Texas Water Development Board





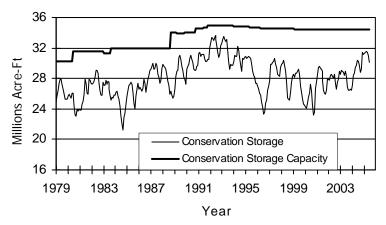
RESERVOIR STORAGE

June 2005

Near the end of June, the 77 reservoirs monitored for this report held 30.17 million acre-feet in conservation storage, or 88 percent of the conservation storage capacity of the state's major reservoirs. Storage decreased during the month by 0.82 million acre-feet (2.4% of conservation storage capacity). Compared to last year, storage decreased by 0.25 million acre-feet (0.7%).

Storage was near capacity in the South Central Region (96%), Upper Coast (96%), Edwards Plateau (93%), East (92%), and North Central (90%) Regions, but slightly lower than one-third of capacity in the High Plains Region (32%). Storage was at 100% in 10 reservoirs, and the Texas share of Amistad continued to remain above its capacity, at 138%. Compared to this time last year, the storage increased in five regions, with the greatest increase in the Edwards Plateau Region (+25%) and decreased in four regions, with the steepest decline in the East Region (-8%).

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.

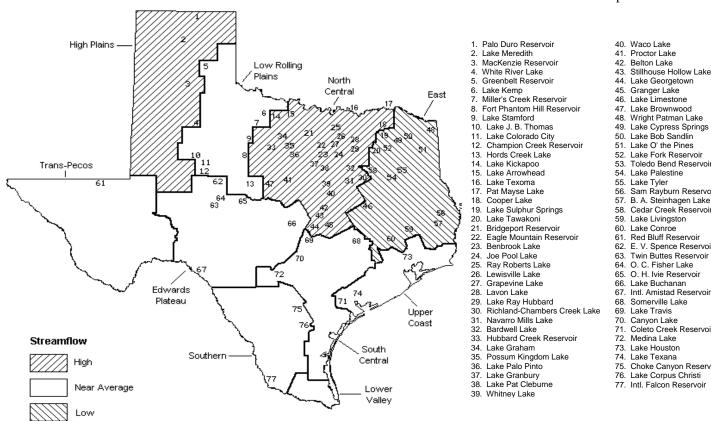
STREAMFLOW

Of 29 reporting index stations in June, computed 30-day mean flows were very high (0% - 5% exceedance) at 1 station, high (5% - 30%) at 8 stations, low (70% - 95%) at 3 stations, very low (95% - 100%) at 1 station, and near normal (30% - 70% exceedance) at the remaining 16 stations. Compared to May, flows have increased at 11 index stations and decreased at 18 stations.

On a regional basis, flows in June were high in the High Plains and North Central Regions, low in the East Texas Region and normal everywhere else. Streamflow in the Lower Valley Region is not monitored.

June Streamflow Conditions

Reservoirs Shown on Map



62. E. V. Spence Reservoir Twin Buttes Reservoir 64. O. C. Fisher Lake 65. O. H. Ivie Reservoir Lake Buchanan 67. Intl. Amistad Reservoir Somerville Lake 69. Lake Travis 70. Canvon Lake Coleto Creek Reservoir 72. Medina Lake 73. Lake Houston 74. Lake Texana 75. Choke Canvon Reservoir Lake Corpus Christi 77. Intl. Falcon Reservoir

Belton Lake

Granger Lake

Lake Bob Sandlin

Toledo Bend Reservoir

Sam Rayburn Reservoir

Cedar Creek Reservoir

Stillhouse Hollow Lake

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

| | T | | | | | | | |
|------------------------------------|----------|--------------------|----------------------|----------|--------------------|----------|-----------------|-----------|
| Name of Lake | No. | Conservation | Conservation | | Change since | | Change since | |
| or Reservoir | on | Storage | Storage Late Jun. | | Late May | | Late June | |
| | Map | Capacity | 2005 | | 2005 | | 2004 | |
| | | (acre-feet) | (acre-feet) | (%) | (acre-feet) | (%) | (acre-feet) | (%) |
| | | HIGH | PLAINS | | | | | |
| Palo Duro Reservoir | 1 | 60,900 | 3,330 | 5 | -190 | 0 | -3,820 | -6 |
| Lake Meredith (Texas) | 2 | 500,000 | 182,160 | 36 | 13,030 | 3 | 43,150 | 9 |
| Lake Meredith | | | | | | | | |
| (Texas and Oklahoma) | (2) | 779,560 | 182,160 | 23 | 13,030 | 2 | 43,150 | 6 |
| MacKenzie Reservoir | 3 | 46,250 | 10,650 | 23 | 570 | 1 | 3,090 | 7 |
| White River Lake | 4 | 31,850 | 8,520 | 27 | -670 | -2 | 1,870 | 6 |
| TOTAL | | 639,000 | 204,660 | 32 | 12,740 | 2 | 44,290 | 7 |
| | | | | | | | | |
| | | | ING PLAINS | | | | | |
| Greenbelt Reservoir | 5 | 58,200 | 25,930 | 45 | 1,980 | 3 | 1,710 | 3 |
| Lake Kemp | 6 | 319,600 | 222,600 | 70 | -12,380 | -4 | 42,640 | 13 |
| Miller's Creek Reservoir | 7 | 27,890 | 20,500 | 74 | 280 | 1 | 9,850 | 35 |
| Fort Phantom Hill Reservoir | 8 9 | 70,030 | 58,050 | 83 | -3,560 | -5 5 | 26,430 | 38 |
| Lake Stamford Lake J. B. Thomas | | 52,700 | 35,080 | 67 26 | 2,510 | | 1,420 | 3 16 |
| Lake Colorado City | 10 11 | 202,300 30,800 | 53,100 28,610 | 26 93 | -1,470 -1,010 | -1 -3 | 31,490 6,460 | 16 21 |
| Champion Creek Reservoir | 12 | 41,600 | 4,830 | 12 | -1,010 -140 | -3 0 | 1,610 | 4 |
| Hords Creek Lake | 13 | 8,600 | 7,750 | 90 | -300 | -3 | 4,980 | 58 |
| TOTAL | 13 | 811,720 | 456,450 | 56 | -14,090 | -2 | 126,590 | 16 |
| | | 0==,.=0 | 100,100 | | , | _ | | |
| | | NORTH | CENTRAL | | | | | |
| Lake Kickapoo | 14 | 106,000 | 63,180 | 60 | -3,320 | -3 | 8,540 | 8 |
| Lake Arrowhead | 15 | 262,100 | 182,600 | 70 | -4,940 | -2 | 66,020 | 25 |
| Lake Texoma | 16 | 2,722,300 | 2,287,140 | 84 | 64,240 | 2 | -404,290 | -15 |
| Pat Mayse Lake | 17 | 124,500 | 113,550 | 91 | -4,320 | -3 | -6,920 | -6 |
| Cooper Lake | 18 | 273,000 | 241,850 | 89 | -19,780 | -7 | 35,320 | 13 |
| Lake Sulphur Springs | 19 | 17,710 | 15,930 | 90 | -920 | -5 | -1,310 | -7 |
| Lake Tawakoni | 20 | 936,200 | 802,500 | 86 | -35,300 | -4 | -88,800 | -9 |
| Bridgeport Reservoir | 21 | 374,830 | 331,800 | 89 | -11,300 | -3 | -2,700 | -1 |
| Eagle Mountain Reservoir | 22 | 178,380 | 160,500 | 90 | -9,800 | -5 | -17,880 | -10 |
| Benbrook Lake | 23 | 88,200 | 79,650 | 90 | -3,570 | -4 | -8,550 | -10 |
| Joe Pool Lake | 24 | 175,800 | 172,620 | 98 | -3,180 | -2 | -3,180 | -2 |
| Ray Roberts Lake | 25 | 798,760 | 780,050 | 98 | -14,820 | -2 | -18,710 | -2 |
| Lewisville Lake | 26 | 555,000 | 555,000 | 100 | 0 | 0 | 0 | 0 |
| Grapevine Lake Lavon Lake | 27 | 187,700 | 168,960 | 90 05 | -9,990 | -5 -5 | -18,740 | -10 -5 |
| Lake Ray Hubbard | 28 29 | 443,800 413,420 | 420,470 398,900 | 95 96 | -23,330 -14,520 | -3 -4 | -21,980 -300 | -5 |
| Richland-Chambers Creek Lake | 30 | 1,103,820 | 1,100,000 | 100 | -3,820 | 0 | -3,820 | 0 |
| Navarro Mills Lake | 31 | 55,810 | 53,340 | 96 | -2,470 | -4 | -2,470 | -4 |
| Bardwell Lake | 32 | 53,580 | 45,110 | 84 | -1,910 | -4 | -5,520 | -10 |
| Hubbard Creek Reservoir | 33 | 317,800 | 185,990 | 59 | 3,170 | 1 | 53,300 | 17 |
| Lake Graham | 34 | 45,000 | 38,620 | 86 | -1,040 | -2 | 15,730 | 35 |
| Possum Kingdom Lake | 35 | 551,820 | 474,600 | 86 | -4,000 | -1 | 5,400 | 1 |
| Lake Palo Pinto | 36 | 27,650 | 23,390 | 85 | -1,890 | -7 | 2,750 | 10 |
| Lake Granbury | 37 | 135,680 | 132,300 | 98 | -1,200 | -1 | -200 | 0 |
| Lake Pat Cleburne | 38 | 25,300 | 24,100 | 95 | -1,200 | -5 | -1,200 | -5 |
| Whitney Lake | 39 | 622,800 | 566,490 | 91 | -32,400 | -5 | -56,310 | -9 |
| Waco Lake | 40 | 144,500 | 144,500 | 100 | 0 | 0 | 0 | 0 |
| Proctor Lake | 41 | 55,590 | 51,860 | 93 | -3,330 | -6 | -3,730 | -7 |
| Belton Lake | 42 | 434,500 | 433,720 | 100 | -780 | 0 | -780 | 0 |
| Stillhouse Hollow Lake | 43 | 226,060 | 226,060 | 100 | 0 | 0 | 0 | 0 |
| Lake Georgetown | 44 | 37,010 | 35,110 | 95 | -1,900 | -5 | -650 | -2 |
| Granger Lake | 45 | 54,280 | 54,280 | 100 | 0 | 0 | 0 | 0 |
| Lake Limestone | 46 | 215,750 | 203,620 | 94 | -8,440 | -4 | -12,130 | -6 |
| Lake Brownwood | 47 | 143,400 | 128,850 | 90 | -7,970 | -6 | -2,720 | -2 |
| TOTAL | | 11,908,050 | 10,696,640 | 90 | -164,030 | -1 | -495,830 | -4 |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

| Name of Lake | NT.O. | Conservation | Concorret | on | Change si- | a o | Change si- | | |
|---------------------------|-------|--------------|--|-----|--------------|------------|--------------|-----|--|
| | No. | | Conservation | | Change since | | Change since | | |
| or Reservoir | on | Storage | Storage Late Jun. | | Late May | | Late June | | |
| | Map | Capacity | 2005 | | 2005 | | 2004 | | |
| | | (acre-feet) | (acre-feet) | (%) | (acre-feet) | (%) | (acre-feet) | (%) | |
| | | | | | | | | | |
| | | E | AST | | | | | | |
| Wright Patman Lake | 48 | 142,700 | 142,700 | 100 | 0 | 0 | 0 | 0 | |
| Lake Cypress Springs | 49 | 66,800 | 64,650 | 97 | -1,890 | -3 | -2,150 | -3 | |
| Lake Bob Sandlin | 50 | 202,300 | 188,100 | 93 | -9,100 | -4 | -14,200 | -7 | |
| Lake O' the Pines | 51 | 252,000 | 221,170 | 88 | -10,760 | -4 | -30,830 | -12 | |
| Lake Fork Reservoir | 52 | 635,200 | 635,200 | 100 | 0 | 0 | 0 | 0 | |
| Toledo Bend Reservoir | 53 | 4,472,900 | 3,826,000 | 86 | -239,000 | -5 | -646,900 | -14 | |
| Lake Palestine | 54 | 411,300 | 400,250 | 97 | -6,280 | -2 | -11,050 | -3 | |
| Lake Tyler | 55 | 73,700 | 73,280 | 99 | -420 | -1 | -420 | -1 | |
| Sam Rayburn Reservoir | 56 | 2,876,300 | 2,753,950 | 96 | -95,290 | -3 | -122,350 | -4 | |
| B. A. Steinhagen Lake | 57 | 94,200 | 89,840 | 95 | 4,280 | 5 | 2,990 | 3 | |
| Cedar Creek Reservoir | 58 | 637,050 | 614,200 | 96 | -18,000 | -3 | -22,850 | -4 | |
| Lake Livingston | 59 | 1,750,000 | 1,715,000 | 98 | -35,000 | -2 | -35,000 | -2 | |
| Lake Conroe | 60 | 429,900 | 399,300 | 93 | -9,900 | -2 | -30,600 | -7 | |
| TOTAL | | 12,044,350 | 11,123,640 | 92 | -421,360 | -3 | -913,360 | -8 | |
| | | mp a ar | , pegod | | | | | | |
| | | | S-PECOS | | | | | | |
| Red Bluff Reservoir | 61 | 307,000 | 113,790 | 37 | -11,390 | -4 | 46,150 | 15 | |
| TOTAL | | 307,000 | 113,790 | 37 | -11,390 | -4 | 46,150 | 15 | |
| | | EDWARDS | PLATEAU | | | | | | |
| E. V. Spence Reservoir | 62 | 488,760 | 70,460 | 14 | -3,040 | -1 | 26,300 | 5 | |
| Twin Buttes Reservoir | 63 | 177,800 | 41,820 | 24 | 200 | 0 | 36,360 | 20 | |
| O.C. Fisher Lake | 64 | 119,200 | 6,340 | 5 | -510 | 0 | 4,120 | 3 | |
| O. H. Ivie Reservoir | 65 | 554,340 | 315,400 | 57 | -5,400 | -1 | 132,960 | 24 | |
| Lake Buchanan | 66 | 896,980 | 861,760 | 96 | -15,460 | -2 | -13,240 | -1 | |
| Amistad Reservoir (Texas) | 67 | 1,771,030 | 2,437,000 | 138 | -41,000 | -2 | 803,000 | 45 | |
| Amistad Reservoir | | | | | | | | | |
| (Texas and Mexico) | (67) | 3,151,300 | 2,837,000 | 90 | -16,000 | -1 | 1,005,000 | 32 | |
| TOTAL | | 4,008,110 | 3,732,780 | 93 | -65,210 | -2 | 989,500 | 25 | |
| | | | G=1=================================== | | | | | | |
| Gamanailla Tal | | | CENTRAL | 6.5 | | _ | 4 465 | _ | |
| Somerville Lake | 68 | 155,060 | 150,580 | 97 | -4,480 | -3 | -4,480 | -3 | |
| Lake Travis | 69 | 1,144,100 | 1,083,600 | 95 | -60,500 | -5 | -60,500 | -5 | |
| Canyon Lake | 70 | 385,600 | 383,980 | 100 | -1,620 | 0 | -1,620 | 0 | |
| Coleto Creek Reservoir | 71 | 35,060 | 31,250 | 89 | -190 | -1 | -110 | 0 | |
| Medina Lake | 72 | 254,000 | 250,100 | 98 | -3,900 | -2 | -3,900 | -2 | |
| TOTAL | | 1,973,820 | 1,899,510 | 96 | -70,690 | -4 | -70,610 | -4 | |
| | | UPPER | COAST | | | | | | |
| Lake Houston | 73 | 128,860 | 128,860 | 100 | 0 | 0 | 0 | 0 | |
| Lake Texana | 74 | 157,900 | 147,000 | 93 | -8,640 | -5 | -10,380 | -7 | |
| TOTAL | | 286,760 | 275,860 | 96 | -8,640 | -3 | -10,380 | -4 | |
| | | | | | | | | | |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

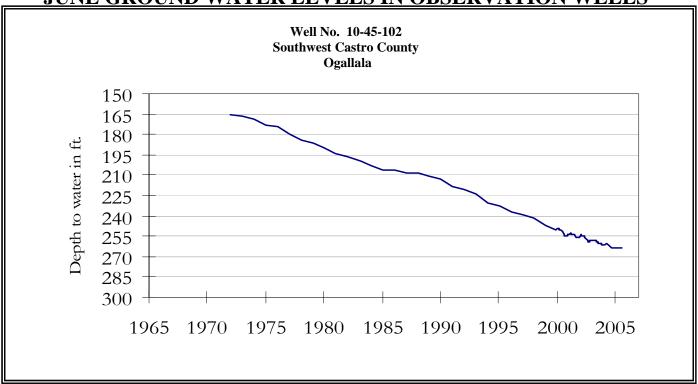
| Name of Lake | No. | Conservation | Conservation | | Change since | | Change since | |
|--------------------------|------|--------------|--------------|-----|--------------|-----|--------------|-----|
| or Reservoir | on | Storage | Storage | | Late May | | Late June | |
| | | _ | Late Ju | n. | 2005 | | | |
| | Map | Capacity | 2005 | | | | 2004 | |
| | | (acre-feet) | (acre-feet) | (%) | (acre-feet) | (%) | (acre-feet) | (%) |
| | | | | | | | | |
| | | SOU | THERN | | | | | |
| Choke Canyon Reservoir | 75 | 695,260 | 679,000 | 98 | -9,000 | -1 | -16,000 | -2 |
| Lake Corpus Christi | 76 | 241,240 | 205,000 | 85 | -36,200 | -15 | -36,240 | -15 |
| Falcon Reservoir (Texas) | 77 | 1,555,120 | 778,000 | 50 | -29,000 | -2 | 82,000 | 5 |
| Falcon Reservoir | | | | | | | | |
| (Texas and Mexico) | (77) | 2,653,290 | 1,217,000 | 46 | -25,000 | -1 | -403,000 | -15 |
| TOTAL | | 2,491,620 | 1,662,000 | 67 | -74,200 | -3 | 29,760 | 1 |
| STATE TOTAL | | 34,470,430 | 30,165,330 | 88 | -816,870 | -2 | -253,890 | -1 |

Note:

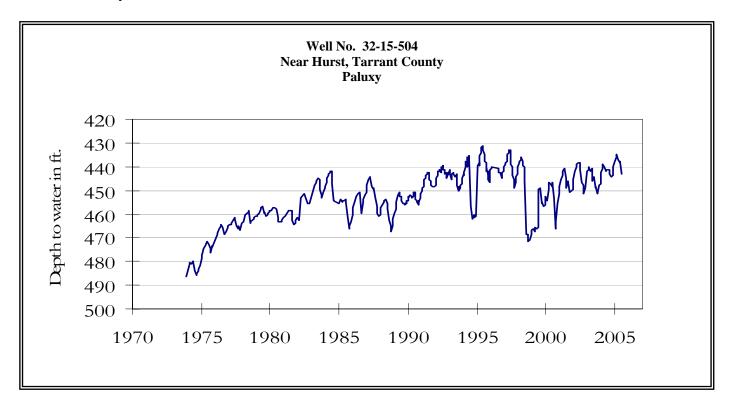
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included 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 % Change = 100 * (current conservation storage - past conservation storage)/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.

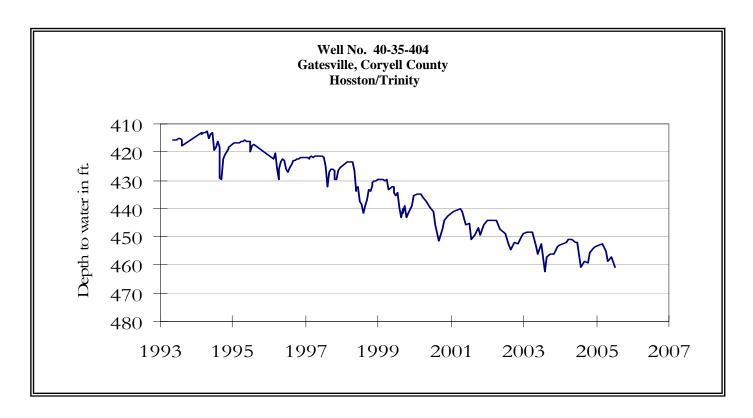
JUNE GROUND WATER LEVELS IN OBSERVATION WELLS



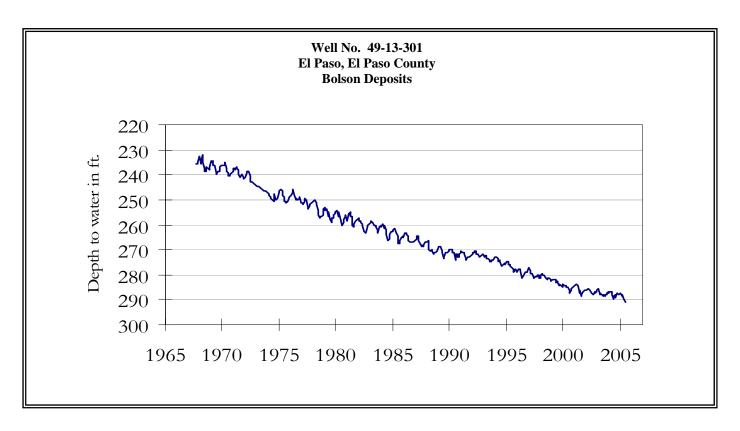
The late June water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 263.86 feet below land surface. This measurement was 0.4 feet below last month's measurement, 1.46 feet below last year's measurement, and 107.86 feet below the initial measurement recorded in 1968.



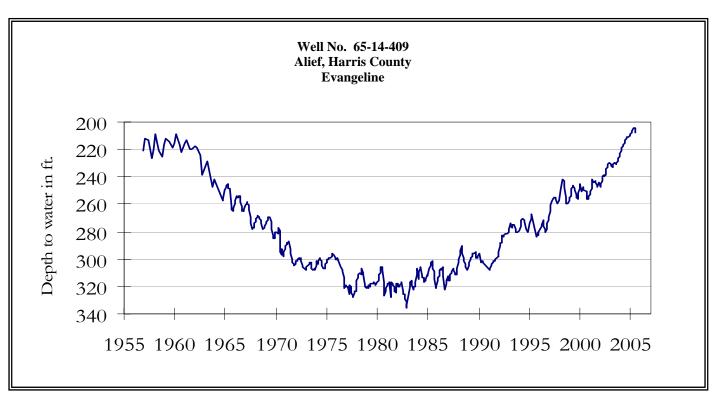
The late June water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 443.28 feet below land surface. This measurement was 5.36 feet below last month's measurement, 1.78 feet below last year's measurement, and 65.28 feet below the initial measurement recorded in 1953.



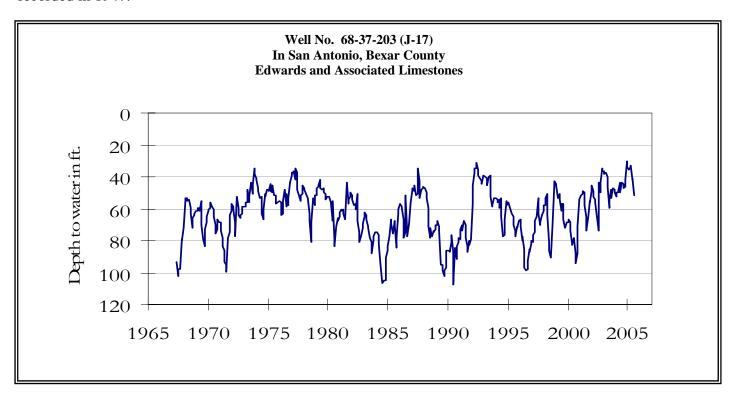
The late June water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 460.82 feet below land surface. This water level was 3.87 feet below last month's measurement, 8.72 feet below last year's measurement, and 168.82 feet below the initial measurement recorded in 1955.



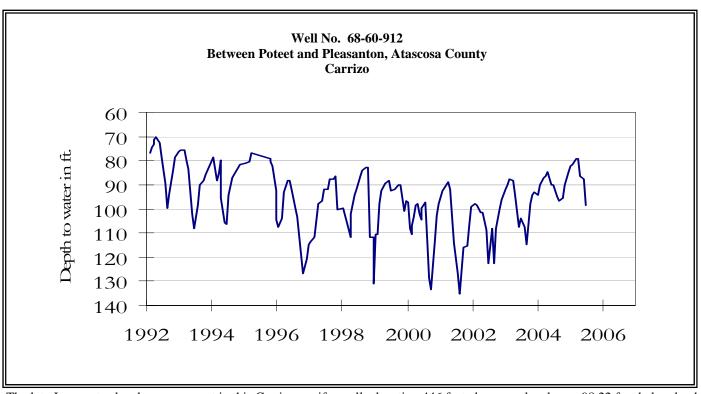
The late June water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 290.70 feet below land surface. This was 0.76 feet below last month's measurement, 1.90 feet below last year's measurement, and 58.80 feet below the initial measurement recorded in 1964.



The late June water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 207.43 feet below land surface. This was 3.30 feet below last month's measurement, 5.47 feet above last year's measurement, and 71.93 feet below the initial measurement recorded in 1947.

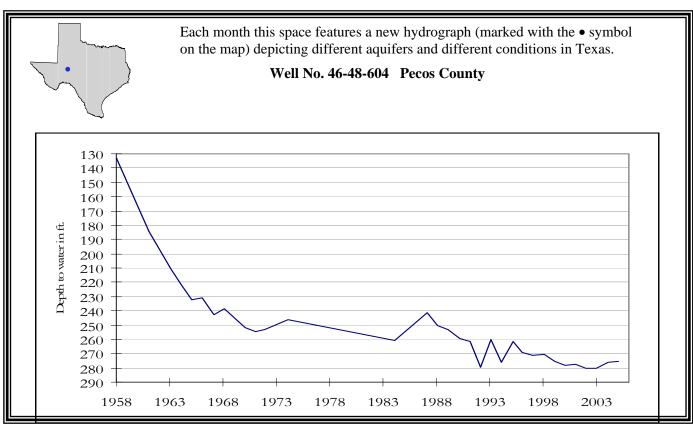


The late June water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 51.94 feet below land surface. This was 11.20 feet below last month's measurement, 8.24 feet below last year's measurement, and 5.30 feet below the initial measurement recorded in 1962.



The late June water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 98.22 feet below land surface. This measurement was 10.26 feet below last month's measurement, 8.23feet below last year's measurement, and 62.86 feet below the initial measurement recorded in 1965.

HYDROGRAPH OF THE MONTH



This water level observation well, located 20 miles north of Fort Stockton, at an elevation of 2528 feet ASL, was completed in the Cenozoic Pecos Alluvium aquifer. Water-level declines in excess of 200 feet historically have occurred in this area, but have moderated since the mid 1970s with decrease in irrigation pumpage.

June, 2005

Water levels fell in all of the seven key monitoring wells since the beginning of June, ranging from 0.4 feet in the Castro County Ogallala well to 11.20 feet in the Bexar county J-17 well, which recorded a water level of 51.94 feet below the land surface. The J-17 water level is approximately 28 feet above the Stage I critical water management criteria.

TEXAS WATER DEVELOPMENT BOARD 1700 N. CONGRESS AVE. P.O. BOX 13231 AUSTIN TX 78711-3231