

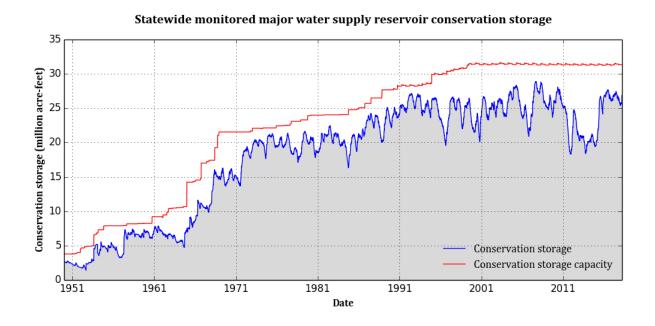


# February 2018 RESERVOIR STORAGE\*

At the end of February 2018, total conservation storage\* in 118 of the state's major water supply reservoirs was 27.07 million acre-feet or 84 percent of total conservation storage capacity. This is approximately 1.26 million acre-feet more than a month ago but 0.01 million acre-feet less than storage at this time last year.

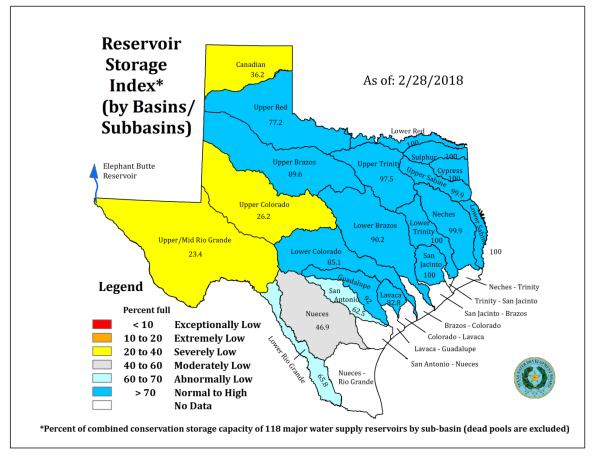
Fifty-two (52) reservoirs held 100 percent of conservation storage capacity, primarily in the North Central (29 reservoirs) and East (21 reservoirs) regions. Two reservoirs, Palo Duro (1 percent) and Twin Buttes (7 percent) remained below 10 percent full.

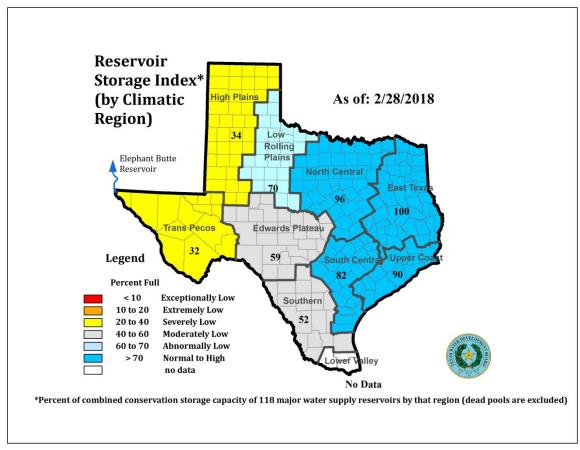
Total combined storage was at or above normal (storage ≥70 percent) in the East (100 percent), Upper Coast (90 percent), North Central (96 percent), South Central (82 percent), and Low Rolling Plains (70 percent) regions. The High Plains (34 percent) and Trans-Pecos (32 percent) regions had the lowest percentage of storage. Overall, storage increased in four and decreased in five regions over the past month.



<sup>\*</sup>Storage is based on end of the month data in 118 major reservoirs that represent 96 percent of the total conservation storage capacity of 188 major water supply reservoirs in Texas plus Elephant Butte reservoir in New Mexico. Major reservoirs are defined as having a conservation storage capacity of 5,000 acre-feet or greater. Only the Texas share of storage in border reservoirs is counted.

#### FEBRUARY 2018 RESERVOIR CONDITIONS





<sup>\*</sup>Reservoir Storage Index is defined as the percent full of conservation storage capacity.

| CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS |                               |   |     |                                     |     |                                   |     |  |  |  |
|---|-------------------------------|---|-----|-------------------------------------|-----|-----------------------------------|-----|--|--|--|
| Name of lake or reservoir                                     | Conservation storage capacity | Conservation storage<br>end of February 2018<br>(acre-feet) (%) |     | Change since<br>end of January 2018 |     | Change since end of February 2017 |     |  |  |  |
|   | (acre-feet)                   |   |     | (acre-feet)**                       | (%) | (acre-feet)**                     | (%) |  |  |  |
| HIGH PLAINS   |                               |   |     |                                     |     |                                   |     |  |  |  |
| MacKenzie Reservoir   | 46,450                        | 6,735   | 14  | -44                                 | -0  | -138                              | -0  |  |  |  |
| Meredith, Lake  | 500,000                       | 202,536   | 41  | -806                                | -0  | 83,463                            | 17  |  |  |  |
| Palo Duro Reservoir   | 61,066                        | 513   | 1   | -82                                 | -0  | -421                              | -1  |  |  |  |
| White River Lake  | 29,880                        | 5,569   | 19  | -160                                | -1  | -1,867                            | -6  |  |  |  |
| TOTAL   | 637,396                       | 215,353   | 34  | -1,092                              | -0  | 81,037                            | 13  |  |  |  |
| LOW ROLLING PLAINS  Abilana Laka                              |                               |   |     |                                     |     |                                   |     |  |  |  |
| Abilene, Lake   | 7,900                         | 4,329   | 55  | -148                                | -2  | -3,487                            | -44 |  |  |  |
| Alan Henry Reservoir  | 94,808                        | 79,288  | 84  | -793                                | -1  | -11,462                           | -12 |  |  |  |
| Champion Creek Reservoir                                      | 41,580                        | 19,183  | 46  | -104                                | -0  | 3,402                             | 8   |  |  |  |
| Coleman, Lake   | 38,075                        | 33,889  | 89  | 486                                 | 1   | -3,952                            | -10 |  |  |  |
| Colorado City, Lake   | 30,758                        | 12,189  | 40  | -109                                | -0  | -2,345                            | -8  |  |  |  |
| Fort Phantom Hill, Lake                                       | 70,030                        | 61,995  | 89  | 251                                 | 0   | -8,035                            | -11 |  |  |  |
| Greenbelt Lake  | 59,968                        | 15,091  | 25  | -156                                | -0  | -1,376                            | -2  |  |  |  |
| Hords Creek Lake  | 8,443                         | 5,337   | 63  | 0                                   | 0   | -2,023                            | -24 |  |  |  |
| J. B. Thomas, Lake  | 199,931                       | 92,428  | 46  | -2,033                              | -1  | -33,942                           | -17 |  |  |  |
| Kemp, Lake  | 245,307                       | 221,888   | 90  | 436                                 | 0   | -23,419                           | -10 |  |  |  |
| Millers Creek Reservoir<br>North Fork Buffalo Creek           | 26,768                        | 24,261  | 91  | -42                                 | -0  | -2,507                            | -9  |  |  |  |
| Reservoir   | 15,400                        | 11,274  | 73  | 176                                 | 1   | -1,147                            | -7  |  |  |  |
| Stamford, Lake  | 51,570                        | 47,412  | 92  | -241                                | -0  | -2,051                            | -4  |  |  |  |
| Sweetwater, Lake  | 12,267                        | 2,362   | 19  | 0                                   | 0   | -495                              | -4  |  |  |  |
| TOTAL   | 902,805                       | 630,926   | 70  | -2,277                              | -0  | -92,839                           | -10 |  |  |  |
| 101111  | 702,000                       | NORTH CENTE   |     |                                     |     | ) <u></u>                         |     |  |  |  |
| Amon G Carter, Lake   | 19,266                        | 19,266  | 100 | 377                                 | 2   | 0                                 | 0   |  |  |  |
| Aquilla Lake  | 43,243                        | 43,243  | 100 | 7,590                               | 18  | 0                                 | 0   |  |  |  |
| Arlington, Lake   | 40,188                        | 40,188  | 100 | 4,395                               | 11  | 269                               | 1   |  |  |  |
| Arrowhead, Lake   | 230,359                       | 200,766   | 87  | 4,795                               | 2   | -29,593                           | -13 |  |  |  |
| Bardwell Lake   | 46,122                        | 46,122  | 100 | 7,140                               | 15  | 0                                 | 0   |  |  |  |
| Belton Lake   | 435,225                       | 404,304   | 93  | 8,663                               | 2   | -30,921                           | -7  |  |  |  |
| Benbrook Lake   | 85,648                        | 85,648  | 100 | 6,810                               | 8   | 10,716                            | 13  |  |  |  |
| Bonham, Lake  | 11,027                        | 11,027  | 100 | 1,140                               | 10  | 2,793                             | 25  |  |  |  |
| Bridgeport, Lake  | 366,236                       | 348,115   | 95  | 29,605                              | 8   | -18,121                           | -5  |  |  |  |
| *Brownwood, Lake  | 128,839                       | 106,998   | 83  | 59                                  | 0   | -21,841                           | -17 |  |  |  |
| *Cisco, Lake  | 29,003                        | 24,027  | 83  | 248                                 | 1   | -2,163                            | -7  |  |  |  |
| Crook, Lake   | 9,195                         | 9,195   | 100 | 0                                   | 0   | 219                               | 2   |  |  |  |
| Eagle Mountain Lake   | 179,880                       | 179,880   | 100 | 17,555                              | 10  | 0                                 | 0   |  |  |  |
| Georgetown, Lake  | 36,823                        | 25,200  | 68  | -803                                | -2  | -11,623                           | -32 |  |  |  |
| Graham, Lake  | 45,288                        | 42,848  | 95  | 384                                 | 1   | -2,440                            | -5  |  |  |  |
| Granbury, Lake  | 132,949                       | 132,215   | 99  | 2,986                               | 2   | -326                              | -0  |  |  |  |
| Granger Lake  | 51,822                        | 51,822  | 100 | 0                                   | 0   | 0                                 | 0   |  |  |  |
| Grapevine Lake  | 164,703                       | 164,703   | 100 | 5,224                               | 3   | 0                                 | 0   |  |  |  |
| *Halbert, Lake  | 6,033                         | 5,584   | 93  | 28                                  | 0   | 139                               | 2   |  |  |  |
| Hubbard Creek Reservoir                                       | 318,067                       | 272,290   | 86  | 687                                 | 0   | -43,118                           | -14 |  |  |  |
| Hubert H Moss Lake  | 24,058                        | 24,058  | 100 | 2,194                               | 9   | 184                               | 1   |  |  |  |
| Jim Chapman Lake (Cooper)                                     | 260,332                       | 260,332   | 100 | 29,770                              | 11  | 60,352                            | 23  |  |  |  |
| Joe Pool Lake   | 175,358                       | 175,358   | 100 | 6,125                               | 3   | 0                                 | 0   |  |  |  |
| Kickapoo, Lake  | 86,345                        | 72,290  | 84  | 0                                   | 0   | -8,305                            | -10 |  |  |  |
| Lavon Lake  | 406,388                       | 406,388   | 100 | 54,155                              | 13  | 44,528                            | 11  |  |  |  |
| Leon, Lake  | 27,762                        | 23,634  | 85  | 679                                 | 2   | -361                              | -1  |  |  |  |
| Lewisville Lake   | 563,228                       | 563,228   | 100 | 44,441                              | 8   | 0                                 | 0   |  |  |  |
| Limestone, Lake   | 203,780                       | 162,613   | 80  | 8,268                               | 4   | -41,167                           | -20 |  |  |  |
| *Lost Creek Reservoir   | 11,950                        | 11,950  | 100 | 440                                 | 4   | 0                                 | 0   |  |  |  |
| *Mineral Wells, Lake  | 5,273                         | 5,273   | 100 | 784                                 | 15  | 0                                 | 0   |  |  |  |
| Mountain Creek, Lake  | 22,850                        | 22,850  | 100 | 0                                   | 0   | 0                                 | 0   |  |  |  |

| CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS |              |                                       |     |  |    |   |     |  |  |  |
|---|--------------|---------------------------------------|-----|--|----|---|-----|--|--|--|
| Name of lake or reservoir                                     | Conservation | storage capacity end of February 2018 |     | Change since<br>end of January 2018<br>(acre-feet)** (%) |    | Change since<br>end of February 2017<br>(acre-feet)** (%) |     |  |  |  |
| Name of take of Teservon                                      | (acre-feet)  |                                       |     |  |    |   |     |  |  |  |
| (North Central continued)                                     |              |                                       |     |  |    |   |     |  |  |  |
| Navarro Mills Lake  | 49,827       | 43,561                                | 87  | 2,861  | 6  | -6,266  | -13 |  |  |  |
| New Terrell City Lake   | 8,583        | 8,583                                 | 100 | 538  | 6  | 0   | 0   |  |  |  |
| Nocona, Lake (Farmers Crk)                                    | 21,444       | 21,444                                | 100 | 2,444  | 11 | 0   | 0   |  |  |  |
| Palo Pinto, Lake  | 26,766       | 24,334                                | 91  | 2,839  | 11 | -791  | -3  |  |  |  |
| Pat Cleburne, Lake  | 26,008       | 26,008                                | 100 | 4,916  | 19 | 0   | 0   |  |  |  |
| *Pat Mayse Lake   | 113,683      | 113,683                               | 100 | 0  | 0  | 11,879  | 10  |  |  |  |
| Possum Kingdom Lake   | 538,139      | 518,712                               | 96  | 8,306  | 2  | -17,996   | -3  |  |  |  |
| Proctor Lake  | 54,762       | 45,083                                | 82  | 3,436  | 6  | -9,679  | -18 |  |  |  |
| Ray Hubbard, Lake   | 439,559      | 439,559                               | 100 | 22,905   | 5  | 11,557  | 3   |  |  |  |
| Ray Roberts, Lake   | 788,167      | 788,167                               | 100 | 40,729   | 5  | 0   | 0   |  |  |  |
| Richland-Chambers Reservoir                                   | 1,087,839    | 1,034,965                             | 95  | 69,677   | 6  | -50,305   | -5  |  |  |  |
| Squaw Creek, Lake   | 151,250      | 151,250                               | 100 | 0  | 0  | 601   | 0   |  |  |  |
| Stillhouse Hollow Lake  | 227,771      | 204,071                               | 90  | 1,831  | 1  | -23,700   | -10 |  |  |  |
| Tawakoni, Lake  | 871,685      | 871,685                               | 100 | 27,792   | 3  | 96,374  | 11  |  |  |  |
| Texoma, Lake (Texas)  | 1,258,113    | 1,258,113                             | 100 | 14,867   | 1  | 14,126  | 1   |  |  |  |
| Texoma, Lake (Texas &   | 1,200,110    | 1,200,110                             | 100 | 11,007   | -  | 11,120  | -   |  |  |  |
| Oklahoma)   | 2,525,281    | 2,619,991                             | 100 | 133,492  | 5  | 132,010   | 5   |  |  |  |
| Waco, Lake  | 189,418      | 170,960                               | 90  | 13,009   | 7  | -18,458   | -10 |  |  |  |
| Waxahachie, Lake  | 10,780       | 10,780                                | 100 | 1,518  | 14 | 0   | 0   |  |  |  |
| Weatherford, Lake   | 17,812       | 17,563                                | 99  | 2,298  | 13 | 22  | 0   |  |  |  |
| Whitney, Lake   | 553,344      | 497,304                               | 90  | 41,377   | 7  | -28,159   | -5  |  |  |  |
| Worth, Lake   | 33,495       | 33,495                                | 100 | 6,041  | 18 | 0   | 0   |  |  |  |
| TOTAL   | 10,635,685   | 10,220,735                            | 96  | 511,123  | 5  | -111,574  | -1  |  |  |  |
|   |              | EAST                                  |     |  |    |   |     |  |  |  |
| Athens, Lake  | 29,503       | 29,503                                | 100 | 0  | 0  | 0   | 0   |  |  |  |
| B A Steinhagen Lake   | 66,961       | 62,392                                | 93  | -4,569   | -7 | -2,472  | -4  |  |  |  |
| Bob Sandlin, Lake   | 190,822      | 190,822                               | 100 | 692  | 0  | 0   | 0   |  |  |  |
| Caddo, Lake   | 29,898       | 29,898                                | 100 | 0  | 0  | 0   | 0   |  |  |  |
| Cedar Creek Reservoir in Trinity                              | 644,686      | 644,686                               | 100 | 64,823   | 10 | 327   | 0   |  |  |  |
| Cherokee, Lake  | 40,094       | 40,094                                | 100 | 0  | 0  | 0   | 0   |  |  |  |
| Conroe, Lake  | 410,988      | 410,988                               | 100 |  |    | 0   | 0   |  |  |  |
| Cypress Springs, Lake   | 66,756       | 66,756                                | 100 | 4,580  | 7  | 774   | 1   |  |  |  |
| Fork Reservoir, Lake  | 605,061      | 605,061 100                           |     | 30,308   | 5  | 52,336  | 9   |  |  |  |
| Houston County Lake   | 17,113       | 17,113 10                             |     | 0  | 0  | 0   | 0   |  |  |  |
| Jacksonville, Lake  | 25,670       | 25,670                                | 100 | 0  | 0  | 0   | 0   |  |  |  |
| *Livingston, Lake   | 1,785,348    | 1,785,348                             | 100 | 0  | 0  | 0   | 0   |  |  |  |
| Martin, Lake  | 75,726       | 73,808                                | 97  | 10,705   | 14 | 1,167   | 2   |  |  |  |
| Monticello, Lake  | 34,740       | 33,194                                | 96  | 3,727  | 11 | -1,546  | -4  |  |  |  |
| Murvaul, Lake   | 38,285       | 38,285                                | 100 | 206  | 1  | 1,533   | 4   |  |  |  |
| Nacogdoches, Lake   | 39,522       | 39,434                                | 100 | 2,632  | 7  | 564   | 1   |  |  |  |
| O' the Pines, Lake  | 241,363      | 241,363                               | 100 | 0  | 0  | 0   | 0   |  |  |  |
| Palestine, Lake   | 367,303      | 367,303                               | 100 | 923  | 0  | 0   | 0   |  |  |  |
| Sam Rayburn Reservoir   | 2,857,077    | 2,857,077                             | 100 | 291,208  | 10 | 162,544   | 6   |  |  |  |
| Striker, Lake   | 16,934       | 16,934                                | 100 | 0  | 0  | 422   | 2   |  |  |  |
| *Sulphur Springs, Lake  | 17,747       | 17,747                                | 100 | 0  | 0  | 2,768   | 16  |  |  |  |
| Toledo Bend Reservoir (Texas) Toledo Bend Reservoir (Texas &  | 2,236,450    | 2,236,450                             | 100 | 338,414  | 15 | 221,350   | 10  |  |  |  |
| Louisiana)  | 4,472,900    | 4,621,628                             | 100 | 821,456  | 18 | 587,328   | 13  |  |  |  |
| Tyler, Lake   | 72,073       | 72,073                                | 100 | 0  | 0  | 0   | 0   |  |  |  |
| Wright Patman Lake  | 122,593      | 122,593                               | 100 | 0  | 0  | 0   | 0   |  |  |  |
| TOTAL   | 10,032,713   | 10,024,592                            | 100 | 743,649  | 7  | 439,767   | 4   |  |  |  |

| CONSERVATIO   | N STORAGE DA                  | TA FOR SELE                               | ECTED N     | MAJOR TEXAS                         | RESEI | RVOIRS                               |     |  |
|---|-------------------------------|---|-------------|-------------------------------------|-------|--------------------------------------|-----|--|
| Name of lake or reservoir   | Conservation storage capacity | Conservation storage end of February 2018 |             | Change since<br>end of January 2018 |       | Change since<br>end of February 2017 |     |  |
|   | (acre-feet)                   | (acre-feet)                               | (%)         | (acre-feet)**                       | (%)   | (acre-feet)** (%)                    |     |  |
|   |                               | TRANS-PECO                                | S           |                                     |       |                                      | ``  |  |
| Elephant Butte Reservoir (Texas)<br>Elephant Butte Reservoir (Texas | 852,491                       | 208,644                                   | 24          | 10,810                              | 1     | 81,798                               | 10  |  |
| & New Mexico)   | 1,973,358                     | 482,972                                   | 24          | 25,023                              | 1     | 189,348                              | 10  |  |
| Red Bluff Reservoir   | 151,110                       | 111,176                                   | 74          | 61                                  | 0     | -22,349                              | -15 |  |
| TOTAL   | 1,003,601                     | 319,820                                   | 32          | 10,871                              | 1     | 59,449                               | 6   |  |
|   |                               | EDWARDS PLAT                              | <b>TEAU</b> |                                     |       |                                      |     |  |
| *Amistad Reservoir (Texas) *Amistad Reservoir (Texas &              | 1,840,849                     | 1,389,138                                 | 75          | -2,752                              | -0    | -111,201                             | -6  |  |
| Mexico)   | 3,275,532                     | 2,017,983                                 | 62          | 12,429                              | 0     | -110,669                             | -3  |  |
| Brady Creek Reservoir   | 28,808                        | 16,121                                    | 56          | 366                                 | 1     | -2,746                               | -10 |  |
| Buchanan, Lake  | 860,607                       | 770,874                                   | 90          | 8,916                               | 1     | -46,248                              | -5  |  |
| E. V. Spence Reservoir  | 517,272                       | 63,678                                    | 12          | -860                                | -0    | -7,225                               | -1  |  |
| Inks, Lake  | 13,962                        | 12,847                                    | 92          | 5,076                               | 36    | -23                                  | -0  |  |
| Lyndon B Johnson, Lake  | 115,249                       | 110,636                                   | 96          | -61                                 | -0    | 427                                  | 0   |  |
| Marble Falls, Lake  | 6,901                         | 6,793                                     | 98          | 6                                   | 0     | 27                                   | 0   |  |
| Nasworthy   | 9,615                         | 8,147                                     | 85          | -49                                 | -1    | 618                                  | 6   |  |
| Oak Creek Reservoir   | 39,210                        | 18,935                                    | 48          | -79                                 | -0    | -3,951                               | -10 |  |
| O. C. Fisher Lake   | 119,445                       | 11,640                                    | 10          | -59                                 | -0    | -5,772                               | -5  |  |
| *O. H. Ivie Reservoir   | 554,340                       | 105,359                                   | 19          | -273                                | -0    | -31,680                              | -6  |  |
| Twin Buttes Reservoir   | 182,454                       | 12,497                                    | 7           | 176                                 | 0     | -12,472                              | -7  |  |
| TOTAL   | 4,288,712                     | 2,526,665                                 | 59          | 10,407                              | 0     | -220,246                             | -5  |  |
|   |                               | SOUTH CENTR                               | RAL         |                                     |       |                                      |     |  |
| *Austin, Lake   | 23,972                        | 22,726                                    | 95          | -46                                 | -0    | -216                                 | -1  |  |
| Canyon Lake   | 378,781                       | 348,784                                   | 92          | 0                                   | 0     | -29,997                              | -8  |  |
| *Coleto Creek Reservoir   | 31,040                        | 28,134                                    | 91          | 0                                   | 0     | -1,710                               | -6  |  |
| Medina Lake   | 254,823                       | 159,284                                   | 63          | -4,151                              | -2    | -76,396                              | -30 |  |
| Somerville Lake   | 147,104                       | 147,104                                   | 100         | 0                                   | 0     | 0                                    | 0   |  |
| Travis, Lake  | 1,113,348                     | 899,228                                   | 81          | -162                                | -0    | -214,120                             | -19 |  |
| TOTAL   | 1,949,068                     | 1,605,260                                 | 82          | -4,359                              | -0    | -322,439                             | -17 |  |
|   |                               | UPPER COAS                                | T           | ·                                   |       | ·                                    |     |  |
| Houston, Lake   | 120,686                       | 120,686                                   | 100         | 0                                   | 0     | 0                                    | 0   |  |
| Texana, Lake  | 159,566                       | 132,174                                   | 83          | -1,355                              | -1    | -26,841                              | -17 |  |
| TOTAL   | 280,252                       | 252,860                                   | 90          | -1,355                              | -0    | -26,841                              | -10 |  |
|   | ,                             | SOUTHERN                                  |             | ,                                   |       | -,-                                  |     |  |
| Choke Canyon Reservoir  | 662,820                       | 195,616                                   | 30          | -3,841                              | -1    | -65,369                              | -10 |  |
| Corpus Christi, Lake  | 256,062                       | 235,461                                   | 92          | -3,451                              | -1    | 4,002                                | 2   |  |
| *Falcon Reservoir (Texas) *Falcon Reservoir (Texas &                | 1,551,007                     | 842,490                                   | 54          | -626                                | -0    | 240,535                              | 16  |  |
| Mexico)   | 2,646,817                     | 1,412,290                                 | 53          | -1,239                              | -0    | 610,986                              | 23  |  |
| TOTAL   | 2,469,889                     | 1,273,567                                 | 52          | -7,918                              | -0    | 179,168                              | 7   |  |
| STATEWIDE TOTAL   |                               |   |             |                                     |       |                                      |     |  |
| STATEWIDE TOTAL   | 32,200,121                    | 27,069,778                                | 84          | 1,259,049                           | 4     | -14,518                              | -0  |  |

<sup>\*</sup> Conservation volume is used as conservation storage capacity, because the dead storage is unknown.

#### Note:

Conservation storage capacity is the space available to store water above the lowest outlet and below the top of conservation pool (some may have seasonal variations), or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level) or any water in the dead pool storage. Conservation storage percentage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir on date shown. Percent change is given by 100 \* (current conservation storage - past conservation storage)/conservation storage capacity.

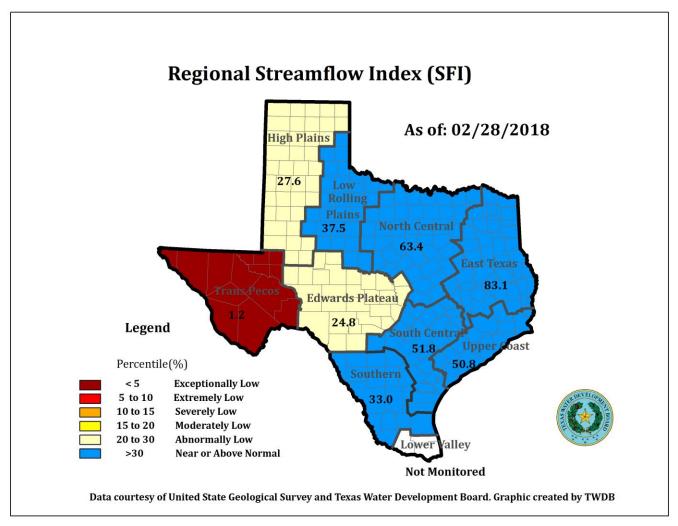
<sup>\*\*</sup>Monthly and yearly changes do not include reservoirs that did not have data in last month or last year, respectively.

#### FEBRUARY 2018 STREAMFLOW CONDITIONS

The computed 30-day mean flow status for 29 reporting index stations monitored this month is presented below. Mean flow increased at 19 index stations, decreased at eight stations, and remained unchanged at two stations.

| Streamflow Status           | Number of Stations |  |  |
|-----------------------------|--------------------|--|--|
| Near or Above Normal (>30%) | 19                 |  |  |
| Abnormally Low (20-30%)     | 3                  |  |  |
| Moderately Low (15-20%)     | 3                  |  |  |
| Severely Low (10-15%)       | 1                  |  |  |
| Extremely Low (5-10%)       | 0                  |  |  |
| Exceptionally Low (<5%)     | 3                  |  |  |

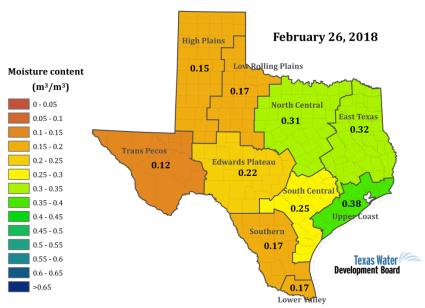
On a regional basis, as shown below, stream flows were near or above normal in the Low Rolling Plains, North Central, East Texas, South Central, Upper Coast, and Southern regions; exceptionally low in the Trans Pecos region; and abnormally low in the High Plains and Edwards Plateau regions. Streamflow in the Lower Valley region is not monitored.



<sup>\*</sup>Streamflow Index is defined as the percentile flow that exceeds a given percent of observed flows.

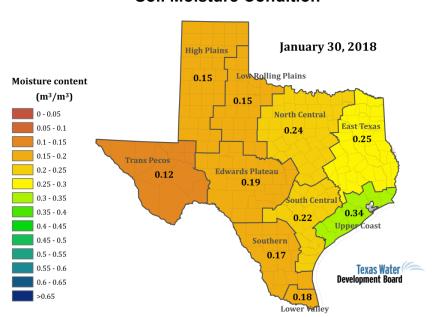
#### FEBRUARY 2018 SOIL MOISTURE CONDITIONS

# **Soil Moisture Condition**



Data from NASA Soil Moisture Active Passive (SMAP) Level 4 - Model - Value Added Version 2 Soil moisture content is shown as volume of water per unit volume of bulk soil. Root zone: 0 to 1 meter depth.

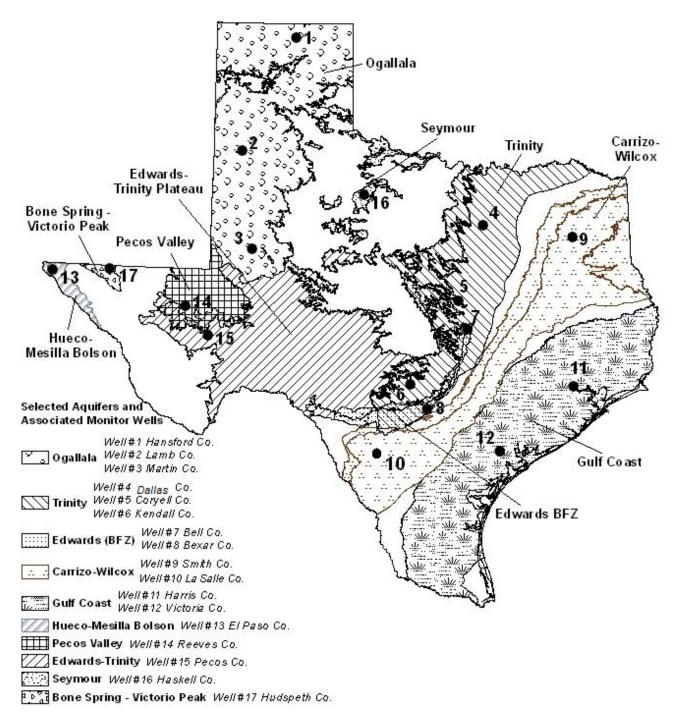
# **Soil Moisture Condition**



Data from NASA Soil Moisture Active Passive (SMAP) Level 4 - Model - Value Added Version 2 Soil moisture content is shown as volume of water per unit volume of bulk soil. Root zone: 0 to 1 meter depth.

Soil moisture at the end of February 2018 (*top image*), as compared to soil moisture at the end of January 2018 (*bottom image*), increased in six climate regions ranging from 12 - 29 percent with the greatest increases in North Central and East Texas regions, declined in the Lower Valley region by 6 percent, and remained unchanged in three climate regions.

# FEBRUARY 2018 GROUNDWATER LEVELS IN OBSERVATION WELLS

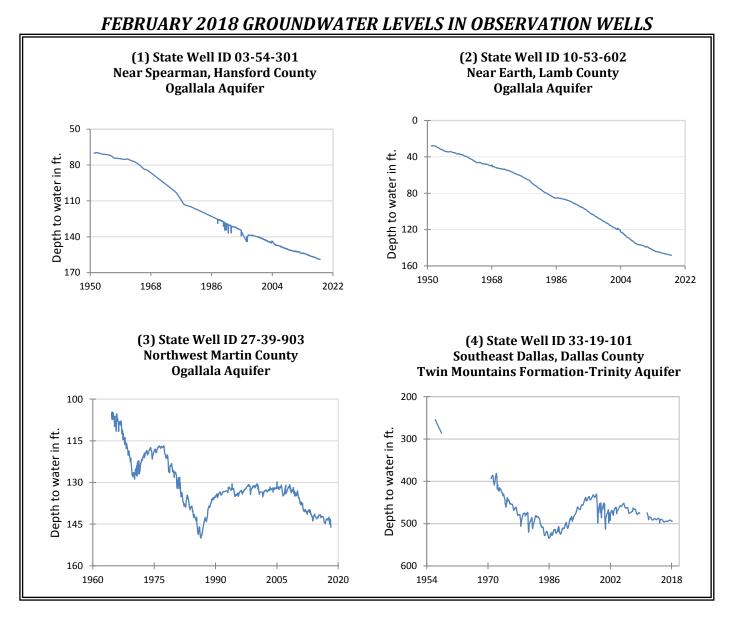


Water-level measurements were available for all 17 key monitoring wells in the state. Water levels rose in 11 monitoring wells since the beginning of February, ranging from an increase of 0.01 feet in the Haskell County Seymour Aquifer well (#16 on map) and the Harris County Gulf Coast Aquifer well (#11 on map) to 6.32 feet in the Kendall County Trinity Aquifer well (#6 on map). Water levels declined in 6 monitoring wells, ranging from a decline of 0.12 feet in the Bell County Edwards (BFZ) Aquifer well (#7 on map) to 13.55 feet in the La Salle County Carrizo-Wilcox Aquifer well (#8 on map). The J-17 well (#8 on map) in San Antonio recorded a water level of 63.91 feet below land surface or 667.09 feet above mean sea level. There are no restrictions currently in place for the San Antonio portion of the Edwards (Balcones Fault Zone) Aquifer, with water levels at 7.09 feet above the Stage I critical management level.

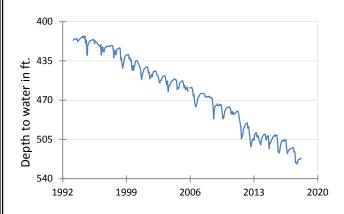
<sup>\*</sup>IDs used in this publication on the aquifer map to indicate the monitoring well location (IDs 1 - 17) are different than the TWDB's six- or seven-digit state well identification number.

| Monitoring Well       | February | January | Month<br>Change | Year<br>Change | Historical<br>Change | First<br>Measured |
|-----------------------|----------|---------|-----------------|----------------|----------------------|-------------------|
| (1) Hansford 0354301  | 158.99   | 158.69  | -0.30           | -1.11          | -88.87               | 1951              |
| (2) Lamb 1053602      | 148.31   | 148.16  | -0.15           | -1.16          | -120.14              | 1951              |
| (3) Martin 2739903    | 146.19   | 143.39  | 0.20            | 0.03           | -38.30               | 1964              |
| (4) Dallas 3319101    | 493.78   | 494.30  | 0.52            | 0.48           | -271.78              | 1954              |
| (5) Coryell 4035404   | 521.73   | 522.64  | 0.91            | -8.77          | -229.73              | 1955              |
| (6) Kendall 6802609   | 125.52   | 131.84  | 6.32            | -15.49         | -65.52               | 1975              |
| (7) Bell 5804816      | 124.19   | 124.07  | -0.12           | -2.81          | -0.68                | 2008              |
| (8) Bexar 6837203     | 63.91    | 67.31   | 3.40            | -20.30         | -17.27               | 1932              |
| (9) Smith 3430907     | 431.81   | 432.18  | 0.37            | -0.86          | -131.81              | 1987              |
| (10) La Salle 7738103 | 497.74   | 484.19  | -13.55          | -37.11         | -244.67              | 2003              |
| (11) Harris 6514409   | 192.43   | 192.44  | 0.01            | 2.00           | <i>-56.93</i> *      | 1947**            |
| (12) Victoria 8017502 | 32.37    | 33.50   | 1.13            | -0.23          | 1.63                 | 1958              |
| (13) El Paso 4913301  | 294.52   | 294.31  | -0.21           | 0.97           | -62.62               | 1964              |
| (14) Reeves 4644501   | 160.56   | 160.80  | 0.24            | 1.22           | -68.47               | 1952              |
| (15) Pecos 5216802    | 186.76   | 183.64  | -3.12           | -3.26          | 60.12                | 1976              |
| (16) Haskell 2135748  | 46.60    | 46.61   | 0.01            | -0.39          | -3.60                | 2002              |
| (17) Hudspeth 4807516 | 139.59   | 139.63  | 0.04            | -3.15          | <i>-35.67</i>        | 1966              |

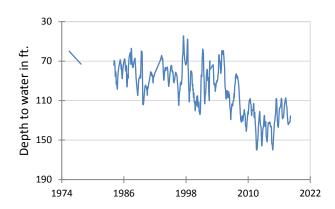
<sup>\*</sup>Change since the original measurement of 135.5 feet below land surface in 1947 (\*\*measurement not shown on the hydrograph)



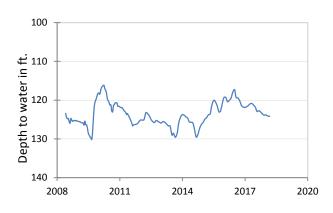
(5) State Well ID 40-35-404 Gatesville, Coryell County Hosston Formation-Trinity Aquifer



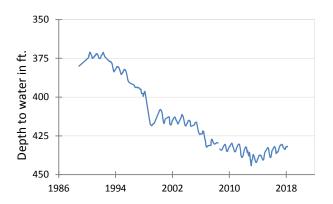
(6) State Well ID 68-02-609 Waring, Kendall County Cow Creek Formation-Trinity Aquifer



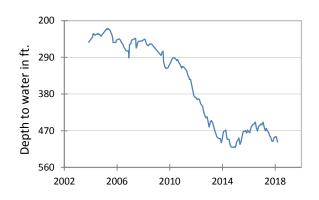
(7) State Well ID 58-04-816 Near Salado, Bell County Edwards (Balcones Fault Zone) Aquifer



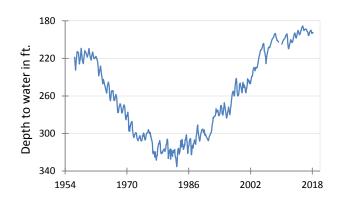
(9) State Well ID 34-30-907 Red Springs, Smith County Carrizo-Wilcox Aquifer



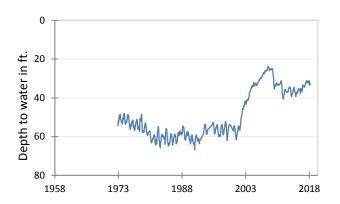
(10) State Well ID 77-38-103 Near Cotulla, La Salle County Carrizo-Wilcox Aquifer



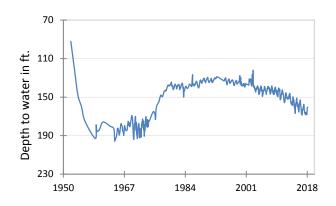
(11) State Well ID 65-14-409 Alief, Harris County Evangeline Formation-Gulf Coast Aquifer



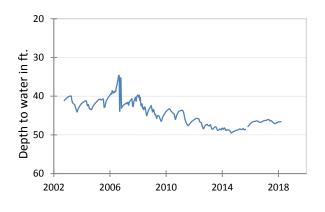
(12) State Well ID 80-17-502 Near Bloomington, Victoria County Lissie Formation-Gulf Coast Aquifer



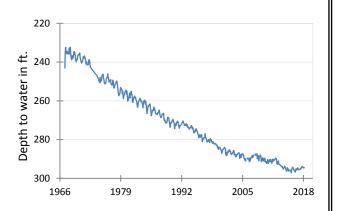
(14) State Well ID 46-44-501 Near Pecos, Reeves County Pecos Valley Aquifer



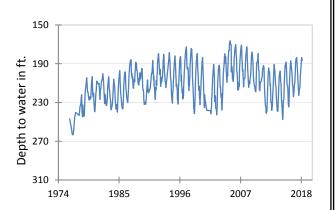
(16) State Well ID 21-35-748 Near O'Brien, Haskell County Seymour Aquifer



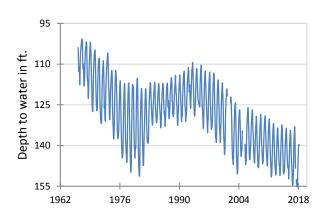
(13) State Well ID 49-13-301 El Paso, El Paso County Hueco-Mesilla Bolson Aquifer



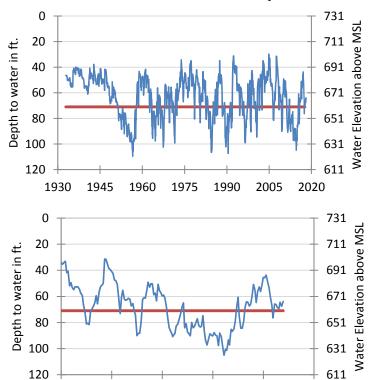
(15) State Well ID 52-16-802 Fort Stockton, Pecos County Edwards-Trinity (Plateau) Aquifer



(17) State Well ID 48-07-516 Dell City, Hudspeth County Bone Spring - Victorio Peak Aquifer



# (8) State Well ID 68-37-203 (J-17) In San Antonio, Bexar County Edwards (Balcones Fault Zone) Aquifer



The late February water-level measurement in this Edwards (Balcones Fault Zone) Aquifer well, elevation 731 feet above mean sea level, was 67.91 feet below land surface, or 667.09 feet above mean sea level. This was 3.40 feet above last month's measurement, 20.30 feet below last year's measurement, and 17.27 feet below the initial measurement recorded in 1932.

\*\*\* Water levels below the red line indicate periods in which Edwards Aquifer Authority Stage I drought restrictions are in effect. \*\*\*



2005

2008

2011

2014

2017

# HYDROGRAPH OF THE MONTH

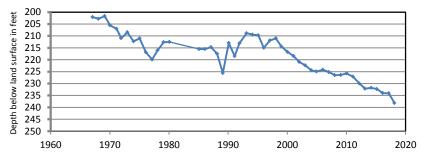
2020

Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and their conditions in Texas.

# **Bone Springs – Victorio Peak Aquifer**

The Bone Springs – Victorio Peak Aquifer is a minor aquifer located in Northern Hudspeth County. The principal water-bearing units in the aguifer are the Permian aged Bone Springs and Victorio Peak limestones. The formations produce groundwater from solution cavities developed along joints and fracture planes. Water is generally slightly saline, with total dissolved solids of 1,000 to 3,000 milligrams per liter. In the Dell City area, total dissolved solids increase to 3,000 to 10,000 milligrams per liter. Since the late 1940s, pumping has been the primary means of discharge from the aquifer. Water levels have declined in the Dell City area from 5 to 60 feet, with an average of about 30 feet for the area over a period of about 55 years. These declines are most likely due to pumping for irrigation, aggravated during drought periods such as the one most recently experienced after 2010.

Well #4807418, 948 feet deep Unused, northern Hudspeth County



The first recorded water-level measurement of this unused well was 202.05 feet below land surface in 1967 by the USGS. TWDB began measuring this well in 1969 and has measured every year since. This 1969 measurement of 201.69 feet below land surface was the highest recorded measurement. Over the past 20 years, the water level has mainly declined due to continued nearby irrigation pumping. The lowest water-level measurement was recorded in 2018 at 238.15 feet below land surface, indicating an overall decline of nearly 40 feet in this well in just over 50 years.