

Texas Water Development Board



WATER Conditions

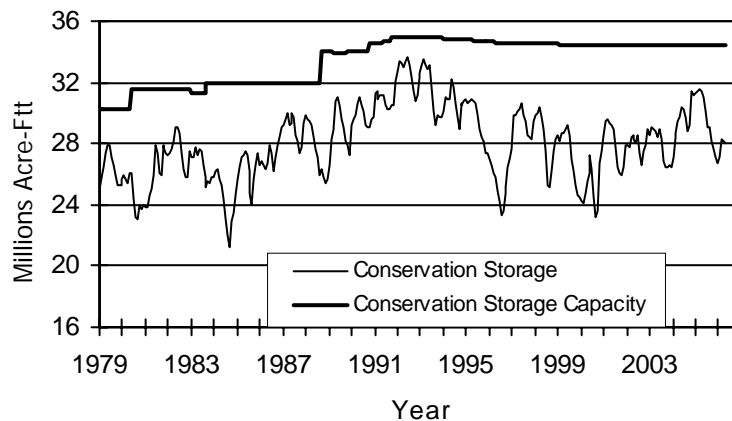
RESERVOIR STORAGE

May 2006

Near the end of May, the 77 reservoirs monitored for this report held 28.05 million acre-feet in conservation storage, or 81 percent of the conservation storage capacity of the state's major reservoirs. Statewide total storage is below normal for this time of year. Storage decreased during the month by 143,760 acre-feet (-0.4% of conservation storage capacity). Compared to last year, storage decreased by 2.9 million acre-feet (-9%).

Storage was 90% of capacity in Upper Coast Region but below 90% in all other Regions, with the lowest in the High Plains Region (21%). Storage was at 100% in 5 reservoirs. During May, storage increased in 14 reservoirs but decreased in 59 reservoirs. Regionally, storage decreased in 5 out of 9 Regions, increased in 2 Regions, and remained unchanged in 2 Regions. Compared to this time last year, the storage decreased in all except Low Rolling Plains Region where storage increased by 1%. The sharpest decrease was in the South Central Region (-23%).

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Current data are based on elevation near end of month at 77 reservoirs that represent 98 percent of total conservation storage capacity in Texas reservoirs having a capacity of 5,000 acre-feet or more.

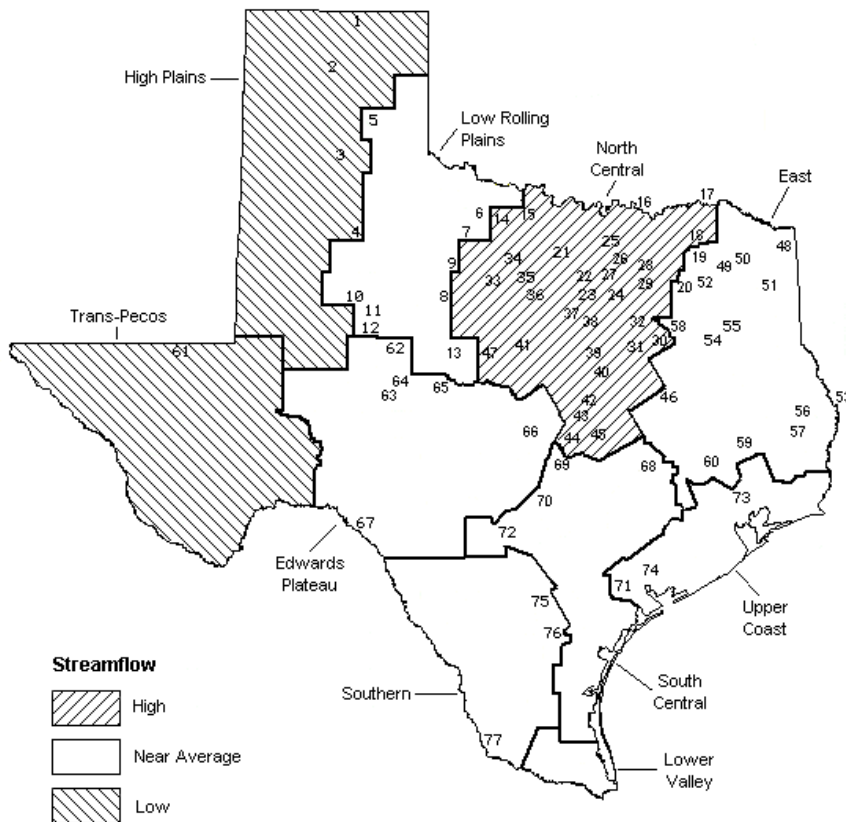
STREAMFLOW

Of 29 reporting index stations in May, computed 30-day mean flows were high (5% - 30%) at 6 stations, low (70% - 95%) at 8 stations, very low (>95%) at 1 station, and near normal (30% - 70% exceedance) at the remaining 14 stations. Compared to April, flows have increased at 14 index stations and decreased at 15 stations.

On a regional basis, flows in May were high in North Central Region, low in the High Plains and Trans-Pecos Regions, but normal in all other Regions. Streamflow in the Lower Valley Region is not monitored.

MAY STREAMFLOW CONDITIONS

Reservoirs Shown on Map



- | | |
|----------------------------------|-----------------------------|
| 1. Palo Duro Reservoir | 40. Waco Lake |
| 2. Lake Meredith | 41. Proctor Lake |
| 3. MacKenzie Reservoir | 42. Belton Lake |
| 4. White River Lake | 43. Stillhouse Hollow Lake |
| 5. Greenbelt Reservoir | 44. Lake Georgetown |
| 6. Lake Kemp | 45. Granger Lake |
| 7. Miller's Creek Reservoir | 46. Lake Limestone |
| 8. Fort Phantom Hill Reservoir | 47. Lake Brownwood |
| 9. Lake Stamford | 48. Wright Patman Lake |
| 10. Lake J. B. Thomas | 49. Lake Cypress Springs |
| 11. Lake Colorado City | 50. Lake Bob Sandlin |
| 12. Champion Creek Reservoir | 51. Lake O' the Pines |
| 13. Hords Creek Lake | 52. Lake Fork Reservoir |
| 14. Lake Kickapoo | 53. Toledo Bend Reservoir |
| 15. Lake Arrowhead | 54. Lake Palestine |
| 16. Lake Texoma | 55. Lake Tyler |
| 17. Pat Mayse Lake | 56. Sam Rayburn Reservoir |
| 18. Cooper Lake | 57. B. A. Steinhagen Lake |
| 19. Lake Sulphur Springs | 58. Cedar Creek Reservoir |
| 20. Lake Tawakoni | 59. Lake Livingston |
| 21. Bridgeport Reservoir | 60. Lake Conroe |
| 22. Eagle Mountain Reservoir | 61. Red Bluff Reservoir |
| 23. Benbrook Lake | 62. E. V. Spence Reservoir |
| 24. Joe Pool Lake | 63. Twin Buttes Reservoir |
| 25. Ray Roberts Lake | 64. O. C. Fisher Lake |
| 26. Lewisville Lake | 65. O. H. Ivie Reservoir |
| 27. Grapevine Lake | 66. Lake Buchanan |
| 28. Lavon Lake | 67. Intl. Amistad Reservoir |
| 29. Lake Ray Hubbard | 68. Somerville Lake |
| 30. Richland-Chambers Creek Lake | 69. Lake Travis |
| 31. Navarro Mills Lake | 70. Canyon Lake |
| 32. Bardwell Lake | 71. Coletto Creek Reservoir |
| 33. Hubbard Creek Reservoir | 72. Medina Lake |
| 34. Lake Graham | 73. Lake Houston |
| 35. Possum Kingdom Lake | 74. Lake Texana |
| 36. Lake Palo Pinto | 75. Choke Canyon Reservoir |
| 37. Lake Granbury | 76. Lake Corpus Christi |
| 38. Lake Pat Cleburne | 77. Intl. Falcon Reservoir |
| 39. Whitney Lake | |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

| Name of Lake or Reservoir | No. on Map | Conservation Storage Capacity (acre-feet) | Conservation Storage Late May, 2006 (acre-feet) (%) | Change since Late April 2006 (acre-feet) (%) | Change since Late May 2005 (acre-feet) (%) | |
|---------------------------------------|------------------|--|--|---|---|--------------|
| HIGH PLAINS | | | | | | |
| Palo Duro Reservoir | 1 | 60,900 | 1,210 | 2 | -200 0 | -2,310 -4 |
| Lake Meredith (Texas) | 2 | 500,000 | 121,690 | 24 | -7,580 -2 | -47,440 -9 |
| Lake Meredith (Texas and Oklahoma) | (2) | 779,560 | 121,690 | 16 | -7,580 -1 | -47,440 -6 |
| MacKenzie Reservoir | 3 | 46,250 | 9,120 | 20 | -130 0 | -960 -2 |
| White River Lake | 4 | 31,850 | 4,570 | 14 | -370 -1 | -4,620 -15 |
| TOTAL | | 639,000 | 136,590 | 21 | -8,280 -1 | -55,330 -9 |
| LOW ROLLING PLAINS | | | | | | |
| Greenbelt Reservoir | 5 | 58,200 | 20,360 | 35 | -560 -1 | -3,590 -6 |
| Lake Kemp | 6 | 319,600 | 249,300 | 78 | -6,080 -2 | 14,320 4 |
| Miller's Creek Reservoir | 7 | 27,890 | 24,370 | 87 | 80 0 | 4,150 15 |
| Fort Phantom Hill Reservoir | 8 | 70,030 | 54,650 | 78 | 9,170 13 | -6,960 -10 |
| Lake Stamford | 9 | 52,700 | 47,030 | 89 | 2,380 5 | 14,460 27 |
| Lake J. B. Thomas | 10 | 202,300 | 46,660 | 23 | -3,520 -2 | -7,910 -4 |
| Lake Colorado City | 11 | 30,800 | 26,750 | 87 | -300 -1 | -2,870 -9 |
| Champion Creek Reservoir | 12 | 41,600 | 6,230 | 15 | 290 1 | 1,260 3 |
| Hords Creek Lake | 13 | 8,600 | 6,080 | 71 | -130 -2 | -1,970 -23 |
| TOTAL | | 811,720 | 481,430 | 59 | 1,330 0 | 10,890 1 |
| NORTH CENTRAL | | | | | | |
| Lake Kickapoo | 14 | 106,000 | 84,400 | 80 | -2,360 -2 | 17,900 17 |
| Lake Arrowhead | 15 | 262,100 | 213,320 | 81 | -2,560 -1 | 25,780 10 |
| Lake Texoma | 16 | 2,722,300 | 2,656,410 | 98 | 142,480 5 | 433,510 16 |
| Pat Mayse Lake | 17 | 124,500 | 96,250 | 77 | -2,290 -2 | -21,620 -17 |
| Cooper Lake | 18 | 273,000 | 164,880 | 60 | -15,550 -6 | -96,750 -35 |
| Lake Sulphur Springs | 19 | 17,710 | 17,220 | 97 | -490 -3 | 370 2 |
| Lake Tawakoni | 20 | 936,200 | 679,100 | 73 | -16,500 -2 | -158,700 -17 |
| Bridgeport Reservoir | 21 | 374,830 | 262,600 | 70 | 20,400 5 | -80,500 -21 |
| Eagle Mountain Reservoir | 22 | 178,380 | 144,400 | 81 | -1,600 -1 | -25,900 -15 |
| Benbrook Lake | 23 | 88,200 | 76,710 | 87 | 2,540 3 | -6,510 -7 |
| Joe Pool Lake | 24 | 175,800 | 175,800 | 100 | 0 0 | 0 0 |
| Ray Roberts Lake | 25 | 798,760 | 719,010 | 90 | 810 0 | -75,860 -9 |
| Lewisville Lake | 26 | 555,000 | 457,610 | 82 | -9,930 -2 | -97,390 -18 |
| Grapevine Lake | 27 | 187,700 | 143,340 | 76 | 250 0 | -35,610 -19 |
| Lavon Lake | 28 | 443,800 | 285,130 | 64 | -15,460 -3 | -158,670 -36 |
| Lake Ray Hubbard | 29 | 413,420 | 398,100 | 96 | -13,000 -3 | -15,320 -4 |
| Richland-Chambers Creek Lake | 30 | 1,103,820 | 913,100 | 83 | -26,500 -2 | -190,720 -17 |
| Navarro Mills Lake | 31 | 55,810 | 35,370 | 63 | -2,140 -4 | -20,440 -37 |
| Bardwell Lake | 32 | 53,580 | 46,220 | 86 | -1,050 -2 | -800 -1 |
| Hubbard Creek Reservoir | 33 | 317,800 | 184,490 | 58 | 4,880 2 | 1,670 1 |
| Lake Graham | 34 | 45,000 | 43,550 | 97 | 2,250 5 | 3,890 9 |
| Possum Kingdom Lake | 35 | 551,820 | 528,620 | 96 | 42,280 8 | 50,020 9 |
| Lake Palo Pinto | 36 | 27,650 | 20,180 | 73 | 5,250 19 | -5,100 -18 |
| Lake Granbury | 37 | 135,680 | 133,060 | 98 | 230 0 | -440 0 |
| Lake Pat Cleburne | 38 | 25,300 | 24,810 | 98 | -370 -1 | -490 -2 |
| Whitney Lake | 39 | 622,800 | 573,100 | 92 | 37,830 6 | -25,790 -4 |
| Waco Lake | 40 | 144,500 | 144,500 | 100 | 0 0 | 0 0 |
| Proctor Lake | 41 | 55,590 | 42,830 | 77 | 7,030 13 | -12,360 -22 |
| Belton Lake | 42 | 434,500 | 411,660 | 95 | 8,980 2 | -22,840 -5 |
| Stillhouse Hollow Lake | 43 | 226,060 | 225,680 | 100 | -380 0 | -380 0 |
| Lake Georgetown | 44 | 37,010 | 25,060 | 68 | 2,190 6 | -11,950 -32 |
| Granger Lake | 45 | 54,280 | 52,810 | 97 | -1,470 -3 | -1,470 -3 |
| Lake Limestone | 46 | 215,750 | 211,660 | 98 | -1,840 -1 | -400 0 |
| Lake Brownwood | 47 | 143,400 | 119,740 | 84 | 3,040 2 | -17,080 -12 |
| TOTAL | | 11,908,050 | 10,310,720 | 87 | 166,950 1 | -549,950 -5 |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

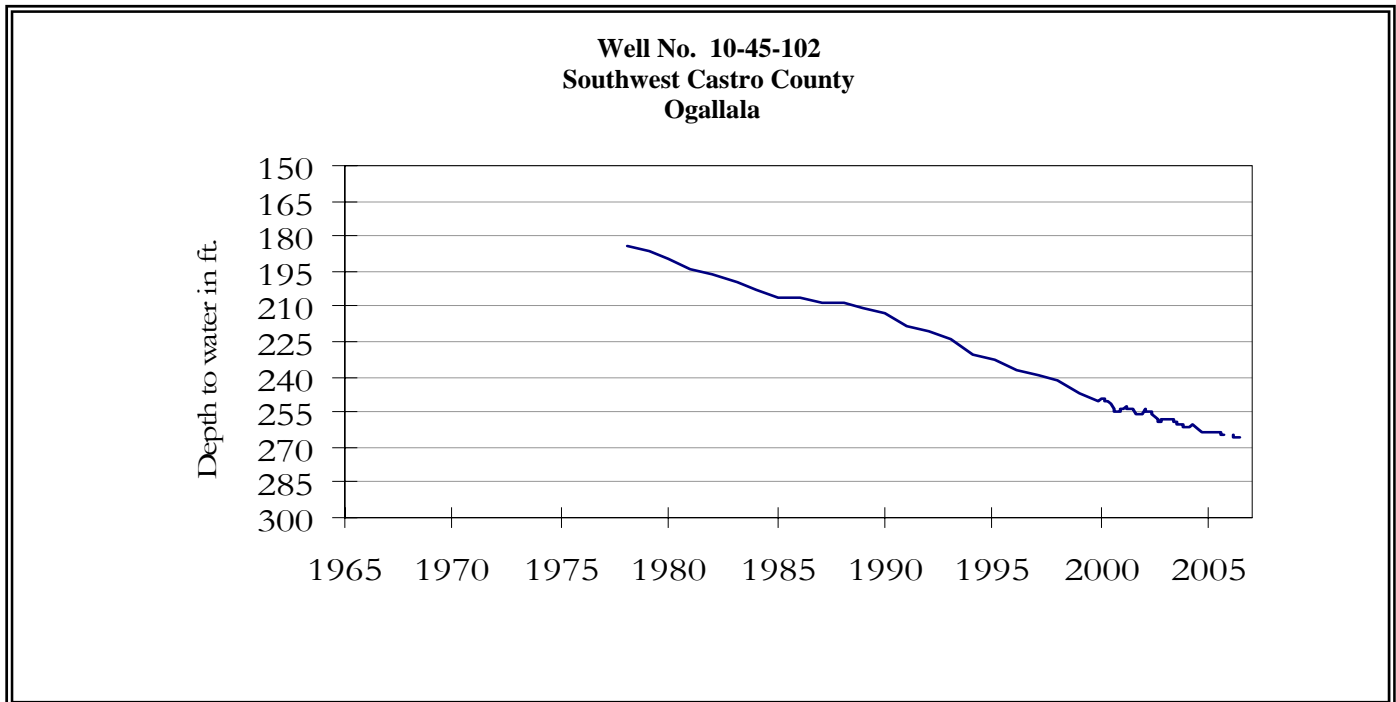
| Name of Lake or Reservoir | No. on Map | Conservation Storage Capacity (acre-feet) | Conservation Storage Late May, 2006 (acre-feet) (%) | Change since Late April 2006 (acre-feet) (%) | Change since Late May 2005 (acre-feet) (%) |
|---|------------------|--|--|---|---|
| EAST | | | | | |
| Wright Patman Lake | 48 | 142,700 | 142,700 100 | 0 0 | 0 0 |
| Lake Cypress Springs | 49 | 66,800 | 60,450 90 | -1,630 -2 | -6,090 -9 |
| Lake Bob Sandlin | 50 | 202,300 | 159,300 79 | -3,700 -2 | -37,900 -19 |
| Lake O' the Pines | 51 | 252,000 | 209,020 83 | -5,790 -2 | -22,910 -9 |
| Lake Fork Reservoir | 52 | 635,200 | 607,600 96 | -4,900 -1 | -27,600 -4 |
| Toledo Bend Reservoir | 53 | 4,472,900 | 3,795,000 85 | -82,000 -2 | -270,000 -6 |
| Lake Palestine | 54 | 411,300 | 366,460 89 | -2,890 -1 | -40,070 -10 |
| Lake Tyler | 55 | 73,700 | 60,740 82 | -2,770 -4 | -12,960 -18 |
| Sam Rayburn Reservoir | 56 | 2,876,300 | 2,748,350 96 | -14,570 -1 | -100,890 -4 |
| B. A. Steinhagen Lake | 57 | 94,200 | 21,370 23 | -53,410 -57 | -64,190 -68 |
| Cedar Creek Reservoir | 58 | 637,050 | 566,800 89 | -15,600 -2 | -65,400 -10 |
| Lake Livingston | 59 | 1,750,000 | 1,540,000 88 | 69,000 4 | -210,000 -12 |
| Lake Conroe | 60 | 429,900 | 351,000 82 | -1,100 0 | -58,200 -14 |
| TOTAL | | 12,044,350 | 10,628,790 88 | -119,360 -1 | -916,210 -8 |
| TRANS-PECOS | | | | | |
| Red Bluff Reservoir | 61 | 307,000 | 107,300 35 | -15,280 -5 | -17,880 -6 |
| TOTAL | | 307,000 | 107,300 35 | -15,280 -5 | -17,880 -6 |
| EDWARDS PLATEAU | | | | | |
| E. V. Spence Reservoir | 62 | 488,760 | 84,980 17 | -2,410 0 | 11,480 2 |
| Twin Buttes Reservoir | 63 | 177,800 | 50,100 28 | -4,490 -3 | 8,480 5 |
| O.C. Fisher Lake | 64 | 119,200 | 11,710 10 | -780 -1 | 4,860 4 |
| O. H. Ivie Reservoir | 65 | 554,340 | 274,600 50 | -7,600 -1 | -46,200 -8 |
| Lake Buchanan | 66 | 896,980 | 718,360 80 | 5,850 1 | -158,860 -18 |
| Amistad Reservoir (Texas) | 67 | 1,771,030 | 2,014,000 114 | -100,000 -6 | -464,000 -26 |
| Amistad Reservoir (Texas and Mexico) | (67) | 3,151,300 | 2,515,000 80 | -85,000 -3 | -338,000 -11 |
| TOTAL | | 4,008,110 | 3,153,750 79 | -109,430 -3 | -644,240 -16 |
| SOUTH CENTRAL | | | | | |
| Somerville Lake | 68 | 155,060 | 131,080 85 | -820 -1 | -23,980 -15 |
| Lake Travis | 69 | 1,144,100 | 865,200 76 | 7,500 1 | -278,900 -24 |
| Canyon Lake | 70 | 385,600 | 351,430 91 | 1,090 0 | -34,170 -9 |
| Coletto Creek Reservoir | 71 | 35,060 | 23,110 66 | 340 1 | -8,330 -24 |
| Medina Lake | 72 | 254,000 | 153,600 60 | -9,300 -4 | -100,400 -40 |
| TOTAL | | 1,973,820 | 1,524,420 77 | -1,190 0 | -445,780 -23 |
| UPPER COAST | | | | | |
| Lake Houston | 73 | 128,860 | 128,860 100 | 0 0 | 0 0 |
| Lake Texana | 74 | 157,900 | 129,940 82 | 12,790 8 | -25,700 -16 |
| TOTAL | | 286,760 | 258,800 90 | 12,790 4 | -25,700 -9 |
| SOUTHERN | | | | | |
| Choke Canyon Reservoir | 75 | 695,260 | 578,000 83 | -11,000 -2 | -110,000 -16 |
| Lake Corpus Christi | 76 | 241,240 | 92,510 38 | -11,290 -5 | -148,690 -62 |
| Falcon Reservoir (Texas) | 77 | 1,555,120 | 775,000 50 | -49,000 -3 | -32,000 -2 |
| Falcon Reservoir (Texas and Mexico) | (77) | 2,653,290 | 1,100,000 41 | -192,000 -7 | -142,000 -5 |
| TOTAL | | 2,491,620 | 1,445,510 58 | -71,290 -3 | -290,690 -12 |
| STATE TOTAL | | 34,470,430 | 28,047,310 81 | -143,760 0 | -2,934,890 -9 |

Note:

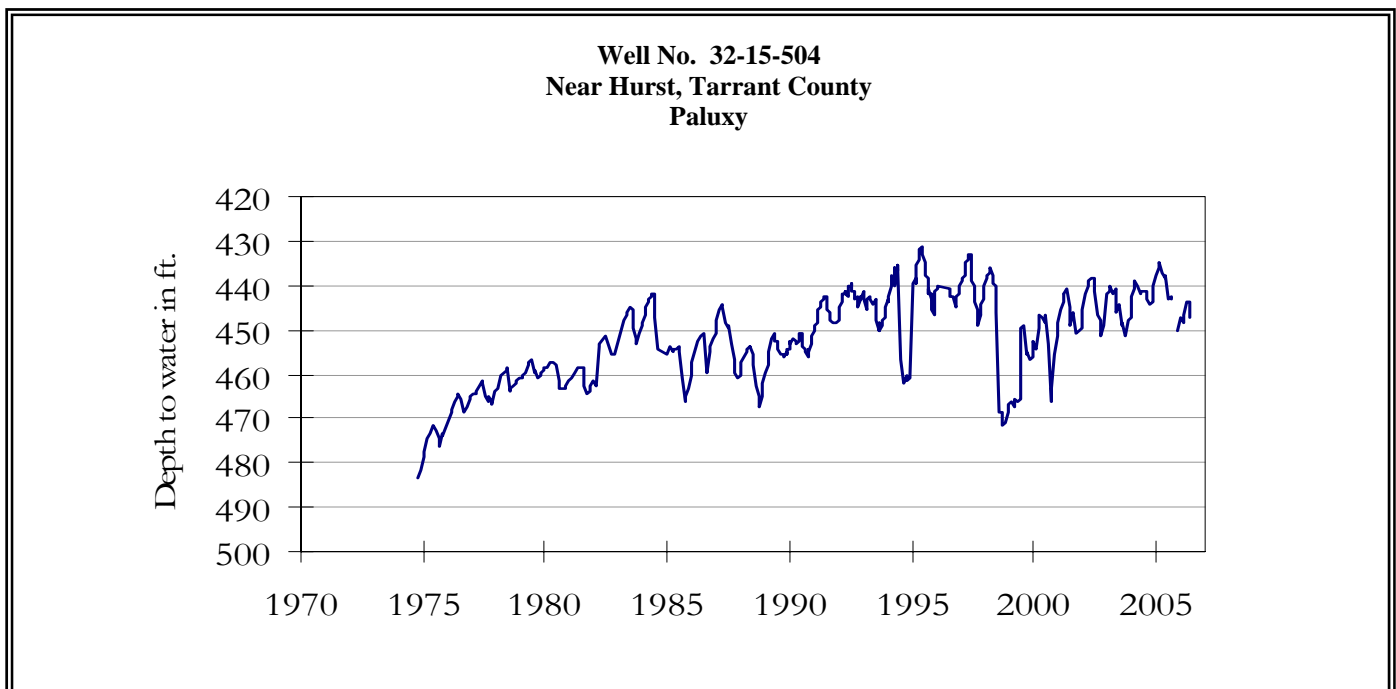
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level), or any water in so called dead storage (in the bottom of the reservoir, below the invert of lowest outlet works and consequently not removable by gravity flow alone.) Percentage of conservation storage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir for date shown. Percent change is given by $\% \text{ Change} = 100 * (\text{current conservation storage} - \text{past conservation storage}) / \text{conservation storage capacity}$.

Current data are based on elevations near end of month at 77 reservoirs that together represent 98 percent of the total conservation storage capacity of major Texas reservoirs (those with capacity of 5,000 acre-feet or more each). Preliminary figures are shown for the Texas' share of conservation storage in all reservoirs.

MAY GROUND WATER LEVELS IN OBSERVATION WELLS

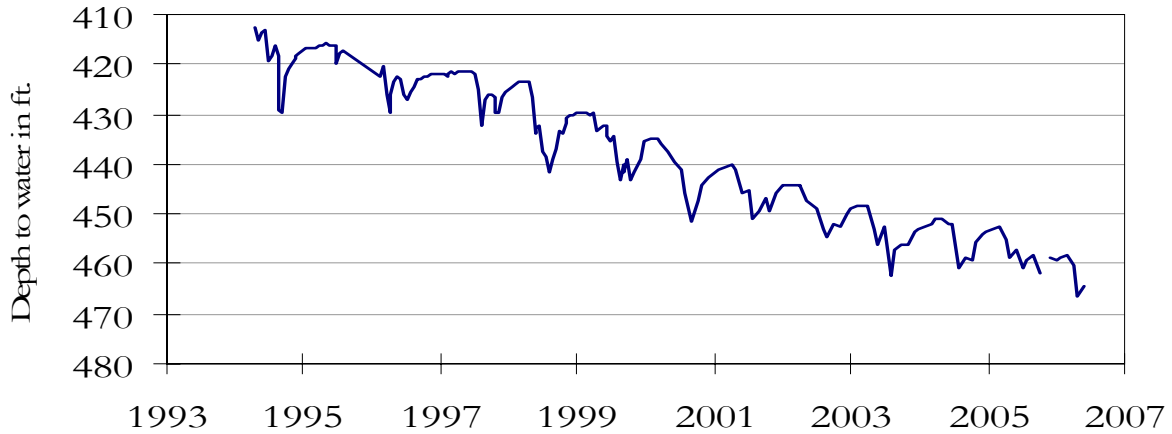


The late May water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 265.75 feet below land surface. This measurement was 0.15 feet below last month's measurement, 2.29 feet below last year's measurement, and 109.75 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.



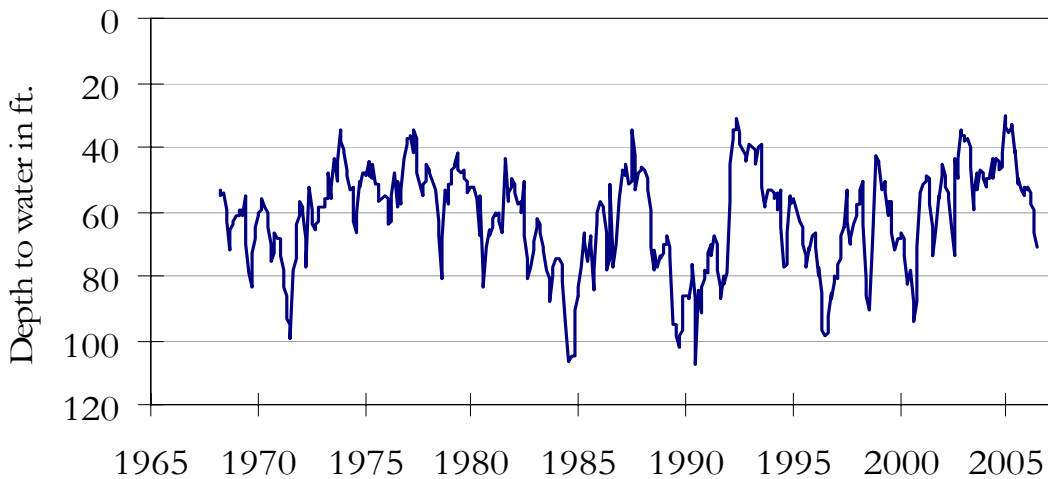
The late May water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 447.03 feet below land surface. This measurement was 3.50 feet below last month's measurement, 9.11 feet below last year's measurement, and 69.03 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.

**Well No. 40-35-404
Gatesville, Coryell County
Hosston/Trinity**



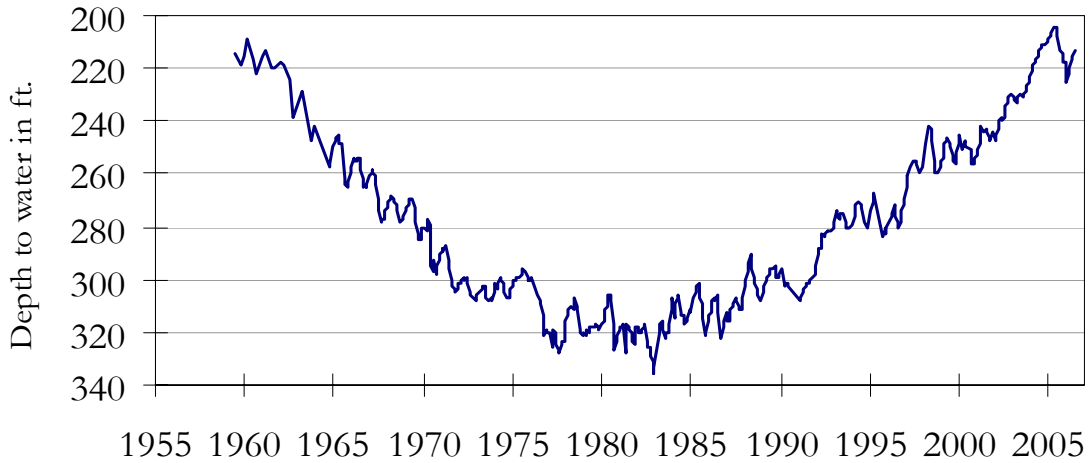
The late May water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 464.58 feet below land surface. This water level was 1.74 feet above last month's measurement, 7.63 feet below last year's measurement, and 172.58 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

**Well No. 49-13-301
El Paso, El Paso County
Bolson Deposits**



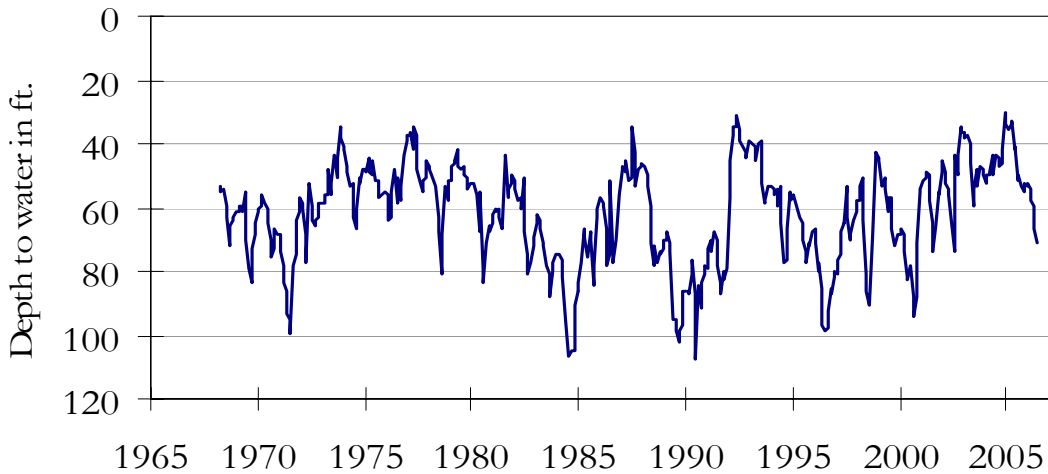
The late May water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 290.97 feet below land surface. This was 1.18 feet below last month's measurement, 1.03 feet below last year's measurement, and 59.07 feet below the initial measurement in 1964. No water level measurements were recorded for October or December 2005.

**Well No. 65-14-409
Alief, Harris County
Evangeline**



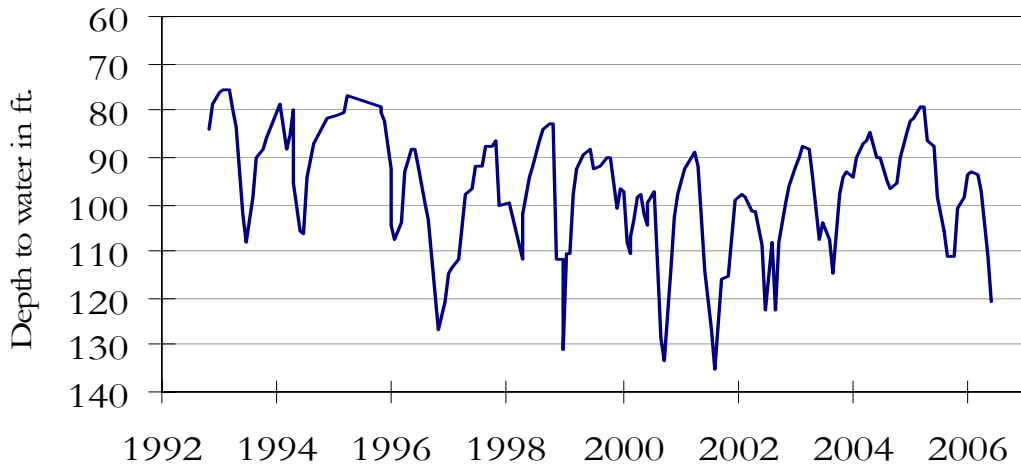
The late May water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 213.25 feet below land surface. This was 1.78 feet above last month's measurement, 9.12 feet below last year's measurement, and 77.75 feet below the initial measurement recorded in 1947.

**Well No. 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards and Associated Limestones**



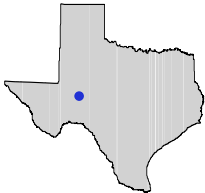
The late May water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 71.28 feet below land surface. This was 4.38 feet below last month's measurement, 30.54 feet below last year's measurement, and 24.64 feet below the initial measurement recorded in 1962.

**Well No. 68-60-912
Between Poteet and Pleasanton, Atascosa County
Carrizo**



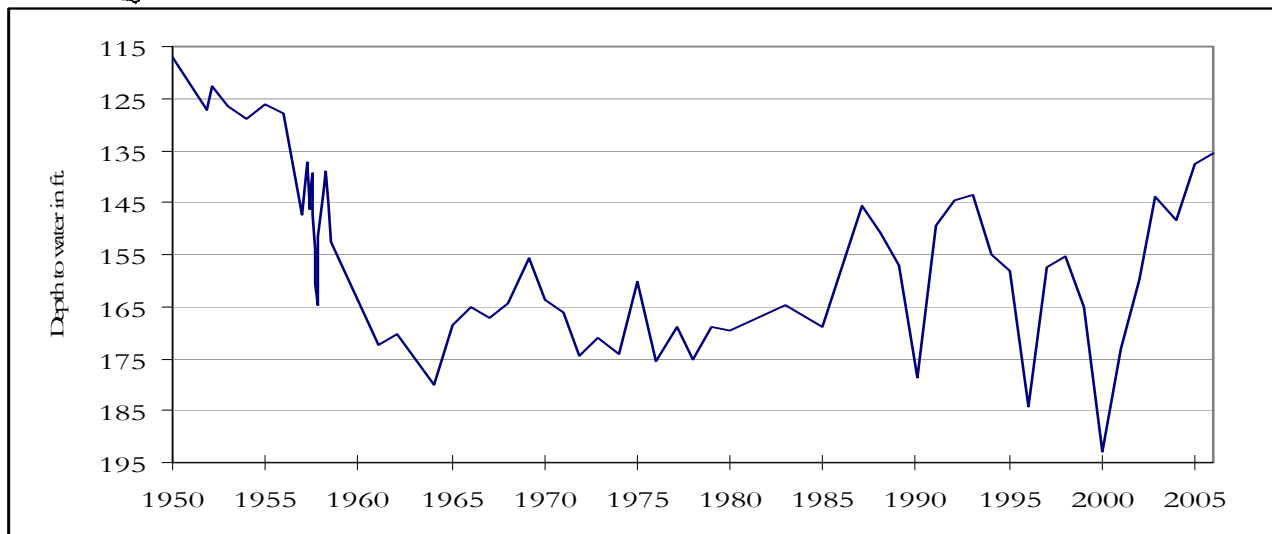
The late May water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 121.05 feet below land surface. This measurement was 9.70 feet below last month's measurement, 33.09 feet below last year's measurement, and 85.69 feet below the initial measurement recorded in 1965.

HYDROGRAPH OF THE MONTH



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

**Well No. 53-02-708
Pecos County**



This water level observation well, located in Fort Stockton, at an elevation of 3025 feet ASL, was completed in the Edwards-Trinity aquifer. Significant water-level fluctuations in this well since 1990 are the result of drawdown from nearby pumping wells at time of measurement.

May, 2006

Water level measurements were available for all seven key monitoring wells. Water levels declined in five of the monitoring wells since the beginning of May, ranging from 0.15 feet in the Castro Co. Ogallala well to 9.70 feet in the Atascosa Co. Carrizo well. Water levels rose in the remaining two monitoring wells, ranging from 1.74 feet in the Coryell Co. Trinity well to 1.78 feet in the Harris Co. Evangeline well. The J-17 well recorded a water level of 71.28 feet below land surface. This water level is approximately nine (9) feet above the Stage 1 critical management level.