

Texas Water Development Board



WATER Conditions

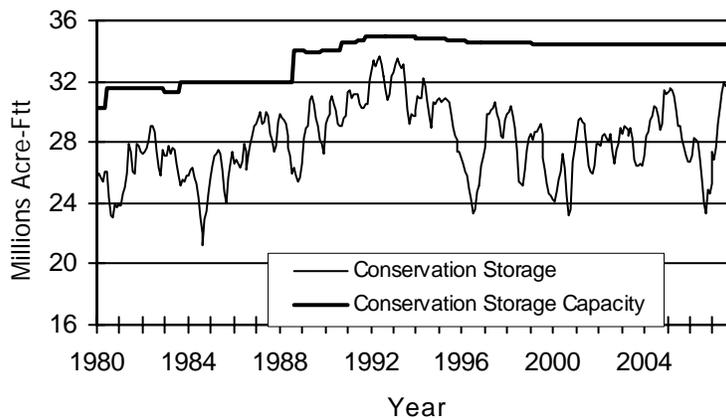
RESERVOIR STORAGE

August 2007

Near the end of August, the 77 reservoirs monitored for this report held 31.7 million acre-feet in conservation storage. As a statewide total, the state's major reservoirs are approximately 92% full, which is near the record high for this time of year. Storage went down during the month by 0.18 million acre-feet (-1% of conservation storage capacity). Compared to July last year, reservoir storage increased by 7.73 million acre-feet (22%).

Toward the end of August this year, 32 reservoirs were at 100% of their conservation capacities. Regionally, storage was 100% of capacity in the South Central Region, and above 90% in the Upper Coast (99%), North Central (98%), and East (96%) Regions, but the High Plains and Trans-Pecos Regions are still experiencing storage below 30% of their regional capacities. In the past month, three out of nine Regions observed increases in storage but six had decreases. Compared to this time last year, the storage increased in all except the High Plains and Trans-Pecos 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.

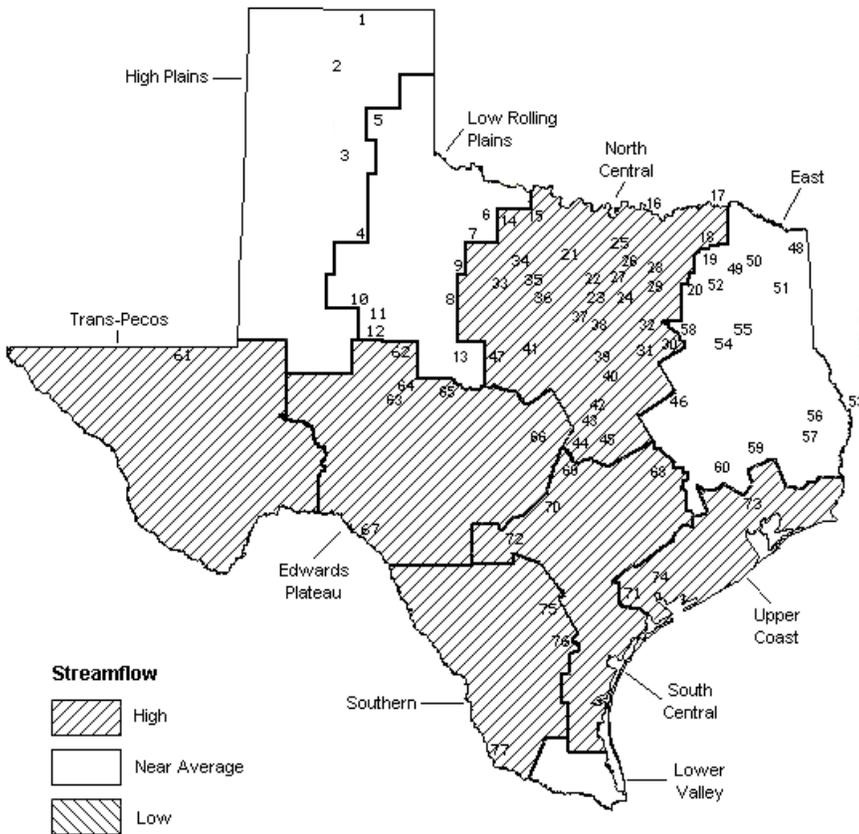
STREAMFLOW

Of 29 reporting index stations in August, computed 30-day mean flows were very high (<5%) at 7 stations, high (5% - 30%) at 10 stations, low (70% - 95%) at 1 stations, and near normal (30% - 70% exceedance) at the remaining 11 stations. Compared to July, flows have increased at 7 index stations and decreased at 22 stations.

On a regional basis, flows in August were very high in the Trans-Pecos Region, high in the North Central, Edwards Plateau, South Central, Upper Coast, and Southern Regions, and normal in the High Plains, East Texas, and Low Rolling Plains Region. Streamflow in the Lower Valley Region is not monitored.

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. 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 Aug. 2007 (acre-feet) (%)	Late July 2007 (acre-feet) (%)	Late August 2006 (acre-feet) (%)			
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	1,810	3	-300	0	900	1
Lake Meredith (Texas)	2	500,000	102,700	21	-7,890	-2	-8,100	-2
Lake Meredith (Texas and Oklahoma)	(2)	779,560	102,700	13	-7,890	-1	-8,100	-1
MacKenzie Reservoir	3	46,250	8,770	19	-290	-1	90	0
White River Lake	4	31,850	4,450	14	-150	0	1,130	4
TOTAL		639,000	117,730	18	-8,630	-1	-5,980	-1
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	23,960	41	-370	-1	5,320	9
Lake Kemp	6	319,600	301,360	94	-4,130	-1	131,630	41
Miller's Creek Reservoir	7	27,890	27,730	99	-160	-1	7,500	27
Fort Phantom Hill Reservoir	8	70,030	70,030	100	2,540	4	26,380	38
Lake Stamford	9	52,700	52,700	100	0	0	15,150	29
Lake J. B. Thomas	10	202,300	35,060	17	3,840	2	-2,350	-1
Lake Colorado City	11	30,800	29,820	97	4,340	14	5,570	18
Champion Creek Reservoir	12	41,600	10,790	26	4,360	10	5,420	13
Hords Creek Lake	13	8,600	7,900	92	-240	-3	2,760	32
TOTAL		811,720	559,350	69	10,180	1	197,380	24
NORTH CENTRAL								
Lake Kickapoo	14	106,000	89,140	84	-5,410	-5	19,850	19
Lake Arrowhead	15	262,100	246,920	94	-11,180	-4	67,620	26
Lake Texoma	16	2,722,300	2,722,300	100	0	0	524,950	19
Pat Mayse Lake	17	124,500	118,890	95	-5,610	-5	35,960	29
Cooper Lake	18	273,000	273,000	100	0	0	163,840	60
Lake Sulphur Springs	19	17,710	17,460	99	-250	-1	3,180	18
Lake Tawakoni	20	936,200	860,500	92	-43,100	-5	289,300	31
Bridgeport Reservoir	21	374,830	361,900	97	-12,930	-3	161,300	43
Eagle Mountain Reservoir	22	178,380	175,500	98	-2,880	-2	39,900	22
Benbrook Lake	23	88,200	80,630	91	-5,240	-6	30,430	35
Joe Pool Lake	24	175,800	175,800	100	0	0	13,340	8
Ray Roberts Lake	25	798,760	798,760	100	0	0	165,040	21
Lewisville Lake	26	555,000	555,000	100	0	0	171,760	31
Grapevine Lake	27	187,700	187,700	100	0	0	72,320	39
Lavon Lake	28	443,800	443,800	100	0	0	248,460	56
Lake Ray Hubbard	29	413,420	407,200	98	-6,220	-2	77,000	19
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	301,820	27
Navarro Mills Lake	31	55,810	55,810	100	0	0	28,640	51
Bardwell Lake	32	53,580	47,160	88	-6,420	-12	8,760	16
Hubbard Creek Reservoir	33	317,800	312,580	98	-3,650	-1	147,640	46
Lake Graham	34	45,000	42,770	95	-2,090	-5	4,690	10
Possum Kingdom Lake	35	551,820	535,900	97	15,870	3	81,420	15
Lake Palo Pinto	36	27,650	25,830	93	-370	-1	11,270	41
Lake Granbury	37	135,680	132,370	98	-620	0	7,250	5
Lake Pat Cleburne	38	25,300	25,150	99	-150	-1	4,720	19
Whitney Lake	39	622,800	622,800	100	0	0	148,490	24
Waco Lake	40	144,500	144,500	100	0	0	8,160	6
Proctor Lake	41	55,590	55,590	100	0	0	25,980	47
Belton Lake	42	434,500	434,500	100	0	0	59,440	14
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	10,290	5
Lake Georgetown	44	37,010	37,010	100	0	0	18,740	51
Granger Lake	45	54,280	54,280	100	0	0	8,500	16
Lake Limestone	46	215,750	208,660	97	-7,090	-3	21,080	10
Lake Brownwood	47	143,400	131,570	92	-1,460	-1	29,950	21
TOTAL		11,908,050	11,710,860	98	-98,800	-1	3,011,090	25

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

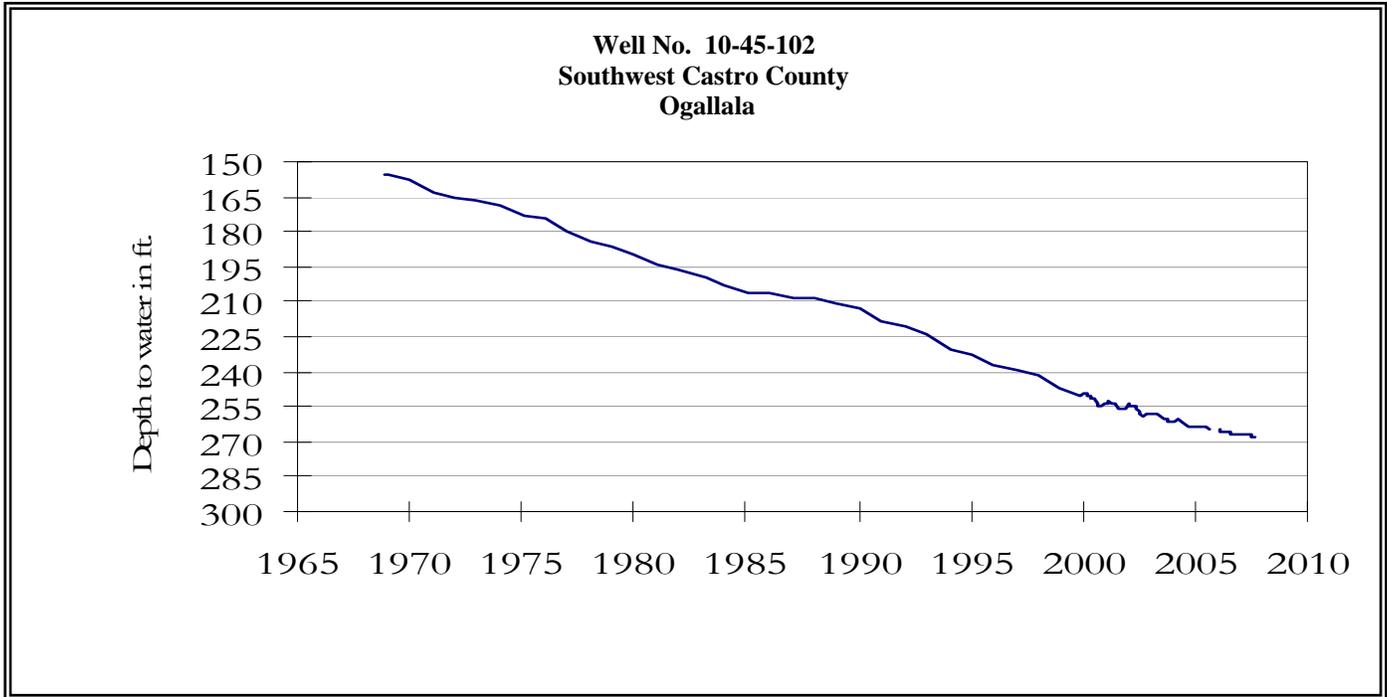
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Aug. 2007 (acre-feet)	(%)	Change since Late July 2007 (acre-feet)	(%)	Change since Late August 2006 (acre-feet)	(%)
EAST								
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	66,800	100	0	0	12,480	19
Lake Bob Sandlin	50	202,300	202,300	100	3,600	2	69,200	34
Lake O' the Pines	51	252,000	252,000	100	0	0	72,580	29
Lake Fork Reservoir	52	635,200	635,200	100	0	0	70,000	11
Toledo Bend Reservoir	53	4,472,900	4,247,000	95	-225,900	-5	1,286,000	29
Lake Palestine	54	411,300	406,530	99	-4,770	-1	89,440	22
Lake Tyler	55	73,700	73,700	100	0	0	23,940	32
Sam Rayburn Reservoir	56	2,876,300	2,747,230	96	-129,070	-4	242,490	8
B. A. Steinhagen Lake	57	94,200	54,930	58	1,070	1	54,750	58
Cedar Creek Reservoir	58	637,050	624,800	98	-12,250	-2	136,200	21
Lake Livingston	59	1,750,000	1,750,000	100	0	0	293,000	17
Lake Conroe	60	429,900	410,400	95	-5,200	-1	68,800	16
TOTAL		12,044,350	11,613,590	96	-372,520	-3	2,418,880	20
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	82,950	27	-4,290	-1	-4,430	-1
TOTAL		307,000	82,950	27	-4,290	-1	-4,430	-1
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	85,390	17	14,140	3	13,520	3
Twin Buttes Reservoir	63	177,800	69,050	39	18,080	10	34,470	19
O.C. Fisher Lake	64	119,200	12,210	10	4,660	4	3,090	3
O. H. Ivie Reservoir	65	554,340	383,000	69	33,400	6	140,500	25
Lake Buchanan	66	896,980	844,290	94	3,270	0	266,390	30
Amistad Reservoir (Texas)	67	1,771,030	2,029,000	115	-85,000	-5	178,000	10
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	2,719,000	86	11,000	0	352,000	11
TOTAL		4,008,110	3,422,940	85	-11,450	0	635,970	16
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	0	0	29,100	19
Lake Travis	69	1,144,100	1,144,100	100	0	0	473,580	41
Canyon Lake	70	385,600	385,600	100	0	0	53,540	14
Coletto Creek Reservoir	71	35,060	32,260	92	-190	-1	6,580	19
Medina Lake	72	254,000	254,000	100	0	0	142,100	56
TOTAL		1,973,820	1,971,020	100	-190	0	704,900	36
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	0	0
Lake Texana	74	157,900	153,830	97	200	0	8,480	5
TOTAL		286,760	282,690	99	200	0	8,480	3
SOUTHERN								
Choke Canyon Reservoir	75	695,260	695,260	100	0	0	158,260	23
Lake Corpus Christi	76	241,240	241,240	100	0	0	160,550	67
Falcon Reservoir (Texas)	77	1,555,120	1,035,000	67	306,000	20	441,000	28
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	1,447,000	55	395,000	15	537,000	20
TOTAL		2,491,620	1,971,500	79	306,000	12	759,810	30
STATE TOTAL		34,470,430	31,732,630	92	-179,500	-1	7,726,100	22

Note:

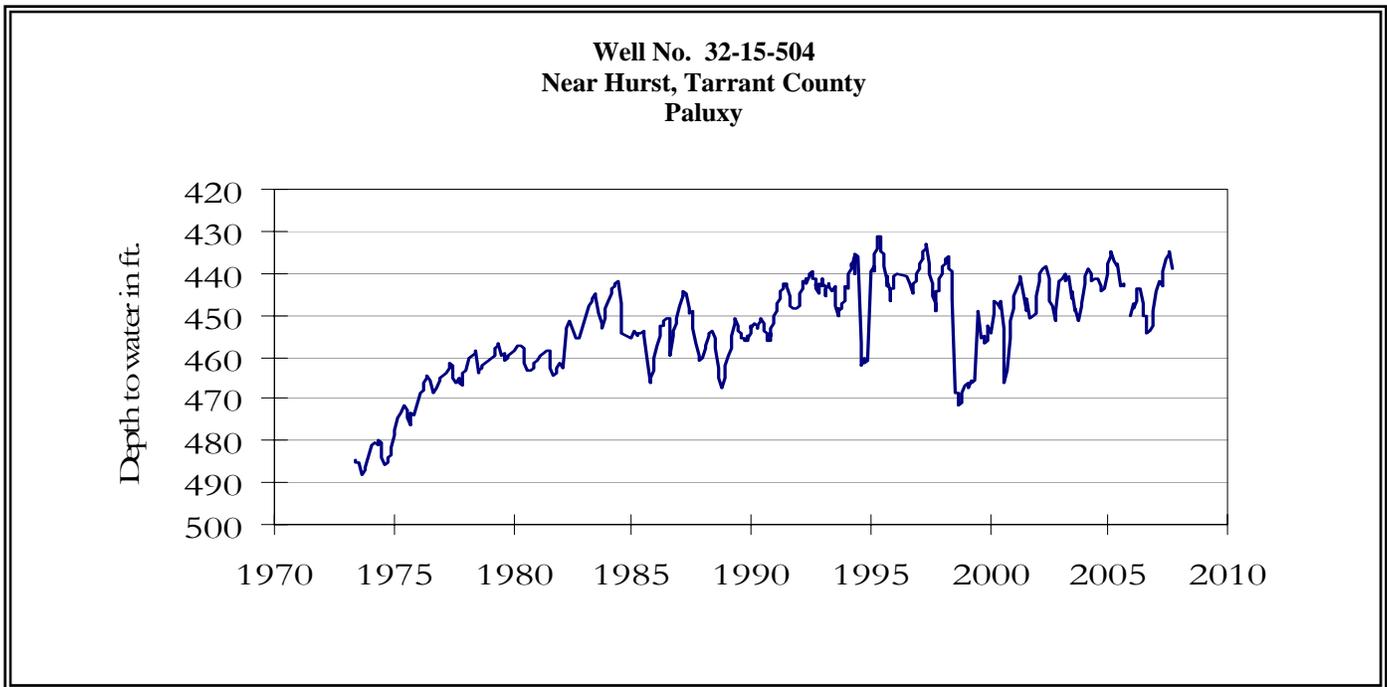
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

AUGUST GROUND WATER LEVELS IN OBSERVATION WELLS

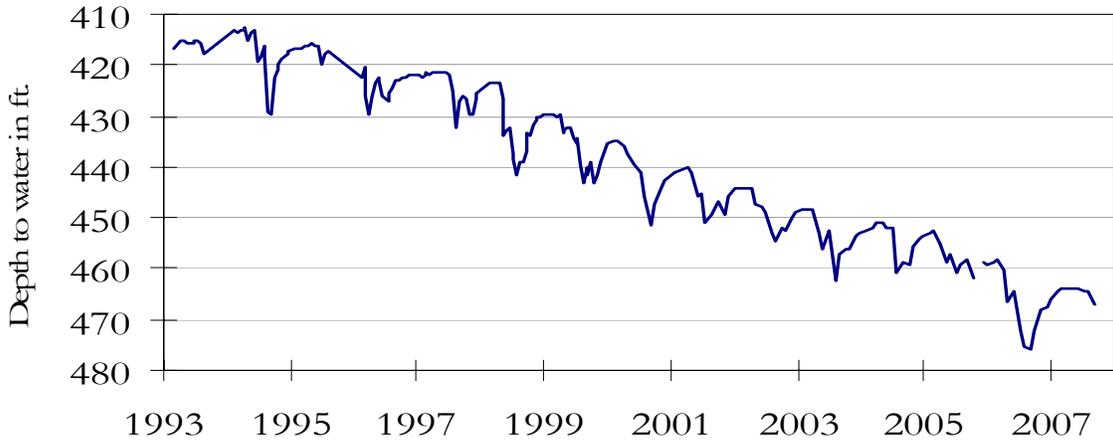


The late August water-level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 267.84 feet below land surface. This measurement was 0.28 feet below last month's measurement, 1.11 feet below last year's measurement, and 111.84 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.



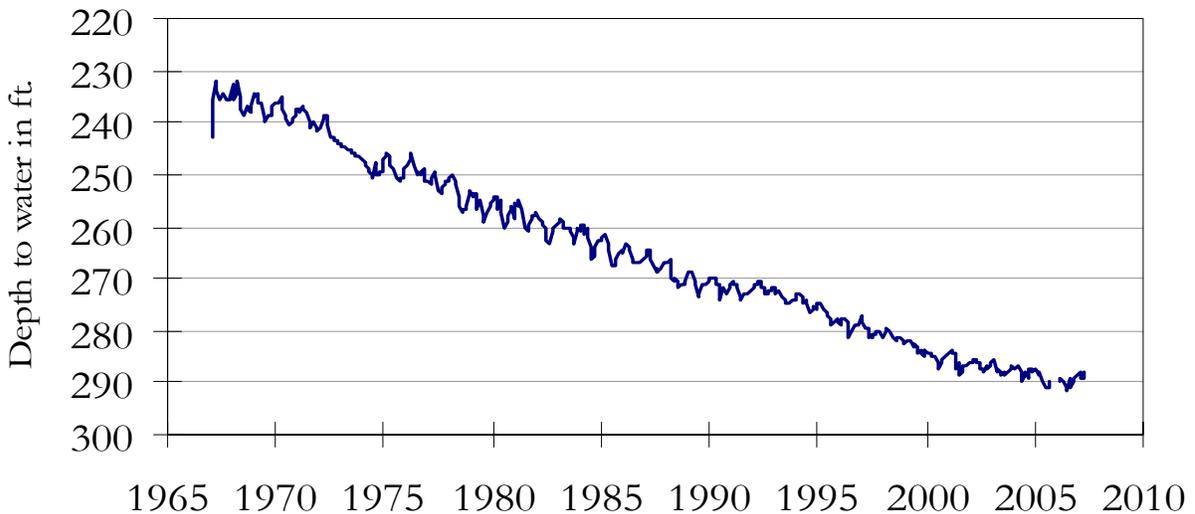
The late August water-level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 439.25 feet below land surface. This measurement was 4.27 feet below last month's measurement, 15.41 feet above last year's measurement, and 61.25 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.

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



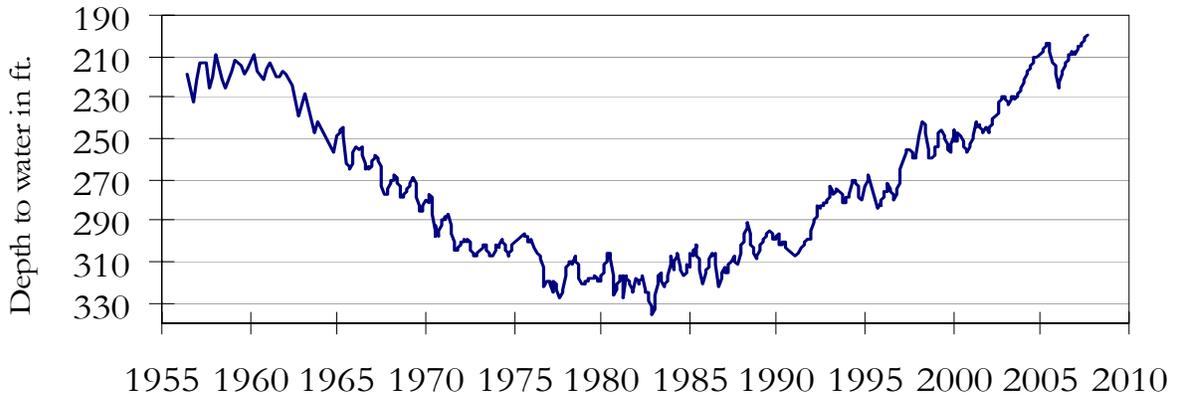
The late August water-level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 467.17 feet below land surface. This water level was 2.71 feet below last month's measurement, 8.58 feet above last year's measurement, and 175.17 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

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



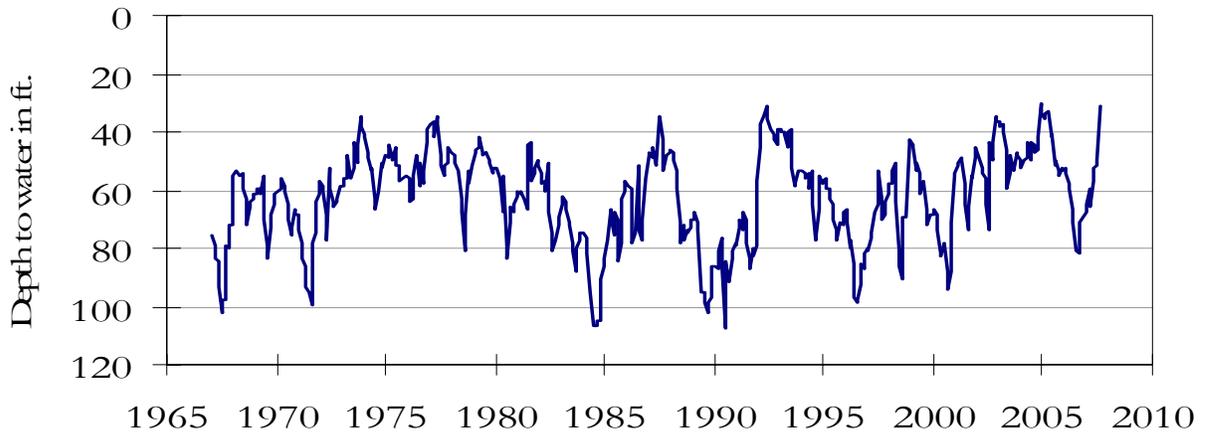
The late August water-level measurement in this Hueco Bolson Aquifer well, elevation 3,882 feet above sea level, was 288.06 feet below land surface. This was 2.87 feet above last year's measurement, and 56.16 feet below the initial measurement in 1964. No water level measurements were recorded for May through July 2007, and October or December 2005.

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



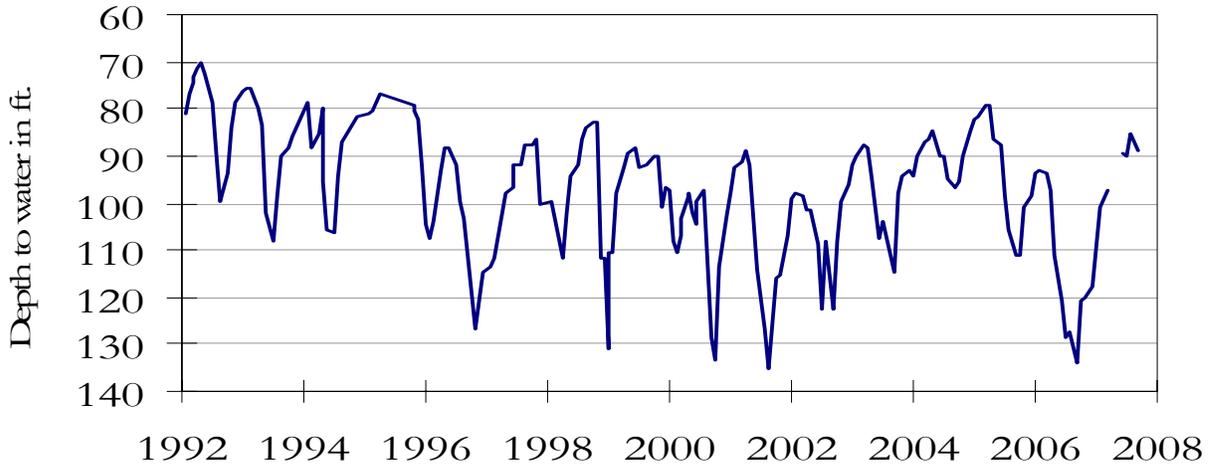
The late August water-level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 199.22 feet below land surface. This was 0.60 feet above last month's measurement, 9.39 feet above last year's measurement, and 63.72 feet below the initial measurement recorded in 1947.

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



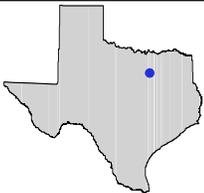
The late August water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 31.50 feet below land surface. This was 0.10 feet below last month's measurement, 50.15 feet above last year's measurement, and 15.14 feet above the initial measurement recorded in 1962.

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



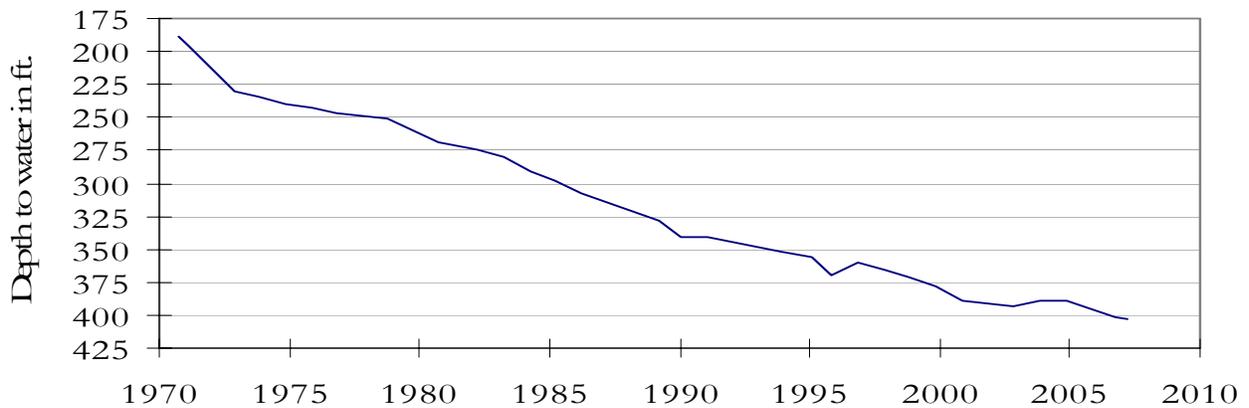
The late August water-level measurement in this Carrizo Aquifer well, elevation 446 feet above sea level, was 88.77 feet below land surface. This measurement was 3.49 feet below last month's measurement, 45.50 feet above last year's measurement, and 53.41 feet below the initial measurement recorded in 1965. No water level measurements were recorded for March and April 2007.

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 19-47-801
Denton County**



This water level observation well, located 3 miles west of Denton, at an elevation of 715 feet ASL, was completed in the Trinity Aquifer. Water level declines have occurred in this area due to municipal pumping.

August, 2007

Water level measurements were available for all seven key monitoring wells. Water levels declined in five of the monitoring wells since the beginning of August, ranging from 0.10 feet in the Bexar Co. Edwards well to 4.27 feet in the Tarrant Co. Trinity well. Water levels rose 0.60 feet in the Harris Co. Evangeline well. The J-17 well recorded a water level of 31.50 feet below land surface. This water level is 48.50 feet above the Stage 1 critical management level.

TEXAS WATER DEVELOPMENT BOARD

1700 N. CONGRESS AVE.

P.O. BOX 13231

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