Texas Water Development Board

WATER Conditions

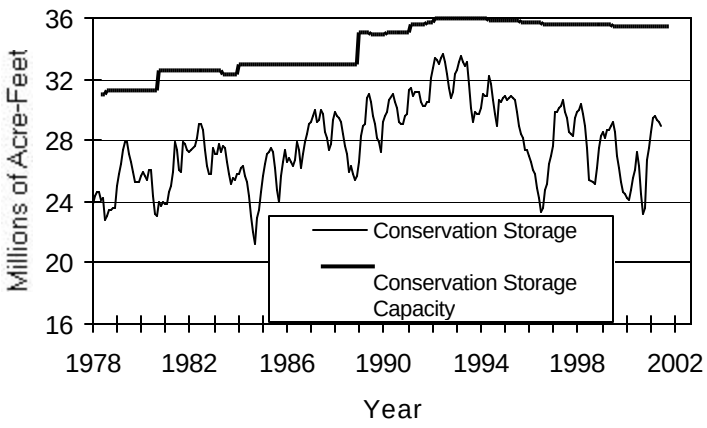
RESERVOIR STORAGE

June 2001

Near the end of June, the 77 reservoirs monitored for this report held 28.9 million acre-feet in conservation storage, or 83.8 percent of the conservation storage capacity of the State's major reservoirs. Statewide storage decreased by 0.335 million acre-feet (-1.0% of conservation storage capacity) during the month. Compared to June 2000, storage is up 1.71 million acre-feet (+5.0%), but it is below the historical median for this time of year.

Storage increased in only the East region (+1.5%), and decreased in all other regions. The North Central (95.6%), East (98.9%), South Central (96.5%), and Upper Coast (95.3%) regions remained near capacity, while the Trans-Pecos (14.0%) and Southern (22.6%) regions remained below 25%. Storage is at 100% in 23 reservoirs, 10 fewer than last month. Storage in the High Plains (-11.2%), Trans-Pecos (-7.8%), Upper Coast (-3.0%) and Southern (-3.8%) 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.

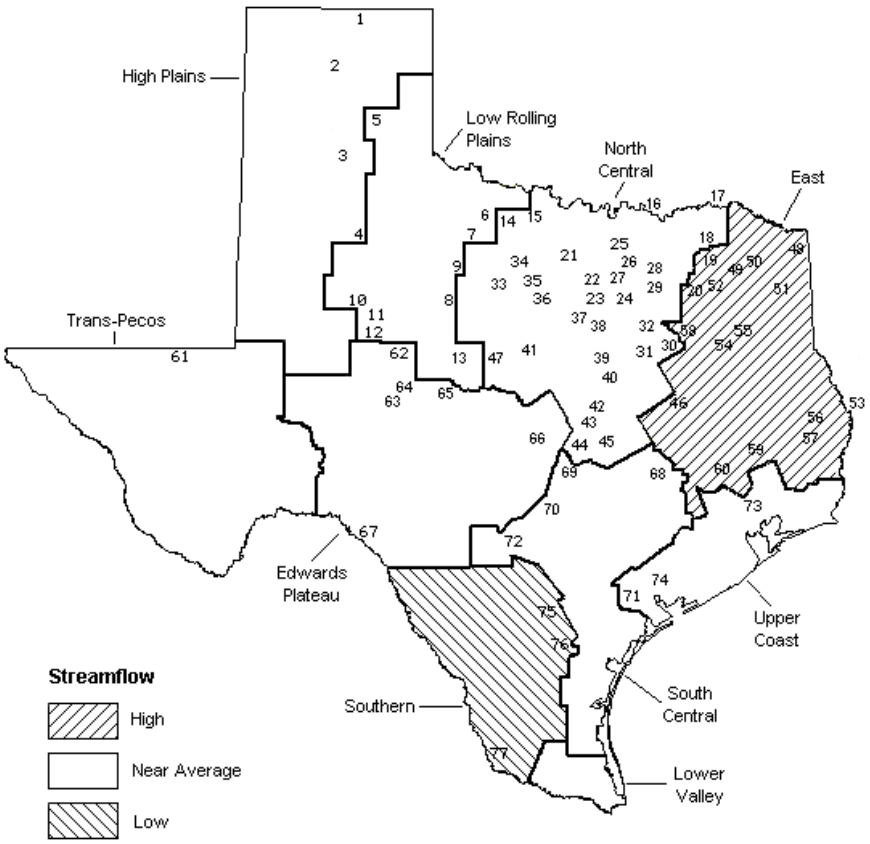
PO BOX 13231 • 1700 N. Congress Avenue • Austin, TX 78711-3231
Telephone (512) 463-7847 • Telefax (512) 475-2053 • 1-800-RELAYTX (for the hearing impaired)

STREAMFLOW

Of 29 reporting index stations in June, computed 30-day mean flows were very high (0% - 5% exceedance) at two stations, high (5% - 30% exceedance) at 5 stations, near normal (30% - 70% exceedance) at 15 stations, low (70% - 95% exceedance) at 6 stations, and very low (95% - 100%) at one station. In comparison to May, flows increased at 7 index stations and decreased at 22.

On a regional basis, flows in June were high in the East region, low in the Southern region and normal in all other regions. The stations reporting a very high flow for the month were on Bedias Creek and Spring Creek. The station reporting a very low flow was on the Atascosa River.

JUNE STREAMFLOW CONDITIONS



Reservoirs Shown on Map

1. Palo Duro Reservoir
2. Lake Meredith
3. MacKenzie Reservoir
4. White River Lake
5. Greenbelt Reservoir
6. Lake Kemp
7. Miller's Creek Reservoir
8. Fort Phantom Hill Reservoir
9. Lake Stamford
10. Lake J. B. Thomas
11. Lake Colorado City
12. Champion Creek Reservoir
13. Hords Creek Lake
14. Lake Kickapoo
15. Lake Arrowhead
16. Lake Texoma
17. Pat Mayse Lake
18. Cooper Lake
19. Lake Sulphur Springs
20. Lake Tawakoni
21. Bridgeport Reservoir
22. Eagle Mountain Reservoir
23. Benbrook Lake
24. Joe Pool Lake
25. Ray Roberts Lake
26. Lewisville Lake
27. Grapevine Lake
28. Lavon Lake
29. Lake Ray Hubbard
30. Richland-Chambers Creek Lake
31. Navarro Mills Lake
32. Bardwell Lake
33. Hubbard Creek Reservoir
34. Lake Graham
35. Possum Kingdom Lake
36. Lake Palo Pinto
37. Lake Granbury
38. Lake Pat Cleburne
39. Whitney Lake
40. Waco Lake
41. Proctor Lake
42. Belton Lake
43. Stillhouse Hollow Lake
44. Lake Georgetown
45. Granger Lake
46. Lake Limestone
47. Lake Brownwood
48. Wright Patman Lake
49. Lake Cypress Springs
50. Lake Bob Sandlin
51. Lake O' the Pines
52. Lake Fork Reservoir
53. Toledo Bend Reservoir
54. Lake Palestine
55. Lake Tyler
56. Sam Rayburn Reservoir
57. B. A. Steinhagen Lake
58. Cedar Creek Reservoir
59. Lake Livingston
60. Lake Conroe
61. Red Bluff Reservoir
62. E. V. Spence Reservoir
63. Twin Buttes Reservoir
64. O. C. Fisher Lake
65. O. H. Ivie Reservoir
66. Lake Buchanan
67. Intl. Amistad Reservoir
68. Somerville Lake
69. Lake Travis
70. Canyon Lake
71. Coleto Creek Reservoir
72. Medina Lake
73. Lake Houston
74. Lake Texana
75. Choke Canyon Reservoir
76. Lake Corpus Christi
77. Intl. Falcon Reservoir

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late June 2001 (acre-feet)	(%)	Change since Late May 2001 (acre-feet)	(%)	Change since Late June 2000 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	8,860	15	-1,280	-2	-13,980	-23
Lake Meredith (Texas)	2	500,000	328,800	66	-13,600	-3	-52,900	-11
Lake Meredith (Texas and Oklahoma)	(2)	779,560	328,800	42	-13,600	-2	-52,900	-7
MacKenzie Reservoir	3	46,250	9,590	21	-290	-1	300	1
White River Lake	4	31,850	10,040	32	-720	-2	-4,920	-15
TOTAL		639,000	357,290	56	-15,890	-2	-71,500	-11
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	25,760	44	-1,040	-2	-1,290	-2
Lake Kemp	6	319,600	181,200	57	-24,900	-8	23,400	7
Miller's Creek Reservoir	7	27,890	15,870	57	-890	-3	7,240	26
Fort Phantom Hill Reservoir	8	70,030	37,310	53	-2,830	-4	14,380	21
Lake Stamford	9	52,700	15,970	30	-1,120	-2	5,690	11
Lake J. B. Thomas	10	202,300	19,210	9	-2,120	-1	-15,990	-8
Lake Colorado City	11	30,800	18,740	61	-1,330	-4	-8,160	-26
Champion Creek Reservoir	12	41,600	2,570	6	-110	0	-2,830	-7
Hords Creek Lake	13	8,600	4,070	47	-290	-3	-250	-3
TOTAL		811,720	320,700	40	-34,630	-4	22,190	3
NORTH CENTRAL								
Lake Kickapoo	14	106,000	94,910	90	-5,590	-5	46,357	44
Lake Arrowhead	15	262,100	190,500	73	-9,800	-4	76,700	29
Lake Texoma	16	2,722,300	2,699,000	99	-23,300	-1	9,643	0
Pat Mayse Lake	17	124,500	122,200	98	-1,400	-1	-1,547	-1
Cooper Lake	18	273,000	273,000	100	0	0	0	0
Lake Sulphur Springs	19	17,710	12,030	68	-5,680	-32	-5,680	-32
Lake Tawakoni	20	936,200	854,200	91	-70,800	-8	-82,000	-9
Bridgeport Reservoir	21	374,830	367,100	98	-6,500	-2	153,860	41
Eagle Mountain Reservoir	22	178,380	168,200	94	-10,180	-6	32,848	18
Benbrook Lake	23	88,200	81,080	92	-2,360	-3	-7,120	-8
Joe Pool Lake	24	175,800	175,800	100	0	0	0	0
Ray Roberts Lake	25	798,760	798,760	100	0	0	244,863	31
Lewisville Lake	26	555,000	555,000	100	0	0	211,600	38
Grapevine Lake	27	187,700	176,600	94	-8,300	-4	45,600	24
Lavon Lake	28	443,800	421,700	95	-22,100	-5	-22,100	-5
Lake Ray Hubbard	29	413,420	402,300	97	-10,800	-3	-11,120	-3
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	0	0
Navarro Mills Lake	31	55,810	55,620	100	-190	0	-190	0
Bardwell Lake	32	53,580	46,440	87	-1,120	-2	-7,140	-13
Hubbard Creek Reservoir	33	317,800	146,200	46	-7,500	-2	-28,700	-9
Lake Graham	34	45,000	41,560	92	-2,250	-5	3,860	9
Possum Kingdom Lake	35	551,820	520,700	94	-8,400	-2	34,400	6
Lake Palo Pinto	36	27,650	23,100	84	-2,730	-10	-4,263	-15
Lake Granbury	37	135,680	125,900	93	-4,500	-3	-6,551	-5
Lake Pat Cleburne	38	25,300	24,090	95	-1,030	-4	-1,210	-5
Whitney Lake	39	622,800	611,500	98	-11,300	-2	-4,900	-1
Waco Lake	40	144,500	144,500	100	0	0	0	0
Proctor Lake	41	55,590	52,610	95	-2,980	-5	36,440	66
Belton Lake	42	434,500	434,500	100	0	0	26,500	6
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	4,353	2
Lake Georgetown	44	37,010	37,010	100	0	0	13,480	36
Granger Lake	45	54,280	54,280	100	0	0	0	0
Lake Limestone	46	215,750	215,750	100	2,550	1	650	0
Lake Brownwood	47	143,400	122,900	86	-7,100	-5	18,800	13
TOTAL		11,908,050	11,378,920	96	-223,360	-2	777,433	7

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late June 2001 (acre-feet)	(%)	Change since Late May 2001 (acre-feet)	(%)	Change since Late June 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	0	0
Toledo Bend Reservoir	53	4,472,900	4,388,000	98	197,000	4	-22,000	0
Lake Palestine	54	411,300	411,300	100	0	0	0	0
Lake Tyler	55	73,700	73,700	100	0	0	2,526	3
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	0	0	507,300	18
B. A. Steinhagen Lake	57	94,200	85,040	90	650	1	5,708	6
Cedar Creek Reservoir	58	637,050	628,500	99	-1,900	0	-8,550	-1
Lake Livingston	59	1,750,000	1,730,000	99	-20,000	-1	-20,000	-1
Lake Conroe	60	429,900	417,800	97	8,600	2	43,800	10
TOTAL		12,044,350	11,909,640	99	184,350	2	508,784	4
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	43,070	14	-7,910	-3	-23,800	-8
TOTAL		307,000	43,070	14	-7,910	-3	-23,800	-8
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	71,790	15	-4,830	-1	-27,440	-6
Twin Buttes Reservoir	63	177,800	6,680	4	-3,890	-2	-1,239	-1
O.C. Fisher Lake	64	119,200	6,140	5	-730	-1	-5,430	-5
O. H. Ivie Reservoir	65	554,340	295,000	53	-13,000	-2	-39,200	-7
Lake Buchanan	66	896,980	832,200	93	-4,400	0	171,300	19
Amistad Reservoir (Texas)	67	1,771,030	934,000	53	-94,000	-5	-28,000	-2
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,129,000	36	-97,000	-3	-18,000	-1
TOTAL		4,008,110	2,145,810	54	-120,850	-3	69,991	2
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	0	0	18,152	12
Lake Travis	69	1,144,100	1,090,000	95	-54,100	-5	389,200	34
Canyon Lake	70	385,600	385,600	100	0	0	31,000	8
Coleto Creek Reservoir	71	35,060	28,620	82	-1,960	-6	-2,240	-6
Medina Lake	72	254,000	245,800	97	-8,200	-3	95,200	37
TOTAL		1,973,820	1,905,080	97	-64,260	-3	531,312	27
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	0	0
Lake Texana	74	157,900	144,400	91	-9,000	-6	-8,700	-6
TOTAL		286,760	273,260	95	-9,000	-3	-8,700	-3

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

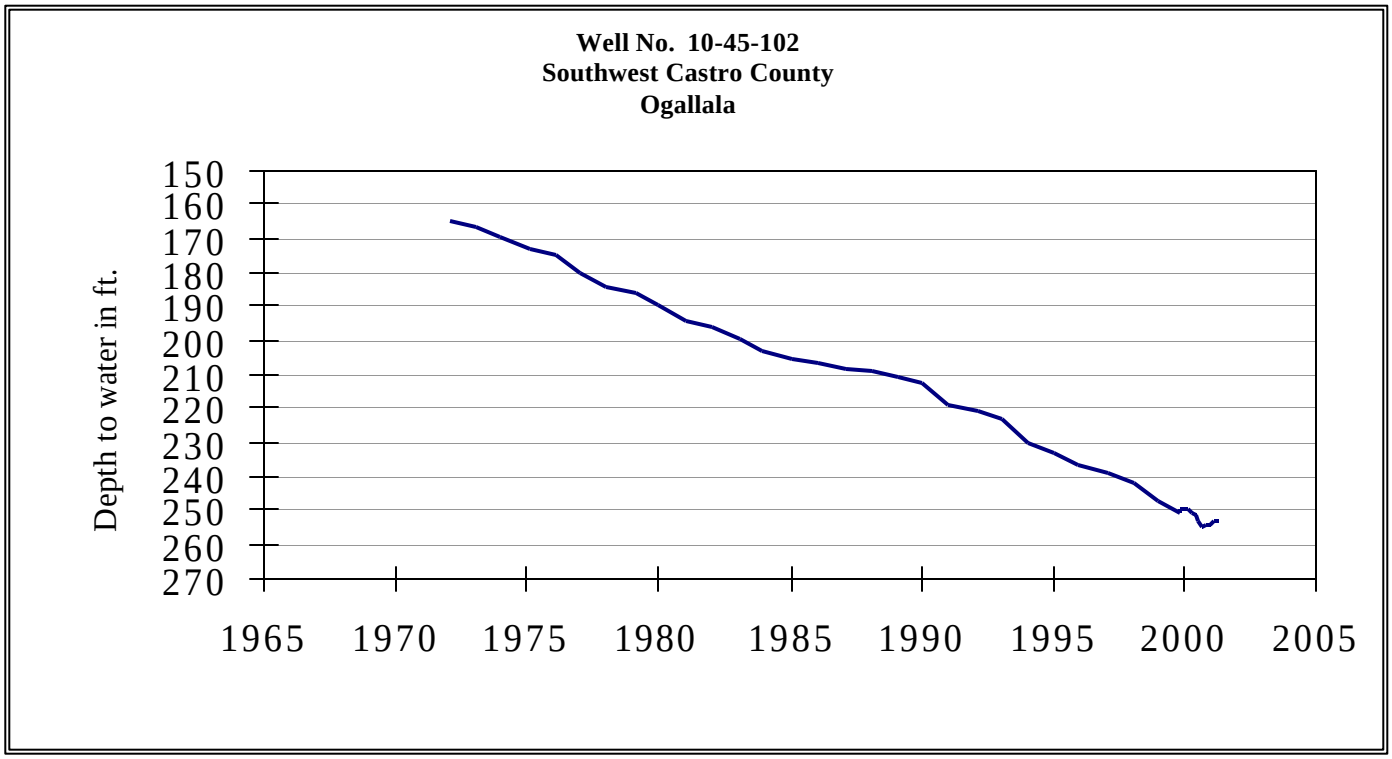
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late June 2001 (acre-feet)	(%)	Change since Late May 2001 (acre-feet)	(%)	Change since Late June 2000 (acre-feet)	(%)
			SOUTHERN					
Choke Canyon Reservoir	75	695,260	248,000	36	-12,000	-2	-25,000	-4
Lake Corpus Christi	76	241,240	75,130	31	-13,760	-6	-50,670	-21
Falcon Reservoir (Texas)	77	1,555,120	239,000	15	-18,000	-1	-18,000	-1
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	280,000	11	-38,000	-1	-25,000	-1
TOTAL		2,491,620	562,130	23	-43,760	-2	-93,670	-4
STATE TOTAL		34,470,430	28,895,900	84	-335,310	-1	1,712,040	5

Note:

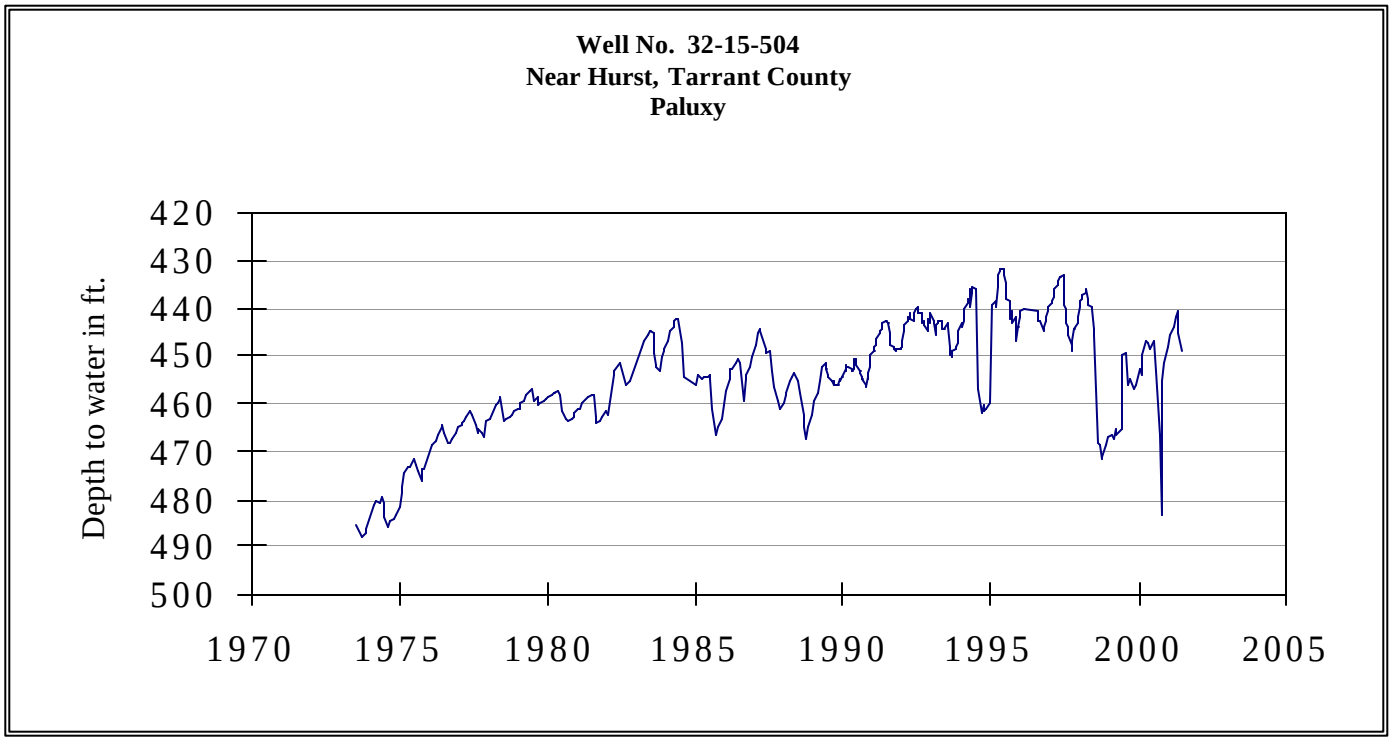
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

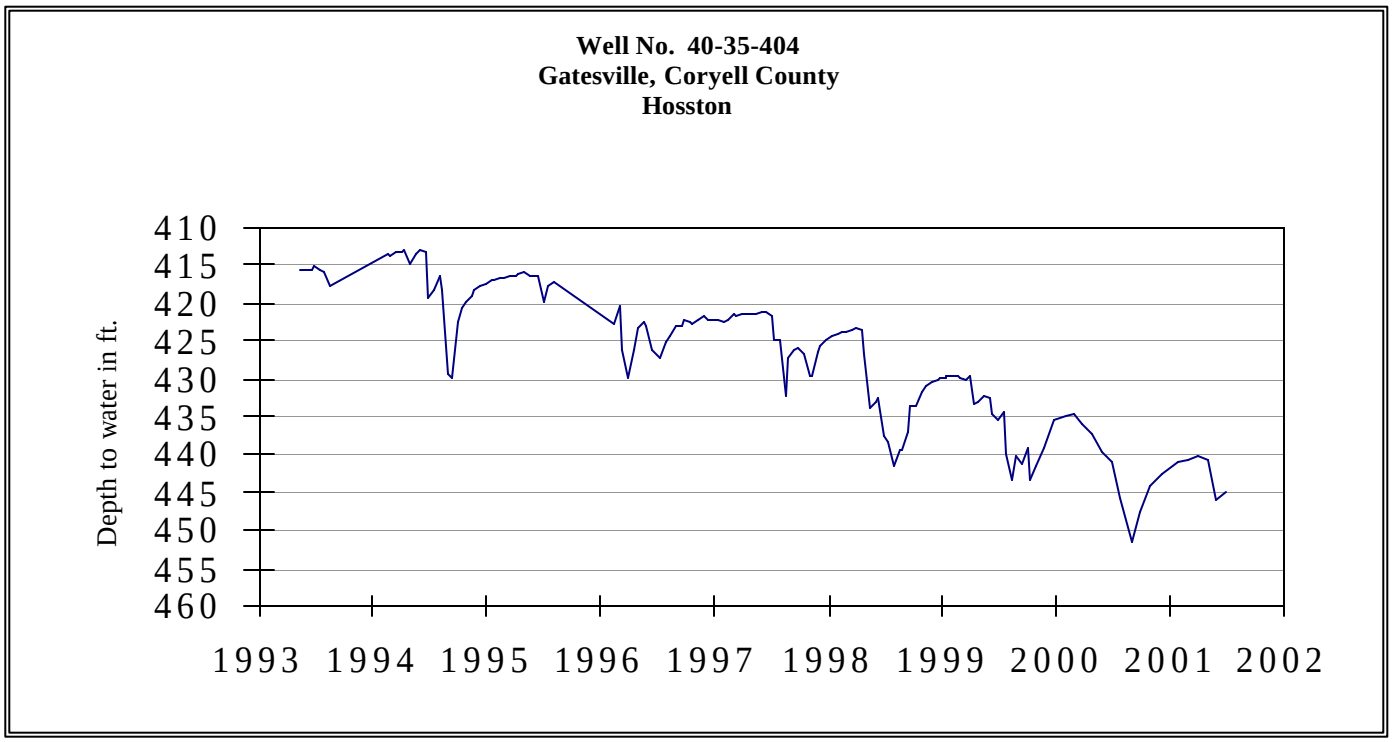
JUNE GROUND WATER LEVELS IN OBSERVATION WELLS



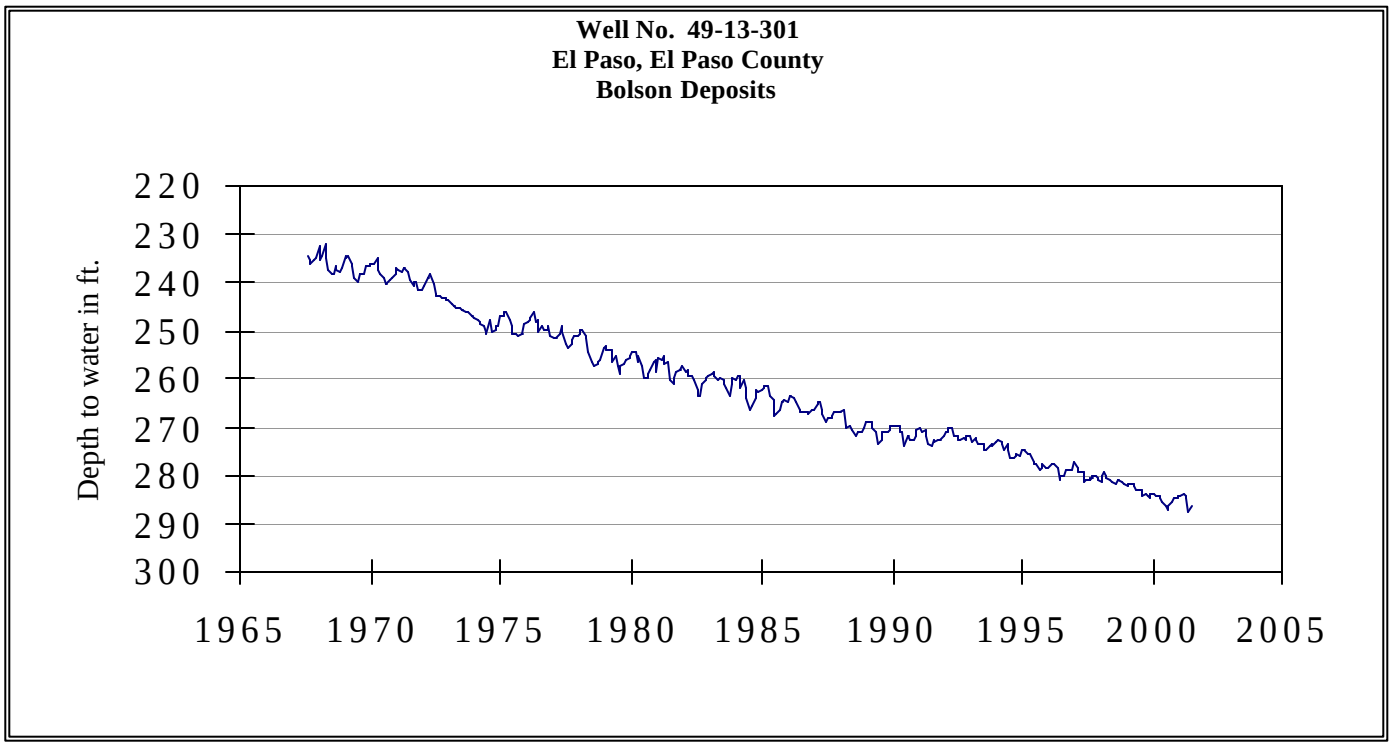
The late June water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was not available.



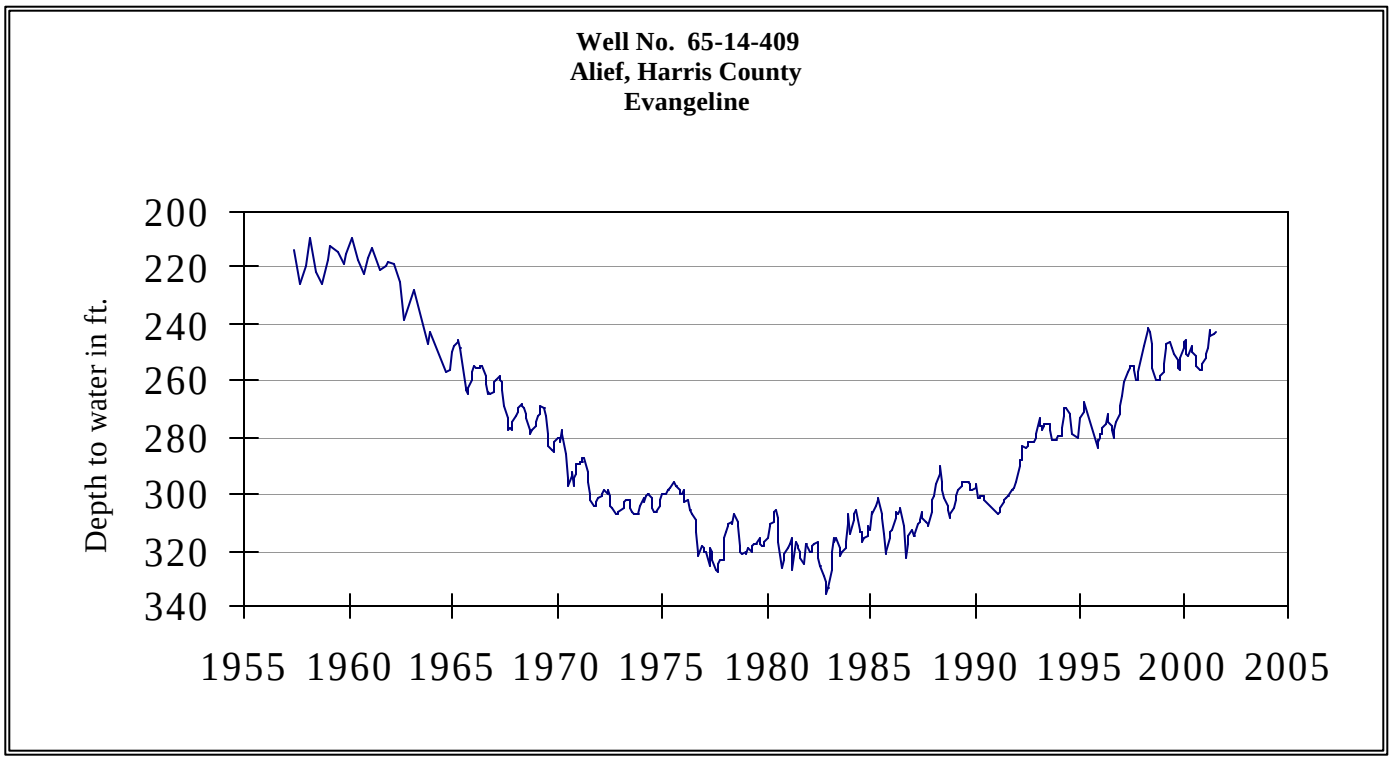
The late June water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 448.75 feet below land surface. This measurement was 3.65 feet below last month's measurement, 2.29 feet below last year's measurement, and 55.36 feet below the initial measurement recorded in 1953.



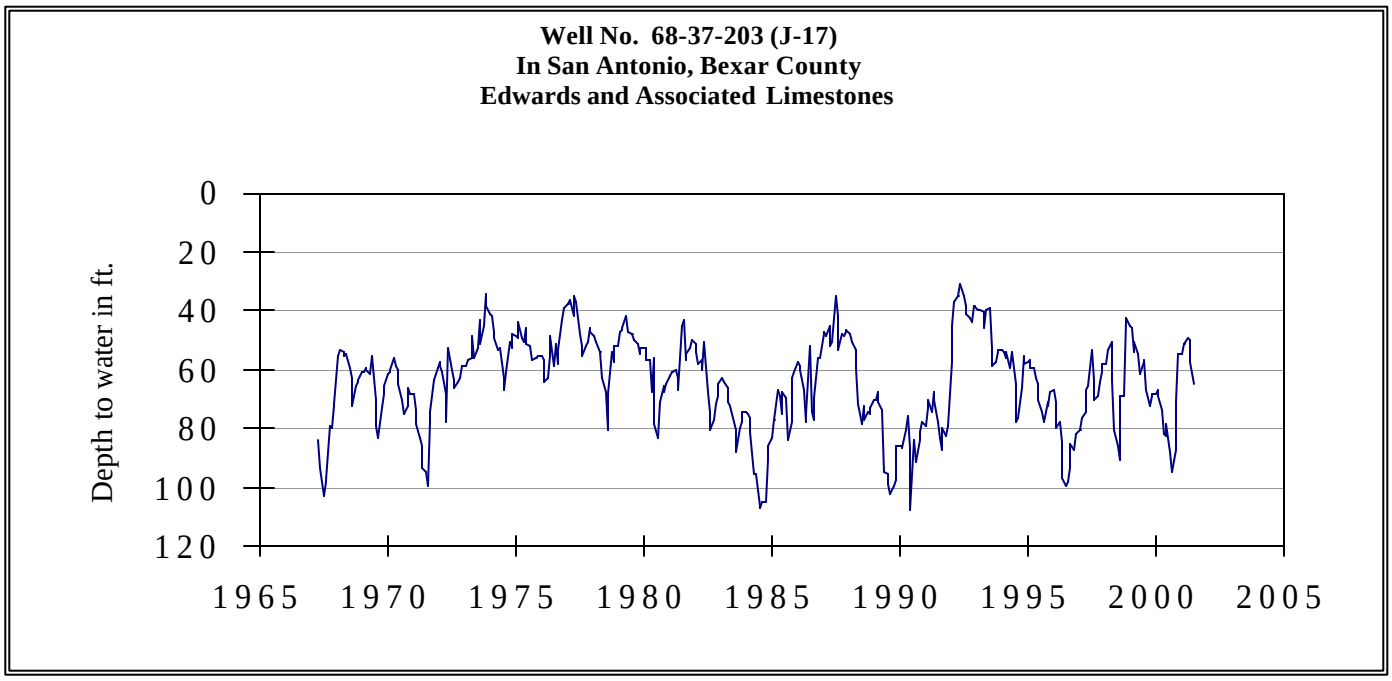
The late June water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 445.05 feet below land surface. This measurement was 0.96 feet above last month's measurement, 3.97 feet below last year's measurement, and 153.05 feet below the initial measurement recorded in 1955.



The late June water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 286.34 feet below land surface. This was 1.3 feet above last month's measurement, 0.03 feet above last year's measurement, and 54.44 feet below the initial measurement recorded in 1964.

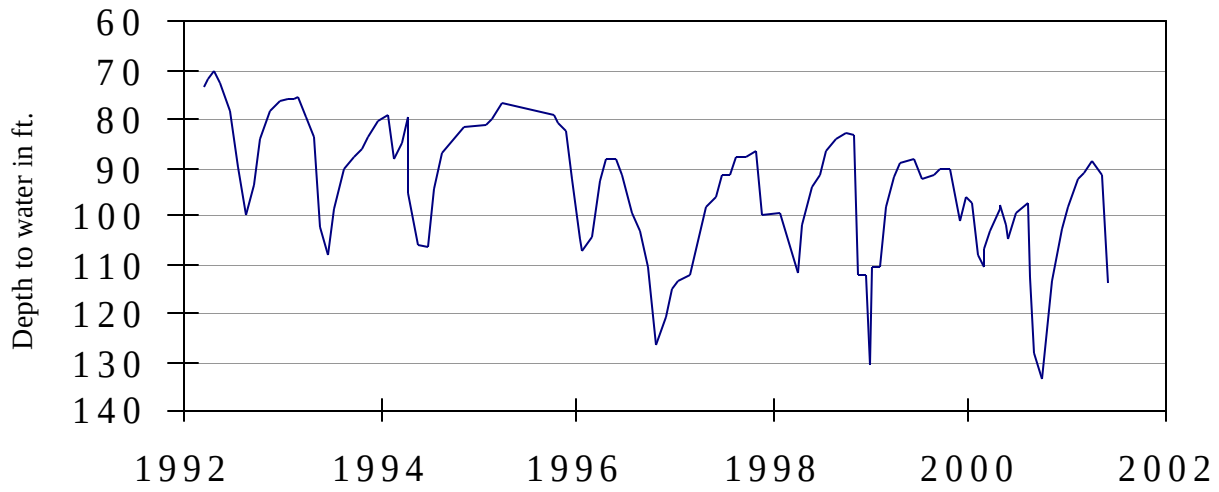


The late June water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 243.00 feet below land surface. This was 0.59 feet above last month's measurement, 6.11 feet above last year's measurement, and 139.77 feet below the initial measurement recorded in 1947.



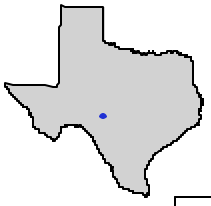
The late June water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 65.08 feet below land surface. This was 7.52 feet below last month's measurement, 13.35 feet above last year's measurement, and 5.46 feet below the initial measurement recorded in 1962.

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



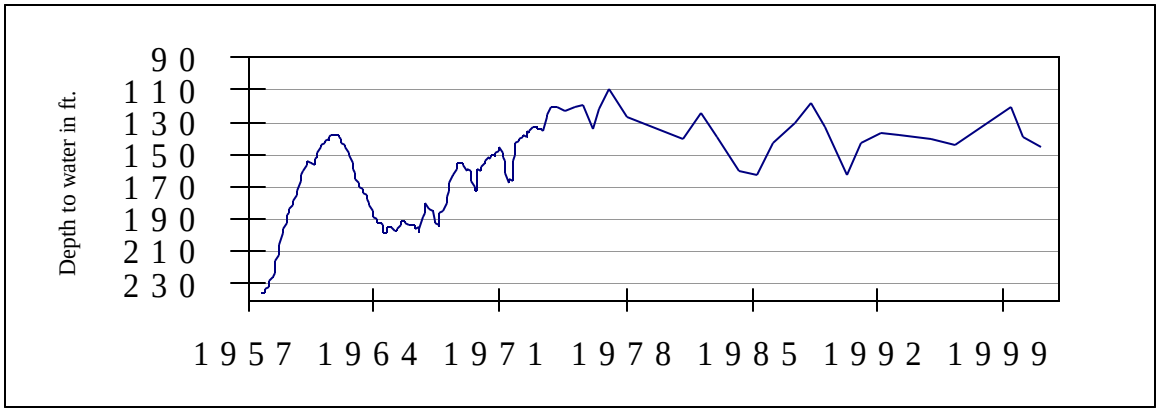
The late June water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 113.97 feet below land surface. This measurement was 15.63 feet below last month's measurement, 16.74 feet below last year's measurement, and 32.72 feet below the initial measurement recorded in 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 6943202
Uvalde County



This 721 feet deep unused well, located approximately 12 miles northeast of Uvalde, at an elevation of 1,086 feet above sea level, was completed in the Edwards aquifer. The water level declines reflect drought periods coupled with increased withdrawal rates during the early to mid-1950's and 1960's, and during the mid-1980's.

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