

Texas Water Development Board



WATER Conditions

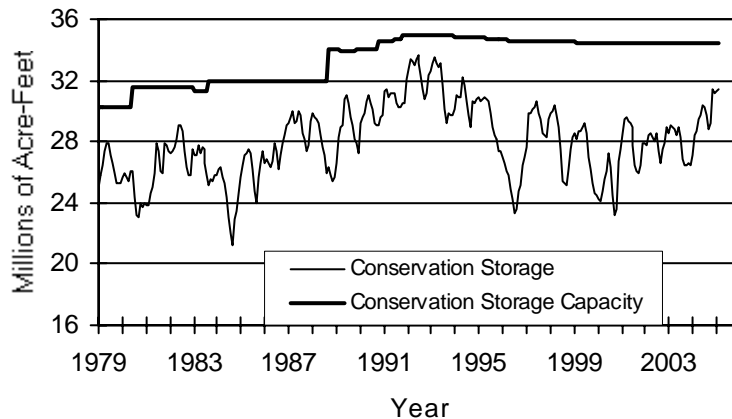
RESERVOIR STORAGE

February 2005

Near the end of February, the 77 reservoirs monitored for this report held 31.45 million acre-feet in conservation storage, or **91.2** percent of the conservation storage capacity of the state's major reservoirs. Storage increased during the month by 0.17 million acre-feet (1% of conservation storage capacity). Compared to the previous year, storage was greater, up 3 million acre-feet (9%).

Storage was at capacity (100%) in the South Central and Upper Coast Regions, near capacity in the East (97%), North Central (95%), and Edwards Plateau (93%) Regions, while the High Plains (31%) Region remained lower than one-third. Storage was at 100% in 35 reservoirs, and the Texas share of Amistad continued to remain above its capacity, reaching 138%. Compared to this time last year, all regions except the East had increases in storage with the greatest increase in the Edwards Plateau Region (+31%). The storage in the East Region reduced by 3%.

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.

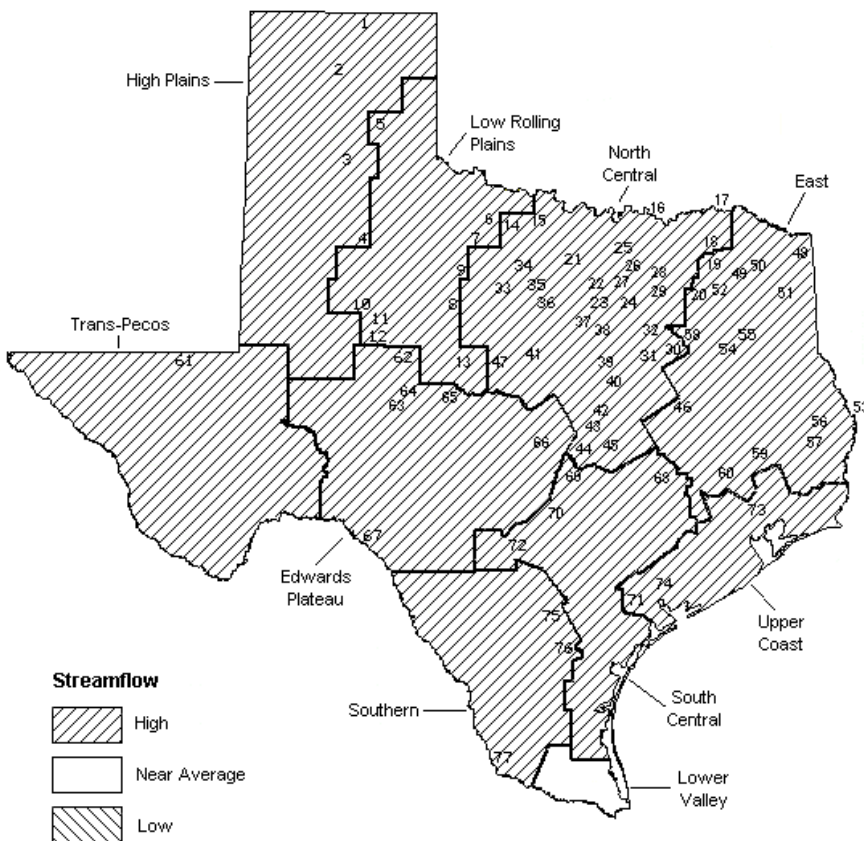
STREAMFLOW

Of 29 reporting index stations in February, computed 30-day mean flows are very high (0% - 5% exceedance) at 3 stations, high (5% - 30% exceedance) at 20 stations, and near normal (30% - 70% exceedance) at 6 stations. In comparison to January, flows have increased at 19 index stations and decreased at 10 stations.

On a regional basis, flows in February were high in all monitored regions of the state. Streamflow in the Lower Valley Region is not monitored.

FEBRUARY 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	Conservation	Change since		Change since		
		Storage Capacity (acre-feet)	Storage Late Feb. 2005 (acre-feet) (%)	Late January 2005 (acre-feet) (%)	Late February 2004 (acre-feet) (%)			
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	4,430	7	-220	0	1,870	3
Lake Meredith (Texas)	2	500,000	175,010	35	2,730	1	40,650	8
Lake Meredith (Texas and Oklahoma)	(2)	779,560	175,010	22	2,730	0	40,650	5
MacKenzie Reservoir	3	46,250	10,050	22	20	0	3,800	8
White River Lake	4	31,850	10,130	32	130	0	4,640	15
TOTAL		639,000	199,620	31	2,660	0	50,960	8
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	23,360	40	260	0	-810	-1
Lake Kemp	6	319,600	254,320	80	5,170	2	78,610	25
Miller's Creek Reservoir	7	27,890	21,360	77	270	1	9,360	34
Fort Phantom Hill Reservoir	8	70,030	66,120	94	260	0	37,310	53
Lake Stamford	9	52,700	36,200	69	600	1	4,940	9
Lake J. B. Thomas	10	202,300	61,460	30	-340	0	41,440	20
Lake Colorado City	11	30,800	30,800	100	0	0	10,680	35
Champion Creek Reservoir	12	41,600	5,130	12	90	0	1,710	4
Hords Creek Lake	13	8,600	8,370	97	440	5	6,000	70
TOTAL		811,720	507,120	62	6,750	1	189,240	23
NORTH CENTRAL								
Lake Kickapoo	14	106,000	73,390	69	930	1	12,050	11
Lake Arrowhead	15	262,100	198,380	76	2,440	1	77,100	29
Lake Texoma	16	2,722,300	2,529,480	93	-26,770	-1	408,440	15
Pat Mayse Lake	17	124,500	124,360	100	-140	0	13,220	11
Cooper Lake	18	273,000	273,000	100	4,540	2	51,190	19
Lake Sulphur Springs	19	17,710	17,490	99	-220	-1	-220	-1
Lake Tawakoni	20	936,200	892,900	95	-5,000	-1	67,600	7
Bridgeport Reservoir	21	374,830	353,400	94	1,500	0	130,400	35
Eagle Mountain Reservoir	22	178,380	178,380	100	2,380	1	33,380	19
Benbrook Lake	23	88,200	86,290	98	1,980	2	-970	-1
Joe Pool Lake	24	175,800	175,800	100	0	0	0	0
Ray Roberts Lake	25	798,760	798,760	100	0	0	68,950	9
Lewisville Lake	26	555,000	555,000	100	0	0	19,300	3
Grapevine Lake	27	187,700	183,750	98	-3,820	-2	28,600	15
Lavon Lake	28	443,800	443,800	100	0	0	63,930	14
Lake Ray Hubbard	29	413,420	413,420	100	0	0	39,120	9
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	1,820	0
Navarro Mills Lake	31	55,810	55,810	100	0	0	0	0
Bardwell Lake	32	53,580	49,200	92	-1,690	-3	-1,810	-3
Hubbard Creek Reservoir	33	317,800	187,070	59	1,080	0	63,200	20
Lake Graham	34	45,000	41,720	93	210	0	19,580	44
Possum Kingdom Lake	35	551,820	523,700	95	-10,200	-2	106,600	19
Lake Palo Pinto	36	27,650	26,750	97	800	3	9,100	33
Lake Granbury	37	135,680	134,500	99	1,300	1	700	1
Lake Pat Cleburne	38	25,300	25,300	100	0	0	2,390	9
Whitney Lake	39	622,800	582,610	94	-27,530	-4	105,640	17
Waco Lake	40	144,500	144,500	100	0	0	0	0
Proctor Lake	41	55,590	55,590	100	0	0	6,780	12
Belton Lake	42	434,500	434,500	100	0	0	0	0
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	0	0
Lake Georgetown	44	37,010	37,010	100	0	0	14,960	40
Granger Lake	45	54,280	54,280	100	0	0	0	0
Lake Limestone	46	215,750	215,750	100	0	0	0	0
Lake Brownwood	47	143,400	141,930	99	9,460	7	14,240	10
TOTAL		11,908,050	11,337,700	95	-48,750	0	1,355,290	11

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 Feb. 2005 (acre-feet)	(%)	Late January 2005 (acre-feet)	(%)	Late February 2004 (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	2,900	1	5,000	2	
Lake O' the Pines	51	252,000	247,440	98	1,930	1	-3,560	-1	
Lake Fork Reservoir	52	635,200	635,200	100	0	0	4,500	1	
Toledo Bend Reservoir	53	4,472,900	4,091,000	91	135,000	3	-381,900	-9	
Lake Palestine	54	411,300	411,300	100	0	0	0	0	
Lake Tyler	55	73,700	73,700	100	0	0	0	0	
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	0	0	0	0	
B. A. Steinhagen Lake	57	94,200	76,750	81	-9,590	-10	-7,380	-8	
Cedar Creek Reservoir	58	637,050	637,050	100	0	0	61,350	10	
Lake Livingston	59	1,750,000	1,750,000	100	0	0	0	0	
Lake Conroe	60	429,900	422,100	98	1,600	0	2,000	0	
TOTAL		12,044,350	11,632,640	97	131,840	1	-319,990	-3	
TRANS-PECOS									
Red Bluff Reservoir	61	307,000	123,210	40	3,980	1	66,820	22	
TOTAL		307,000	123,210	40	3,980	1	66,820	22	
EDWARDS PLATEAU									
E. V. Spence Reservoir	62	488,760	78,850	16	490	0	36,190	7	
Twin Buttes Reservoir	63	177,800	34,600	19	3,620	2	29,760	17	
O.C. Fisher Lake	64	119,200	7,250	6	50	0	4,360	4	
O. H. Ivie Reservoir	65	554,340	272,000	49	35,800	6	79,530	14	
Lake Buchanan	66	896,980	896,980	100	0	0	80,540	9	
Amistad Reservoir (Texas)	67	1,771,030	2,436,000	138	2,000	0	1,003,000	57	
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	2,995,000	95	20,000	1	1,412,000	45	
TOTAL		4,008,110	3,725,680	93	41,960	1	1,233,380	31	
SOUTH CENTRAL									
Somerville Lake	68	155,060	155,060	100	0	0	0	0	
Lake Travis	69	1,144,100	1,144,100	100	0	0	155,930	14	
Canyon Lake	70	385,600	381,410	99	170	0	2,800	1	
Coleta Creek Reservoir	71	35,060	32,150	92	-210	-1	250	1	
Medina Lake	72	254,000	254,000	100	0	0	30,500	12	
TOTAL		1,973,820	1,966,720	100	-40	0	189,480	10	
UPPER COAST									
Lake Houston	73	128,860	128,860	100	0	0	0	0	
Lake Texana	74	157,900	157,070	99	-830	-1	820	1	
TOTAL		286,760	285,930	100	-830	0	820	0	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Feb. 2005 (acre-feet) (%)	Change since Late January 2005 (acre-feet) (%)	Change since Late February 2004 (acre-feet) (%)
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SOUTHERN

Choke Canyon Reservoir	75	695,260	695,260	100	2,260	0	11,260	2
Lake Corpus Christi	76	241,240	241,240	100	0	0	740	0
Falcon Reservoir (Texas)	77	1,555,120	736,000	47	35,000	2	244,000	16
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	1,748,000	66	52,000	2	596,000	22
TOTAL		2,491,620	1,672,500	67	37,260	1	256,000	10

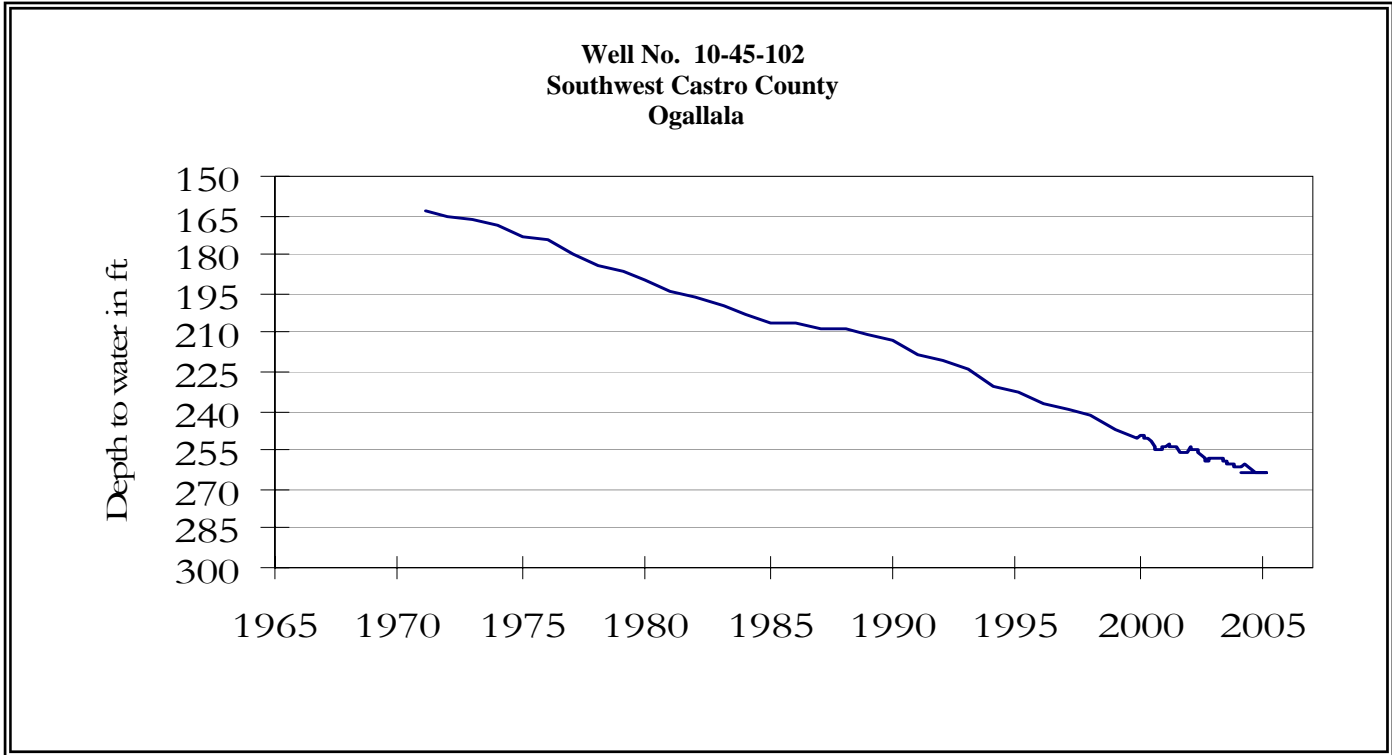
STATE TOTAL		34,470,430	31,451,120	91	174,830	1	3,022,000	9
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Note:

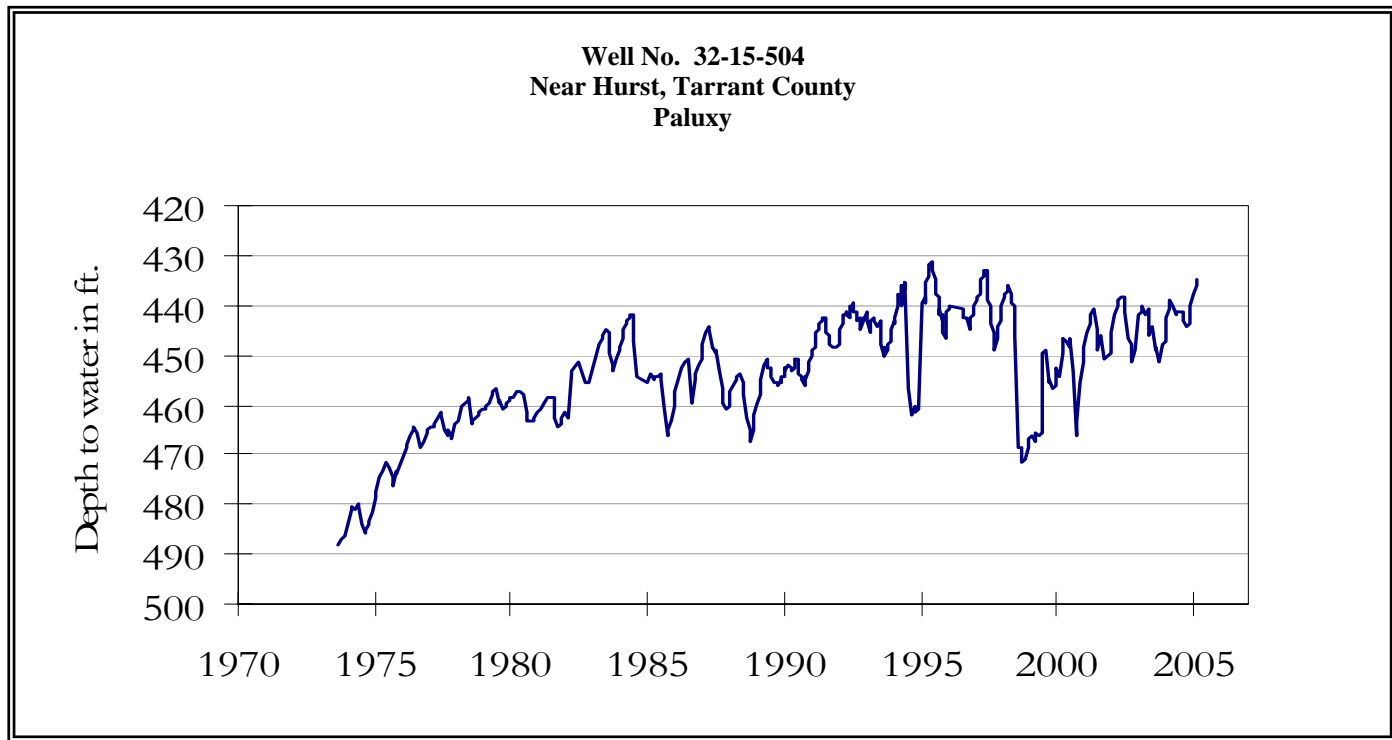
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

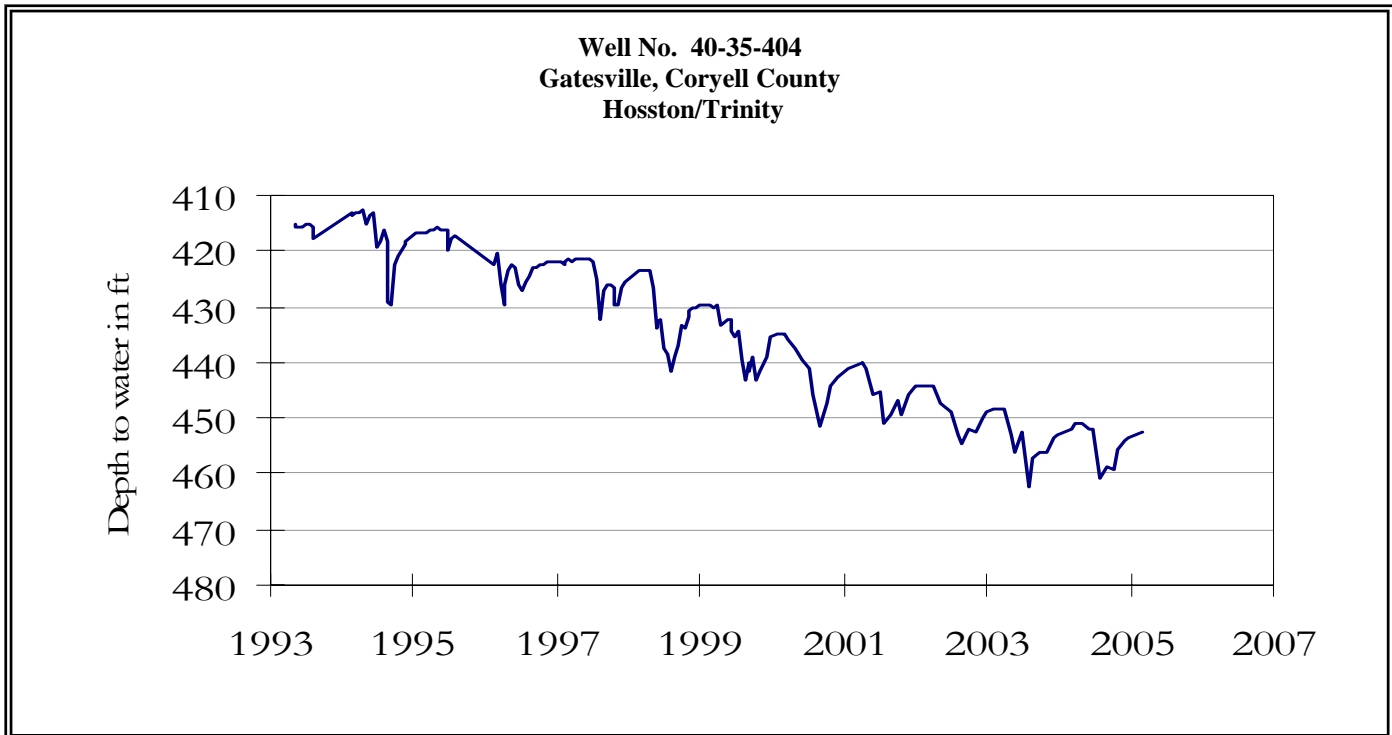
FEBRUARY GROUND WATER LEVELS IN OBSERVATION WELLS



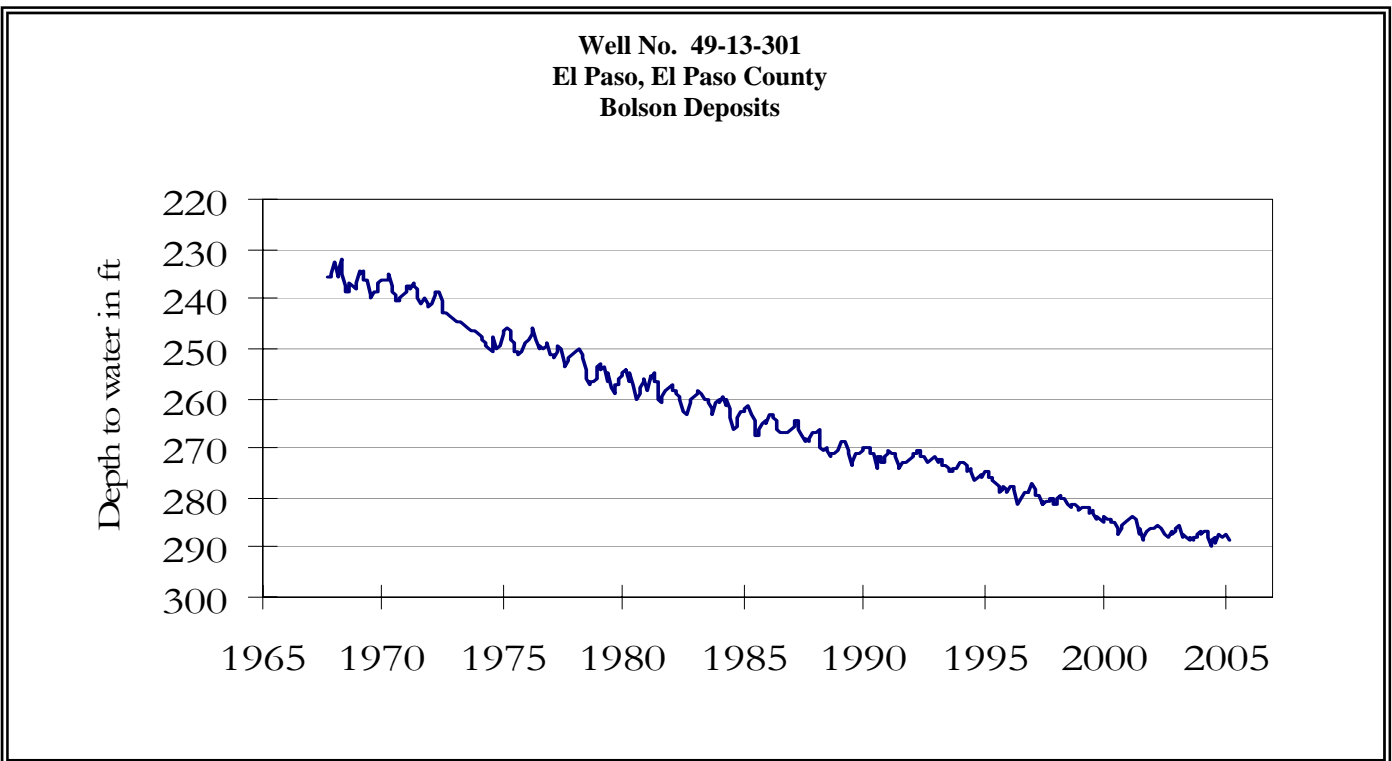
The late February water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 263.40 feet below land surface. This measurement was 0.2 foot above last month's measurement, 2.43 feet below last year's measurement, and 107.40 feet below the initial measurement recorded in 1968.



The late February water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 435.10 feet below land surface. This measurement was 0.9 foot above last month's measurement, 3.65 feet above last year's measurement, and 41.71 feet below the initial measurement recorded in 1953.

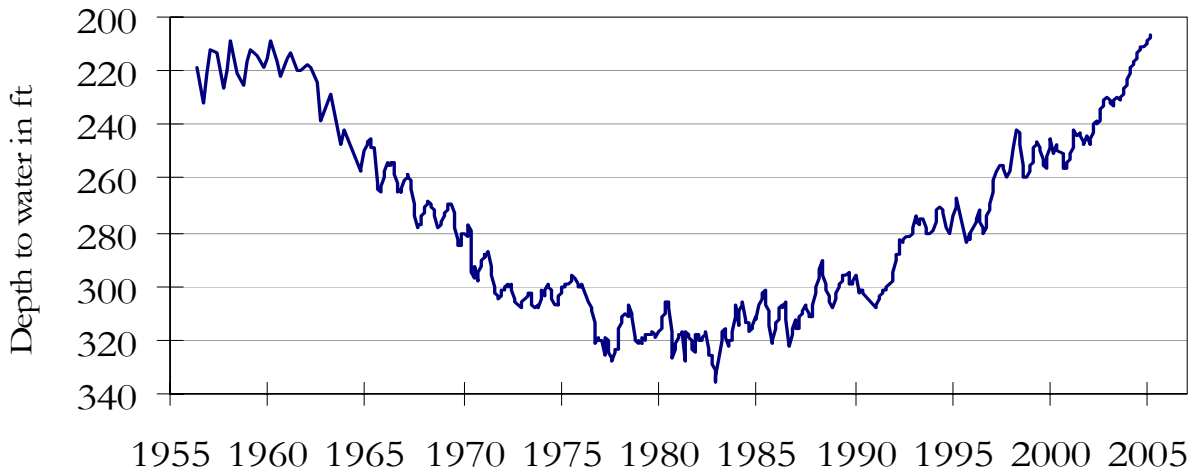


The late February water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 452.6 feet below land surface. This water level was 0.5 foot above last month's measurement, 0.75 foot below last year's measurement, and 160.6 feet below the initial measurement recorded in 1955.



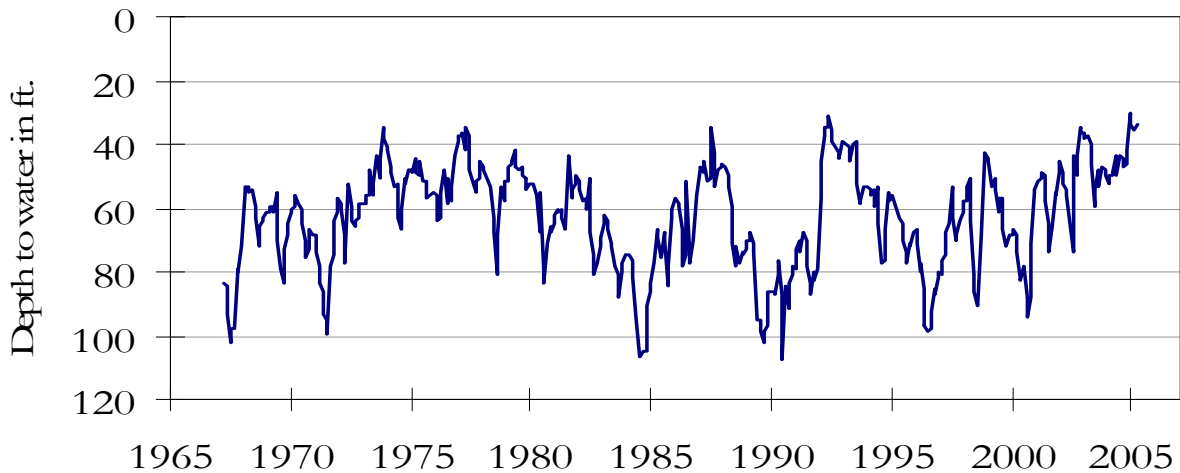
The late February water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 288.4 feet below land surface. This was 0.8 foot below last month's measurement, 1.61 feet below last year's measurement, and 56.5 feet below the initial measurement recorded in 1964.

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



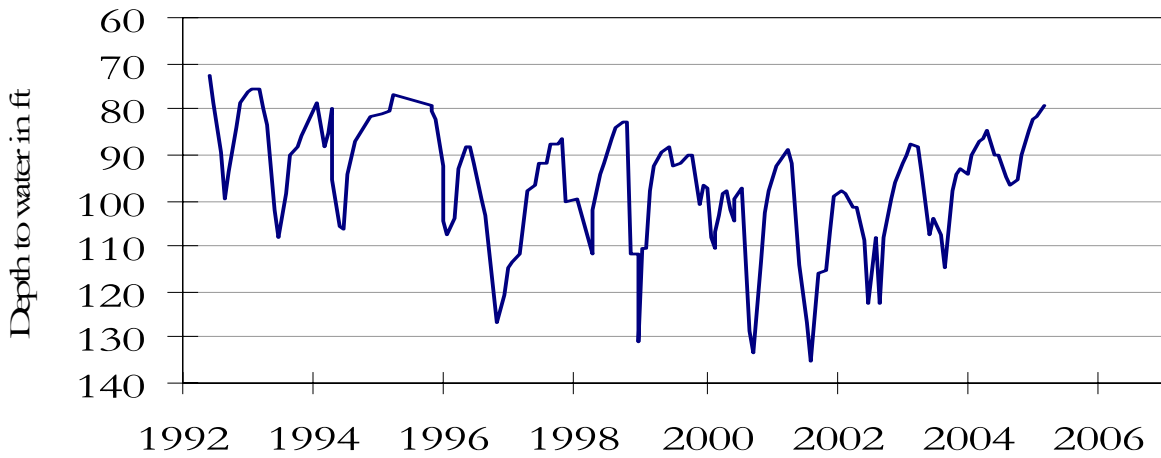
The late February water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 206.1 feet below land surface. This was 1.4 feet above last month's measurement, 12.77 feet above last year's measurement, and 102.87 feet below the initial measurement recorded in 1947.

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



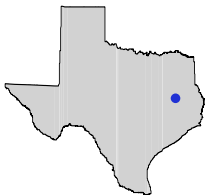
The late February water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 34.1 feet below land surface. This was 1.3 feet below last month's measurement, 15.92 feet above last year's measurement, and 25.52 feet above the initial measurement recorded in 1962.

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



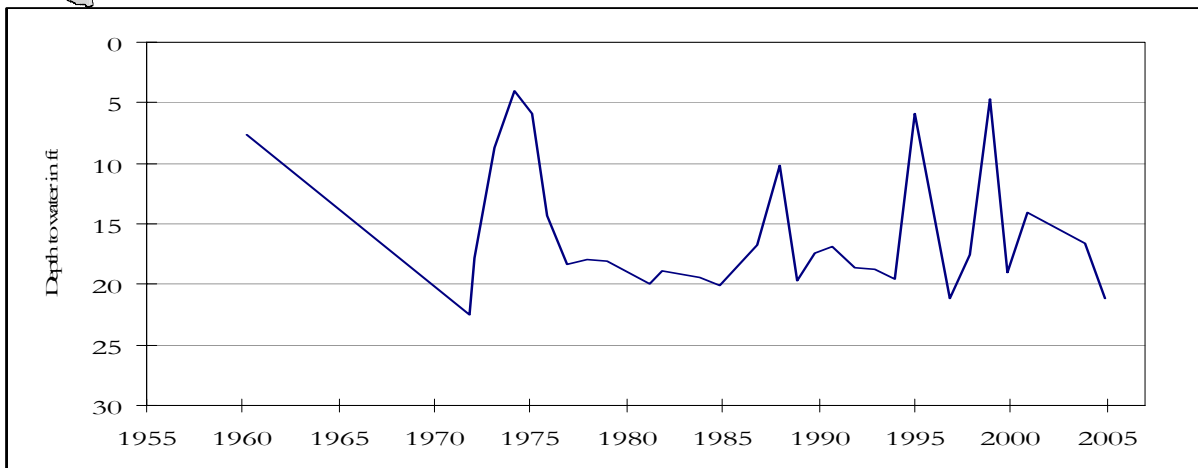
The late February water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 79.00 feet below land surface. This measurement was 2.65 feet above last month's measurement, 8.23 feet above last year's measurement, and 2.25 feet above the initial measurement recorded in 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. 34-40-301
Smith County**



This unused water level observation well, located 20 miles northeast of Tyler, at an elevation of 395 feet ASL, was completed in the Queen City Aquifer. Water level data does not indicate any areas of problems which can be attributed partly to the amount of aquifer pumpage compared to the total annual recharge and partly to management practices.

February, 2005

Water levels rose in six of the seven key monitoring wells since the beginning of February, ranging from 0.2 foot in the Castro County Ogallala well to 2.65 feet in the Atascosa County Carrizo well. The water level declined 0.8 feet in the El Paso County Bolson Deposits well. The J-17 well recorded a water level of 34.10 feet below the land surface, a rise of 1.3 feet from the January 2005 measurement. This water level is approximately forty-six (46) feet above the Stage I critical water management criteria.

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