

Texas Water Development Board



WATER Conditions

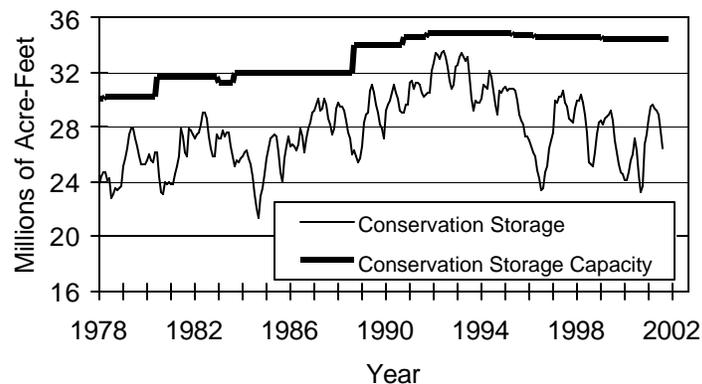
RESERVOIR STORAGE

August 2001

Near the end of August, the 77 reservoirs monitored for this report held 26.5 million acre-feet in conservation storage, or 76.8 percent of the conservation storage capacity of the State's major reservoirs. Statewide storage decreased by 1.25 million acre-feet (-3.6% of conservation storage capacity) during the month. Compared to August 2000, storage is up 1.97 million acre-feet (+5.7%), but below the historical median for this time of year.

Storage decreased in most Regions this month; however the Southern Region increased marginally (1.7%) and the Upper Coast Region reached capacity (100%). The Trans-Pecos (10.7%) and Southern (22.7%) Regions remained below 25%. Storage is at 100% in 14 reservoirs, two more than last month. Storage is down relative to this time last year in the High Plains (-10.9%) and Trans-Pecos (-6.4%) Regions.

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.

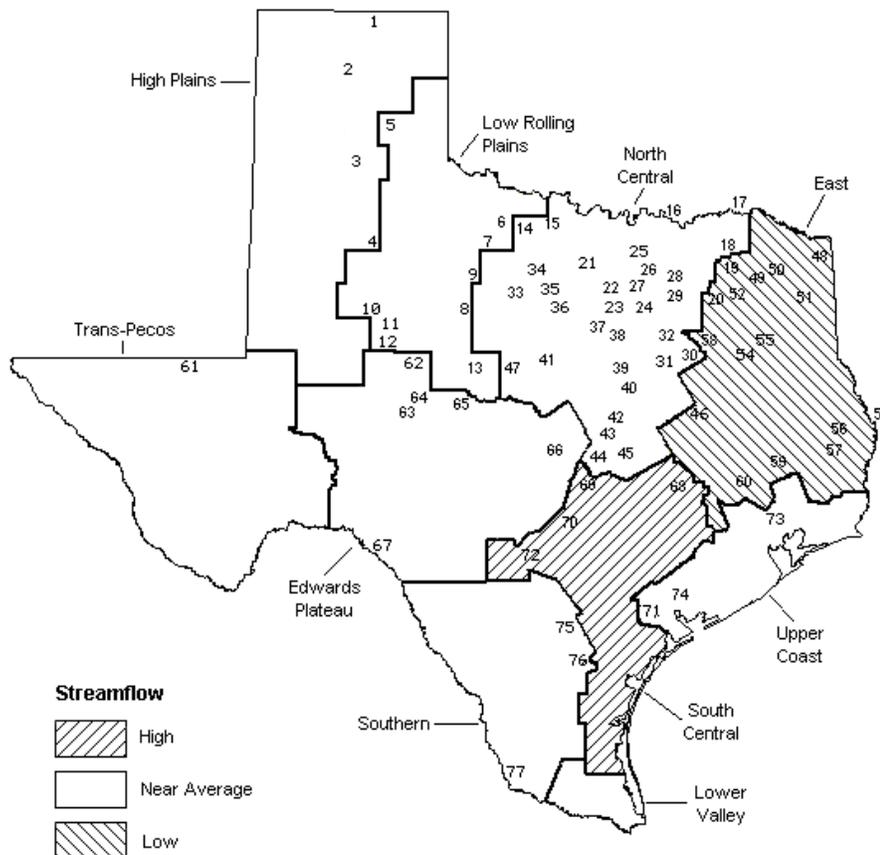
STREAMFLOW

Of 29 reporting index stations in August, computed 30-day mean flows were high (5% - 30% exceedance) at 8 stations, near normal (30% - 70% exceedance) at 8 stations, low (70% - 95% exceedance) at 11 stations, and very high (95% - 100%) at 2 stations. In comparison to July, flows increased at 14 index stations, decreased at 13 stations, and remain unchanged at 2 stations.

On a regional basis, flows in August were low in East Texas, high in South Central and normal in all other Regions. There were no stations reporting very low flows, but very high flows were reported on Cibolo Creek and the Lavaca River.

AUGUST 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. Coleto 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 August 2001 (acre-feet) (%)	Change since Late July 2001 (acre-feet) (%)	Change since Late August 2000 (acre-feet) (%)
HIGH PLAINS					
Palo Duro Reservoir	1	60,900	8,100 13	100 0	-9,630 -16
Lake Meredith (Texas)	2	500,000	298,200 60	-16,000 -3	-56,500 -11
Lake Meredith (Texas and Oklahoma)	(2)	779,560	298,200 38	-16,000 -2	-56,500 -7
MacKenzie Reservoir	3	46,250	9,140 20	0 0	590 1
White River Lake	4	31,850	8,740 27	-460 -1	-4,340 -14
TOTAL		639,000	324,180 51	-16,360 -3	-69,880 -11
LOW ROLLING PLAINS					
Greenbelt Reservoir	5	58,200	23,880 41	-620 -1	-780 -1
Lake Kemp	6	319,600	138,100 43	-19,300 -6	19,000 6
Miller's Creek Reservoir	7	27,890	13,870 50	-870 -3	6,620 24
Fort Phantom Hill Reservoir	8	70,030	31,060 44	-3,030 -4	7,250 10
Lake Stamford	9	52,700	12,580 24	-1,610 -3	4,250 8
Lake J. B. Thomas	10	202,300	16,510 8	-1,100 -1	-13,600 -7
Lake Colorado City	11	30,800	17,590 57	-350 -1	-6,050 -20
Champion Creek Reservoir	12	41,600	2,220 5	-130 0	-2,450 -6
Hords Creek Lake	13	8,600	3,550 41	-250 -3	-110 -1
TOTAL		811,720	259,360 32	-27,260 -3	14,130 2
NORTH CENTRAL					
Lake Kickapoo	14	106,000	83,340 79	-5,740 -5	40,560 38
Lake Arrowhead	15	262,100	168,200 64	-11,300 -4	69,460 27
Lake Texoma	16	2,722,300	2,211,000 81	-183,000 -7	-189,685 -7
Pat Mayse Lake	17	124,500	112,200 90	-4,300 -3	1,010 1
Cooper Lake	18	273,000	273,000 100	0 0	21,447 8
Lake Sulphur Springs	19	17,710	11,480 65	-80 0	-4,735 -27
Lake Tawakoni	20	936,200	788,700 84	-31,900 -3	-102,200 -11
Bridgeport Reservoir	21	374,830	320,700 86	-27,600 -7	133,025 35
Eagle Mountain Reservoir	22	178,380	158,700 89	-1,200 -1	48,072 27
Benbrook Lake	23	88,200	62,650 71	-10,590 -12	670 1
Joe Pool Lake	24	175,800	175,800 100	0 0	8,200 5
Ray Roberts Lake	25	798,760	772,900 97	-19,600 -2	320,279 40
Lewisville Lake	26	555,000	555,000 100	0 0	235,100 42
Grapevine Lake	27	187,700	155,900 83	-10,000 -5	39,900 21
Lavon Lake	28	443,800	337,600 76	-47,700 -11	-19,875 -4
Lake Ray Hubbard	29	413,420	372,100 90	-13,700 -3	-35,133 -8
Richland-Chambers Creek Lake	30	1,103,820	1,059,000 96	-36,000 -3	-6,005 -1
Navarro Mills Lake	31	55,810	48,360 87	-4,150 -7	-231 0
Bardwell Lake	32	53,580	41,390 77	-3,070 -6	-7,150 -13
Hubbard Creek Reservoir	33	317,800	130,600 41	-8,100 -3	-22,800 -7
Lake Graham	34	45,000	36,670 81	-2,440 -5	4,490 10
Possum Kingdom Lake	35	551,820	463,200 84	-32,500 -6	6,500 1
Lake Palo Pinto	36	27,650	18,690 68	-2,280 -8	-2,849 -10
Lake Granbury	37	135,680	127,400 94	5,600 4	7,930 6
Lake Pat Cleburne	38	25,300	20,790 82	-1,820 -7	-1,339 -5
Whitney Lake	39	622,800	483,200 78	-68,700 -11	-38,900 -6
Waco Lake	40	144,500	130,500 90	-7,200 -5	-4,200 -3
Proctor Lake	41	55,590	42,180 76	-6,670 -12	33,010 59
Belton Lake	42	434,500	434,500 100	7,300 2	59,400 14
Stillhouse Hollow Lake	43	226,060	226,060 100	360 0	20,788 9
Lake Georgetown	44	37,010	32,870 89	-2,660 -7	15,280 41
Granger Lake	45	54,280	54,280 100	0 0	7,560 14
Lake Limestone	46	215,750	205,200 95	-7,500 -3	8,600 4
Lake Brownwood	47	143,400	109,300 76	-6,400 -4	20,540 14
TOTAL		11,908,050	10,223,460 86	-542,940 -5	666,719 6

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation	Conservation	Change since		Change since		
		Storage Capacity (acre-feet)	Storage Late August 2001 (acre-feet) (%)	Late July 2001 (acre-feet) (%)	Late August 2000 (acre-feet) (%)			
EAST								
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	66,120	99	-680	-1	860	1
Lake Bob Sandlin	50	202,300	192,100	95	-6,000	-3	-10,200	-5
Lake O' the Pines	51	252,000	252,000	100	0	0	9,416	4
Lake Fork Reservoir	52	635,200	635,200	100	0	0	0	0
Toledo Bend Reservoir	53	4,472,900	3,844,000	86	-310,000	-7	-97,000	-2
Lake Palestine	54	411,300	396,500	96	-7,000	-2	22,300	5
Lake Tyler	55	73,700	73,700	100	0	0	13,201	18
Sam Rayburn Reservoir	56	2,876,300	2,784,000	97	-92,300	-3	655,000	23
B. A. Steinhagen Lake	57	94,200	78,380	83	-4,580	-5	-7,911	-8
Cedar Creek Reservoir	58	637,050	591,300	93	-15,500	-2	-3,383	-1
Lake Livingston	59	1,750,000	1,746,000	100	7,000	0	99,000	6
Lake Conroe	60	429,900	409,800	95	800	0	56,800	13
TOTAL		12,044,350	11,211,800	93	-428,260	-4	738,083	6
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	32,830	11	-3,580	-1	-19,510	-6
TOTAL		307,000	32,830	11	-3,580	-1	-19,510	-6
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	62,760	13	-4,860	-1	-26,390	-5
Twin Buttes Reservoir	63	177,800	8,280	5	2,280	1	7,167	4
O.C. Fisher Lake	64	119,200	4,600	4	-1,090	-1	-3,280	-3
O. H. Ivie Reservoir	65	554,340	270,300	49	-12,400	-2	-31,400	-6
Lake Buchanan	66	896,980	753,500	84	-54,000	-6	254,200	28
Amistad Reservoir (Texas)	67	1,771,030	717,000	40	-164,000	-9	-146,000	-8
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	899,000	29	-177,000	-6	-130,000	-4
TOTAL		4,008,110	1,816,440	45	-234,070	-6	54,297	1
SOUTH CENTRAL								
Somerville Lake	68	155,060	149,100	96	-3,900	-3	43,621	28
Lake Travis	69	1,144,100	968,400	85	-63,600	-6	356,200	31
Canyon Lake	70	385,600	385,600	100	6,100	2	48,957	13
Coletto Creek Reservoir	71	35,060	32,690	93	6,070	17	6,780	19
Medina Lake	72	254,000	223,800	88	-9,100	-4	106,000	42
TOTAL		1,973,820	1,759,590	89	-64,430	-3	561,558	28
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	22,260	17
Lake Texana	74	157,900	157,900	100	21,800	14	27,400	17
TOTAL		286,760	286,760	100	21,800	8	49,660	17

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

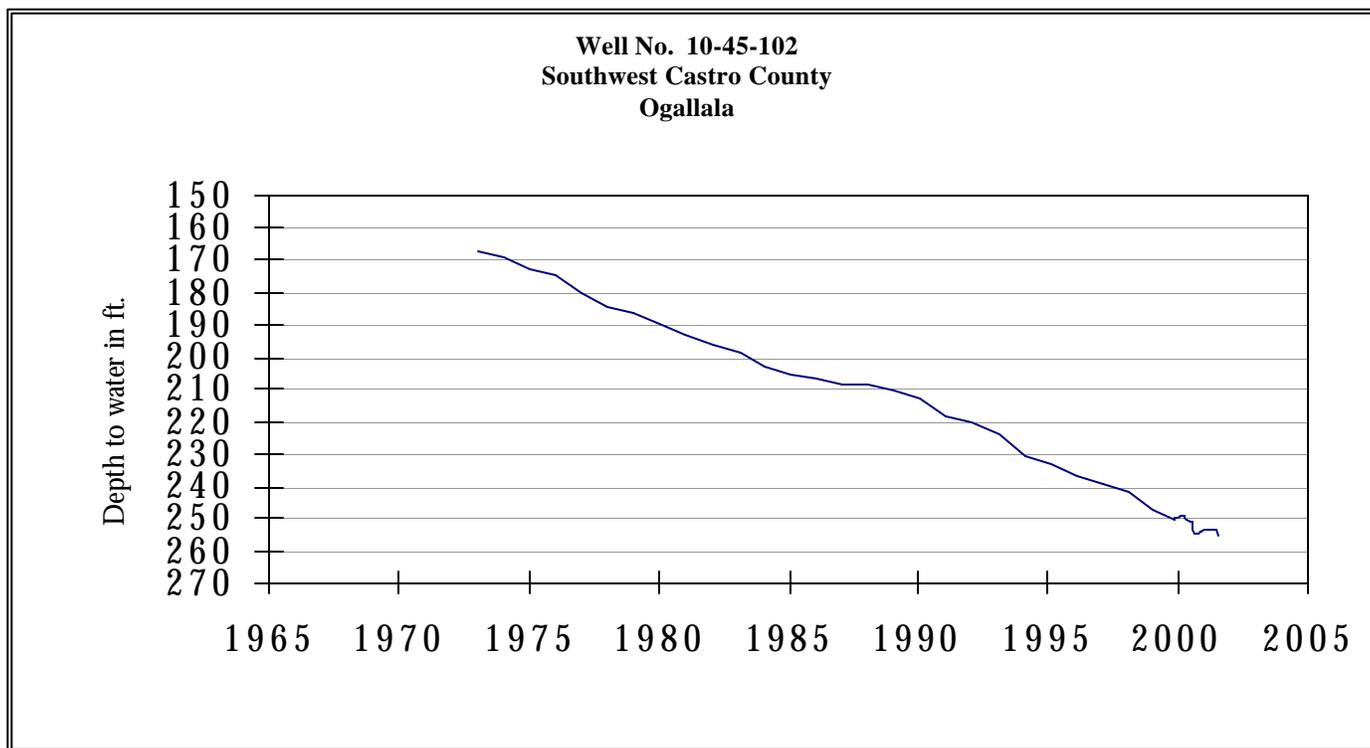
Name of Lake or Reservoir	No. on Map	Conservation Storage	Conservation Storage		Change since Late July		Change since Late August		
		Capacity (acre-feet)	Late August 2001 (acre-feet)	(%)	2001 (acre-feet)	(%)	2000 (acre-feet)	(%)	
SOUTHERN									
Choke Canyon Reservoir	75	695,260	233,000	34	-7,000	-1	-15,000	-2	
Lake Corpus Christi	76	241,240	114,800	48	49,210	20	31,810	13	
Falcon Reservoir (Texas)	77	1,555,120	217,000	14	0	0	-39,000	-3	
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	243,000	9	2,000	0	-52,000	-2	
TOTAL		2,491,620	564,800	23	42,210	2	-22,190	-1	
STATE TOTAL		34,470,430	26,479,220	77	-1,252,890	-4	1,972,867	6	

Note:

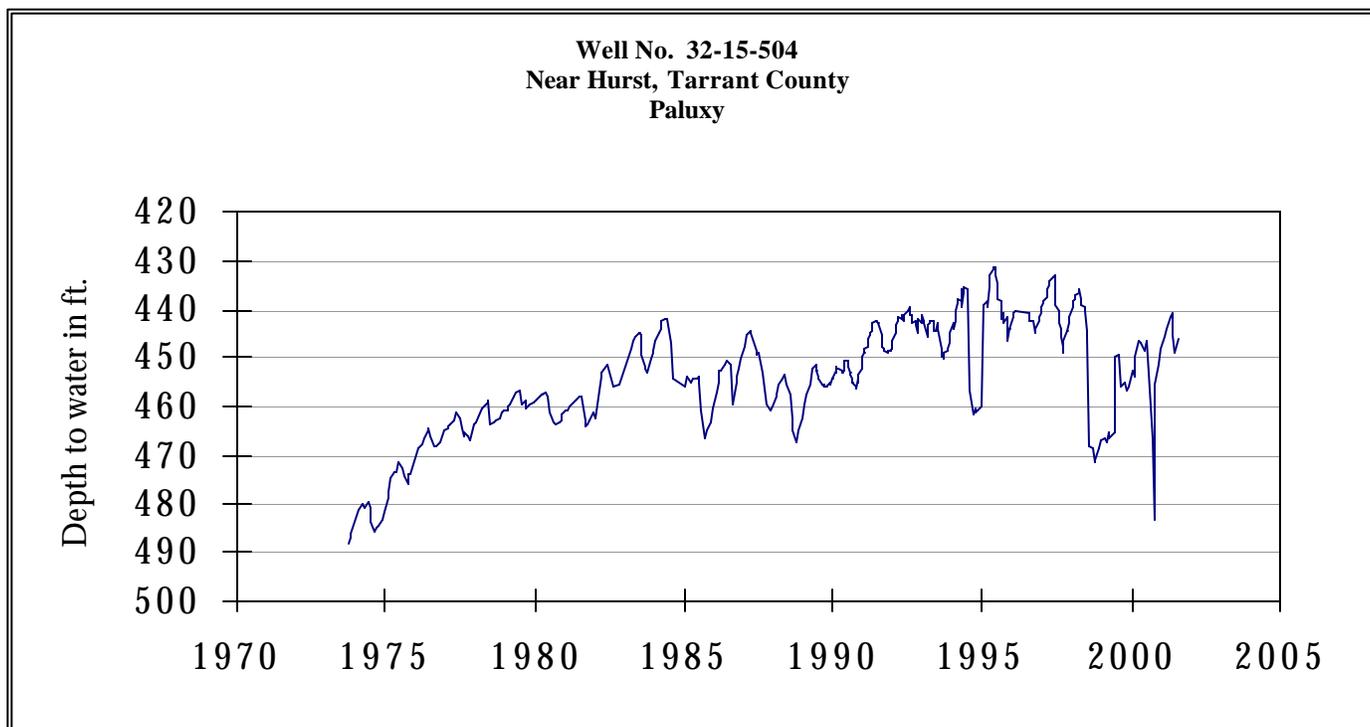
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included 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). Figures in parentheses for Lake Meredith represent the total conservation storage excluding 58,014 acre-feet of dead storage and are not included in State total. Preliminary figures are shown for the United States' share of conservation storage in International Amistad and International Falcon Reservoirs; the estimates may be subject to revision on completion of international water accounting. Texas (United States' share) and Mexico and are not included in State total.

AUGUST GROUND WATER LEVELS IN OBSERVATION WELLS

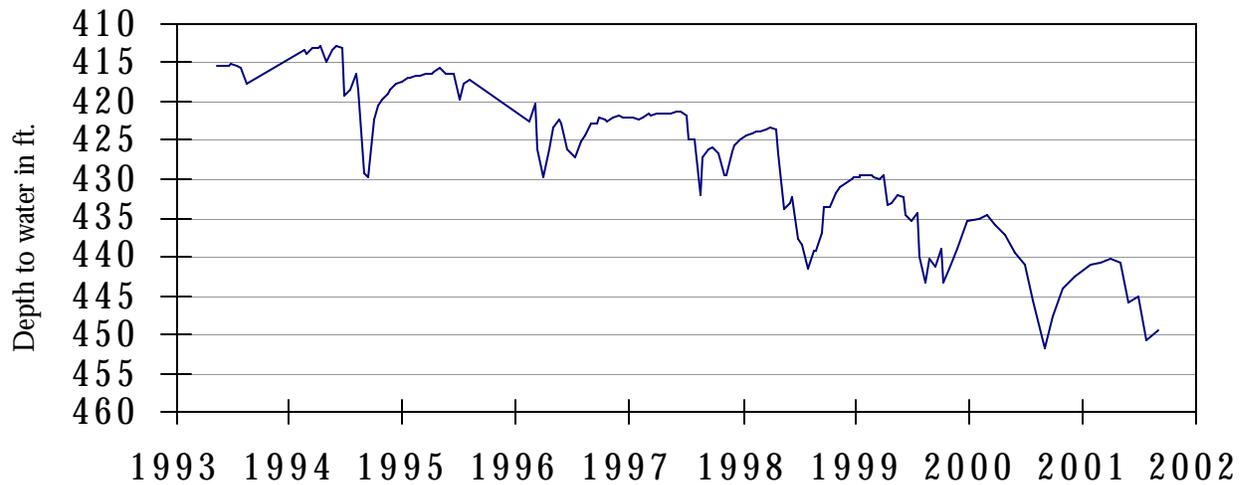


The late August water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was not available.



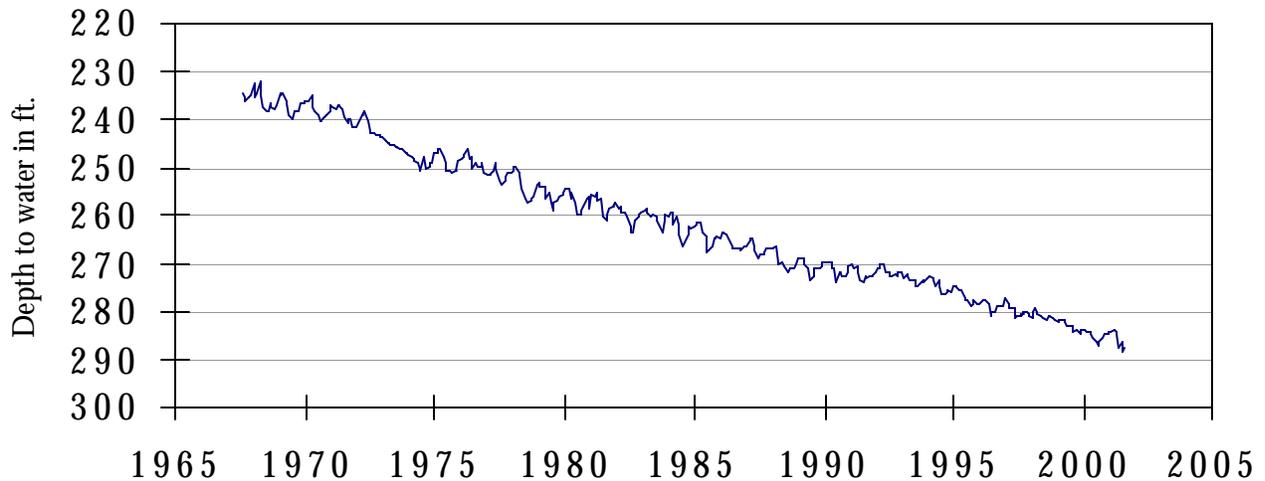
The late August water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 452.05 feet below land surface. This measurement was 5.85 feet below last month's measurement, 14.41 feet above last year's measurement, and 58.66 feet below the initial measurement recorded in 1953.

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



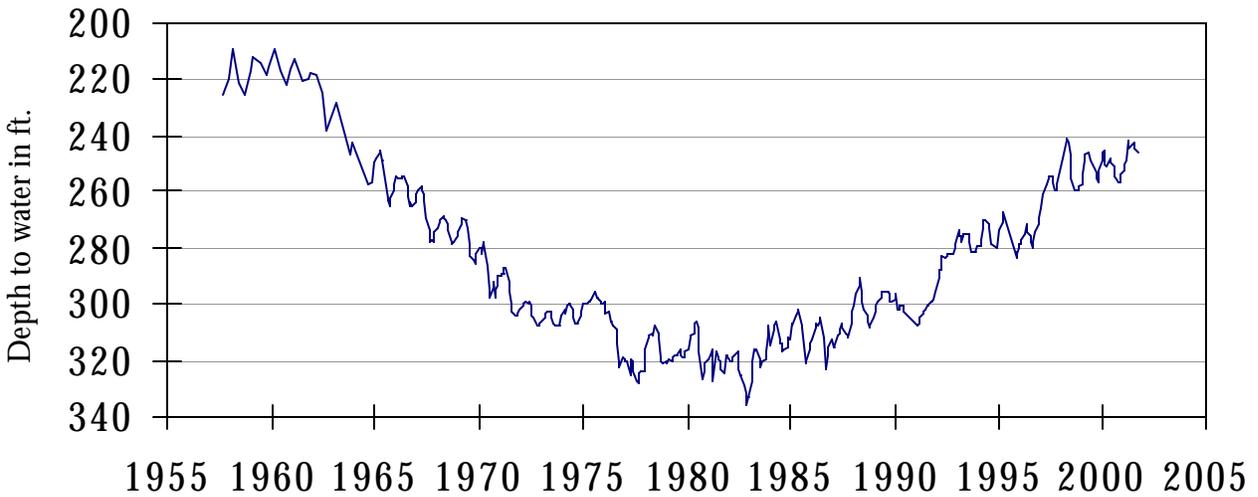
The late August water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 449.35 feet below land surface. This measurement was 1.58 feet above last month's measurement, 2.31 feet above last year's measurement, and 157.35 feet below the initial measurement recorded in 1955.

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



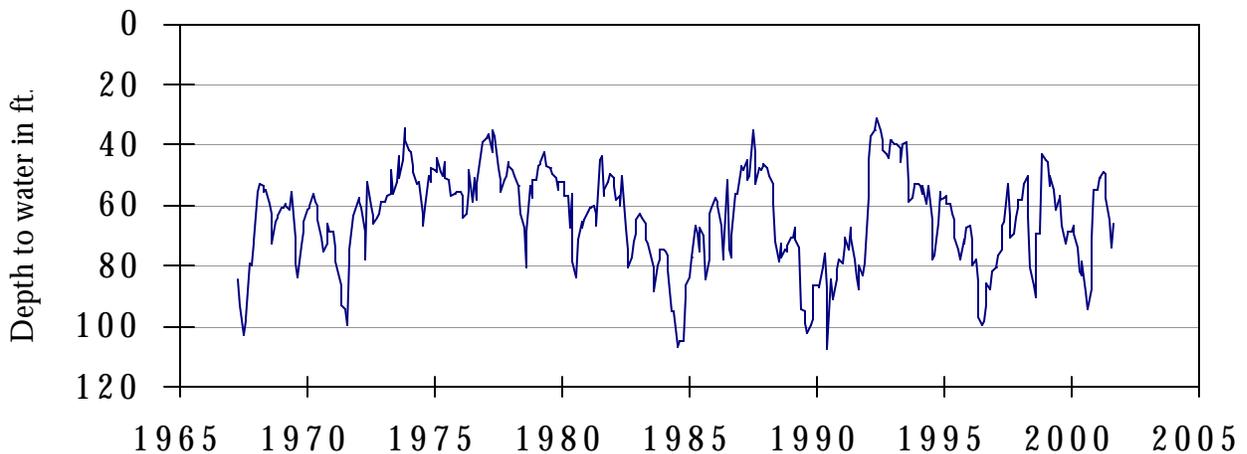
The late August water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 287.87 feet below land surface. This was 0.51 feet above last month's measurement, 1.58 feet below last year's measurement, and 55.97 feet below the initial measurement recorded in 1964.

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



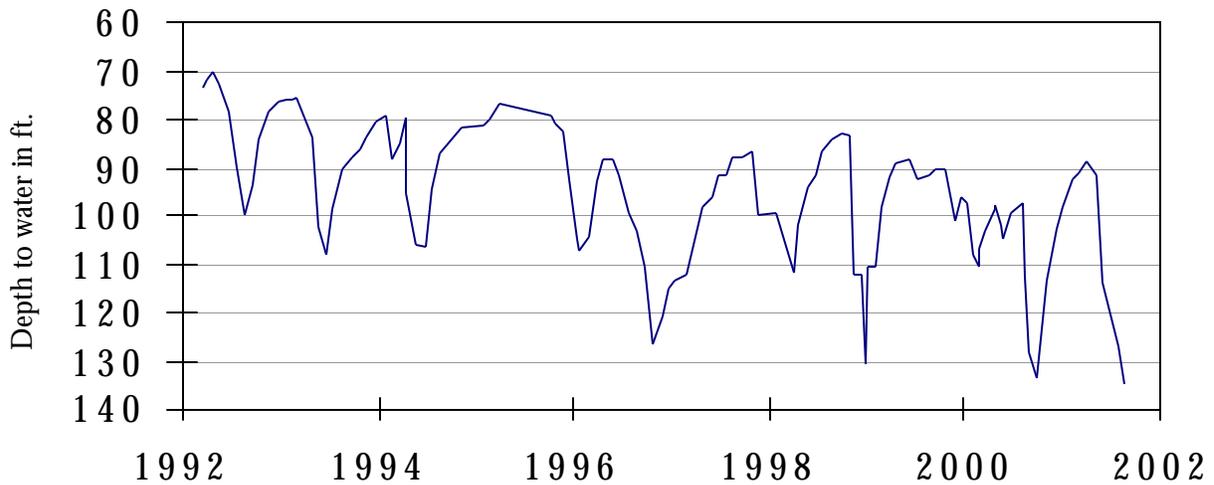
The late August water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 245.78 feet below land surface. This was 1.59 feet below last month's measurement, 8.64 feet above last year's measurement, and 142.55 feet below the initial measurement recorded in 1947.

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



The late August water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 66.0 feet below land surface. This was 7.71 feet above last month's measurement, 28.65 feet above last year's measurement, and 6.38 feet below the initial measurement recorded in 1962.

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



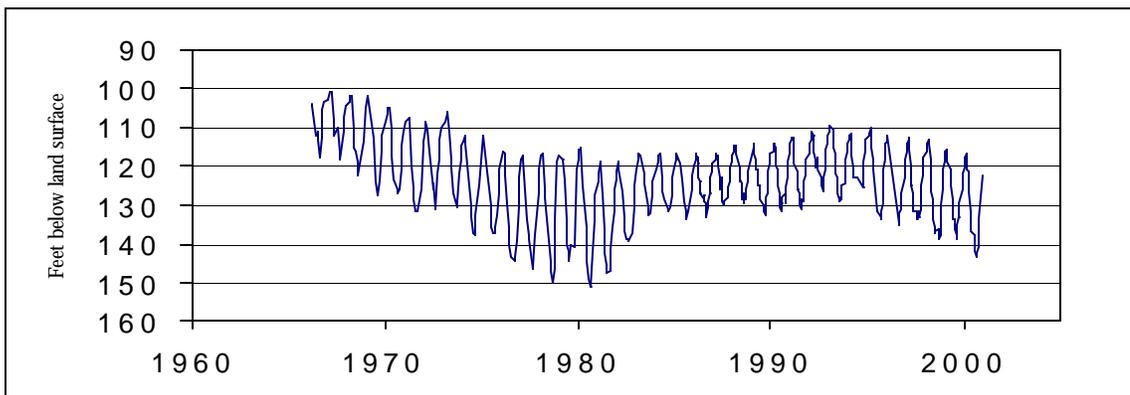
The late August water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 134.95 feet below land surface. This measurement was 8.06 feet below last month's measurement, 6.67 feet below last year's measurement, and 53.7 feet below the initial measurement recorded in 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 48-07-516
Hudspeth County**



This 300-foot deep recorder well in Dell City, at an elevation of 3,702 feet above sea level, was completed in the Bone Spring/Victorio Peak aquifer. Average depth to water has declined approximately 20 feet since the well began being monitored in the mid sixties. The hydrograph illustrates yearly seasonal declines due to irrigation pumpage during summer months.

TEXAS WATER DEVELOPMENT BOARD
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