

Texas Water Development Board



W *Conditions* **A** **T** **T** **E** **R**

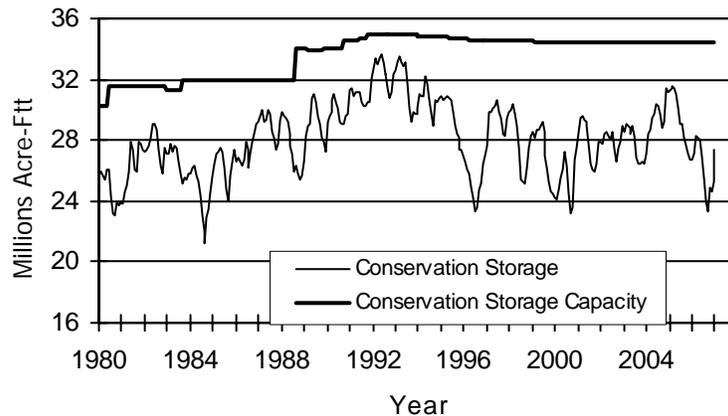
RESERVOIR STORAGE

January 2007

Near the end of January, the 77 reservoirs monitored for this report held 27.37 million acre-feet in conservation storage, or 79 percent of the conservation storage capacity of the state's major reservoirs. Statewide total storage is below median for this time of year. Storage increased during the month by 2.09 million acre-feet (6% of conservation storage capacity). Compared to last year, storage increased by 0.68 million acre-feet (2%).

Storage was near capacity in the Upper Coast Region (99%) and East Region (98%), but lower than or near one-third of capacity in the High Plains Region (19%) and Trans-Pecos (35%). Storage was at 100% in 11 reservoirs. Compared to this time last year, the storage increased in two regions with the greatest increase in the East Region (+20%), and the decreased in seven regions with the sharpest decreases in the Edwards Plateau Region (-21%).

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.

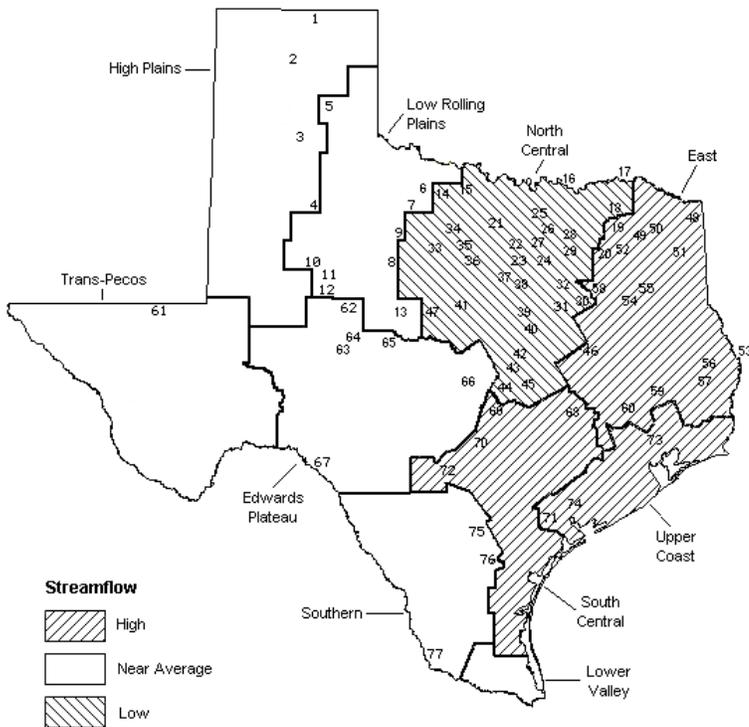
STREAMFLOW

Of 29 reporting index stations in January, computed 30-day mean flows were very high (<5%) at 2 stations, high (5% - 30%) at 10 stations, low (70% - 95%) at 6 stations, and near normal (30% - 70% exceedance) at the remaining 11 stations. Compared to December, flows have increased at 22 index stations, decreased at 3 stations, and remained unchanged at rest 4 stations.

On a regional basis, flows in January were high in East, South Central, and Upper Coast Regions, low in North Central Region, and normal everywhere else. Streamflow in the Lower Valley Region is not monitored.

JANUARY 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 Jan. 2007 (acre-feet) (%)	Late December 2006 (acre-feet) (%)	Late January 2006 (acre-feet) (%)			
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	1,480	2	750	1	-350	-1
Lake Meredith (Texas)	2	500,000	108,040	22	1,590	0	-34,930	-7
Lake Meredith (Texas and Oklahoma)	(2)	779,560	108,040	14	1,590	0	-34,930	-4
MacKenzie Reservoir	3	46,250	8,700	19	-50	0	-920	-2
White River Lake	4	31,850	4,390	14	0	0	-1,500	-5
TOTAL		639,000	122,610	19	2,290	0	-37,700	-6
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	19,080	33	530	1	-2,410	-4
Lake Kemp	6	319,600	226,580	71	7,030	2	-46,220	-14
Miller's Creek Reservoir	7	27,890	20,630	74	-70	0	-5,330	-19
Fort Phantom Hill Reservoir	8	70,030	36,760	52	-360	-1	-8,460	-12
Lake Stamford	9	52,700	32,900	62	-140	0	-15,950	-30
Lake J. B. Thomas	10	202,300	29,090	14	-1,730	-1	-28,120	-14
Lake Colorado City	11	30,800	23,470	76	-160	-1	-4,440	-14
Champion Creek Reservoir	12	41,600	5,180	12	30	0	-620	-1
Hords Creek Lake	13	8,600	4,570	53	-40	0	-2,010	-23
TOTAL		811,720	398,260	49	5,090	1	-113,560	-14
NORTH CENTRAL								
Lake Kickapoo	14	106,000	69,240	65	0	0	-22,370	-21
Lake Arrowhead	15	262,100	177,930	68	8,910	3	-45,210	-17
Lake Texoma	16	2,722,300	2,516,520	92	134,670	5	140,920	5
Pat Mayse Lake	17	124,500	113,670	91	22,270	18	21,200	17
Cooper Lake	18	273,000	162,850	60	66,350	24	32,540	12
Lake Sulphur Springs	19	17,710	17,710	100	1,280	7	5,800	33
Lake Tawakoni	20	936,200	612,900	65	103,300	11	7,200	1
Bridgeport Reservoir	21	374,830	189,800	51	0	0	-56,400	-15
Eagle Mountain Reservoir	22	178,380	113,600	64	200	0	-26,900	-15
Benbrook Lake	23	88,200	77,050	87	11,090	13	31,450	36
Joe Pool Lake	24	175,800	175,800	100	8,800	5	24,530	14
Ray Roberts Lake	25	798,760	613,510	77	19,750	2	-85,390	-11
Lewisville Lake	26	555,000	488,830	88	65,040	12	40,840	7
Grapevine Lake	27	187,700	112,410	60	6,930	4	-22,560	-12
Lavon Lake	28	443,800	305,820	69	120,780	27	33,340	8
Lake Ray Hubbard	29	413,420	382,300	92	39,300	10	47,100	11
Richland-Chambers Creek Lake	30	1,103,820	868,300	79	135,900	12	-54,700	-5
Navarro Mills Lake	31	55,810	25,480	46	2,000	4	-13,370	-24
Bardwell Lake	32	53,580	47,560	89	7,310	14	12,110	23
Hubbard Creek Reservoir	33	317,800	151,450	48	-1,380	0	-31,170	-10
Lake Graham	34	45,000	33,990	76	-230	-1	-8,280	-18
Possum Kingdom Lake	35	551,820	515,380	93	4,640	1	22,130	4
Lake Palo Pinto	36	27,650	12,300	44	-350	-1	-1,740	-6
Lake Granbury	37	135,680	132,640	98	5,370	4	710	1
Lake Pat Cleburne	38	25,300	25,300	100	0	0	6,500	26
Whitney Lake	39	622,800	462,560	74	19,920	3	-35,680	-6
Waco Lake	40	144,500	122,230	85	6,120	4	-22,270	-15
Proctor Lake	41	55,590	25,490	46	-70	0	-8,910	-16
Belton Lake	42	434,500	360,010	83	11,200	3	-39,280	-9
Stillhouse Hollow Lake	43	226,060	211,200	93	5,650	2	-10,300	-5
Lake Georgetown	44	37,010	19,990	54	3,900	11	-1,840	-5
Granger Lake	45	54,280	54,280	100	2,280	4	0	0
Lake Limestone	46	215,750	214,300	99	21,090	10	45,750	21
Lake Brownwood	47	143,400	92,740	65	-540	0	-26,070	-18
TOTAL		11,908,050	9,505,140	80	831,480	7	-40,320	0

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

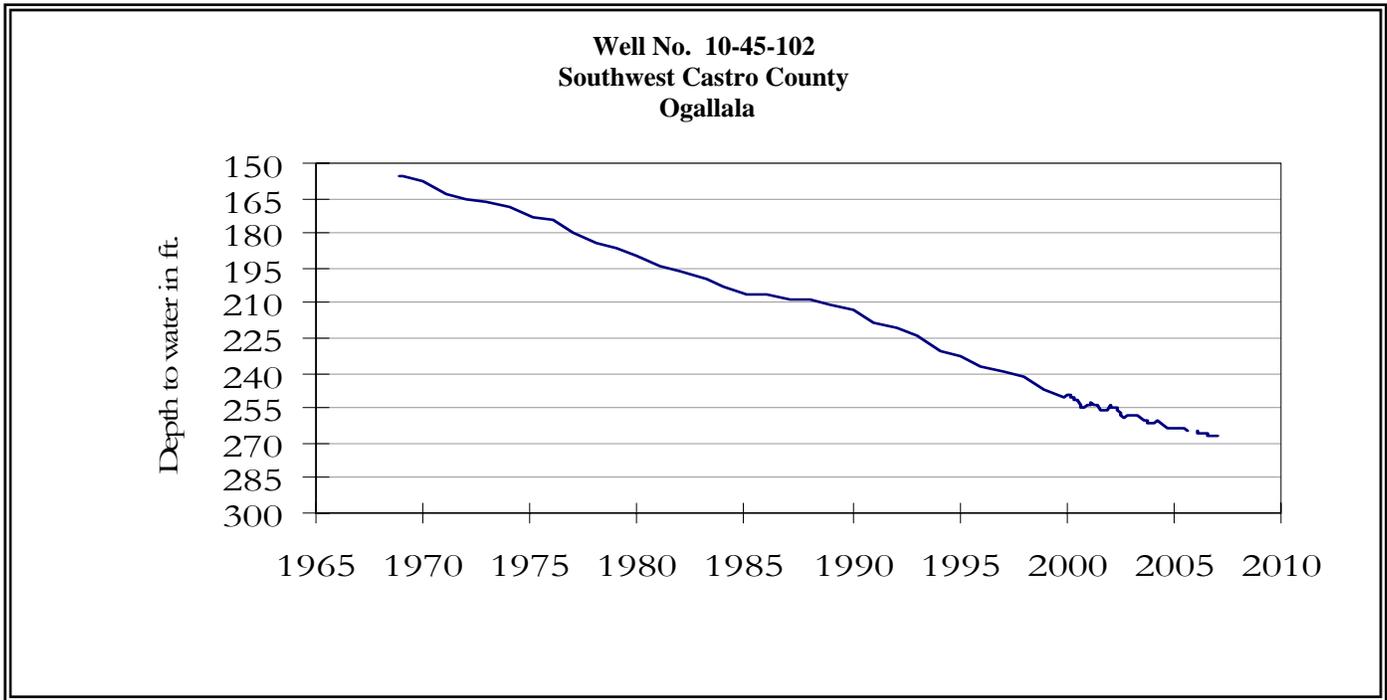
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Jan. 2007 (acre-feet) (%)	Change since Late December 2006 (acre-feet) (%)	Change since Late January 2006 (acre-feet) (%)
EAST					
Wright Patman Lake	48	142,700	142,700 100	0 0	7,400 5
Lake Cypress Springs	49	66,800	60,070 90	6,750 10	3,820 6
Lake Bob Sandlin	50	202,300	142,200 70	20,300 10	-13,400 -7
Lake O' the Pines	51	252,000	252,000 100	86,350 34	72,870 29
Lake Fork Reservoir	52	635,200	623,900 98	66,000 10	54,800 9
Toledo Bend Reservoir	53	4,472,900	4,447,000 99	737,000 16	1,354,000 30
Lake Palestine	54	411,300	411,300 100	94,000 23	78,240 19
Lake Tyler	55	73,700	61,980 84	13,720 19	1,550 2
Sam Rayburn Reservoir	56	2,876,300	2,876,300 100	740 0	457,820 16
B. A. Steinhagen Lake	57	94,200	730 1	-3,150 -3	-48,620 -52
Cedar Creek Reservoir	58	637,050	577,300 91	125,300 20	77,400 12
Lake Livingston	59	1,750,000	1,750,000 100	0 0	326,000 19
Lake Conroe	60	429,900	417,200 97	-7,100 -2	67,900 16
TOTAL		12,044,350	11,762,680 98	1,139,910 9	2,439,780 20
TRANS-PECOS					
Red Bluff Reservoir	61	307,000	105,990 35	3,000 1	-23,760 -8
TOTAL		307,000	105,990 35	3,000 1	-23,760 -8
EDWARDS PLATEAU					
E. V. Spence Reservoir	62	488,760	68,070 14	-1,040 0	-23,800 -5
Twin Buttes Reservoir	63	177,800	37,120 21	2,060 1	-12,890 -7
O.C. Fisher Lake	64	119,200	7,900 7	20 0	-5,560 -5
O. H. Ivie Reservoir	65	554,340	218,800 39	-1,100 0	-69,000 -12
Lake Buchanan	66	896,980	468,130 52	2,710 0	-294,220 -33
Amistad Reservoir (Texas)	67	1,771,030	1,849,000 104	-4,000 0	-445,000 -25
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	2,569,000 82	4,000 0	-186,000 -6
TOTAL		4,008,110	2,649,020 66	-1,350 0	-850,470 -21
SOUTH CENTRAL					
Somerville Lake	68	155,060	155,060 100	0 0	32,160 21
Lake Travis	69	1,144,100	658,960 58	37,880 3	-224,240 -20
Canyon Lake	70	385,600	329,730 86	7,590 2	-28,730 -7
Coletto Creek Reservoir	71	35,060	32,170 92	8,580 24	6,880 20
Medina Lake	72	254,000	92,140 36	-2,220 -1	-99,160 -39
TOTAL		1,973,820	1,268,060 64	51,830 3	-313,090 -16
UPPER COAST					
Lake Houston	73	128,860	128,860 100	0 0	0 0
Lake Texana	74	157,900	156,050 99	16,700 11	21,240 13
TOTAL		286,760	284,910 99	16,700 6	21,240 7
SOUTHERN					
Choke Canyon Reservoir	75	695,260	518,600 75	3,500 1	-93,400 -13
Lake Corpus Christi	76	241,240	118,000 49	21,650 9	-17,700 -7
Falcon Reservoir (Texas)	77	1,555,120	638,000 41	18,000 1	-294,000 -19
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	1,077,000 41	19,000 1	-494,000 -19
TOTAL		2,491,620	1,274,600 51	43,150 2	-405,100 -16
STATE TOTAL		34,470,430	27,371,270 79	2,092,100 6	677,020 2

Note:

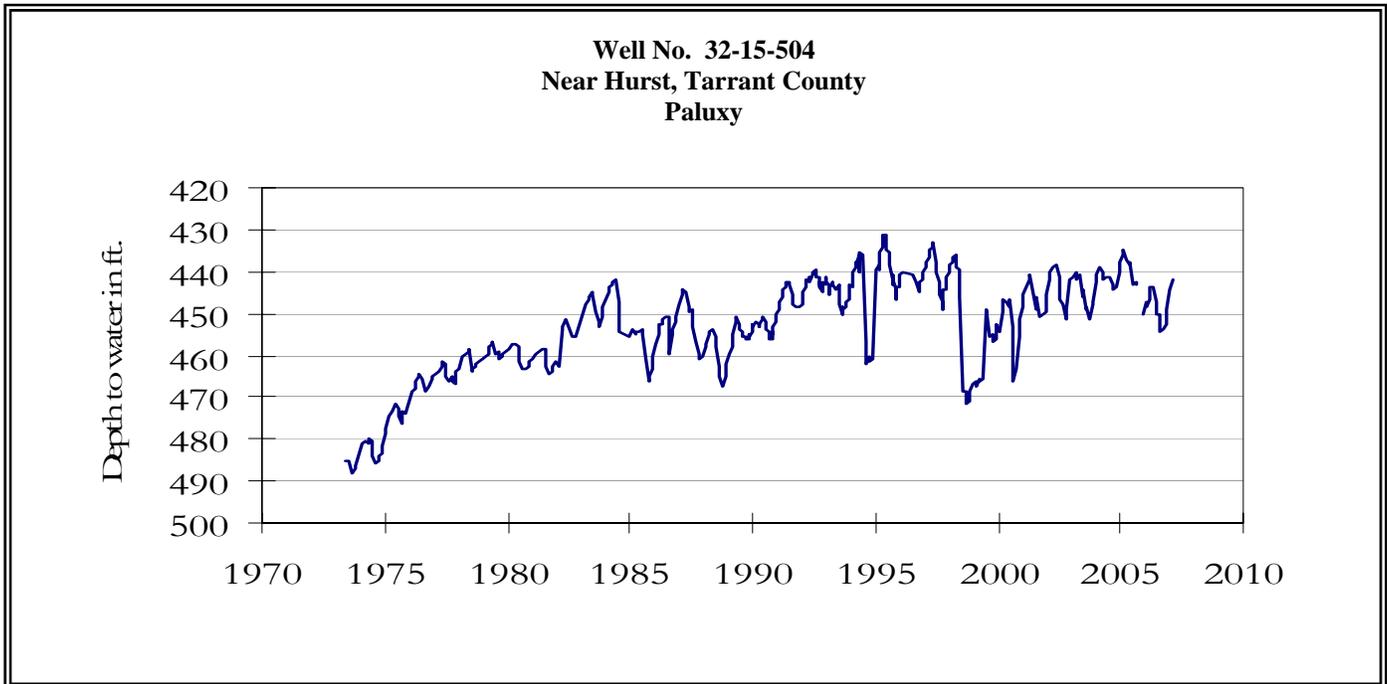
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

JANUARY GROUND WATER LEVELS IN OBSERVATION WELLS

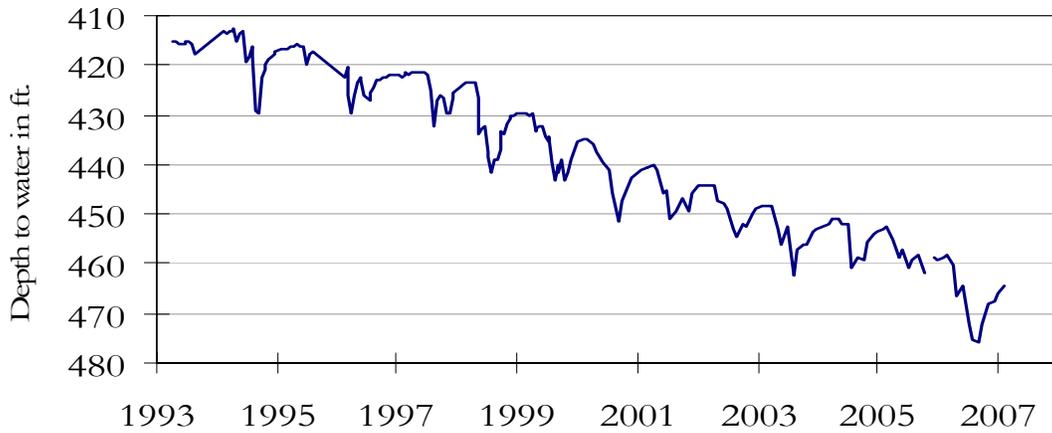


The late January water-level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 267.07 feet below land surface. This measurement was 0.14 feet above last month's measurement, 1.92 feet below last year's measurement, and 111.07 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.



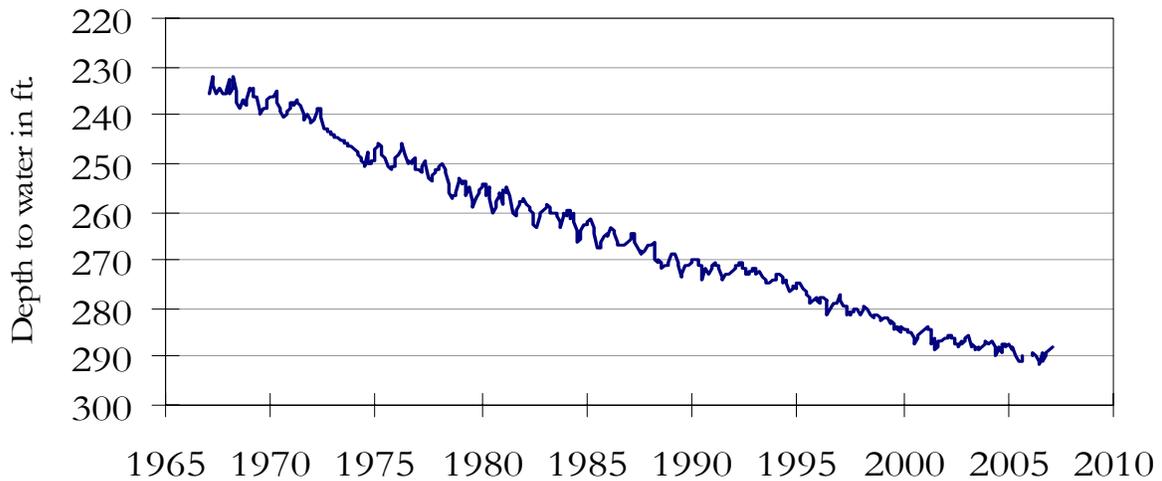
The late January water-level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 441.72 feet below land surface. This measurement was 2.68 feet above last month's measurement, 6.70 feet above last year's measurement, and 63.72 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.

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



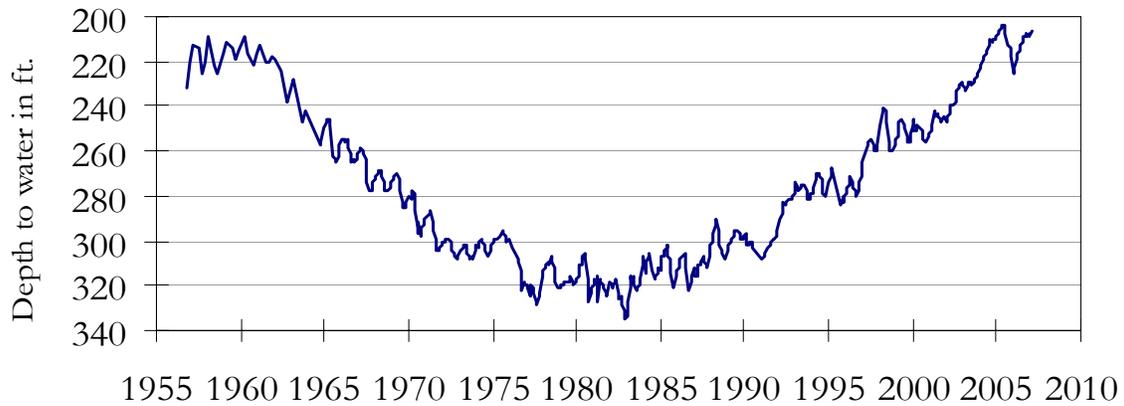
The late January water-level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 464.66 feet below land surface. This water level was 1.22 feet above last month's measurement, 5.68 feet below last year's measurement, and 172.66 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

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



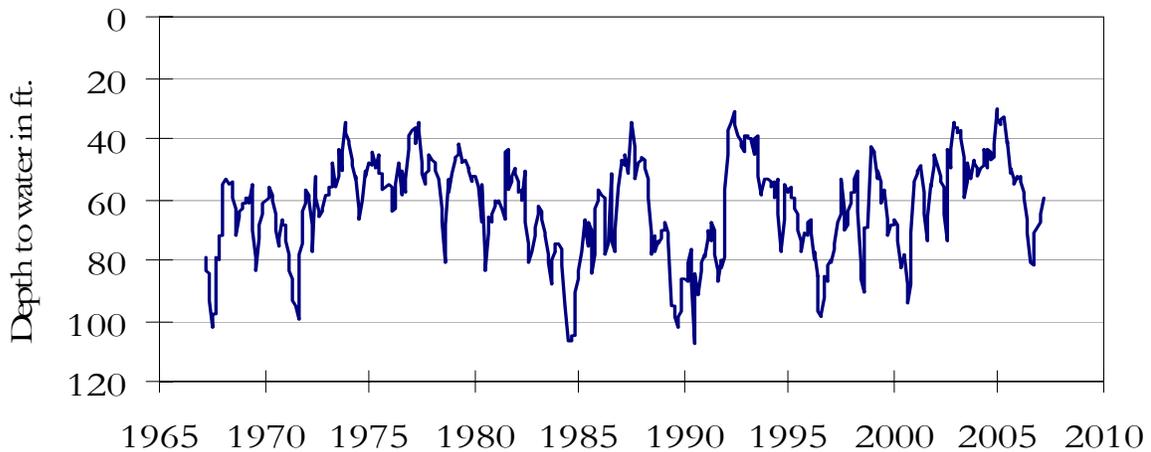
The late January water-level measurement in this Hueco Bolson Aquifer well, elevation 3,882 feet above sea level, was 288.10 feet below land surface. This was 0.60 feet above last month's measurement, 1.88 feet above last year's measurement, and 56.20 feet below the initial measurement in 1964. No water level measurements were recorded for October or December 2005.

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



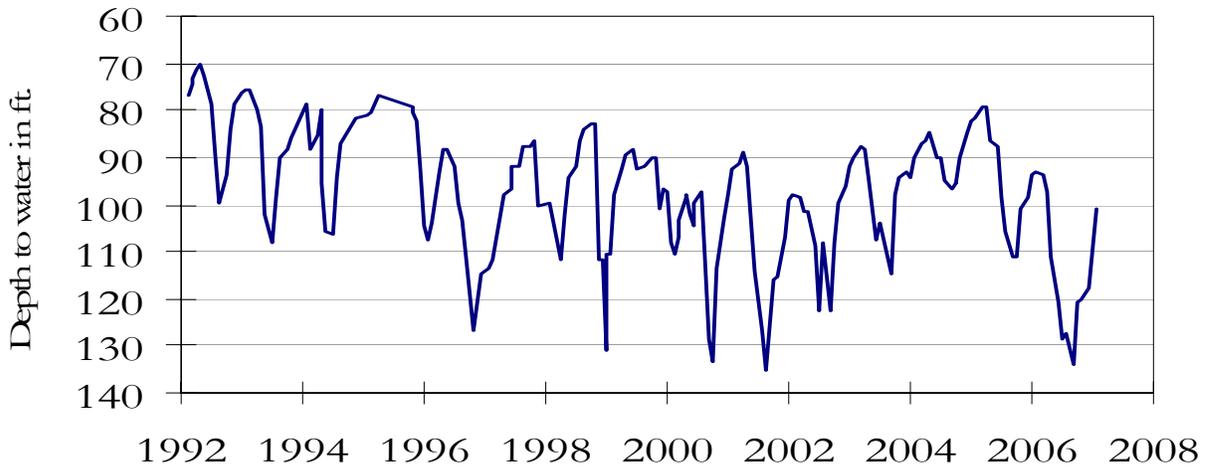
The late January water-level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 206.99 feet below land surface. This was 1.56 feet above last month's measurement, 15.46 feet above last year's measurement, and 71.49 feet below the initial measurement recorded in 1947.

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



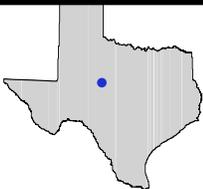
The late January water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 59.50 feet below land surface. This was 5.46 feet above last month's measurement, 5.03 feet below last year's measurement, and 12.86 feet below the initial measurement recorded in 1962.

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



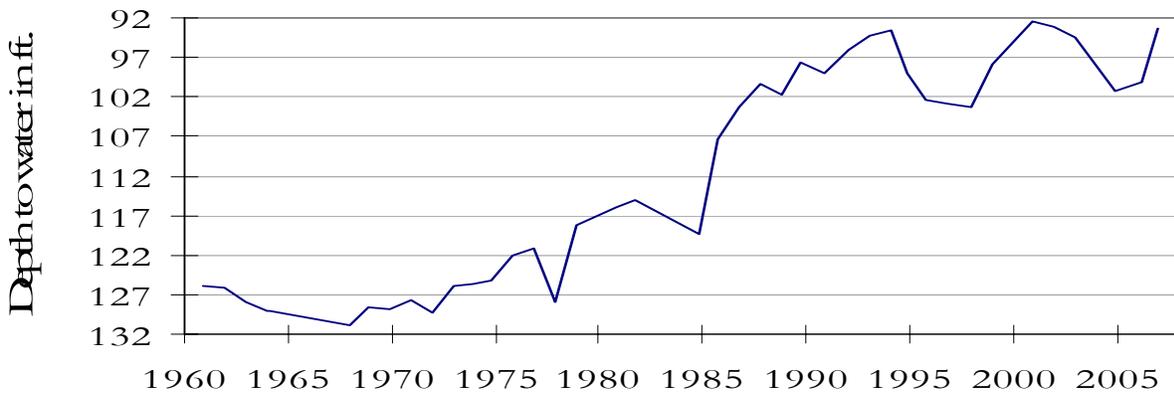
The late January water-level measurement in this Carrizo Aquifer well, elevation 446 feet above sea level, was 100.79 feet below land surface. This measurement was 8.69 feet above last month's measurement, 7.80 feet below last year's measurement, and 65.43 feet below the initial measurement recorded 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. 29-43-801
Mitchell County**



This water level observation well, located 8 miles east of Colorado City, at an elevation of 2298 feet ASL, was completed in the Dockum Aquifer. Water level declines and rises have occurred in different areas of the aquifer, the general rise in water levels in the vicinity of this well is in part due to decreased irrigation.

January, 2007

Water level measurements were available for all seven key monitoring wells. Water levels rose in all seven monitoring wells since the beginning of January, ranging from 0.14 feet in the Castro Co. Ogallala well to 8.69 feet in the Atascosa Co. Carrizo well. The J-17 well recorded a water level of 59.50 feet below land surface. This water level is 20.50 feet above the Stage 1 critical management level.

TEXAS WATER DEVELOPMENT BOARD

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