

Texas Water Development Board



WATER Conditions

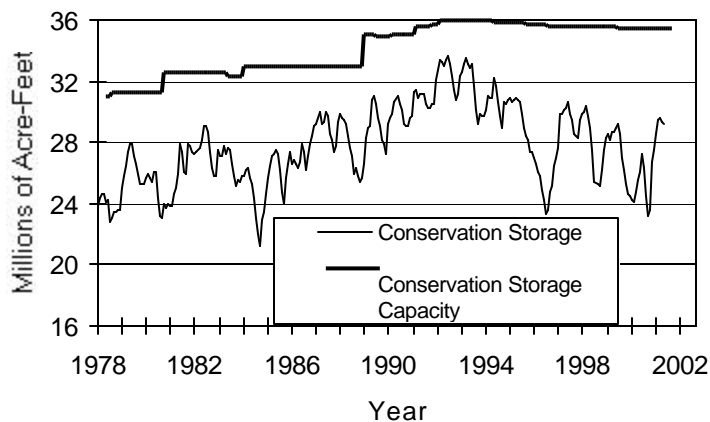
RESERVOIR STORAGE

May 2001

Near the end of May, the 77 reservoirs monitored for this report held 29.2 million acre-feet in conservation storage, or 84.8 percent of the conservation storage capacity of the State's major reservoirs. Statewide total storage is now below normal for this time of year. Storage decreased by 0.065 million acre-feet (-0.2% of conservation storage capacity) during the month. Compared to May 2000, storage is up 3.19 million acre-feet (+9.3%). Statewide storage was slowly declining at the end of the month.

Changes for the month were decidedly mixed, with storage declining in four regions, increasing in four regions, and steady in one region (the Southern +0.4%). The North Central (97.4%), East (97.4%), South Central (99.8%), and Upper Coast (98.4%) regions remained near capacity, while the Trans-Pecos (16.6%) and Southern (24.3%) regions remained below 25%. Storage is at 100% in 33 reservoirs, 3 fewer than last month. Storage in the High Plains (-8.4%), Trans-Pecos (-6.5%) and Upper Coast (-0.9%) regions is down relative to this time last year.

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.

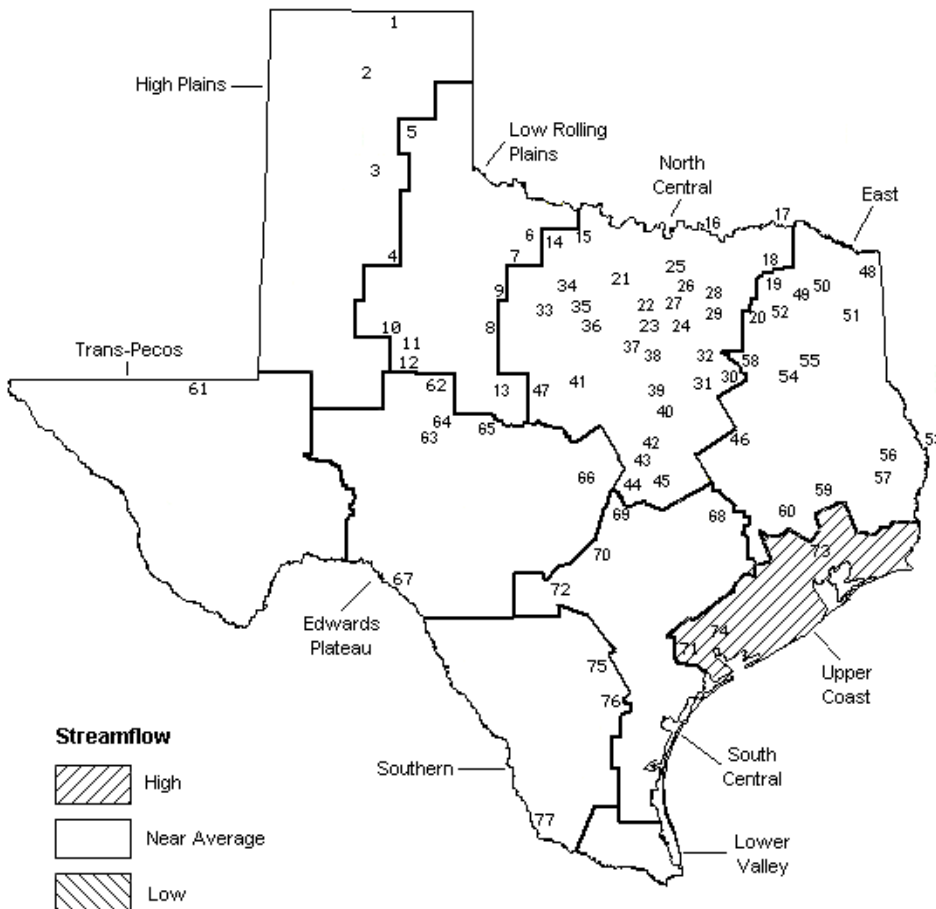
STREAMFLOW

Of 29 reporting index stations in May, computed 30-day mean flows were very high (0% - 5% exceedance) at one station, high (5% - 30% exceedance) at 8 stations, near normal (30% - 70% exceedance) at 15 stations, and low (70% - 95% exceedance) at 5 stations. In comparison to April, flows increased at 11 index stations and decreased at 18.

On a regional basis, flows in May were high in the Upper Coast region and normal in all other regions. The sole station reporting a very high flow for the month was on the West Nueces River near Brackettville.

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 2001 (acre-feet)	(%)	Change since Late April 2001 (acre-feet)	(%)	Change since Late May 2000 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	10,140	17	-1,740	-3	-3,870	-6
Lake Meredith (Texas)	2	500,000	342,400	68	-4,000	-1	-46,100	-9
Lake Meredith (Texas and Oklahoma)	(2)	779,560	342,400	44	-4,000	-1	-46,100	-6
MacKenzie Reservoir	3	46,250	9,880	21	1,470	3	940	2
White River Lake	4	31,850	10,760	34	-590	-2	-4,530	-14
TOTAL		639,000	373,180	58	-4,860	-1	-53,560	-8
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	26,800	46	2,510	4	1,750	3
Lake Kemp	6	319,600	206,100	64	13,300	4	47,700	15
Miller's Creek Reservoir	7	27,890	16,760	60	3,110	11	6,500	23
Fort Phantom Hill Reservoir	8	70,030	40,140	57	2,000	3	18,370	26
Lake Stamford	9	52,700	17,090	32	150	0	8,400	16
Lake J. B. Thomas	10	202,300	21,330	11	-1,630	-1	-4,580	-2
Lake Colorado City	11	30,800	20,070	65	-850	-3	-6,310	-20
Champion Creek Reservoir	12	41,600	2,680	6	-230	-1	-2,260	-5
Hords Creek Lake	13	8,600	4,360	51	-90	-1	1,750	20
TOTAL		811,720	355,330	44	18,270	2	71,320	9
NORTH CENTRAL								
Lake Kickapoo	14	106,000	100,500	95	1,490	1	50,371	48
Lake Arrowhead	15	262,100	200,300	76	100	0	81,900	31
Lake Texoma	16	2,722,300	2,722,300	100	234,300	9	180,805	7
Pat Mayse Lake	17	124,500	123,600	99	-900	-1	641	1
Cooper Lake	18	273,000	273,000	100	0	0	0	0
Lake Sulphur Springs	19	17,710	17,710	100	0	0	109	1
Lake Tawakoni	20	936,200	925,000	99	-11,200	-1	156,900	17
Bridgeport Reservoir	21	374,830	373,600	100	-1,230	0	159,443	43
Eagle Mountain Reservoir	22	178,380	178,380	100	380	0	51,726	29
Benbrook Lake	23	88,200	83,440	95	-3,860	-4	742	1
Joe Pool Lake	24	175,800	175,800	100	0	0	16,916	10
Ray Roberts Lake	25	798,760	798,760	100	0	0	241,047	30
Lewisville Lake	26	555,000	555,000	100	0	0	204,409	37
Grapevine Lake	27	187,700	184,900	99	-2,800	-1	53,458	28
Lavon Lake	28	443,800	443,800	100	0	0	78,371	18
Lake Ray Hubbard	29	413,420	413,100	100	2,000	0	-320	0
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	124,511	11
Navarro Mills Lake	31	55,810	55,810	100	0	0	1,452	3
Bardwell Lake	32	53,580	47,560	89	1,090	2	-6,020	-11
Hubbard Creek Reservoir	33	317,800	153,700	48	-4,100	-1	-24,100	-8
Lake Graham	34	45,000	43,810	97	-1,050	-2	4,990	11
Possum Kingdom Lake	35	551,820	529,100	96	-1,600	0	57,600	10
Lake Palo Pinto	36	27,650	25,830	93	-810	-3	727	3
Lake Granbury	37	135,680	130,400	96	100	0	11,225	8
Lake Pat Cleburne	38	25,300	25,120	99	-180	-1	10,486	41
Whitney Lake	39	622,800	622,800	100	0	0	209,600	34
Waco Lake	40	144,500	144,500	100	0	0	23,611	16
Proctor Lake	41	55,590	55,590	100	0	0	40,581	73
Belton Lake	42	434,500	434,500	100	0	0	57,425	13
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	6,214	3
Lake Georgetown	44	37,010	37,010	100	0	0	14,678	40
Granger Lake	45	54,280	54,280	100	0	0	0	0
Lake Limestone	46	215,750	213,200	99	1,700	1	19,900	9
Lake Brownwood	47	143,400	130,000	91	-700	0	56,220	39
TOTAL		11,908,050	11,602,280	97	212,730	2	1,885,618	16

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 May 2001 (acre-feet) (%)	Late April 2001 (acre-feet) (%)	Late May 2000 (acre-feet) (%)			
EAST								
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	66,800	100	0	0	0	0
Lake Bob Sandlin	50	202,300	202,300	100	0	0	0	0
Lake O' the Pines	51	252,000	252,000	100	0	0	0	0
Lake Fork Reservoir	52	635,200	635,200	100	0	0	20,900	3
Toledo Bend Reservoir	53	4,472,900	4,191,000	94	-194,000	-4	-185,000	-4
Lake Palestine	54	411,300	411,300	100	0	0	0	0
Lake Tyler	55	73,700	73,700	100	0	0	2,437	3
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	0	0	521,300	18
B. A. Steinhagen Lake	57	94,200	84,390	90	11,810	13	656	1
Cedar Creek Reservoir	58	637,050	630,400	99	-3,700	-1	47,311	7
Lake Livingston	59	1,750,000	1,750,000	100	0	0	0	0
Lake Conroe	60	429,900	409,200	95	-4,300	-1	31,300	7
TOTAL		12,044,350	11,725,290	97	-190,190	-2	438,904	4
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	50,980	17	-10,390	-3	-19,860	-6
TOTAL		307,000	50,980	17	-10,390	-3	-19,860	-6
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	76,620	16	-2,840	-1	-20,720	-4
Twin Buttes Reservoir	63	177,800	10,570	6	-1,360	-1	7,472	4
O.C. Fisher Lake	64	119,200	6,870	6	-1,000	-1	-5,370	-5
O. H. Ivie Reservoir	65	554,340	308,000	56	-5,700	-1	27,000	5
Lake Buchanan	66	896,980	836,600	93	-11,300	-1	245,299	27
Amistad Reservoir (Texas)	67	1,771,030	1,028,000	58	-95,000	-5	23,000	1
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,226,000	39	-93,000	-3	62,000	2
TOTAL		4,008,110	2,266,660	57	-117,200	-3	276,681	7
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	0	0	22,144	14
Lake Travis	69	1,144,100	1,144,100	100	0	0	431,774	38
Canyon Lake	70	385,600	385,600	100	0	0	32,533	8
Coletto Creek Reservoir	71	35,060	30,580	87	360	1	-1,270	-4
Medina Lake	72	254,000	254,000	100	12,300	5	97,100	38
TOTAL		1,973,820	1,969,340	100	12,660	1	582,281	30
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	0	0
Lake Texana	74	157,900	153,400	97	2,800	2	-2,500	-2
TOTAL		286,760	282,260	98	2,800	1	-2,500	-1

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

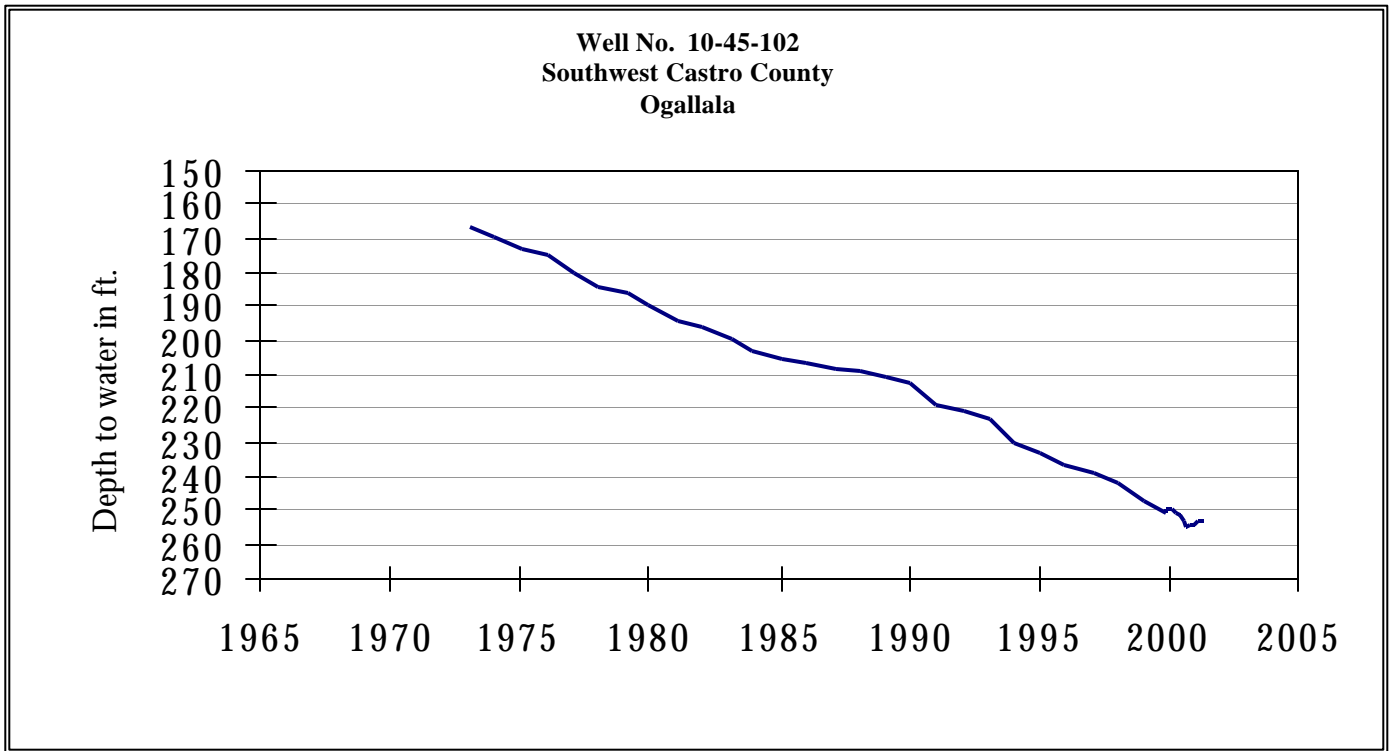
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late May 2001 (acre-feet)	(%)	Change since Late April 2001 (acre-feet)	(%)	Change since Late May 2000 (acre-feet)	(%)
SOUTHERN								
Choke Canyon Reservoir	75	695,260	260,000	37	-5,000	-1	-13,000	-2
Lake Corpus Christi	76	241,240	88,890	37	-5,860	-2	-34,110	-14
Falcon Reservoir (Texas)	77	1,555,120	257,000	17	22,000	1	62,000	4
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	318,000	12	23,000	1	93,000	4
TOTAL		2,491,620	605,890	24	11,140	0	14,890	1
 STATE TOTAL		 34,470,430	 29,231,210	 85	 -65,040	 0	 3,193,774	 9

Note:

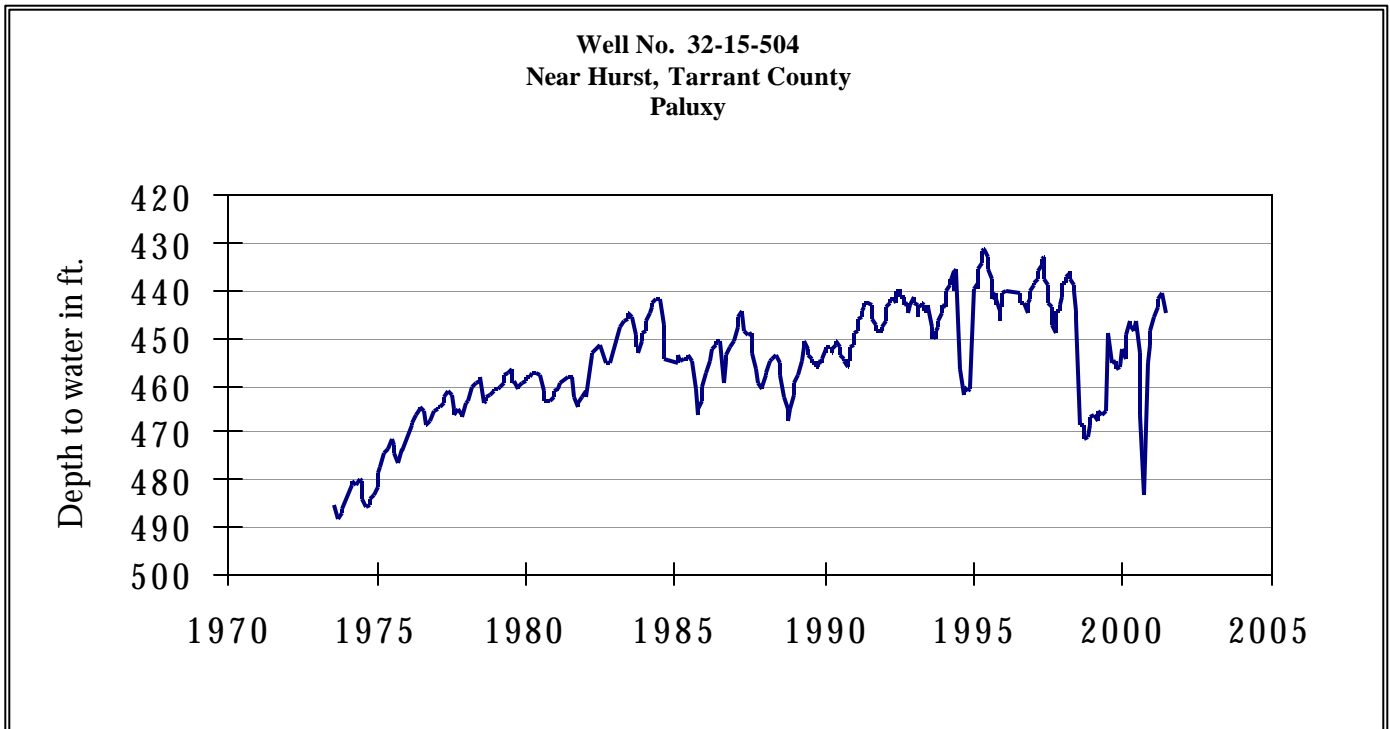
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included 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 % 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.

MAY GROUND WATER LEVELS IN OBSERVATION WELLS

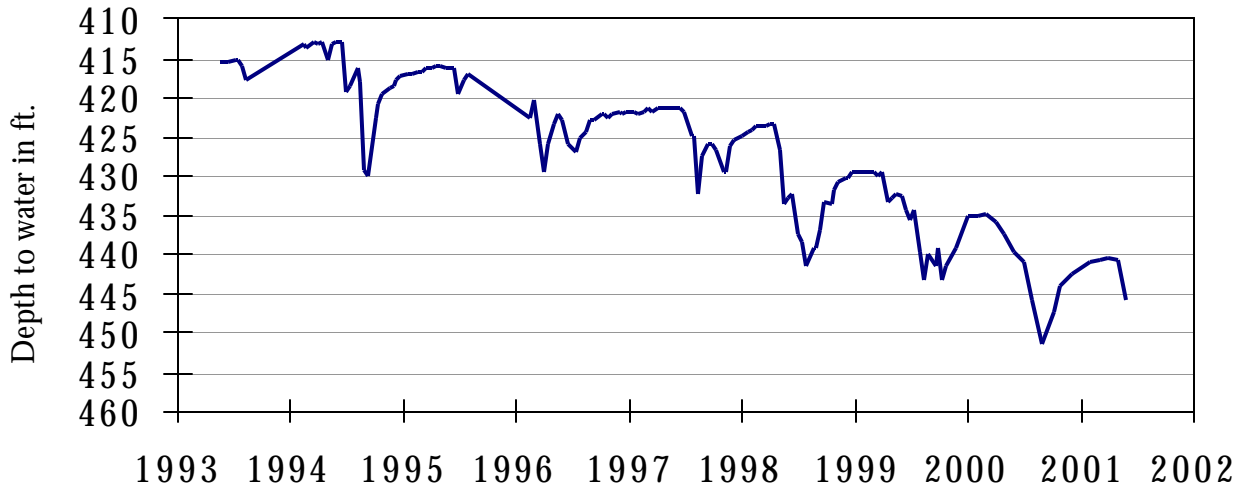


The late May water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 253.54 feet below land surface. This measurement was 0.07 feet below last month's measurement, 2.26 feet below last year's measurement, and 97.54 feet below the initial measurement recorded in 1968.



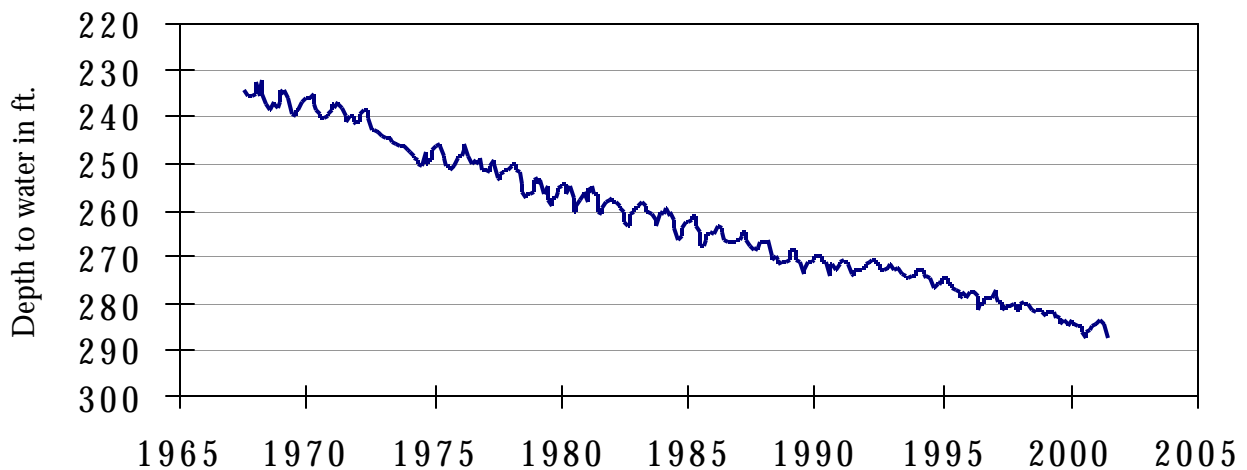
The late May water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 445.10 feet below land surface. This measurement was 4.49 feet below last month's measurement, 3.55 feet above last year's measurement, and 51.71 feet below the initial measurement recorded in 1953.

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



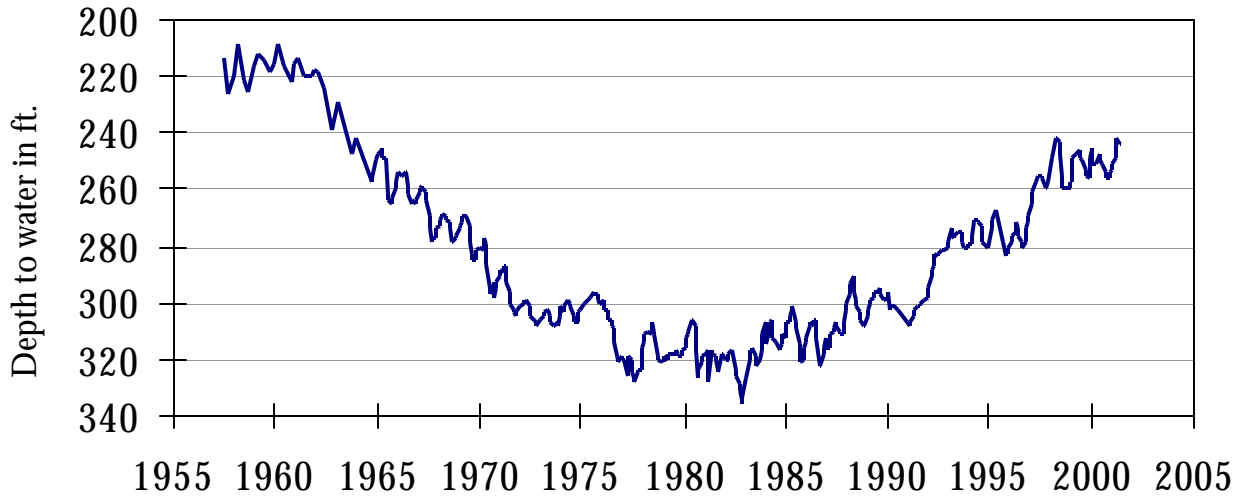
The late May water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 446.01 feet below land surface. This measurement was 5.15 feet below last month's measurement, 6.44 feet below last year's measurement, and 154.01 feet below the initial measurement recorded in 1955.

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



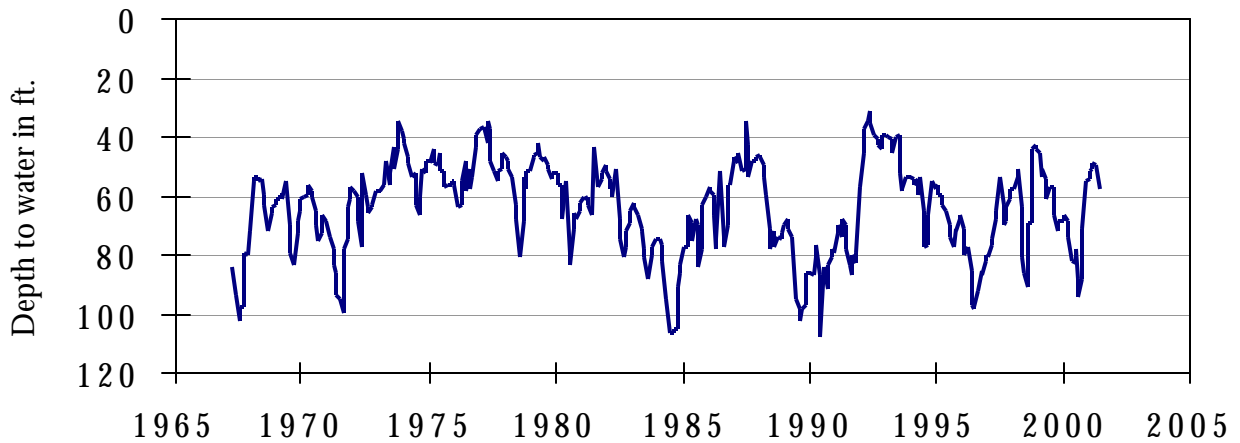
The late May water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 287.64 feet below land surface. This was 3.00 feet below last month's measurement, 2.40 feet below last year's measurement, and 52.74 feet below the initial measurement recorded in 1964.

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



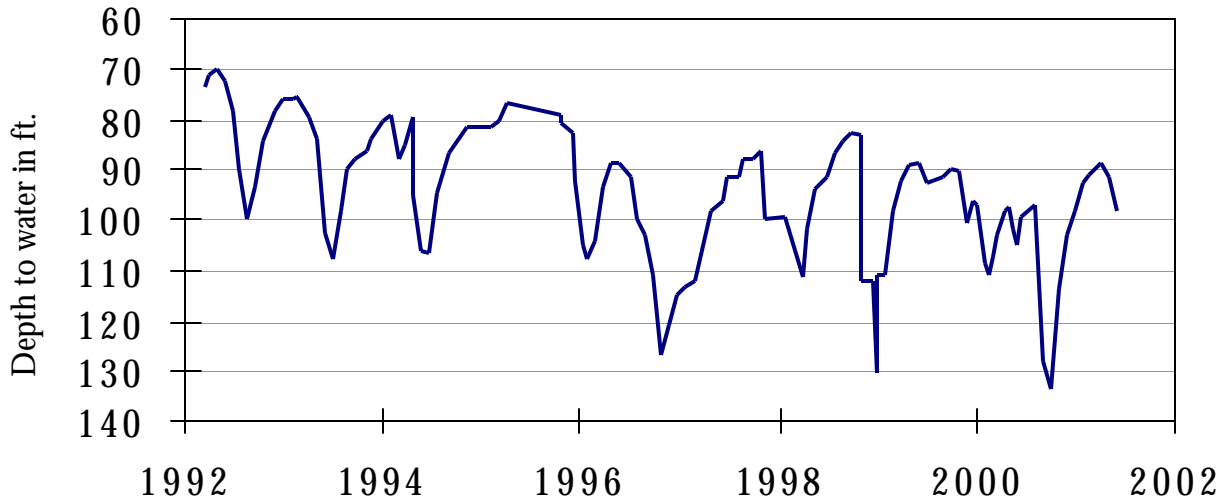
The late May water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 243.59 feet below land surface. This was 1.03 feet above last month's measurement, 4.29 feet above last year's measurement, and 140.59 feet below the initial measurement recorded in 1947.

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



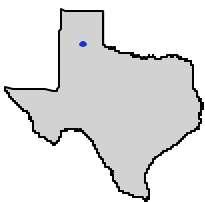
The late May water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 57.56 feet below land surface. This was 7.85 feet below last month's measurement, 25.54 feet above last year's measurement, and 2.06 feet above the initial measurement recorded in 1962.

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



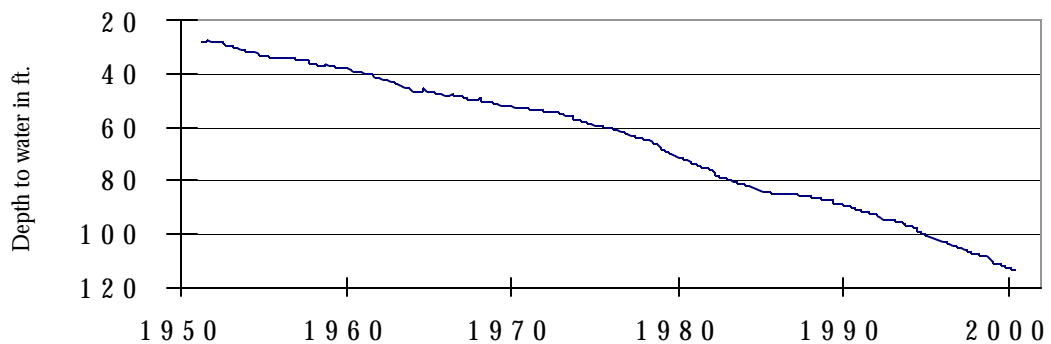
The late May water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 98.34 feet below land surface. This measurement was 6.74 feet below last month's measurement, 1.16 feet above last year's measurement, and 17.09 feet below the initial measurement recorded in 1965.

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 1053602
Lamb County**



This 202 ft. deep recorder well, located approximately 4.5 miles south of Earth, at an elevation of 3,667 feet above sea level, was completed in the Ogallala aquifer. The water levels reflect the aquifer's steady drawdown of approximately 2 feet per year due to irrigation demands and lack of adequate recharge due to drought conditions in the area.

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