

Projected Exempt Groundwater Use Estimates

Groundwater Management Area 10

TWDB Estimates

May 2020

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

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

Projected Exempt Groundwater Use Estimates

Acre-feet per year

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 |
| Total | 4,621 | 5,497 | 6,414 | 7,192 | 8,114 | 9,174 | 9,290 |

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 |
| Total | 585 | 735 | 890 | 1,045 | 1,191 | 1,340 | 1,355 |

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)

| Aquifer | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 | 2080 |
|-------------------------------|------------|------------|------------|------------|------------|------------|------------|
| 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 |
| Total | 212 |

Estimated Domestic Exempt Use (by aquifer)

| Aquifer | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 | 2080 |
|-------------------------------|------|------|------|------|------|------|------|
| 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)

| Aquifer | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 | 2080 |
|-------------------------------|------|------|------|------|------|------|------|
| 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 |
| Total | 1,471 | 1,508 | 1,538 | 1,576 | 1,610 | 1,642 | 1,644 |

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 |
| Total | 451 | 520 | 595 | 674 | 781 | 899 | 913 |

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.