for wells used only for agriculture purposes that are incapable of producing more than 100,000 gallons per day.

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

Values are rounded to the nearest acre-foot.

# Projected Exempt Groundwater Use Estimates

Groundwater Management Area 15

TWDB Estimates

May 2020

Bee GCD.....	1
Calhoun County GCD.....	2
Coastal Bend GCD.....	3
Coastal Plains GCD.....	4
Colorado County GCD.....	5
Evergreen UWCD.....	6
Fayette County GCD.....	7
Goliad County GCD.....	8
Pecan Valley GCD.....	9
Refugio GCD.....	10
Texana GCD.....	11
Victoria County GCD.....	12

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	2,325	2,333	2,312	2,298	2,295	2,295	2,295
Other	7	7	7	7	7	7	7
<b>Total</b>	<b>2,332</b>	<b>2,340</b>	<b>2,319</b>	<b>2,305</b>	<b>2,302</b>	<b>2,302</b>	<b>2,302</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,664	1,672	1,651	1,637	1,634	1,634	1,634

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	661	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**

**Calhoun County GCD**

**Total Estimated Exempt Use (by aquifer)**

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	177	182	187	193	199	205	206
<b>Total</b>	<b>177</b>	<b>182</b>	<b>187</b>	<b>193</b>	<b>199</b>	<b>205</b>	<b>206</b>

**Estimated Domestic Exempt Use (by aquifer)**

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	63	68	73	79	85	91	92

**Estimated Livestock Exempt Use (by aquifer)**

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	114	114	114	114	114	114	114

---

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

#### Coastal Bend GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	3,967	4,067	4,149	4,246	4,335	4,420	4,429
	<b>3,967</b>	<b>4,067</b>	<b>4,149</b>	<b>4,246</b>	<b>4,335</b>	<b>4,420</b>	<b>4,429</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,689	2,786	2,884	2,993	3,094	3,187	3,197

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,219	1,219	1,219	1,219	1,219	1,219	1,219

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	59	62	46	34	22	14	13

\* Coastal Bend GCD Rules include exemptions for wells used for agricultural use if the well owner provides a signed statement that the well will not produce more than five million gallons per year. There is not enough available information in the TWDB Groundwater Database to determine the number of wells that qualify for agricultural exempt use. The number reported here reflects all wells in the TWDB Groundwater Database classified as irrigation wells in the district.

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

#### Coastal Plains GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	3,388	3,485	3,583	3,692	3,793	3,886	3,896
<b>Total</b>	<b>3,388</b>	<b>3,485</b>	<b>3,583</b>	<b>3,692</b>	<b>3,793</b>	<b>3,886</b>	<b>3,896</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	2,689	2,786	2,884	2,993	3,094	3,187	3,197

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	699	699	699	699	699	699	699

##### Estimated Agricultural Exempt Use (by aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	59	62	46	34	22	14	13

\* Coastal Plains GCD Rules include exemptions for wells used for agricultural use if the well owner provides a signed statement that the well will not produce more than five million gallons per year (9.5 gallons per day). There is not enough available information in the TWDB Groundwater Database to determine the number of wells that qualify for agricultural exempt use. The number reported here reflects all wells in the TWDB Groundwater Database classified as irrigation wells in the district.

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

#### Colorado County GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,273	1,283	1,290	1,308	1,329	1,351	1,353
<b>Total</b>	<b>1,273</b>	<b>1,283</b>	<b>1,290</b>	<b>1,308</b>	<b>1,329</b>	<b>1,351</b>	<b>1,353</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	663	673	680	698	719	741	743

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	510	510	510	510	510	510	510

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	100	100	100	100	100	100	100

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

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Evergreen UWCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,825	1,850	1,851	1,851	1,851	1,851	1,851
Yegua-Jackson	1,576	1,578	1,578	1,578	1,578	1,578	1,578
<b>Total</b>	<b>3,401</b>	<b>3,428</b>	<b>3,429</b>	<b>3,429</b>	<b>3,429</b>	<b>3,429</b>	<b>3,429</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	282	307	308	308	308	308	308
Yegua-Jackson	22	24	24	24	24	24	24

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	543	543	543	543	543	543	543
Yegua-Jackson	54	54	54	54	54	54	54

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Yegua-Jackson	1,500	1,500	1,500	1,500	1,500	1,500	1,500

Estimates derived from Evergreen UWCD.

Values are rounded to the nearest acre-foot.

# Projected Exempt Groundwater Use Estimates

## Acre-feet per year

### Fayette County GCD

#### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,198	1,261	1,297	1,328	1,349	1,369	1,391
Other	50	55	56	56	61	61	62
Yegua-Jackson	18	19	19	19	19	18	19
<b>Total</b>	<b>1,266</b>	<b>1,335</b>	<b>1,372</b>	<b>1,403</b>	<b>1,430</b>	<b>1,449</b>	<b>1,473</b>

#### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	570	633	669	700	721	741	763
Other	31	36	37	37	42	42	43
Yegua-Jackson	18	19	19	19	19	18	19

#### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	628	628	628	628	628	628	628
Other	19	19	19	19	19	19	5

Estimates derived from contracted work by Daniel B. Stephens and Associates for Fayette County GCD.  
Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Goliad County GCD

##### Total Estimated Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	2,110	2,211	2,044	2,297	3,100	3,198	2,296
	<b>2,110</b>	<b>2,211</b>	<b>2,044</b>	<b>2,297</b>	<b>3,100</b>	<b>3,198</b>	<b>2,296</b>

##### Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	1,070	1,171	1,234	1,257	2,060	2,158	2,256

##### Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	790	790	790	790	790	790	790

##### Estimated Mining and Rig Supply Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	250	250	250	250	250	250	250

Estimates derived from Goliad County GCD.

Values are rounded to the nearest acre-foot.

## Projected Exempt Groundwater Use Estimates

### Acre-feet per year

#### Pecan Valley GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	5,021	5,043	5,040	5,063	5,084	5,053	5,050
Other	21	20	21	21	21	19	19
<b>Total</b>	<b>5,042</b>	<b>5,063</b>	<b>5,061</b>	<b>5,084</b>	<b>5,105</b>	<b>5,072</b>	<b>5,069</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	720	716	726	734	731	680	675
Other	21	20	21	21	21	19	19

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,131	1,131	1,131	1,131	1,131	1,131	1,131

##### Estimated Municipal Exempt Use (by Aquifer) \*

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	3,170	3,196	3,183	3,198	3,222	3,242	3,244

\*Pecan Valley GCD rules exempt municipal groundwater use from grandfathered wells where the intended use and production amount has not changed.

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

#### Refugio GCD

##### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	580	583	584	585	585	585	585
<b>Total</b>	<b>580</b>	<b>583</b>	<b>584</b>	<b>585</b>	<b>585</b>	<b>585</b>	<b>585</b>

##### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	153	156	157	158	158	158	158

##### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	427	427	427	427	427	427	427

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

## Texana GCD

### Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,581	1,576	1,575	1,578	1,579	1,580	1,581
Total	1,581	1,576	1,575	1,578	1,579	1,580	1,581

### Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	357	352	351	354	355	356	357

### Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,224	1,224	1,224	1,224	1,224	1,224	1,224

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

Victoria County GCD

Total Estimated Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,928	1,980	2,019	2,060	2,103	2,143	2,147
Other	1,928	1,980	2,019	2,060	2,103	2,143	2,147

Estimated Domestic Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	1,290	1,342	1,381	1,422	1,465	1,505	1,509

Estimated Livestock Exempt Use (by aquifer)

Aquifer	2020	2030	2040	2050	2060	2070	2080
Gulf Coast	638	638	638	638	638	638	638

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

Groundwater Management Area 16

TWDB Estimates

May 2020

Bee GCD.....	1
Brush Country GCD .....	2
Corpus Christi ASRCD.....	3
Duval County GCD .....	4
Kenedy County GCD .....	5
Live Oak UWCD .....	6
McMullen GCD .....	7
Red Sands GCD .....	8
San Patricio County GCD .....	9
Starr County GCD .....	10

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
<b>Total</b>	<b>2,570</b>	<b>2,319</b>	<b>2,299</b>	<b>2,285</b>	<b>2,282</b>	<b>2,282</b>	<b>2,282</b>

##### 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
<b>Total</b>	<b>2,280</b>	<b>2,329</b>	<b>2,399</b>	<b>2,479</b>	<b>2,552</b>	<b>2,622</b>	<b>2,629</b>

##### 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
<b>Total</b>	<b>37</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>39</b>	<b>39</b>

##### 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
<b>Total</b>	<b>2,385</b>	<b>2,481</b>	<b>2,586</b>	<b>2,713</b>	<b>2,843</b>	<b>2,979</b>	<b>2,993</b>

##### 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
<b>Total</b>	<b>1,224</b>	<b>1,291</b>	<b>1,281</b>	<b>1,151</b>	<b>980</b>	<b>865</b>	<b>856</b>

##### 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
<b>Total</b>	<b>101</b>	<b>99</b>	<b>99</b>	<b>99</b>	<b>98</b>	<b>98</b>	<b>98</b>

##### 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)**

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

Estimated Domestic Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
Gulf Coast	280	280	277	277	279	281	282

Estimated Livestock Exempt Use (by aquifer)

<b>Aquifer</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>	<b>2070</b>	<b>2080</b>
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
<b>Total</b>	<b>1,429</b>	<b>1,486</b>	<b>1,539</b>	<b>1,596</b>	<b>1,650</b>	<b>1,698</b>	<b>1,703</b>

##### 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.