Texas Water Development Board

WATER Conditions

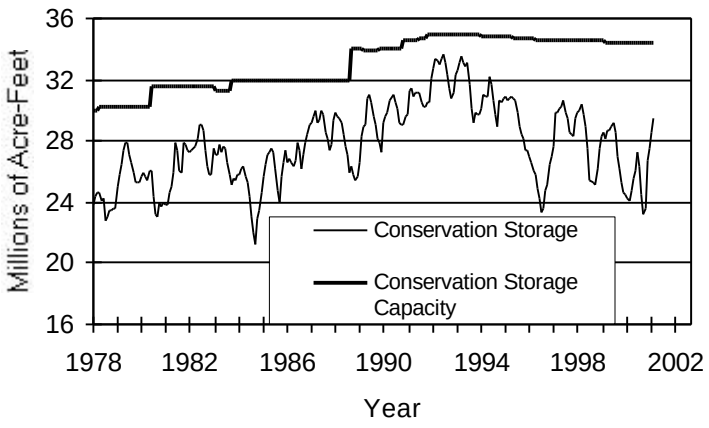
RESERVOIR STORAGE

February 2001

Near the end of February, the 77 reservoirs monitored for this report held 29.5 million acre-feet in conservation storage, or 85.5 percent of the conservation storage capacity of the State's major reservoirs. Statewide total storage remains near normal for this time of year. Storage increased by 0.87 million acre-feet (+2.5% of conservation storage capacity) during the month. Compared to February 2000, storage is up 5.42 million acre-feet (+15.7%). Statewide storage was on the rise at the end of the month

For the month, storage in only the Upper Coast (-1.2%) climatic region decreased. The East (99.8%), South Central (97.8%), and Upper Coast (98.8%) regions are all near capacity, while the Low Rolling Plains (37.1%), Trans-Pecos (23.4%), and Southern (26.8%) regions remained below 40%. Storage is at 100% in 38 reservoirs, 6 more than last month. Storage in the High Plains (-8.8%), Trans-Pecos (-5.8%), and Southern (-2.0%) 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.

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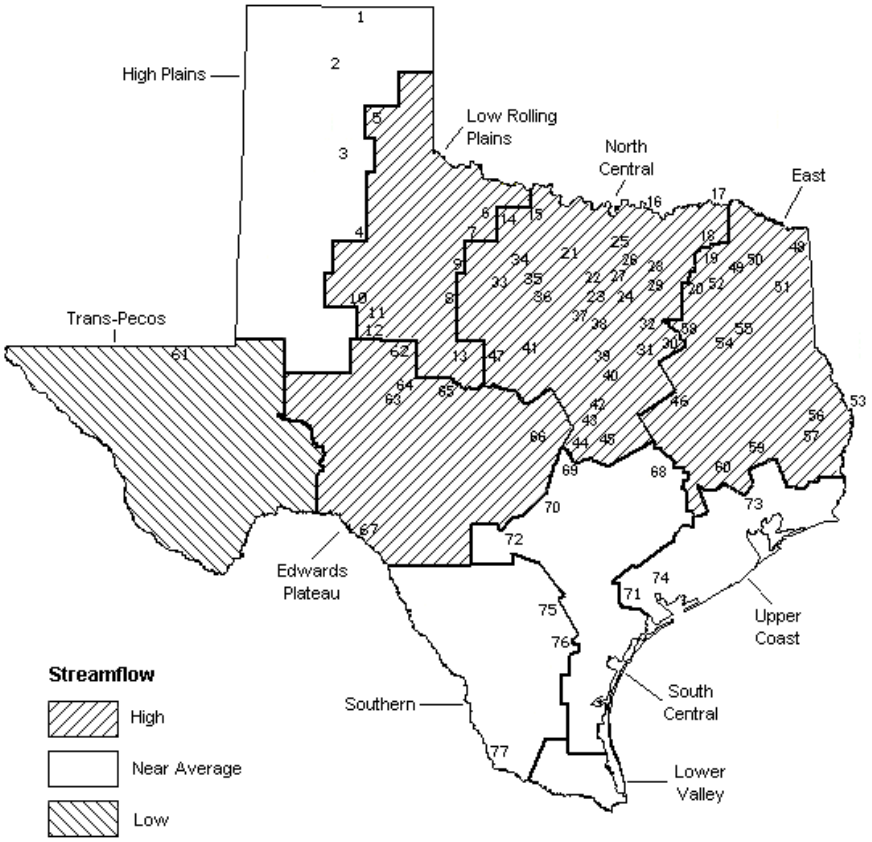
STREAMFLOW

Of 29 reporting index stations in February, computed 30-day mean flows were very high (0% - 5% exceedance) at 3 stations, high (5% - 30% exceedance) at 10 stations, near normal (30% - 70% exceedance) at 14 stations, and low (70% - 95% exceedance) at 2 stations. In comparison to January, flows increased at 15 index stations and decreased at 14.

On a regional basis, flows in February were high in the Low Rolling Plains, North Central, East, and Edwards Plateau regions, near normal in the High Plains, South Central, Upper Coast, and Southern regions, and low in the Trans-Pecos region. Low flows were reported at only the Pecos River near Girvin and Atascosa River at Whitsett stations.

FEBRUARY 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 February 2001 (acre-feet)	(%)	Change since Late January 2001 (acre-feet)	(%)	Change since Late February 2001 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	12,190	20	-570	-1	-4,055	-7
Lake Meredith (Texas)	2	500,000	337,200	67	1,300	0	-46,200	-9
Lake Meredith (Texas and Oklahoma)	(2)	779,560	337,200	43	1,300	0	-46,200	-6
MacKenzie Reservoir	3	46,250	7,930	17	-70	0	-1,540	-3
White River Lake	4	31,850	11,550	36	-40	0	-4,460	-14
TOTAL		639,000	368,870	58	620	0	-56,255	-9
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	24,150	41	520	1	-1,210	-2
Lake Kemp	6	319,600	160,300	50	13,600	4	16,400	5
Miller's Creek Reservoir	7	27,890	9,820	35	1,970	7	-780	-3
Fort Phantom Hill Reservoir	8	70,030	39,730	57	1,240	2	19,140	27
Lake Stamford	9	52,700	12,340	23	3,530	7	1,450	3
Lake J. B. Thomas	10	202,300	25,150	12	-1,110	-1	-2,780	-1
Lake Colorado City	11	30,800	20,860	68	60	0	7,300	24
Champion Creek Reservoir	12	41,600	4,460	11	50	0	-540	-1
Hords Creek Lake	13	8,600	4,390	51	290	3	1,280	15
TOTAL		811,720	301,200	37	20,150	2	40,260	5
NORTH CENTRAL								
Lake Kickapoo	14	106,000	73,390	69	13,100	12	22,130	21
Lake Arrowhead	15	262,100	162,800	62	43,800	17	34,500	13
Lake Texoma	16	2,722,300	2,722,300	100	99,300	4	496,869	18
Pat Mayse Lake	17	124,500	124,500	100	0	0	11,005	9
Cooper Lake	18	273,000	273,000	100	0	0	43,404	16
Lake Sulphur Springs	19	17,710	17,710	100	0	0	2,551	14
Lake Tawakoni	20	936,200	936,200	100	0	0	197,400	21
Bridgeport Reservoir	21	374,830	313,500	84	99,200	26	103,811	28
Eagle Mountain Reservoir	22	178,380	178,380	100	53,680	30	46,468	26
Benbrook Lake	23	88,200	88,200	100	11,610	13	18,763	21
Joe Pool Lake	24	175,800	175,800	100	0	0	18,812	11
Ray Roberts Lake	25	798,760	777,200	97	173,600	22	202,642	25
Lewisville Lake	26	555,000	555,000	100	60,800	11	224,699	40
Grapevine Lake	27	187,700	187,700	100	5,400	3	58,382	31
Lavon Lake	28	443,800	443,800	100	0	0	137,257	31
Lake Ray Hubbard	29	413,420	413,420	100	0	0	0	0
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	150,726	14
Navarro Mills Lake	31	55,810	55,810	100	0	0	14,580	26
Bardwell Lake	32	53,580	53,580	100	3,510	7	14,960	28
Hubbard Creek Reservoir	33	317,800	156,700	49	16,000	5	-39,000	-12
Lake Graham	34	45,000	45,000	100	7,120	16	6,380	14
Possum Kingdom Lake	35	551,820	535,200	97	47,700	9	111,800	20
Lake Palo Pinto	36	27,650	27,170	98	15,190	55	-820	-3
Lake Granbury	37	135,680	125,600	93	-10,080	-7	11,707	9
Lake Pat Cleburne	38	25,300	25,300	100	0	0	9,280	37
Whitney Lake	39	622,800	622,800	100	98,000	16	193,900	31
Waco Lake	40	144,500	144,500	100	0	0	33,940	23
Proctor Lake	41	55,590	36,880	66	15,570	28	16,843	30
Belton Lake	42	434,500	434,500	100	0	0	62,584	14
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	17,214	8
Lake Georgetown	44	37,010	37,010	100	440	1	12,280	33
Granger Lake	45	54,280	54,280	100	0	0	2,430	4
Lake Limestone	46	215,750	215,600	100	-150	0	43,400	20
Lake Brownwood	47	143,400	121,000	84	12,400	9	39,150	27
TOTAL		11,908,050	11,463,710	96	766,190	6	2,320,047	19

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late February 2001 (acre-feet)	(%)	Change since Late January 2001 (acre-feet)	(%)	Change since Late February 2001 (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	2,760	4
Lake Bob Sandlin	50	202,300	202,300	100	0	0	18,900	9
Lake O' the Pines	51	252,000	252,000	100	0	0	17,936	7
Lake Fork Reservoir	52	635,200	635,200	100	0	0	40,100	6
Toledo Bend Reservoir	53	4,472,900	4,472,900	100	0	0	1,029,900	23
Lake Palestine	54	411,300	411,300	100	0	0	50,500	12
Lake Tyler	55	73,700	73,700	100	0	0	1,772	2
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	0	0	1,066,300	37
B. A. Steinhagen Lake	57	94,200	75,710	80	5,920	6	37,099	39
Cedar Creek Reservoir	58	637,050	637,050	100	0	0	88,089	14
Lake Livingston	59	1,750,000	1,750,000	100	0	0	0	0
Lake Conroe	60	429,900	419,100	97	-3,800	-1	43,900	10
TOTAL		12,044,350	12,015,060	100	2,120	0	2,397,256	20
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	71,800	23	3,380	1	-17,740	-6
TOTAL		307,000	71,800	23	3,380	1	-17,740	-6
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	488,760	83,580	17	-760	0	28,310	6
Twin Buttes Reservoir	63	177,800	9,330	5	980	1	3,031	2
O.C. Fisher Lake	64	119,200	9,840	8	-90	0	2,262	2
O. H. Ivie Reservoir	65	554,340	318,900	58	1,000	0	9,900	2
Lake Buchanan	66	896,980	787,600	88	42,500	5	180,737	20
Amistad Reservoir (Texas)	67	1,771,030	1,167,000	66	20,000	1	116,000	7
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,362,000	43	33,000	1	-53,000	-2
TOTAL		4,008,110	2,376,250	59	63,630	2	340,240	8
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	0	0	11,706	8
Lake Travis	69	1,144,100	1,144,100	100	0	0	314,055	27
Canyon Lake	70	385,600	385,600	100	0	0	29,538	8
Coleto Creek Reservoir	71	35,060	31,150	89	-450	-1	3,430	10
Medina Lake	72	254,000	213,800	84	13,000	5	27,000	11
TOTAL		1,973,820	1,929,710	98	12,550	1	385,729	20
UPPER COAST								
Lake Houston	73	128,860	128,860	100	0	0	19,360	15
Lake Texana	74	157,900	154,600	98	-3,300	-2	43,900	28
TOTAL		286,760	283,460	99	-3,300	-1	63,260	22

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CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

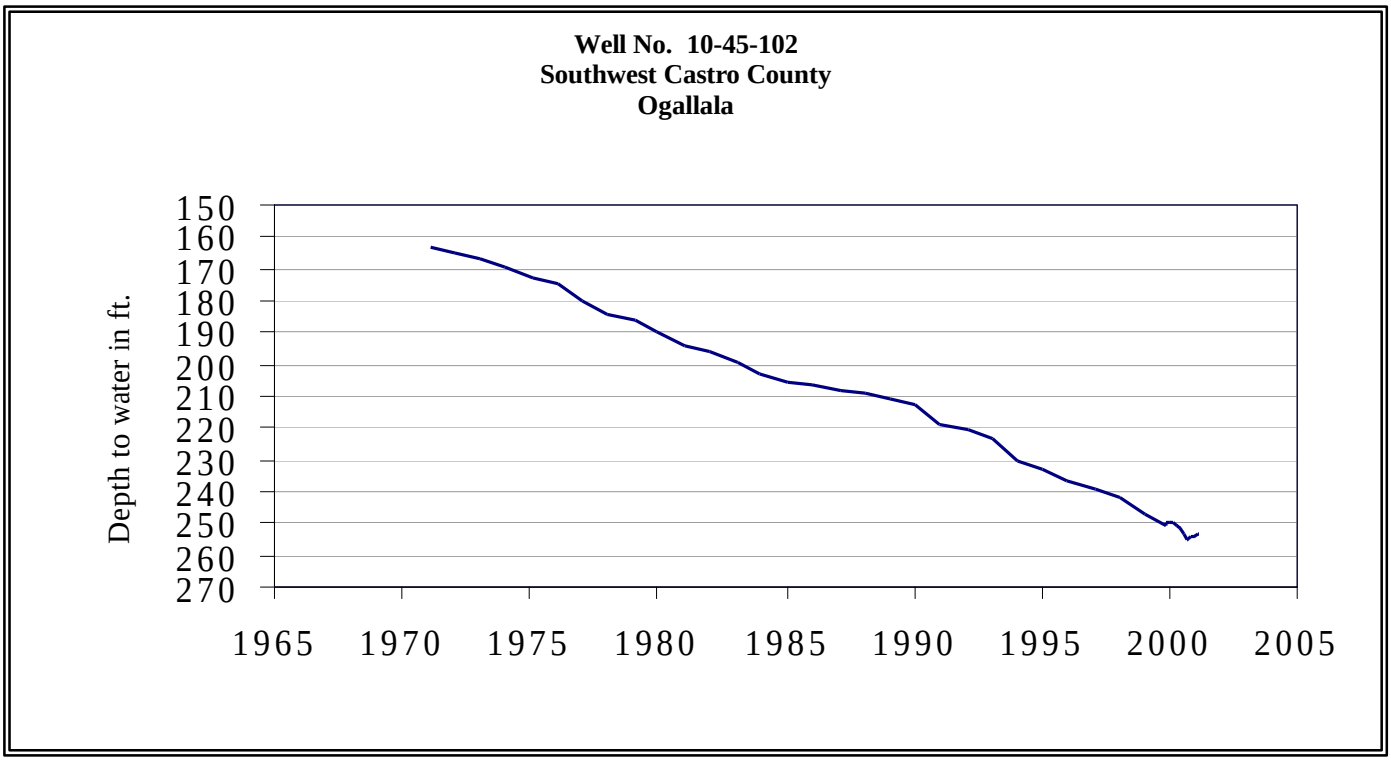
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late February 2001 (acre-feet)	(%)	Change since Late January 2001 (acre-feet)	(%)	Change since Late February 2001 (acre-feet)	(%)
			SOUTHERN					
Choke Canyon Reservoir	75	695,260	272,000	39	-1,000	0	-14,000	-2
Lake Corpus Christi	76	241,240	103,300	43	-2,000	-1	-38,400	-16
Falcon Reservoir (Texas)	77	1,555,120	293,000	19	12,000	1	3,000	0
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	347,000	13	14,000	1	-246,000	-9
TOTAL		2,491,620	668,300	27	9,000	0	-49,400	-2
STATE TOTAL		34,470,430	29,478,360	86	874,340	3	5,423,397	16

Note:

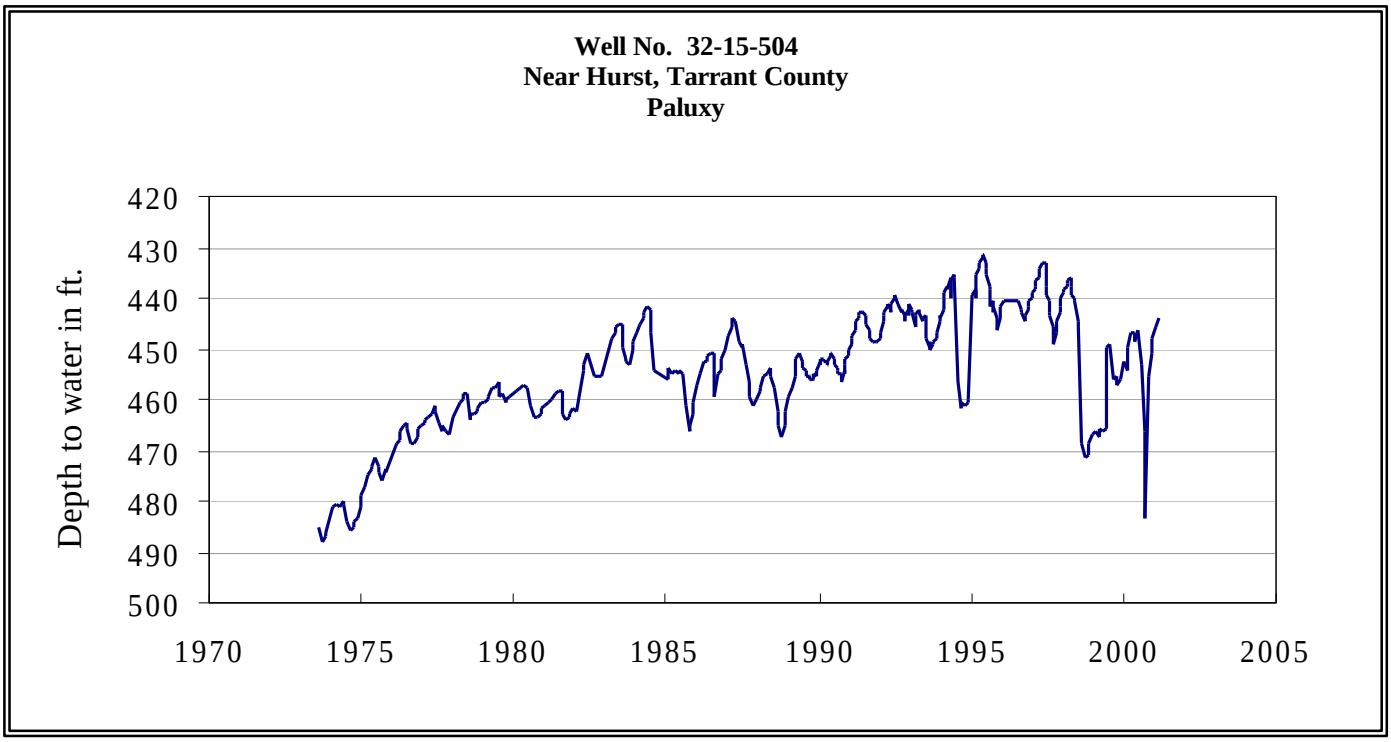
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

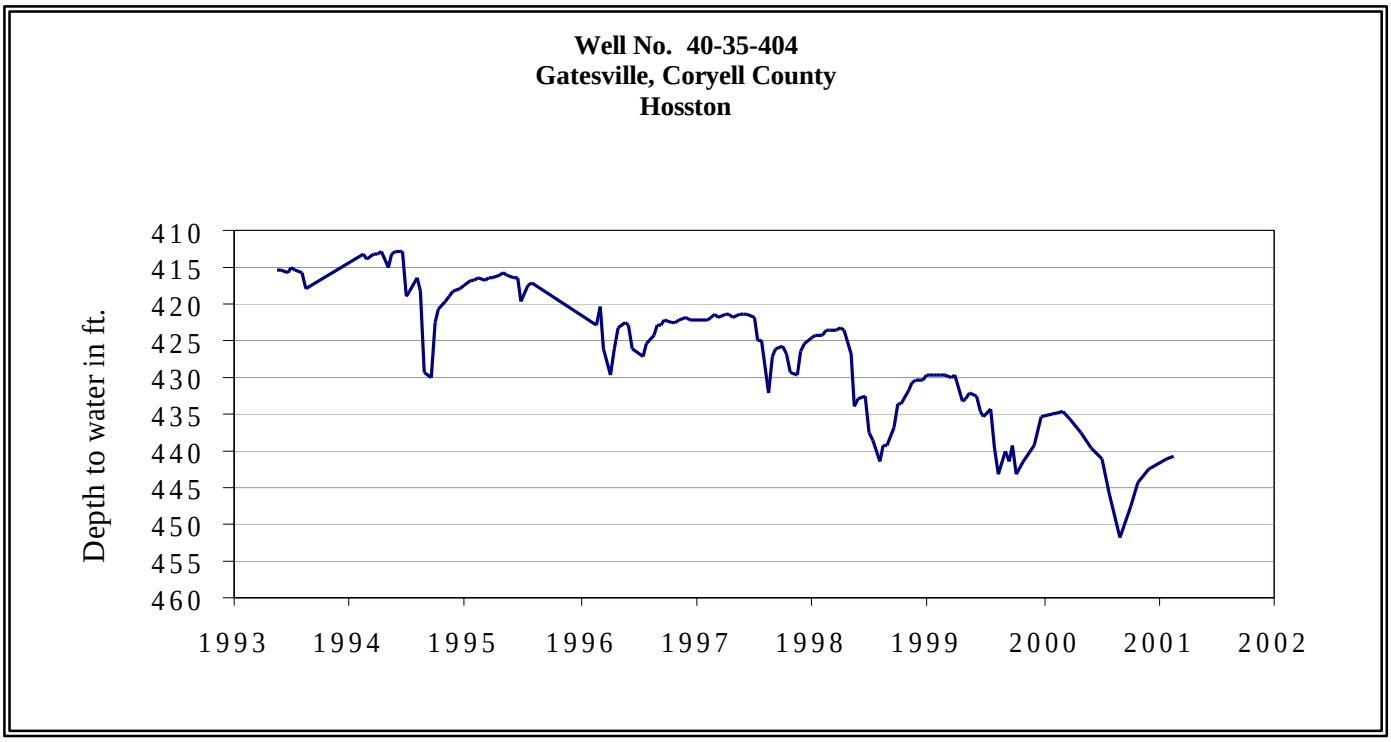
FEBRUARY GROUND WATER LEVELS IN OBSERVATION WELLS



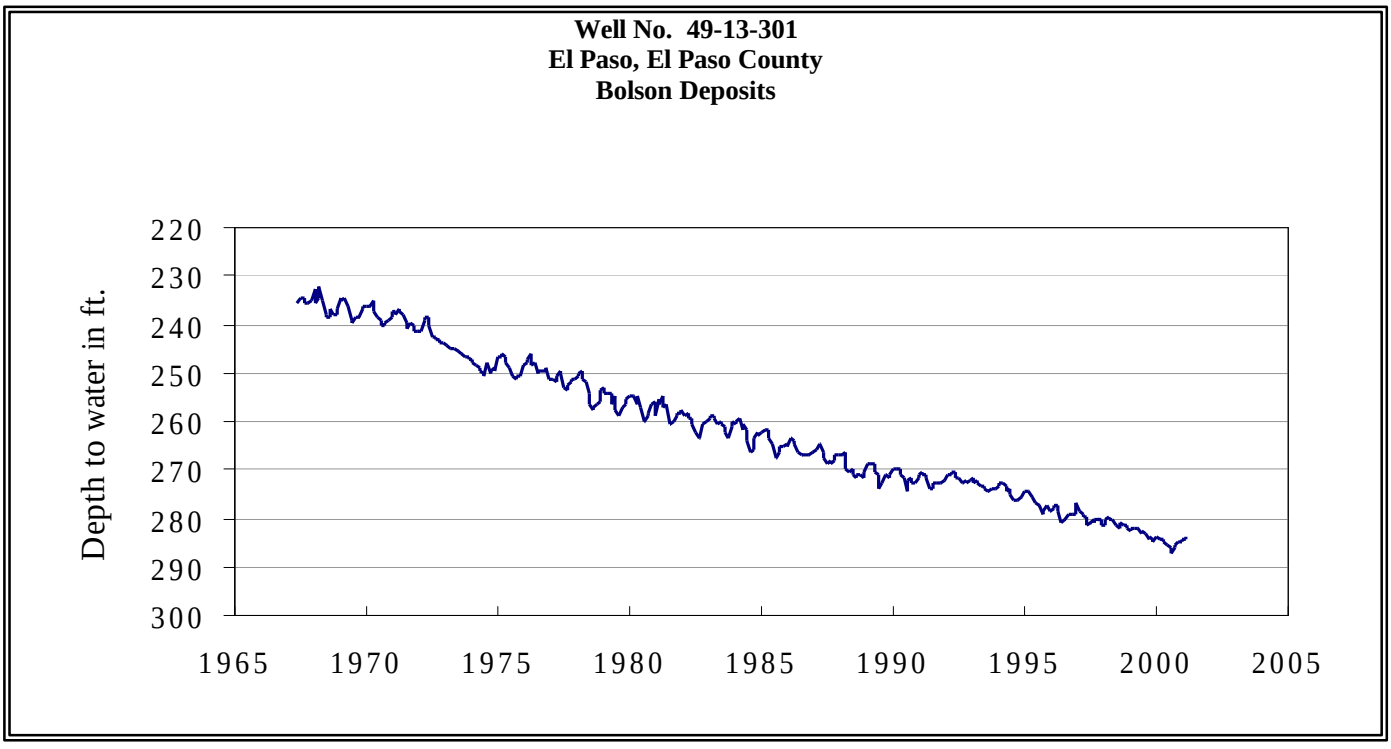
The late February water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 253.11 feet below land surface. This measurement was 0.35 feet above last month's measurement, 3.76 feet below last year's measurement, and 97.11 feet below the initial measurement recorded in 1968.



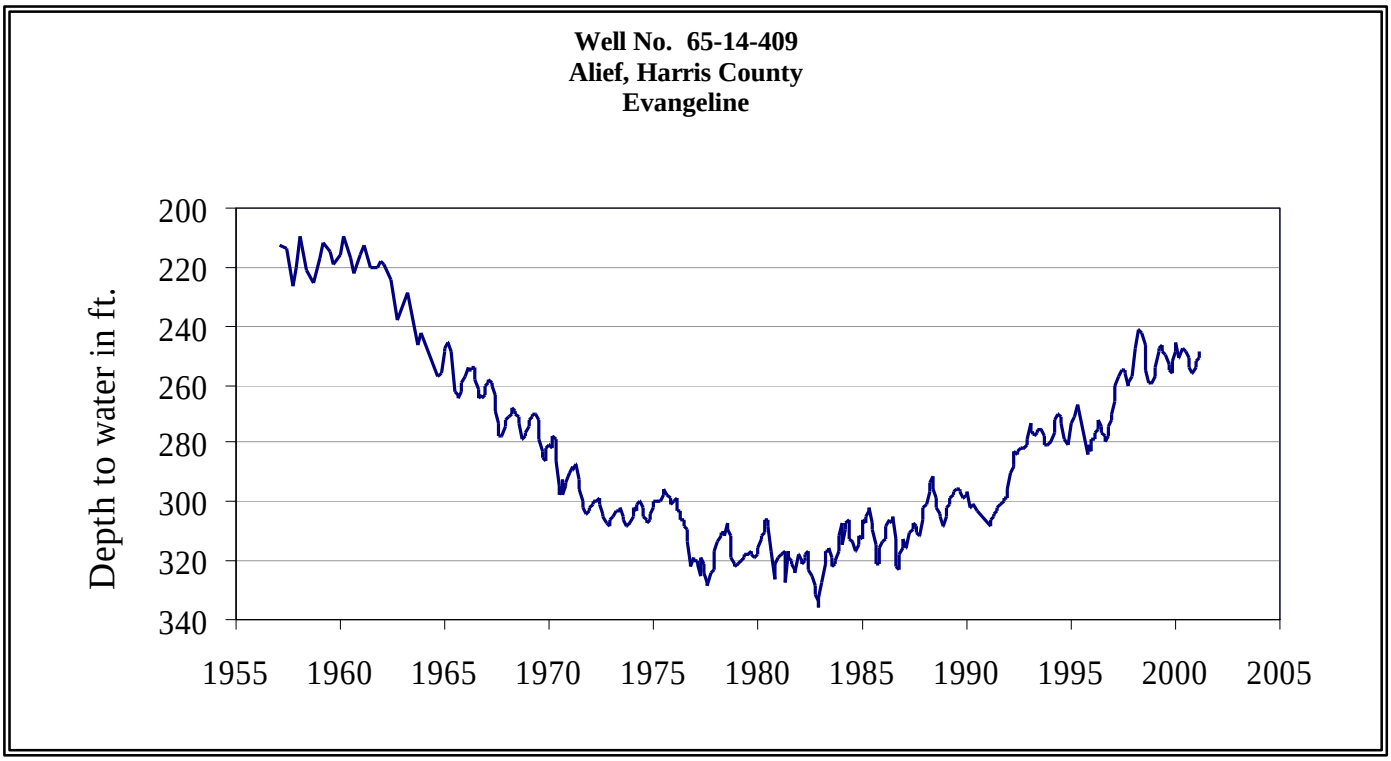
The late February water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 443.73 feet below land surface. This measurement was 1.89 feet above last month's measurement, 5.93 feet above last year's measurement, and 50.34 feet below the initial measurement recorded in 1953.



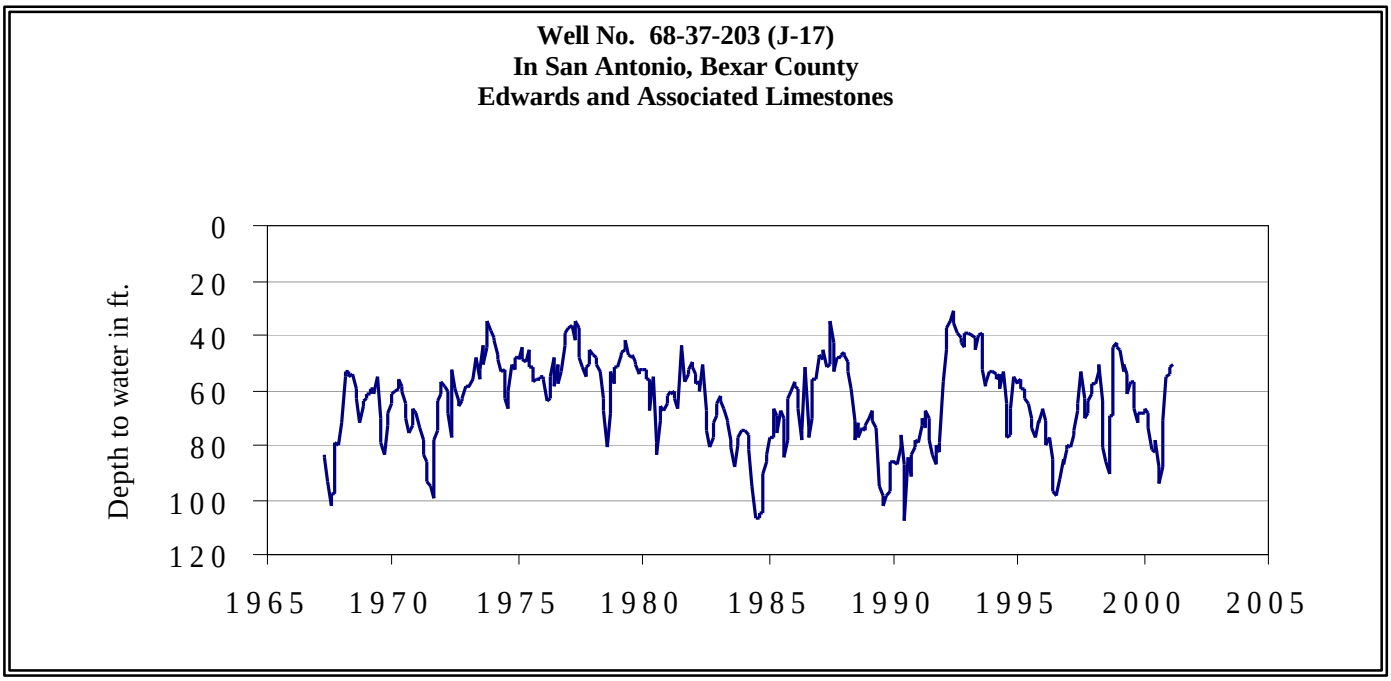
The late February water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 440.69 feet below land surface. This measurement was 0.31 feet above last month's measurement, 5.95 feet below last year's measurement, and 148.69 feet below the initial measurement recorded in 1955.



The late February water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 283.97 feet below land surface. This was 0.42 feet above last month's measurement, 0.18 feet below last year's measurement, and 52.07 feet below the initial measurement recorded in 1964.

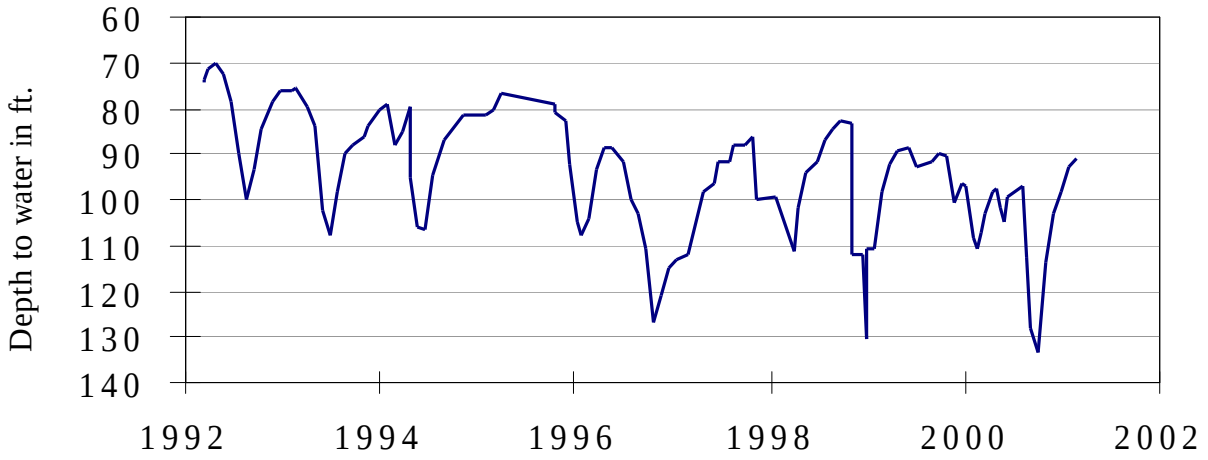


The late February water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 248.44 feet below land surface. This was 2.04 feet above last month's measurement, 2.97 feet below last year's measurement, and 145.21 feet below the initial measurement recorded in 1947.



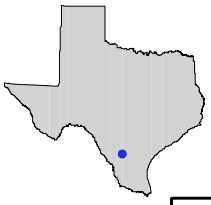
The late February water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 50.93 feet below land surface. This was 0.27 feet above last month's measurement, 17.72 feet above last year's measurement, and 8.69 feet above the initial measurement recorded in 1962.

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



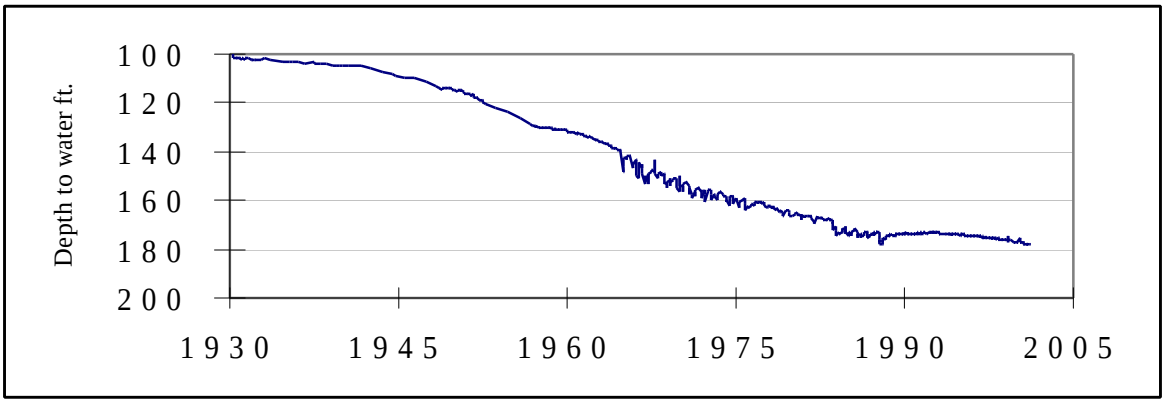
The late February water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 91.26 feet below land surface. This measurement was 1.35 feet above last month's measurement, 6.45 feet above last year's measurement, and 10.01 feet below the initial measurement recorded 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 7733301
Dimmit County



This 320 ft. deep recorder well, located approximately 2 miles southwest of Carrizo Springs, at an elevation of 705 feet above sea level, was completed in the Carrizo aquifer. The water levels reflect typical reservoir drawdown due to increased regional groundwater demands coupled with periods of drought or near-drought conditions.