Texas Water Development Board

WATER Conditions

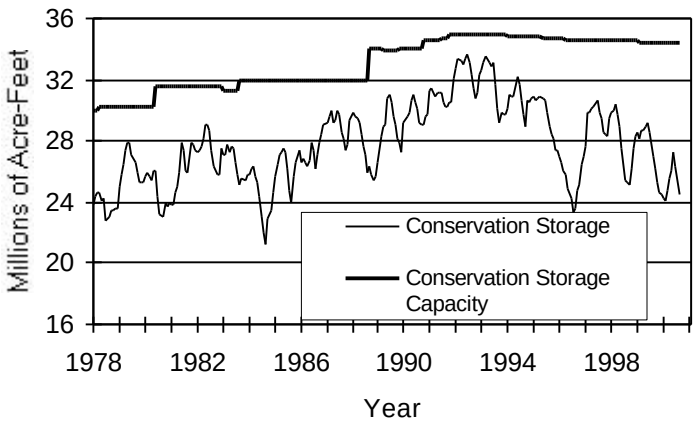
RESERVOIR STORAGE

August 2000

Near the end of August, the 77 reservoirs monitored for this report held 24.5 million acre-feet in conservation storage, or 71.1 percent of the conservation storage capacity of the State's major reservoirs. This is the third-lowest percentage of capacity for an August in 23 years of record, after 1984 and 1996. Storage decreased by 1.78 million acre-feet (-5.2% of conservation storage capacity) during the month. Compared to August 1999, storage is down 2.53 million acre-feet (-7.3%).

Conservation storage decreased during the month in all regions, with greatest percentage decreases occurring in the Upper Coast (-9.5%), Edwards Plateau (-7.3%), and North Central (-6.0%) regions. Only the Southern region (-0.7%) experienced losses in conservation storage of less that 1 percent. Only three monitored reservoirs, all in the East region, held 100 percent of conservation storage near the end of August.

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.

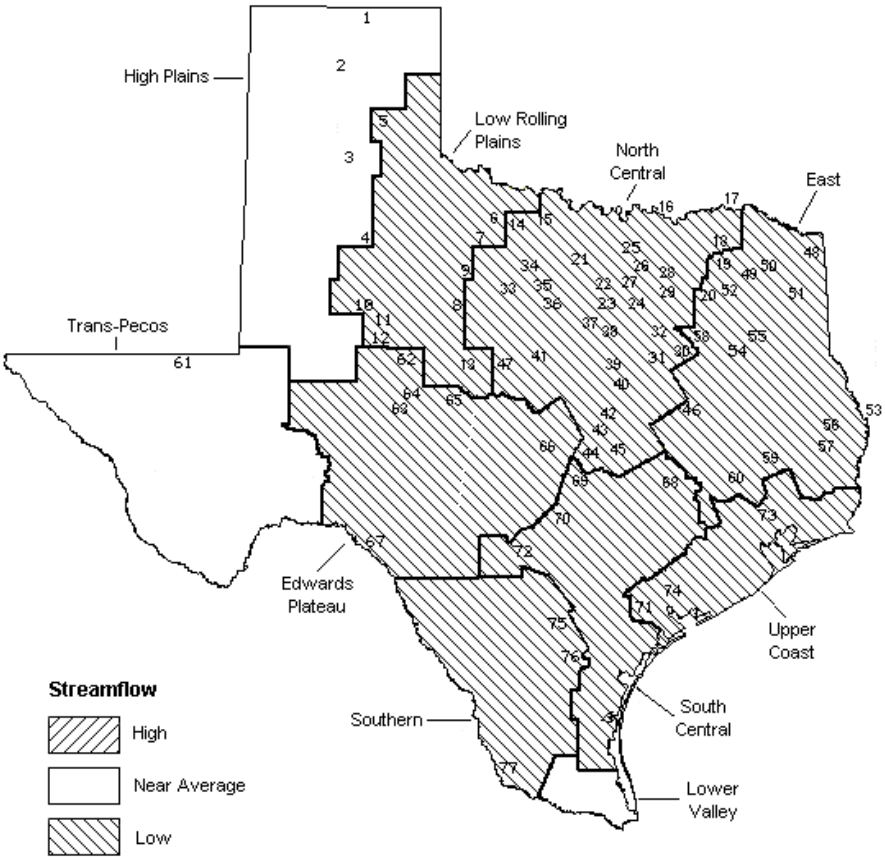
PO BOX 13231 • 1700 N. Congress Avenue • Austin, TX 78711-3231
Telephone (512) 463-7847 • Telefax (512) 475-2053 • 1-800-RELAYTX (for the hearing impaired)

STREAMFLOW

Of 28 reporting index stations in August, computed 30-day mean flows were high (5% - 30% exceedance) at 1 station, near normal (30% - 70% exceedance) at 5 stations, low (70% - 95% exceedance) at 18 stations, and very low (95% - 100% exceedance) at 4 stations. The stations reporting very-low-flow conditions lie in the East, South Central, and Southern regions. The lone station reporting high-flows was the Canadian River near Amarillo in the High Plains. In comparison to July, flows decreased at 20 index stations, increased at 4, and remained the same, with no flow recorded, at 4.

Flows in August were near normal only in the High Plains and Trans-Pecos regions, and were below normal elsewhere. All reporting index stations in the North Central, East, Upper Coast, and Southern regions reported low or very low flows. Five stations reported zero flows in August - Elm Creek at Ballinger, Denton Creek near Justin, Cowhouse Creek at Pidcoke, North Concho River near Carlsbad, and Nueces River near Tilden.

AUGUST 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 August 2000 (acre-feet)	(%)	Change since Late July 2000 (acre-feet)	(%)	Change since Late August 1999 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	17,730	29	-2,380	-4	-8,719	-14
Lake Meredith (Texas)	2	500,000	354,700	71	-18,300	-4	-69,200	-14
Lake Meredith (Texas and Oklahoma)	(2)	779,560	354,700	46	-18,300	-2	-69,200	-9
MacKenzie Reservoir	3	46,250	8,550	18	-440	-1	-1,830	-4
White River Lake	4	31,850	13,080	41	-1,020	-3	-5,970	-19
TOTAL		639,000	394,060	62	-22,140	-3	-85,719	-13
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	24,660	42	-1,420	-2	-2,530	-4
Lake Kemp	6	319,600	119,100	37	-22,500	-7	-67,100	-21
Miller's Creek Reservoir	7	27,890	7,250	26	-790	-3	-5,980	-21
Fort Phantom Hill Reservoir	8	70,030	23,810	34	-2,370	-3	540	1
Lake Stamford	9	52,700	8,330	16	-1,490	-3	-370	-1
Lake J. B. Thomas	10	202,300	30,110	15	-2,450	-1	-6,130	-3
Lake Colorado City	11	30,800	23,640	77	-1,680	-5	8,070	26
Champion Creek Reservoir	12	41,600	4,670	11	-350	-1	-2,950	-7
Hords Creek Lake	13	8,600	3,660	43	-310	-4	-485	-6
TOTAL		811,720	245,230	30	-33,360	-4	-76,935	-9
NORTH CENTRAL								
Lake Kickapoo	14	106,000	42,780	40	-4,589	-4	-17,242	-16
Lake Arrowhead	15	262,100	98,740	38	-8,960	-3	-56,160	-21
Lake Texoma	16	2,722,300	2,400,685	88	-265,210	-10	-6,865	0
Pat Mayse Lake	17	124,500	111,190	89	-6,043	-5	2,213	2
Cooper Lake	18	273,000	251,553	92	-16,190	-6	18,764	7
Lake Sulphur Springs	19	17,710	16,215	92	-1,295	-7	940	5
Lake Tawakoni	20	936,200	890,900	95	-33,800	-4	21,300	2
Bridgeport Reservoir	21	374,830	187,675	50	-16,452	-4	-93,525	-25
Eagle Mountain Reservoir	22	178,380	110,628	62	-16,812	-9	-30,767	-17
Benbrook Lake	23	88,200	61,980	70	-15,130	-17	-4,484	-5
Joe Pool Lake	24	175,800	167,600	95	-6,900	-4	1,287	1
Ray Roberts Lake	25	798,760	452,621	57	-83,373	-10	-222,224	-28
Lewisville Lake	26	555,000	319,900	58	11,300	2	-71,474	-13
Grapevine Lake	27	187,700	116,000	62	-7,600	-4	-31,371	-17
Lavon Lake	28	443,800	357,475	81	-52,069	-12	4,505	1
Lake Ray Hubbard	29	413,420	407,233	99	28,533	7	-6,187	-1
Richland-Chambers Creek Lake	30	1,103,820	1,065,005	96	-38,815	-4	10,696	1
Navarro Mills Lake	31	55,810	48,591	87	-5,118	-9	1,137	2
Bardwell Lake	32	53,580	48,540	91	-2,940	-5	1,484	3
Hubbard Creek Reservoir	33	317,800	153,400	48	-11,400	-4	-79,600	-25
Lake Graham	34	45,000	32,180	72	-2,470	-5	-12,820	-28
Possum Kingdom Lake	35	551,820	456,700	83	-28,900	-5	-14,500	-3
Lake Palo Pinto	36	42,200	21,539	51	-3,075	-7	-15,030	-36
Lake Granbury	37	135,680	119,470	88	-6,730	-5	-13,530	-10
Lake Pat Cleburne	38	25,300	22,129	87	-2,106	-8	1,655	7
Whitney Lake	39	622,800	522,100	84	-56,900	-9	78,728	13
Waco Lake	40	144,500	134,700	93	-9,800	-7	-204	0
Proctor Lake	41	55,590	9,170	16	-3,060	-6	-19,679	-35
Belton Lake	42	434,500	375,100	86	-16,900	-4	-44,132	-10
Stillhouse Hollow Lake	43	226,060	205,272	91	-10,703	-5	-17,155	-8
Lake Georgetown	44	37,010	17,590	48	-3,040	-8	-17,359	-47
Granger Lake	45	54,280	46,720	86	-4,430	-8	-6,143	-11
Lake Limestone	46	215,750	196,600	91	-10,800	-5	1,300	1
Lake Brownwood	47	143,400	88,760	62	-7,750	-5	-10,410	-7
TOTAL		11,922,600	9,556,741	80	-719,527	-6	-646,852	-5

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late August 2000 (acre-feet)	(%)	Change since Late July 2000 (acre-feet)	(%)	Change since Late August 1999 (acre-feet)	(%)
EAST								
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	65,260	98	-1,540	-2	-1,540	-2
Lake Bob Sandlin	50	202,300	202,300	100	0	0	4,700	2
Lake O' the Pines	51	252,000	242,584	96	-9,416	-4	-9,416	-4
Lake Fork Reservoir	52	635,200	635,200	100	0	0	8,900	1
Toledo Bend Reservoir	53	4,472,900	3,941,000	88	-347,000	-8	153,000	3
Lake Palestine	54	411,300	374,200	91	-21,300	-5	-10,300	-3
Lake Tyler	55	73,700	60,499	82	-5,345	-7	-13,201	-18
Sam Rayburn Reservoir	56	2,876,300	2,129,000	74	-110,000	-4	-428,686	-15
B. A. Steinhagen Lake	57	94,200	86,291	92	1,656	2	1,423	2
Cedar Creek Reservoir	58	637,050	594,683	93	-36,273	-6	-42,367	-7
Lake Livingston	59	1,750,000	1,647,000	94	-64,000	-4	-33,000	-2
Lake Conroe	60	429,900	353,000	82	-8,100	-2	-44,700	-10
TOTAL		12,044,350	10,473,717	87	-601,318	-5	-415,187	-3
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	52,340	17	-11,440	-4	-28,460	-9
TOTAL		307,000	52,340	17	-11,440	-4	-28,460	-9
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	484,800	89,150	18	-5,720	-1	19,180	4
Twin Buttes Reservoir	63	177,800	1,113	1	-3,374	-2	-11,274	-6
O.C. Fisher Lake	64	119,200	7,880	7	-1,870	-2	-1,912	-2
O. H. Ivie Reservoir	65	554,340	301,700	54	-16,100	-3	-63,600	-11
Lake Buchanan	66	896,980	499,300	56	-99,200	-11	-244,793	-27
Amistad Reservoir (Texas)	67	1,771,030	863,000	49	-166,000	-9	-193,000	-11
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,029,000	33	-203,000	-6	-319,000	-10
TOTAL		4,004,150	1,762,143	44	-292,264	-7	-495,399	-12
SOUTH CENTRAL								
Somerville Lake	68	155,060	105,479	68	-14,852	-10	-44,060	-28
Lake Travis	69	1,144,100	612,200	54	-12,500	-1	-396,405	-35
Canyon Lake	70	385,600	336,643	87	-6,965	-2	-39,791	-10
Coleto Creek Reservoir	71	35,060	25,910	74	-2,100	-6	-2,050	-6
Medina Lake	72	254,000	117,800	46	-14,500	-6	-119,700	-47
TOTAL		1,973,820	1,198,032	61	-50,917	-3	-602,006	-30
UPPER COAST								
Lake Houston	73	128,860	106,600	83	-14,900	-12	-7,600	-6
Lake Texana	74	157,900	130,500	83	-12,400	-8	-14,100	-9
TOTAL		286,760	237,100	83	-27,300	-10	-21,700	-8

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

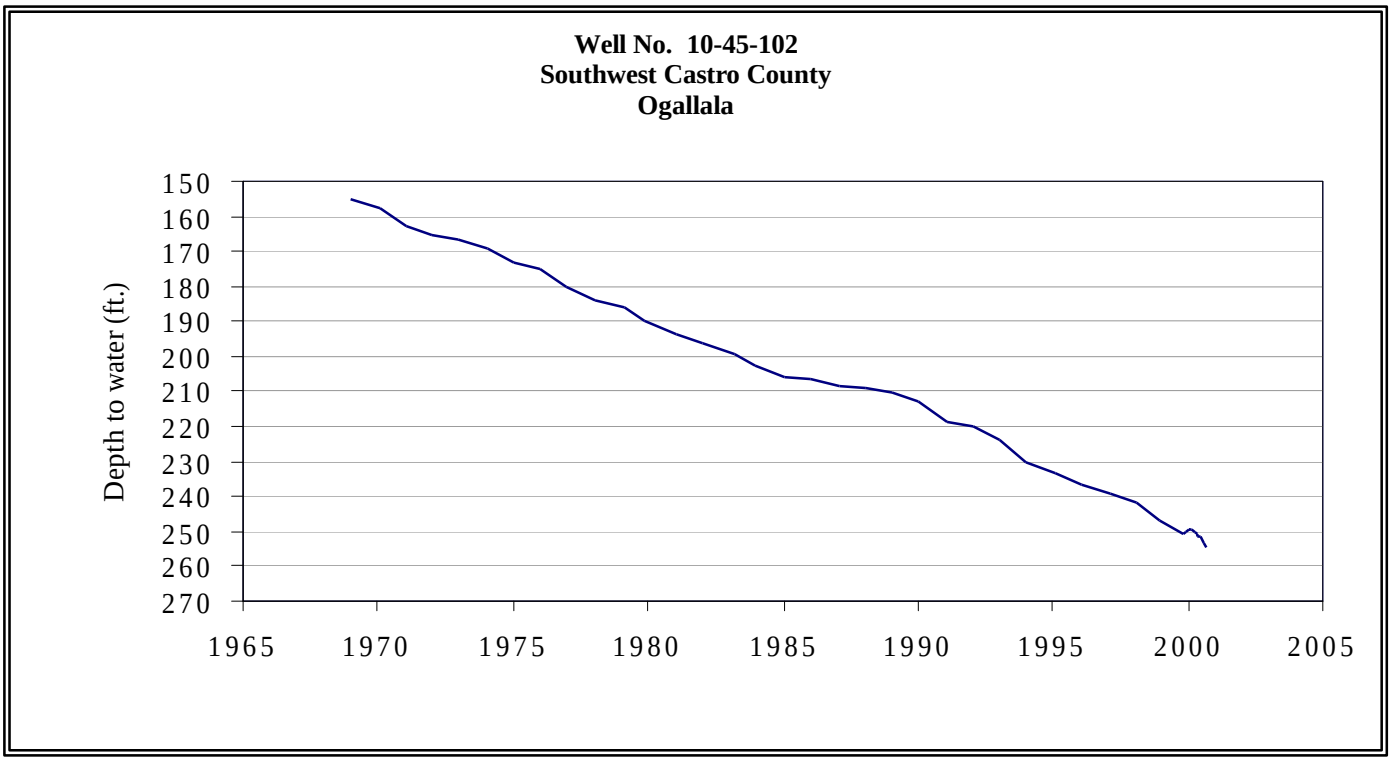
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late August 2000 (acre-feet)	(%)	Change since Late July 2000 (acre-feet)	(%)	Change since Late August 1999 (acre-feet)	(%)
			SOUTHERN					
Choke Canyon Reservoir	75	695,260	248,000	36	-11,000	-2	-89,000	-13
Lake Corpus Christi	76	241,240	82,990	34	-14,800	-6	-96,010	-40
Falcon Reservoir (Texas)	77	1,555,120	256,000	16	8,000	1	32,000	2
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	295,000	11	9,000	0	-144,000	-5
TOTAL		2,491,620	586,990	24	-17,800	-1	-153,010	-6
STATE TOTAL		34,481,020	24,506,353	71	-1,776,066	-5	-2,525,268	-7

Note:

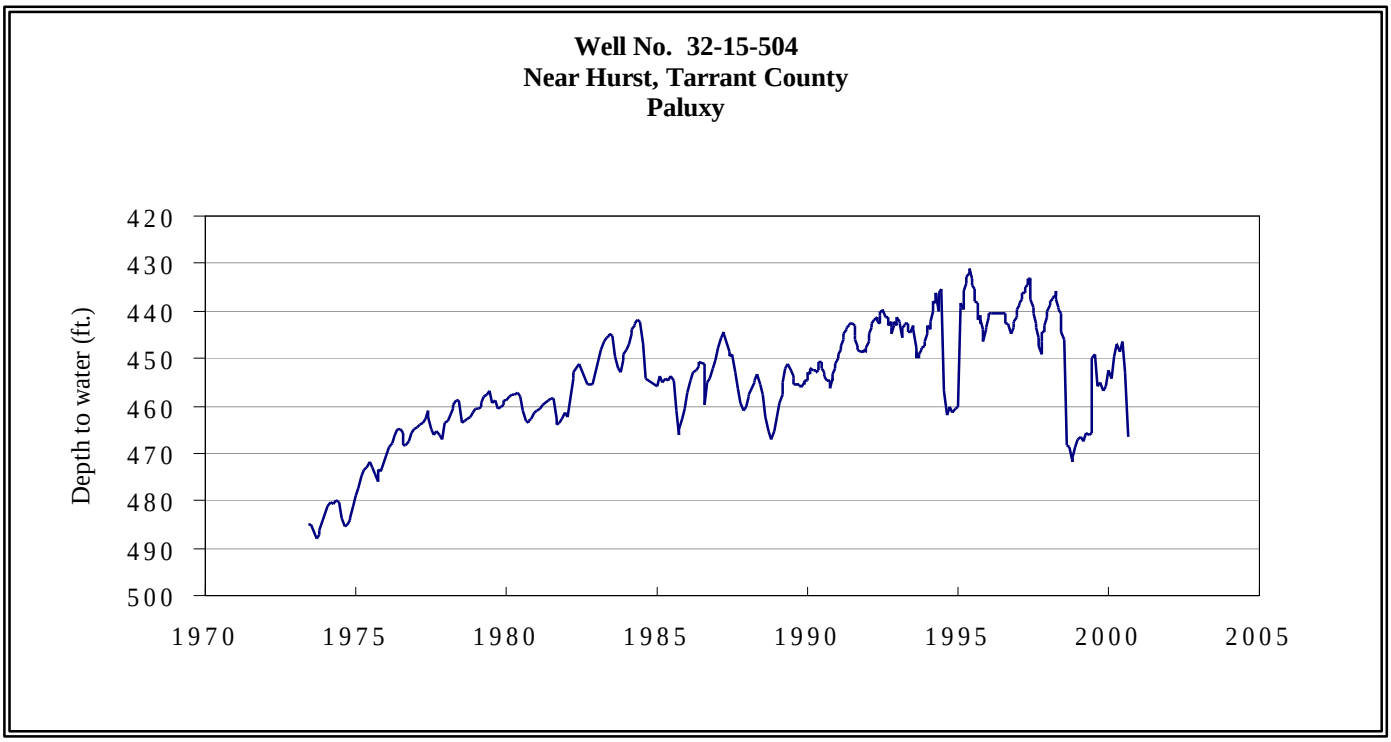
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

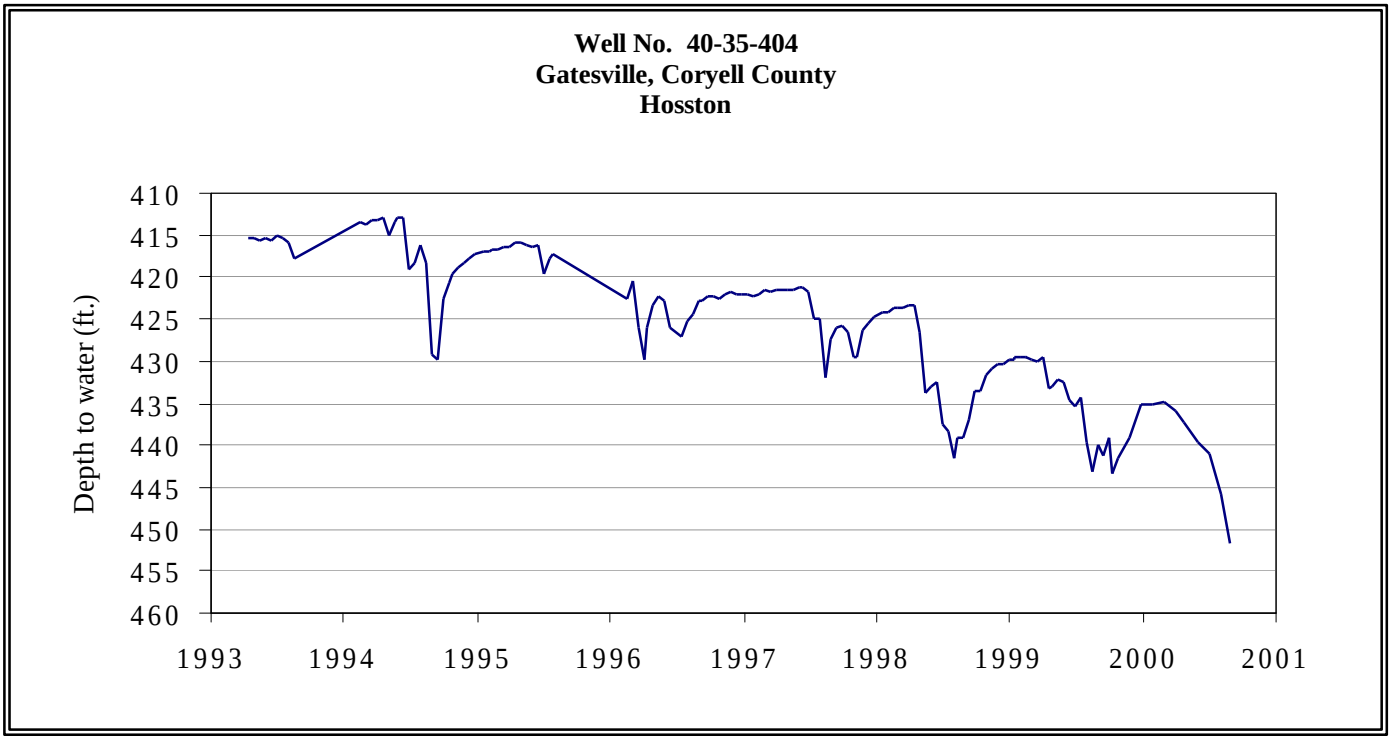
AUGUST GROUND WATER LEVELS IN OBSERVATION WELLS



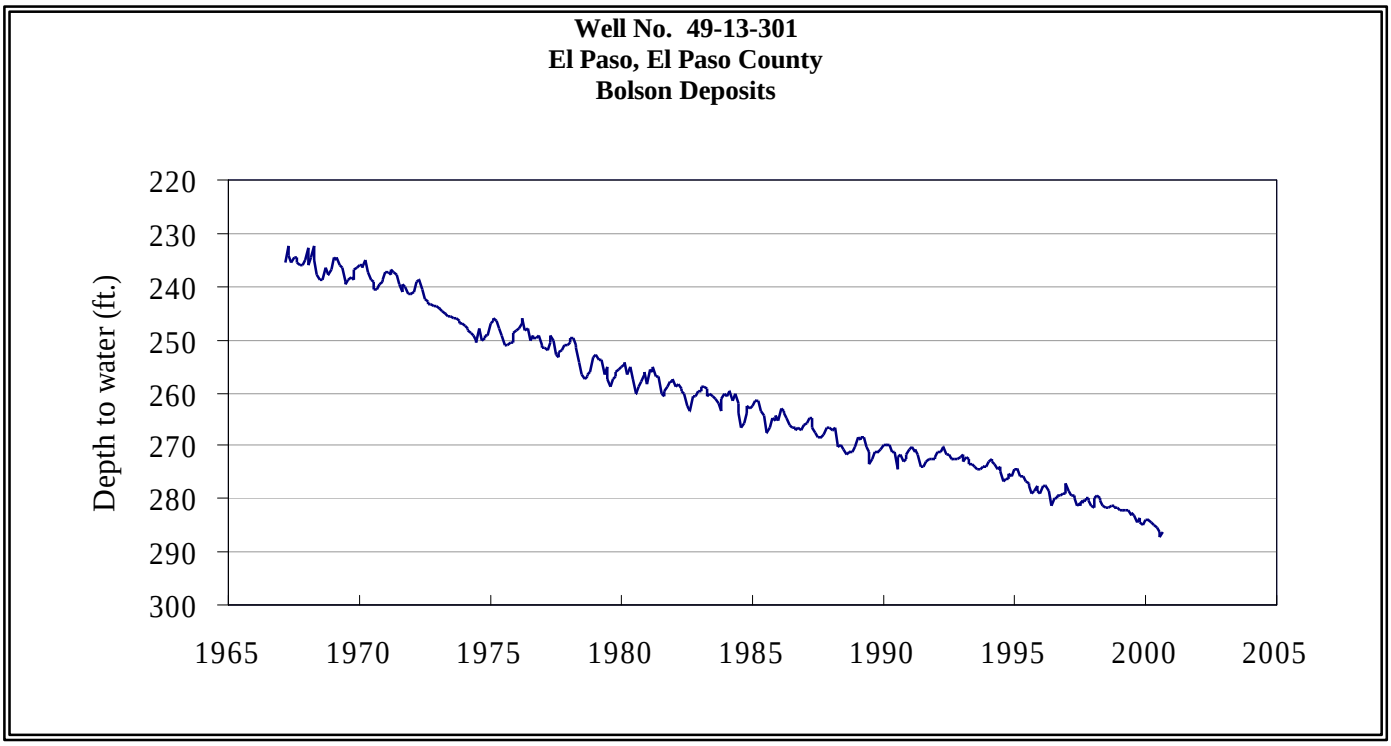
The late August water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 254.8 feet below land surface. This measurement was 1.2 feet below last month's measurement and 98.8 feet below the initial measurement recorded in 1968.



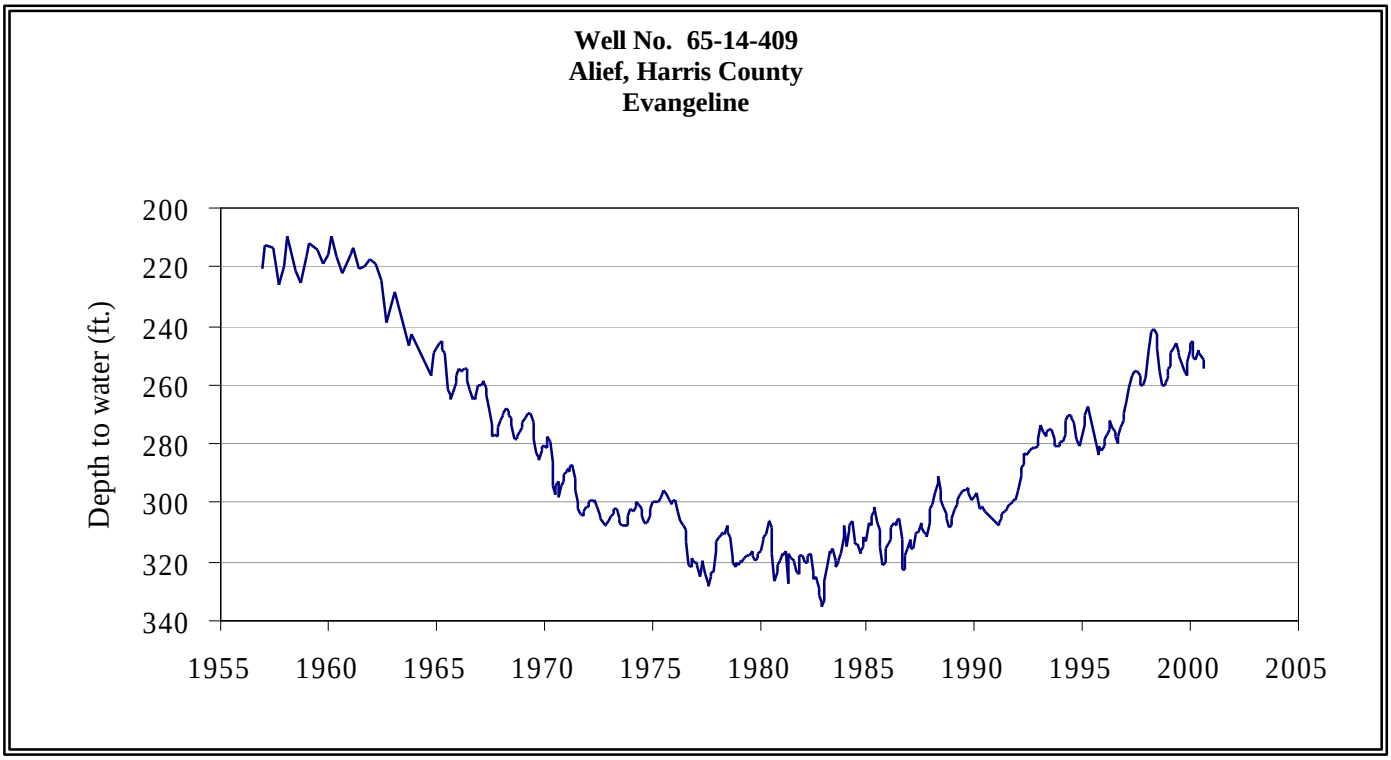
The late August water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 466.46 feet below land surface. This measurement was 13.8 feet below last month's measurement, 10.07 feet above last year's measurement, and 73.32 feet below the initial measurement recorded in 1953.



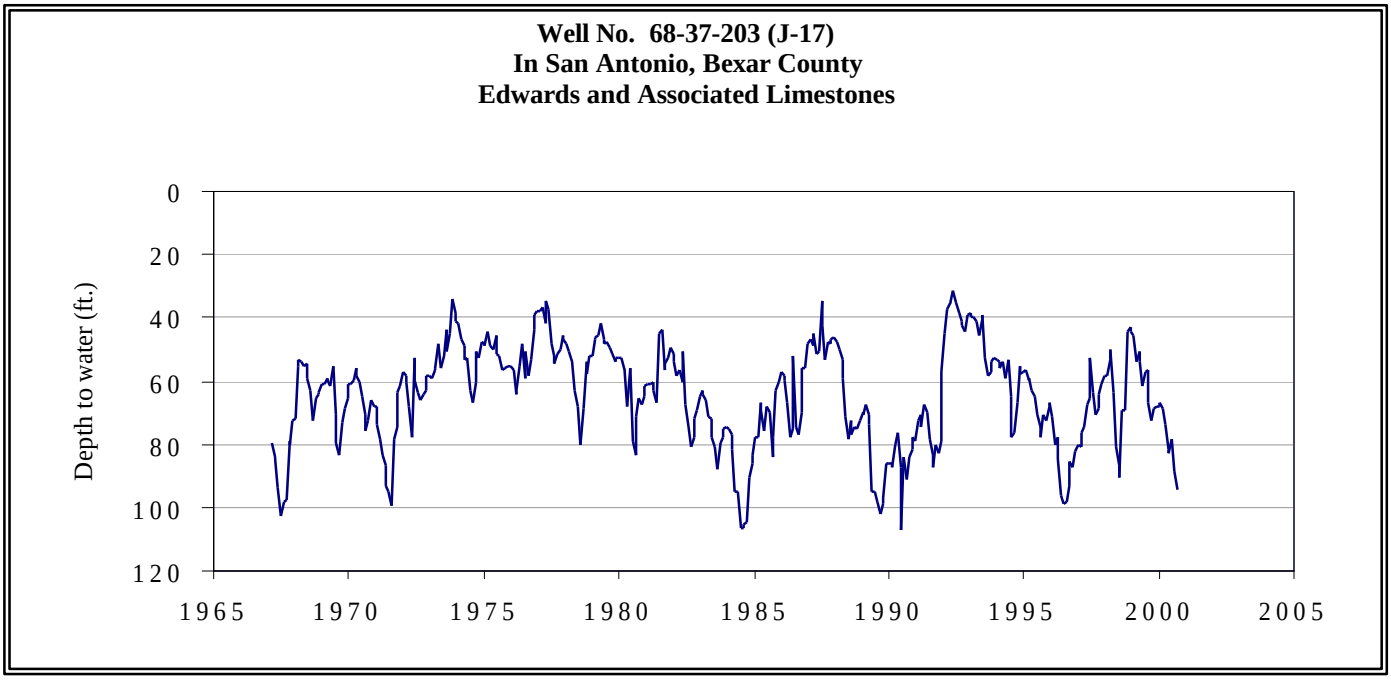
The late August water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 451.66 feet below land surface. This measurement was 1.91 feet below last month's measurement, 8.04 feet below last year's measurement, and 155.66 feet below the initial measurement recorded in 1955.



The late August water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 286.29 feet below land surface. This was 0.84 feet above last month's measurement, 2.01 feet below last year's measurement, and 54.39 feet below the initial measurement recorded in 1964.

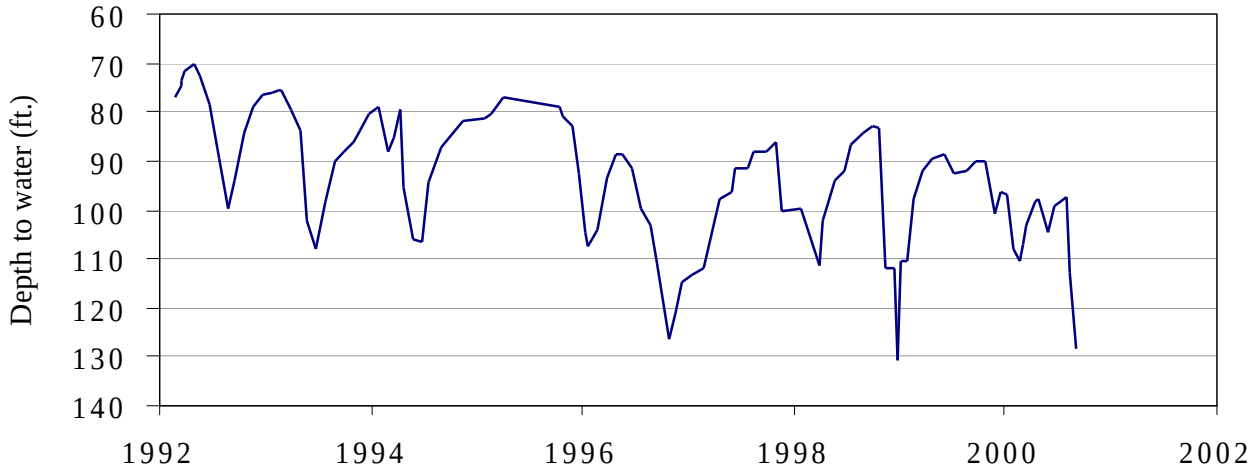


The late August water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 254.42 feet below land surface. This was 3.3 feet below last month's measurement, 1.32 feet below last year's measurement, and 151.19 feet below the initial measurement recorded in 1947.



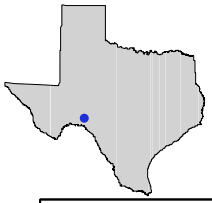
The late August water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 94.65 feet below land surface. This was 6.32 feet below last month's measurement, 27.65 feet below last year's measurement, and 35.03 feet below the initial measurement recorded in 1962.

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



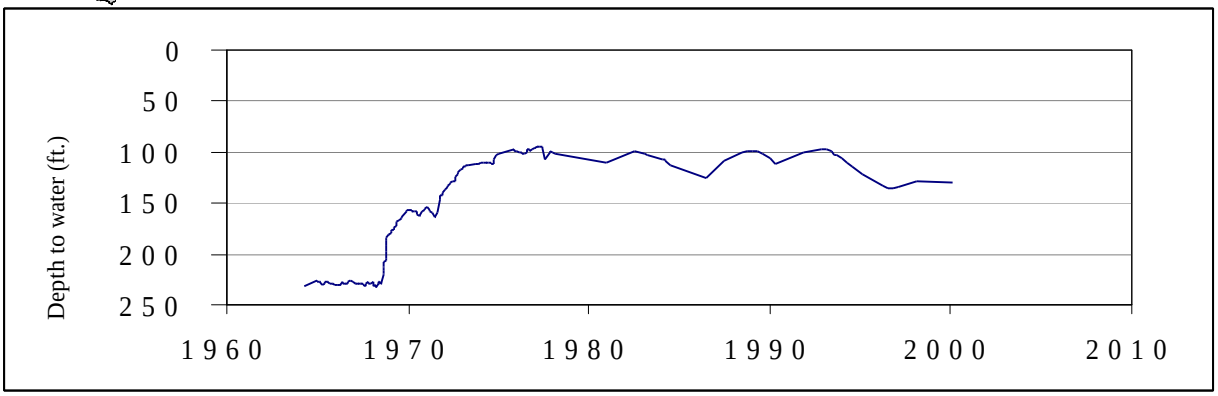
The late August water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 128.28 feet below land surface. This measurement was 15.5 feet below last month's measurement, 36.48 feet above last year's measurement, and 47.03 feet below the initial measurement recorded 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 70-25-502
Val Verde County



This 520-foot deep stock well, approximately 3 miles north of the eastern end of Lake Amistad at an elevation of 1,228 feet above sea level, was completed in the Edwards-Trinity (Plateau) aquifer. The hydrograph reflects a greater reliance on surface water from Lake Amistad in the late 60s followed more recently by groundwater level decline.