

Texas Water Development Board

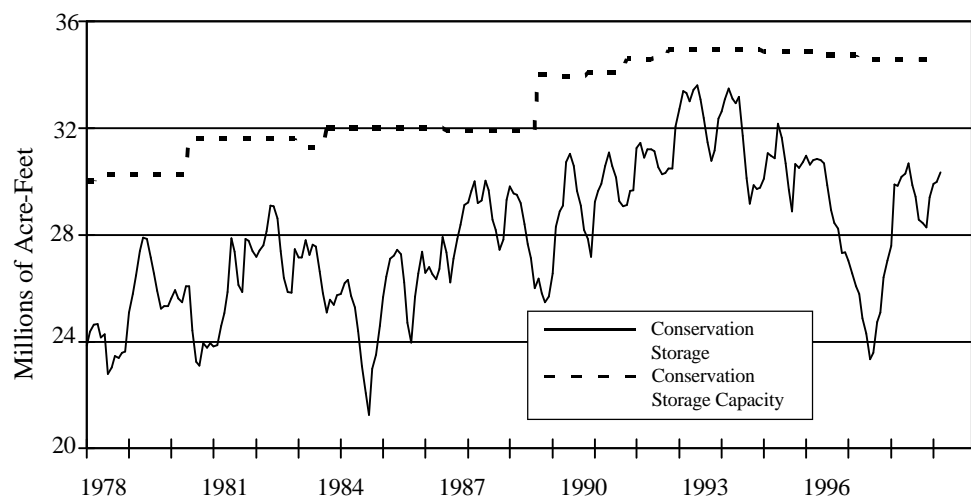
WATER Conditions

RESERVOIR STORAGE

Near the end of March, the 77 reservoirs monitored for this report held 30,341,650 acre-feet in conservation storage. This was 88 percent of the conservation storage capacity of the State's major reservoirs. Compared to last month, storage has increased 347,610 acre-feet. Compared to this month last year, storage has increased 506,330 acre-feet.

Of the monitored reservoirs, 43 held 100 percent or more of their conservation storage capacities near the end of March. Lakes Sulphur Springs, Tawakoni, Bridgeport, Eagle Mountain, Richland-Chambers, Graham, Possum Kingdom, Palo Pinto, Granbury, Pat Cleburne, Limestone, Cypress Springs, Bob Sandlin, Palestine, Tyler, Cedar Creek, Livingston, Buchanan, Medina, and Coletto Creek were full and spilling. An additional amount of water (acre-feet) was contained in the flood storage pool in each of the reservoirs as follows: Texoma, 358,500; Pat Mayse, 7,700; Cooper, 3,410; Benbrook, 18,460; Joe Pool, 5,200; Ray Roberts, 49,030; Lewisville, 96,880; Grapevine, 38,230; Lavon, 10,570; Navarro, 11,670; Bardwell, 4,970; Whitney, 9,440; Waco, 8,790; Proctor, 44,950; Belton, 94,390; Stillhouse, 45,530; Georgetown, 1,160; Granger, 2,290; Wright Patman, 86,530; Lake O' the Pines, 6,950; Sam Rayburn, 277,030; Somerville, 1,260, and Travis, 62,700.

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

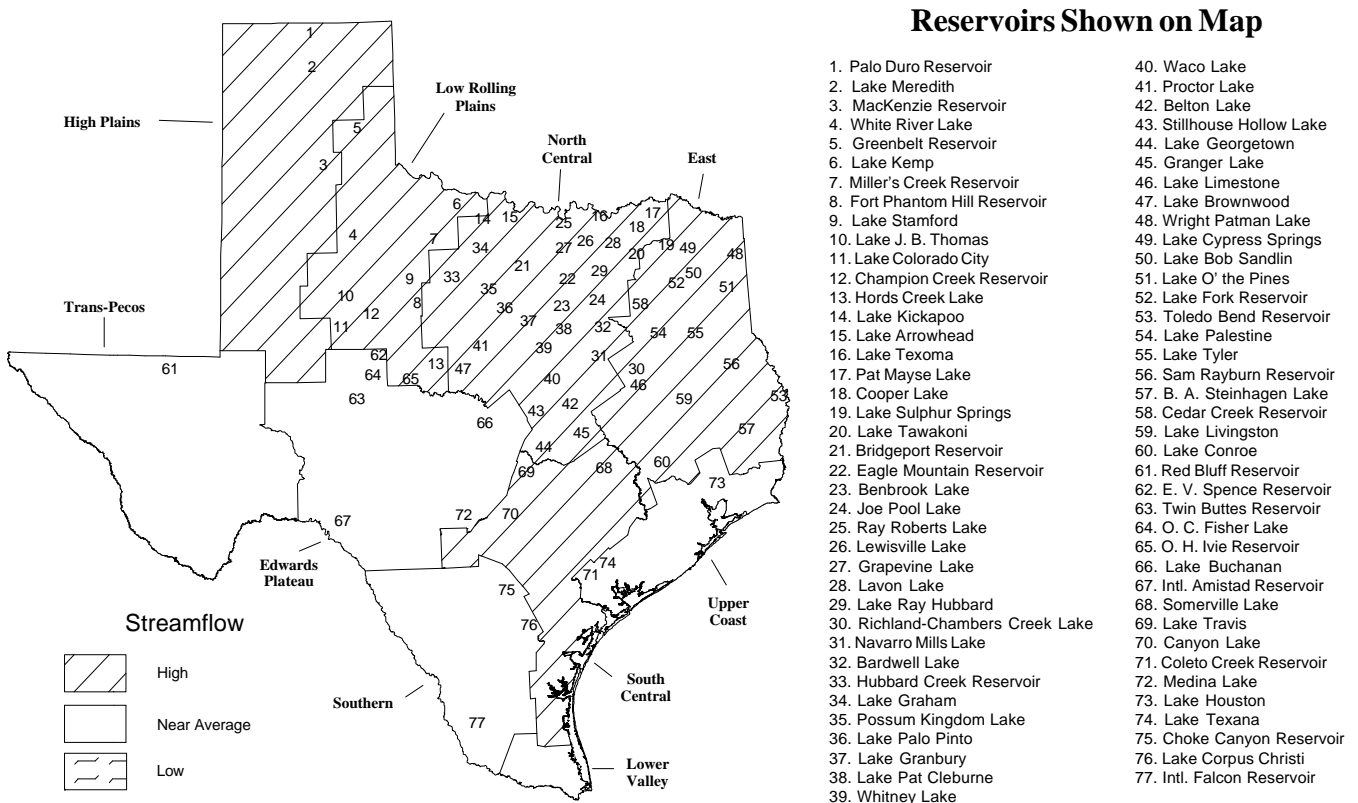
Streamflow conditions across Texas ranged from above-normal to normal during the month of March. Scattered showers and thunderstorms occurred off and on during the month, but much less overall than February. The following is a summary of the measured flows throughout across the State.

The High Plains, Low Rolling Plains, North Central, East, and South Central climatic regions reported above normal streamflow conditions during the month. The 18 gages in these regions, compared to the monthly mean flow for March, averaged flow levels that are exceeded only 18.6% of the time. The North Central climatic region's four gages reported a monthly flow average that was exceeded only 5.5 % of the time. This was the wettest region during the month.

The Trans Pecos, Edwards Plateau, Upper Coast, and Southern climatic regions reported near normal flow conditions. The 10 gages located throughout these regions reported an average flow that was exceeded 35.2% of the time in March. The Trans Pecos region reported the lowest average monthly flow rates during the month. The only gage reporting during this period, Pecos River near Girvin, Texas, reported an average flow that was exceeded 75% of the time.

For the Lower Valley climatic region, there are no streamflow gages that depict the regions overall climatic conditions because of the extensive irrigation system throughout the region. Therefore, rainfall is the only indication of the overall conditions in this area. For March, this area reported normal rainfall.

STREAMFLOW CONDITIONS FOR MARCH COMPARED WITH PAST RECORD



CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No.:	Conservation: Storage Capacity (acre-feet)	Conservation Storage in Acre-Feet and as Percent of Conservation Storage Capacity					
			Map:	Late Mar 1998	Late Feb 1998	Late Mar 1997		
HIGH PLAINS								
Palo Duro Reservoir	1	60,900	5,160	8	6,960	11	9,170	15
Lake Meredith (Texas)	2	500,000	389,930	78	383,320	77	353,660	71
Lake Meredith (Texas and Oklahoma)	(2)	(779,560)	(389,930)	(50)	(383,320)	(49)	(353,660)	(45)
MacKenzie Reservoir	3	46,250	9,230	20	8,430	18	7,500	16
White River Lake	4	31,850	12,480	39	12,480	39	7,420	23
TOTAL		639,000	416,800	65	411,190	64	377,750	59
LOW ROLLING PLAINS								
Greenbelt Reservoir	5	58,200	29,200	50	28,210	48	24,460	42
Lake Kemp	6	319,600	291,920	91	268,480	84	232,740	73
Miller's Creek Reservoir	7	27,890	12,540	45	11,550	41	11,940	43
Fort Phantom Hill Reservoir	8	70,030	58,880	84	57,860	83	64,260	92
Lake Stamford	9	52,700	31,020	59	29,800	57	23,220	44
Lake J. B. Thomas	10	202,300	15,200	8	15,920	8	10,420	5
Lake Colorado City	11	30,800	18,750	61	19,200	62	18,800	61
Champion Creek Reservoir	12	41,600	20,170	48	20,190	49	21,780	52
Hords Creek Lake	13	8,600	6,630	77	6,480	75	7,560	88
TOTAL		811,720	484,310	60	457,690	56	415,180	51
NORTH CENTRAL								
Lake Kickapoo	14	106,000	71,300	67	59,850	56	67,460	64
Lake Arrowhead	15	262,100	234,070	89	211,920	81	210,800	80
Lake Texoma	16	2,722,300	2,722,300	100	2,511,200	92	2,556,900	94
Pat Mayse Lake	17	124,500	124,500	100	124,500	100	124,500	100
Cooper Lake	18	273,000	273,000	100	273,000	100	273,000	100
Lake Sulphur Springs	19	17,710	17,710	100	17,710	100	17,710	100
Lake Tawakoni	20	936,200	936,200	100	936,200	100	936,200	100
Bridgeport Reservoir	21	374,830	374,830	100	349,400	93	374,830	100
Eagle Mountain Reservoir	22	178,380	178,380	100	178,380	100	178,380	100
Benbrook Lake	23	88,200	88,200	100	88,200	100	88,200	100
Joe Pool Lake	24	175,800	175,800	100	175,800	100	175,800	100
Ray Roberts Lake	25	798,760	798,760	100	798,760	100	798,760	100
Lewisville Lake	26	555,000	555,000	100	555,000	100	555,000	100
Grapevine Lake	27	187,700	187,700	100	187,700	100	187,700	100
Lavon Lake	28	443,800	443,800	100	443,800	100	443,800	100
Lake Ray Hubbard	29	490,000	489,700	99	490,000	100	487,700	99
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	1,103,820	100	1,103,820	100
Navarro Mills Lake	31	55,810	55,810	100	55,810	100	55,810	100
Bardwell Lake	32	53,580	53,580	100	53,580	100	53,580	100
Hubbard Creek Reservoir	33	317,800	314,300	99	296,400	93	314,300	99
Lake Graham	34	45,000	45,000	100	45,000	100	45,000	100
Possum Kingdom Lake	35	551,820	551,820	100	478,510	87	551,820	100
Lake Palo Pinto	36	42,200	42,200	100	35,260	84	42,200	100
Lake Granbury	37	135,680	135,680	100	135,680	100	135,680	100
Lake Pat Cleburne	38	25,300	25,300	100	25,300	100	25,300	100
Whitney Lake	39	622,800	622,800	100	622,800	100	622,800	100
Waco Lake	40	144,550	144,550	100	144,550	100	144,550	100

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

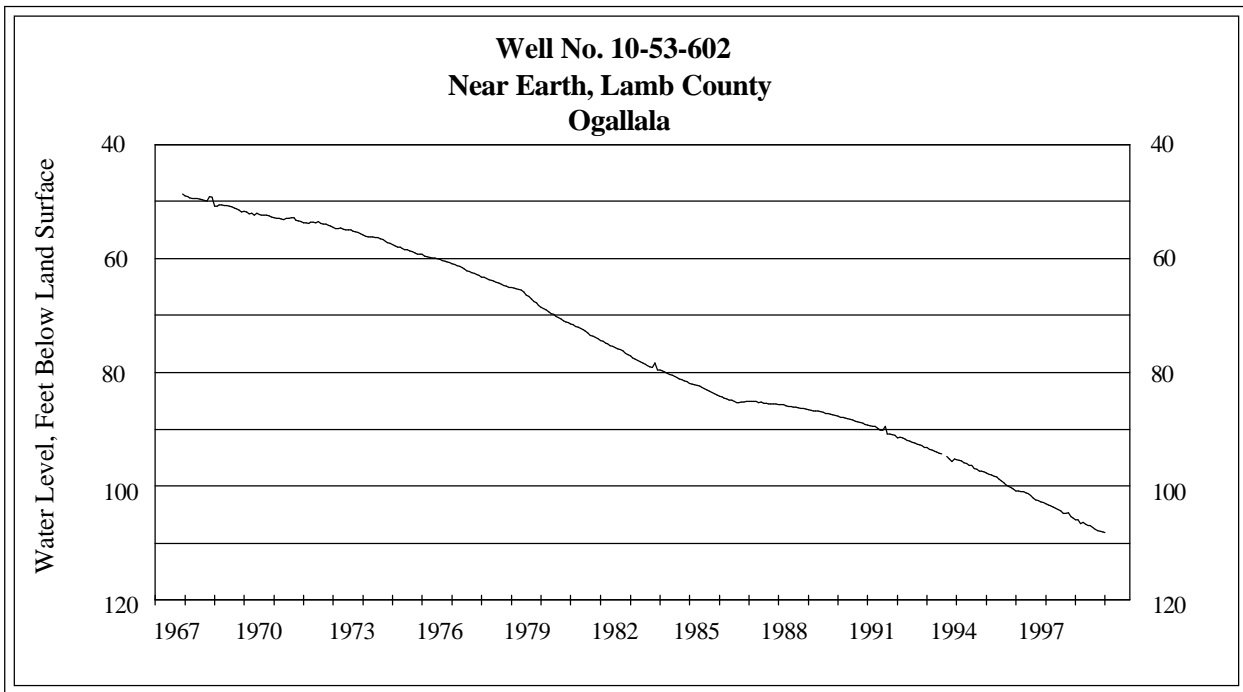
Name of Lake or Reservoir	No.:	Conservation: Storage Capacity (acre-feet)	Conservation Storage in Acre-Feet and as Percent of Conservation Storage Capacity					
			Late Mar 1998	Late Feb 1998	Late Mar 1997			
NORTH CENTRAL (continued)								
Proctor Lake	41	55,590	55,590	100	55,590	100	55,590	100
Belton Lake	42	434,500	434,500	100	434,500	100	434,500	100
Stillhouse Hollow Lake	43	226,060	226,060	100	226,060	100	226,060	100
Lake Georgetown	44	37,010	37,010	100	37,010	100	37,010	100
Granger Lake	45	54,280	54,280	100	54,280	100	54,280	100
Lake Limestone	46	215,750	215,750	100	215,750	100	215,750	100
Lake Brownwood	47	143,400	142,700	99	126,600	88	142,700	99
TOTAL		11,999,230	11,932,000	99	11,547,920	96	11,737,490	98
EAST								
Wright Patman Lake	48	142,700	142,700	100	142,700	100	142,700	100
Lake Cypress Springs	49	66,800	66,800	100	66,800	100	66,800	100
Lake Bob Sandlin	50	202,300	202,300	100	202,300	100	202,300	100
Lake O' the Pines	51	252,000	252,000	100	252,000	100	252,000	100
Lake Fork Reservoir	52	635,200	626,740	99	632,200	99	635,200	100
Toledo Bend Reservoir	53	4,472,900	4,380,000	98	4,472,900	100	4,472,900	100
Lake Palestine	54	411,300	411,300	100	411,300	100	411,300	100
Lake Tyler	55	73,700	73,700	100	73,700	100	73,700	100
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	2,876,300	100	2,876,300	100
B. A. Steinhagen Lake	57	94,200	85,520	91	86,800	92	89,280	95
Cedar Creek Reservoir	58	637,050	637,050	100	637,050	100	637,050	100
Lake Livingston	59	1,750,000	1,750,000	100	1,750,000	100	1,750,000	100
Lake Conroe	60	429,900	415,970	97	428,970	99	417,170	97
TOTAL		12,044,350	11,920,380	99	12,033,020	99	12,026,700	99
TRANS-PECOS								
Red Bluff Reservoir	61	307,000	98,740	32	92,490	30	78,930	26
TOTAL		307,000	98,740	32	92,490	30	78,930	26
EDWARDS PLATEAU								
E. V. Spence Reservoir	62	484,800	102,600	21	117,400	24	122,000	25
Twin Buttes Reservoir	63	177,800	46,000	26	45,400	26	71,320	40
O. C. Fisher Lake	64	119,200	15,900	13	15,880	13	19,770	17
O. H. Ivie Reservoir	65	554,340	513,060	93	511,960	92	475,860	86
Lake Buchanan	66	896,980	896,980	100	865,620	97	868,300	97
Amistad Reservoir (Texas)	67	1,771,030	856,110	48	867,460	49	910,430	51
Amistad Reservoir (Texas and Mexico)	(67)	(3,151,300)	(1,466,570)	(47)	(1,474,680)	(47)	(1,361,180)	(43)
TOTAL		4,004,150	2,430,650	61	2,423,720	61	2,467,680	62
SOUTH CENTRAL								
Somerville Lake	68	155,060	155,060	100	155,060	100	155,060	100
Lake Travis	69	1,144,100	1,144,100	100	1,144,100	100	1,141,340	99
Canyon Lake	70	385,600	384,420	99	383,500	99	385,600	100
Coletto Creek Reservoir	71	35,060	35,060	100	35,060	100	35,060	100
Medina Lake	72	254,000	254,000	100	226,770	89	83,530	33
TOTAL		1,973,820	1,972,640	99	1,944,490	99	1,800,590	91

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

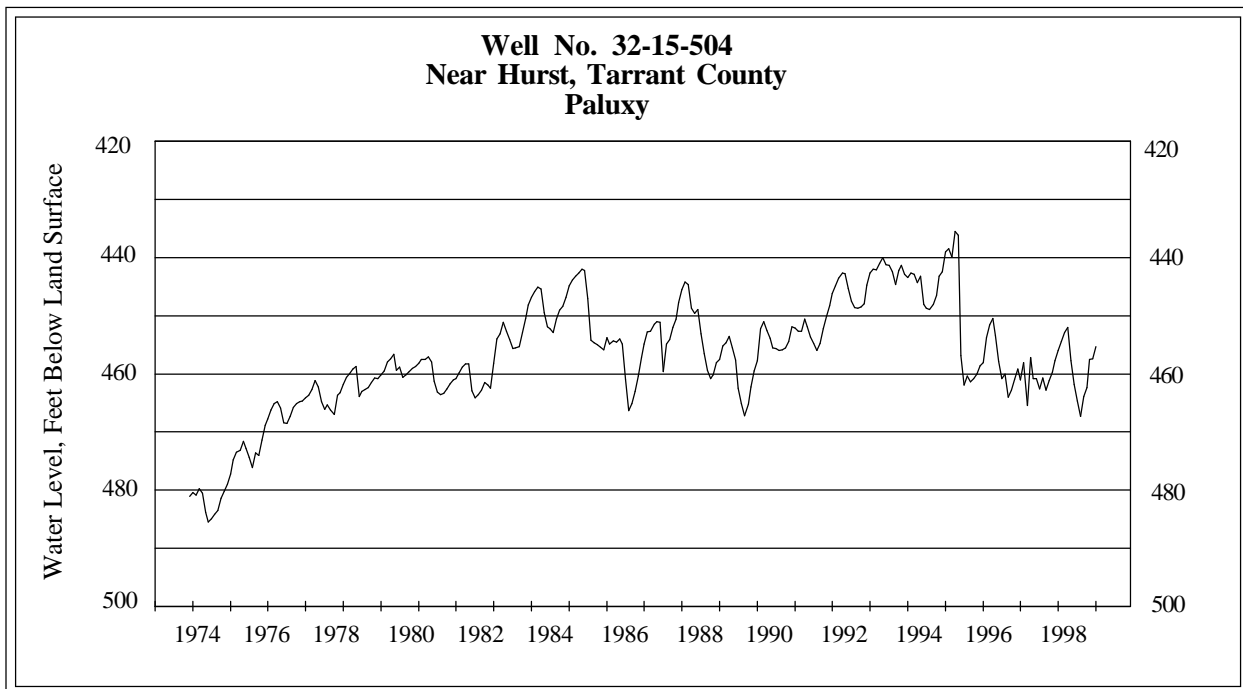
Name of Lake or Reservoir	No.:	Conservation: Storage Capacity (acre-feet)	Conservation Storage in Acre-Feet and as Percent of Conservation Storage Capacity					
			Late Mar 1998	Late Feb 1998	Late Mar 1997			
UPPER COAST								
Lake Houston	73	128,860	123,000	95	128,860	100	128,860	100
Lake Texana	74	157,900	157,810	99	157,900	100	157,360	99
TOTAL		286,760	280,810	98	286,760	100	286,220	99
SOUTHERN								
Choke Canyon Reservoir	75	695,260	278,860	40	275,560	40	169,310	24
Lake Corpus Christi	76	241,240	181,100	75	185,570	77	106,600	44
Falcon Reservoir (Texas)	77	1,555,120	345,360	22	335,630	22	368,870	24
Falcon Reservoir (Texas and Mexico)	(77)	(2,653,290)	(576,410)	(22)	(562,630)	(21)	(646,950)	(24)
TOTAL		2,491,620	805,320	32	796,760	32	644,780	26
STATE TOTAL		34,557,650	30,341,650	88	29,994,040	87	29,835,320	86

NOTES: 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). Percentages are based on the conservation storage capacity of and the conservation storage in the reservoirs for date shown. 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; these estimates may be subject to revision on completion of international water accounting. Figures in parentheses show the total conservation storage for both Texas (United States' share) and Mexico and are not included in State total.

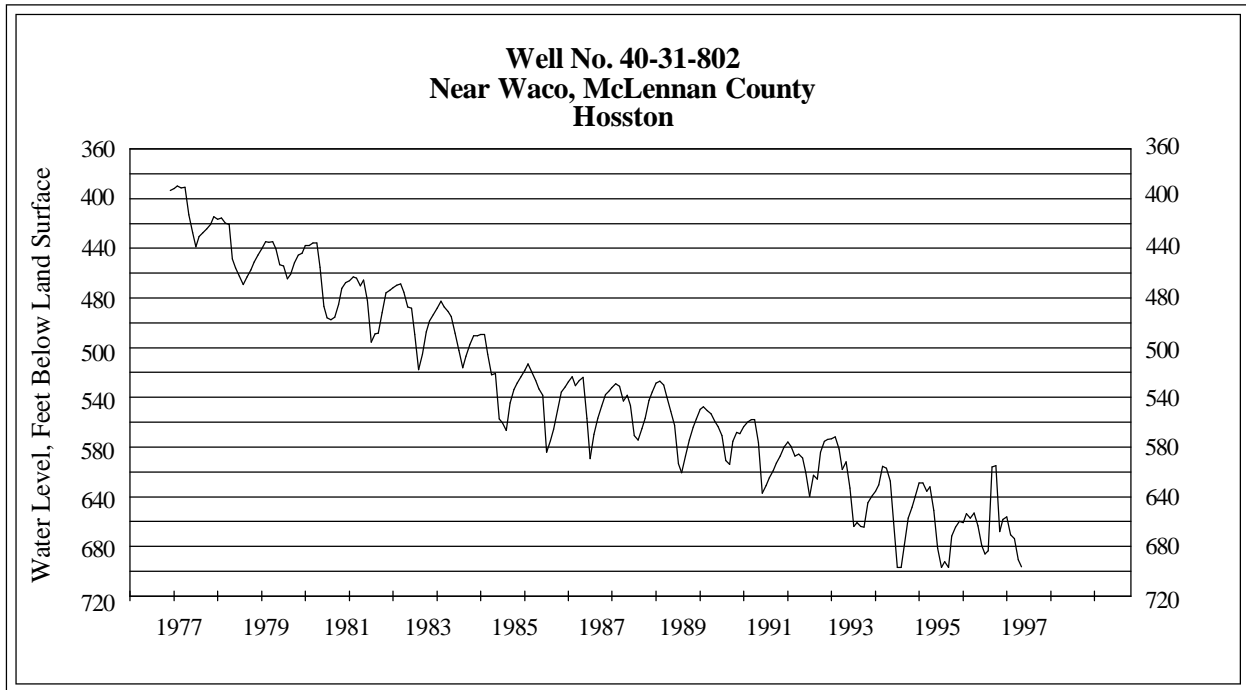
GROUND WATER LEVELS IN OBSERVATION WELLS



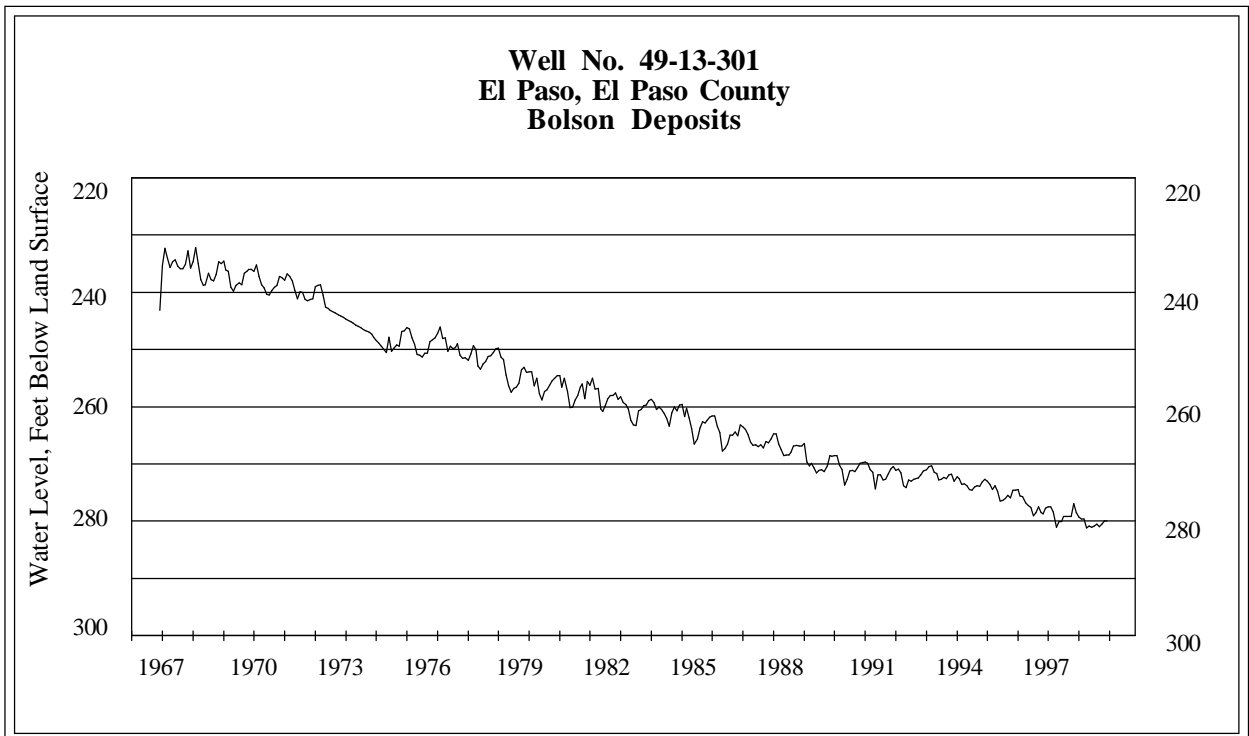
The March water-level measurement in this Ogallala aquifer well, elevation 3667 feet above sea level, was 108.20 feet below land surface. This was 0.09 of a foot below last month's measurement, 2.35 feet below last year's measurement, and 80.05 feet below the initial measurement recorded in 1950.



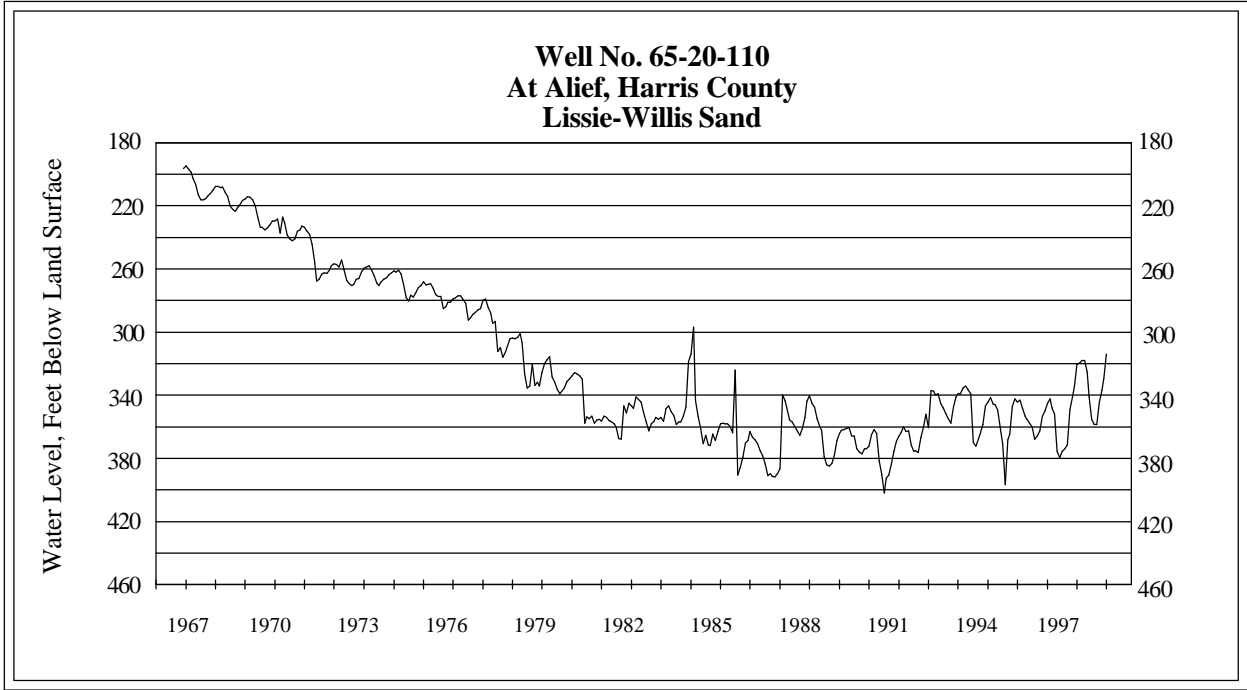
The March water-level measurement in this Paluxy aquifer well, elevation 535 feet above sea level, was 455.29 feet below land surface. This measurement was 1.25 feet above last month's measurement, 0.80 of a foot below last year's measurement, and 61.90 feet below the initial measurement recorded in 1953.



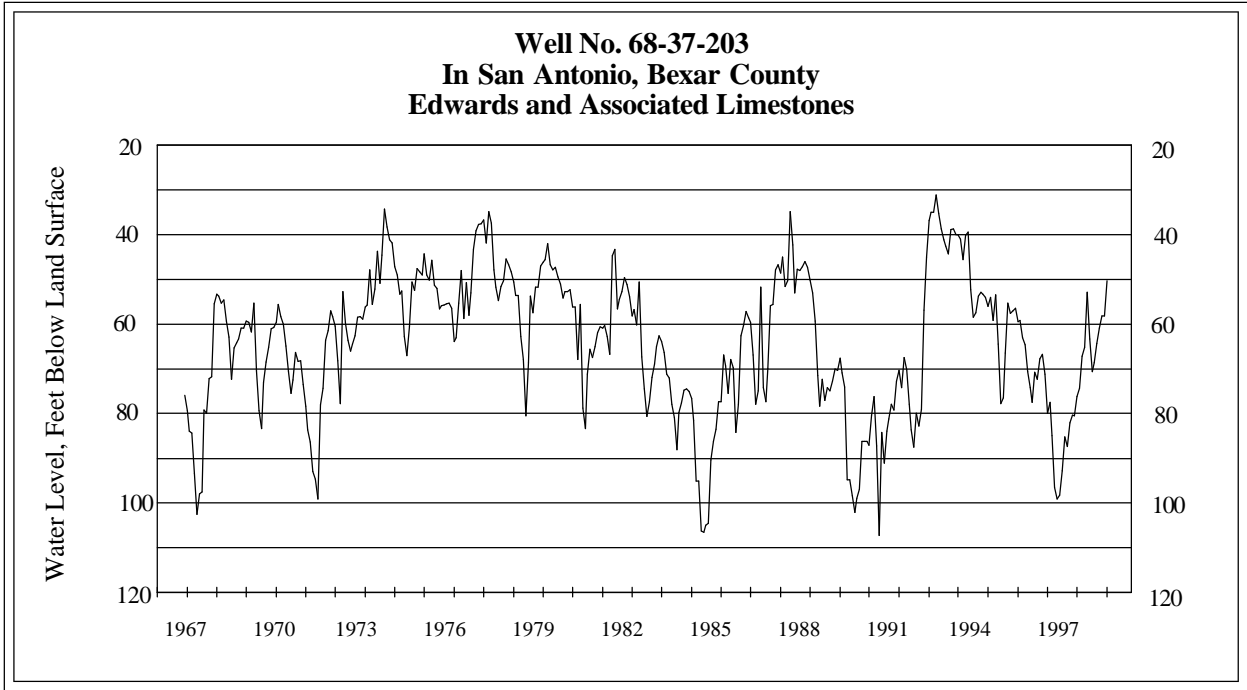
Current water-level measurements are unavailable from this Hosston Formation well due to cave-in problems. The well is scheduled to be repaired in 1998.



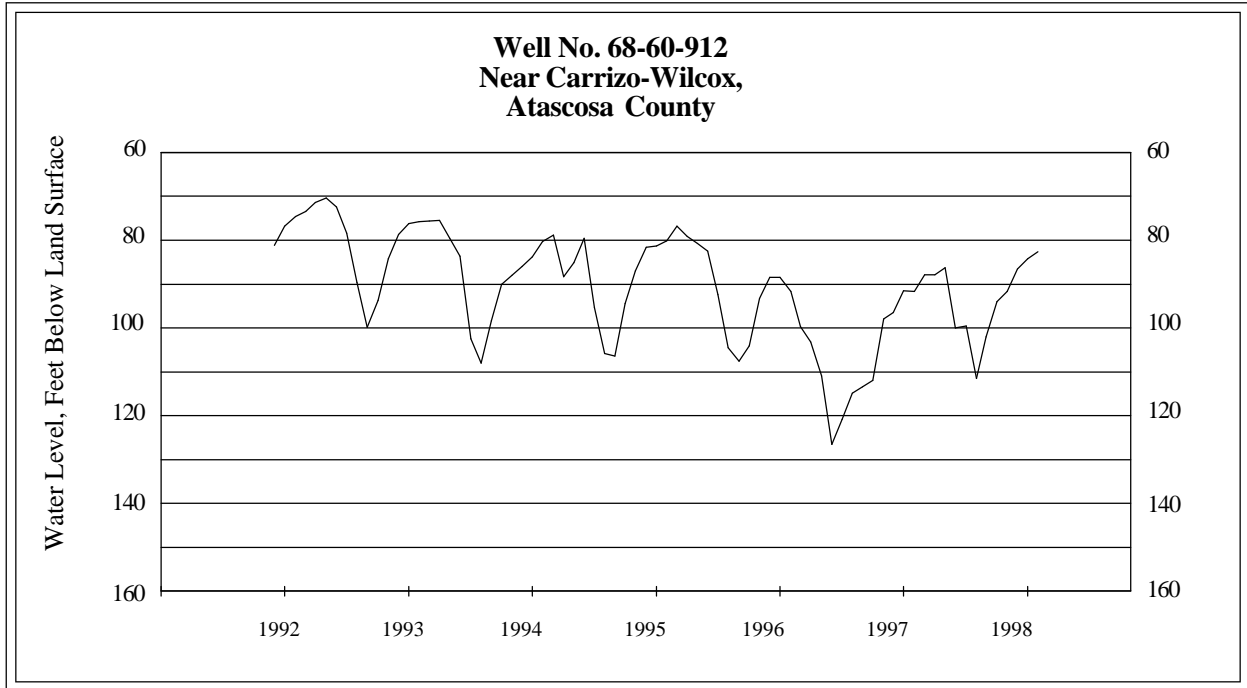
The March water-level measurement in this Bolson Deposits aquifer well, elevation 3882 feet above sea level, was 280.01 feet below land surface. This was 0.53 of a foot below last month's measurement, 0.74 of a foot below last year's measurement, and 48.11 feet below the initial measurement recorded in 1964.



The March water-level measurement in this Lissie Willis Sand aquifer well, elevation 83 feet above sea level, was 313.97 feet below land surface. This was 15.49 feet above the January measurement, 5.71 feet above last year's measurement, and 277.97 feet below the initial measurement recorded in 1939.



The March water-level measurement in this Edwards aquifer well, elevation 731 feet above sea level, was 50.31 feet below land surface. This was 2.99 feet above last month's measurement, 23.99 feet above last year's measurement, and 9.31 feet above the initial measurement recorded in 1962.



The March water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 82.71 feet below land surface. This was 1.57 feet above last month's measurement, 8.99 feet above last year's measurement, and 1.46 feet below the initial measurement recorded in 1992.

