

Texas Water Development Board



WATER Conditions

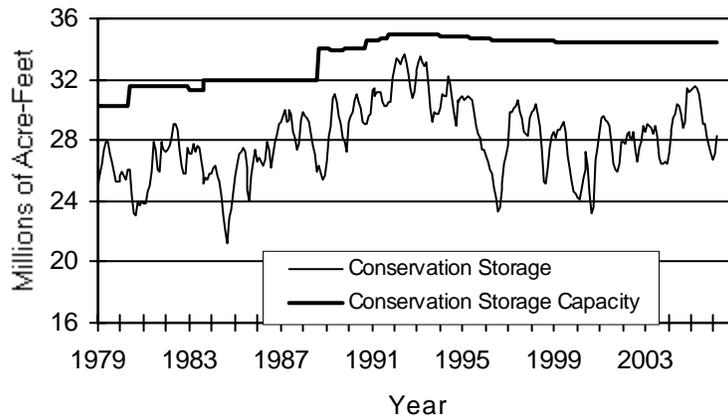
RESERVOIR STORAGE

March 2006

Near the end of March, the 77 reservoirs monitored for this report held 28.27 million acre-feet in conservation storage, or 82 percent of the conservation storage capacity of the state's major reservoirs. Statewide total storage is below normal for this time of year. Storage increased during the month by 1.16 million acre-feet (3% of conservation storage capacity). Compared to last year, storage decreased by 3.3 million acre-feet (-10%).

Storage was below 90% of capacity in all Regions, with the lowest in the High Plains Region (24%). Storage was at 100% in 9 reservoirs. Storage in most reservoirs in the North Central and East Regions increased, due to the heavy but patchy rain experienced in that part of the state during the month of March. Twelve reservoirs in these two Regions enjoyed an increase greater than 10%. Compared to this time last year, the storage decreased in all Regions, with the sharpest decrease in the South Central Region (-21%).

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.

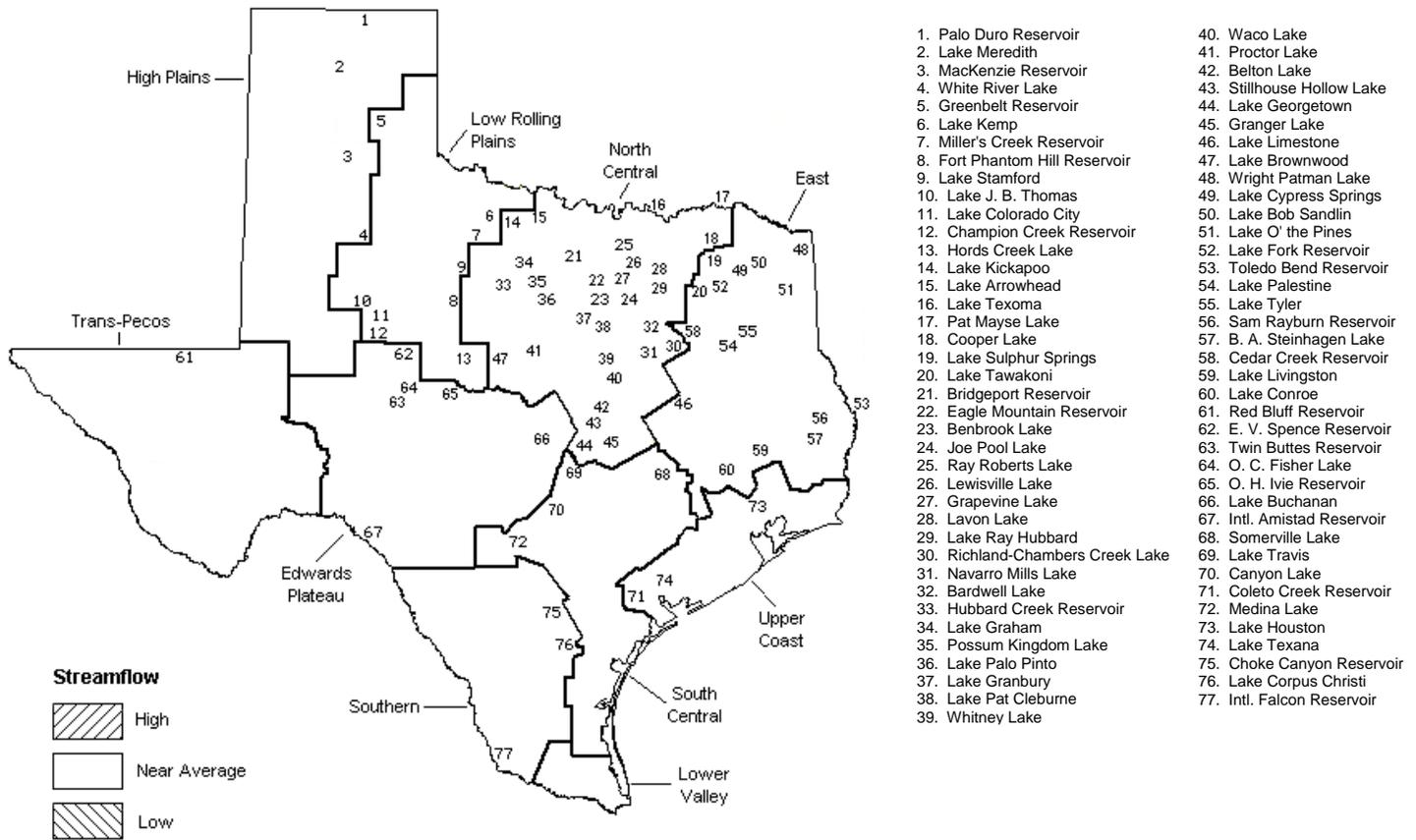
STREAMFLOW

Of 29 reporting index stations in March, computed 30-day mean flows were high (5% - 30%) at 3 stations, low (70% - 95%) at 6 stations, and near normal (30% - 70% exceedance) at the remaining 20 stations. Compared to February, flows have increased at 16 index stations and decreased at 13 stations.

On a regional basis, flows in March were normal in all Regions. Streamflow in the Lower Valley Region is not monitored.

MARCH STREAMFLOW CONDITIONS

Reservoirs Shown on Map



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 Mar. 2006 (acre-feet) (%)		Late February 2006 (acre-feet) (%)	Late March 2005 (acre-feet) (%)			
HIGH PLAINS									
Palo Duro Reservoir	1	60,900	1,590	3	-140	0	-2,510	-4	
Lake Meredith (Texas)	2	500,000	134,590	27	-4,420	-1	-41,180	-8	
Lake Meredith (Texas and Oklahoma)	(2)	779,560	134,590	17	-4,420	-1	-41,180	-5	
MacKenzie Reservoir	3	46,250	9,420	20	-110	0	-590	-1	
White River Lake	4	31,850	5,310	17	-330	-1	-4,720	-15	
TOTAL		639,000	150,910	24	-5,000	-1	-49,000	-8	
LOW ROLLING PLAINS									
Greenbelt Reservoir	5	58,200	21,400	37	10	0	-2,310	-4	
Lake Kemp	6	319,600	263,900	83	-1,520	0	9,580	3	
Miller's Creek Reservoir	7	27,890	25,180	90	-390	-1	3,810	14	
Fort Phantom Hill Reservoir	8	70,030	43,680	62	-380	-1	-21,920	-31	
Lake Stamford	9	52,700	46,460	88	-1,450	-3	11,300	21	
Lake J. B. Thomas	10	202,300	52,850	26	-2,310	-1	-6,630	-3	
Lake Colorado City	11	30,800	27,340	89	-270	-1	-3,290	-11	
Champion Creek Reservoir	12	41,600	5,780	14	-40	0	650	2	
Hords Creek Lake	13	8,600	6,380	74	-70	-1	-2,040	-24	
TOTAL		811,720	492,970	61	-6,420	-1	-10,850	-1	
NORTH CENTRAL									
Lake Kickapoo	14	106,000	89,550	84	-1,050	-1	17,750	17	
Lake Arrowhead	15	262,100	220,330	84	-740	0	25,580	10	
Lake Texoma	16	2,722,300	2,423,210	89	94,460	3	110,520	4	
Pat Mayse Lake	17	124,500	99,980	80	8,370	7	-23,830	-19	
Cooper Lake	18	273,000	193,950	71	71,740	26	-79,050	-29	
Lake Sulphur Springs	19	17,710	17,710	100	4,200	24	0	0	
Lake Tawakoni	20	936,200	714,200	76	114,900	12	-166,800	-18	
Bridgeport Reservoir	21	374,830	241,300	64	-300	0	-110,400	-29	
Eagle Mountain Reservoir	22	178,380	144,500	81	3,100	2	-33,880	-19	
Benbrook Lake	23	88,200	69,940	79	15,670	18	-18,260	-21	
Joe Pool Lake	24	175,800	175,800	100	21,590	12	0	0	
Ray Roberts Lake	25	798,760	713,620	89	13,680	2	-85,140	-11	
Lewisville Lake	26	555,000	475,810	86	25,070	5	-79,190	-14	
Grapevine Lake	27	187,700	142,200	76	6,120	3	-39,130	-21	
Lavon Lake	28	443,800	313,400	71	36,050	8	-130,400	-29	
Lake Ray Hubbard	29	413,420	413,420	100	64,720	16	120	0	
Richland-Chambers Creek Lake	30	1,103,820	945,800	86	33,900	3	-158,020	-14	
Navarro Mills Lake	31	55,810	38,570	69	120	0	-17,240	-31	
Bardwell Lake	32	53,580	47,230	88	11,500	21	320	1	
Hubbard Creek Reservoir	33	317,800	180,340	57	-1,340	0	-6,080	-2	
Lake Graham	34	45,000	41,530	92	-220	0	660	1	
Possum Kingdom Lake	35	551,820	486,500	88	-6,430	-1	-20,900	-4	
Lake Palo Pinto	36	27,650	15,990	58	2,240	8	-10,650	-39	
Lake Granbury	37	135,680	133,700	99	230	0	1,800	1	
Lake Pat Cleburne	38	25,300	25,300	100	6,600	26	0	0	
Whitney Lake	39	622,800	542,990	87	54,330	9	-40,970	-7	
Waco Lake	40	144,500	144,500	100	0	0	0	0	
Proctor Lake	41	55,590	37,520	67	3,810	7	-18,070	-33	
Belton Lake	42	434,500	403,510	93	6,780	2	-30,990	-7	
Stillhouse Hollow Lake	43	226,060	226,060	100	4,370	2	0	0	
Lake Georgetown	44	37,010	21,090	57	-370	-1	-15,920	-43	
Granger Lake	45	54,280	52,970	98	-1,310	-2	-1,310	-2	
Lake Limestone	46	215,750	215,750	100	44,580	21	1,590	1	
Lake Brownwood	47	143,400	118,190	82	370	0	-16,020	-11	
TOTAL		11,908,050	10,126,460	85	636,740	5	-943,910	-8	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

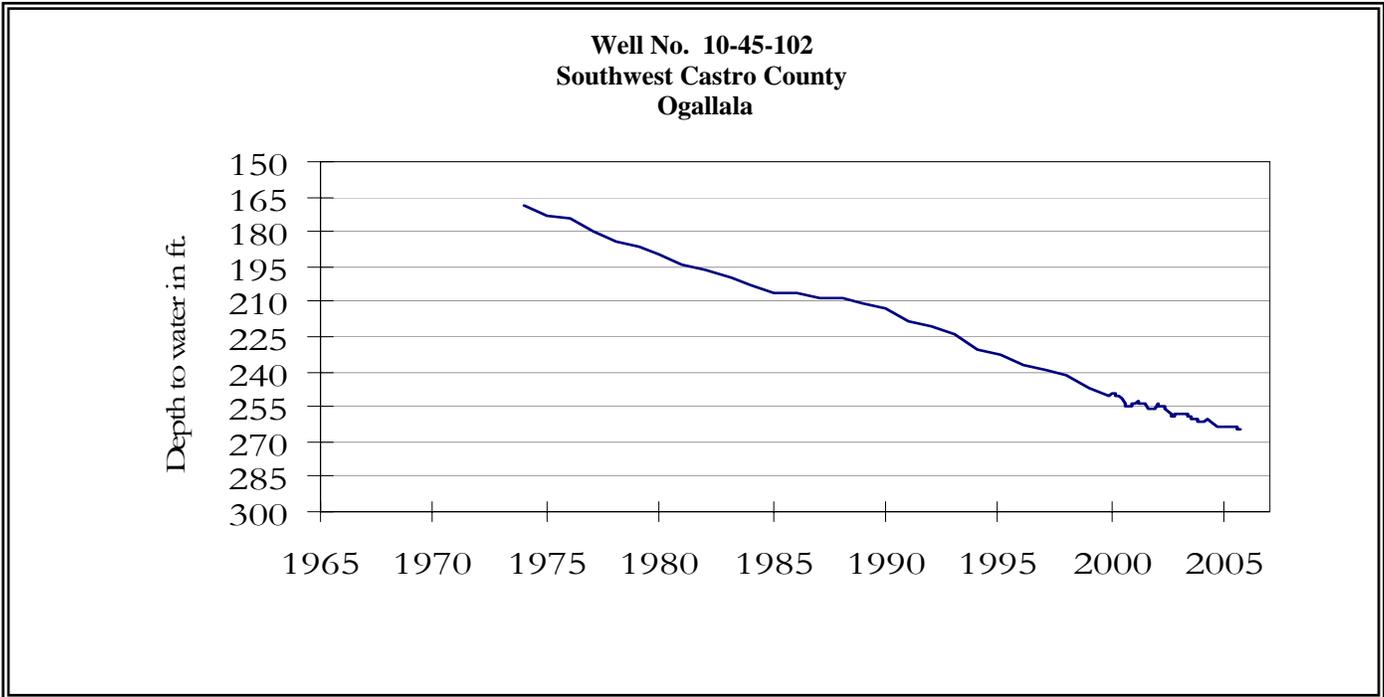
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Mar. 2006 (acre-feet) (%)	Change since Late February 2006 (acre-feet) (%)	Change since Late March 2005 (acre-feet) (%)
EAST					
Wright Patman Lake	48	142,700	142,700 100	5,630 4	0 0
Lake Cypress Springs	49	66,800	62,930 94	4,090 6	-3,870 -6
Lake Bob Sandlin	50	202,300	164,100 81	7,100 4	-38,200 -19
Lake O' the Pines	51	252,000	215,590 86	31,790 13	-33,250 -13
Lake Fork Reservoir	52	635,200	614,800 97	41,500 7	-20,400 -3
Toledo Bend Reservoir	53	4,472,900	3,811,000 85	364,000 8	-354,000 -8
Lake Palestine	54	411,300	375,860 91	25,730 6	-35,440 -9
Lake Tyler	55	73,700	64,620 88	2,480 3	-9,080 -12
Sam Rayburn Reservoir	56	2,876,300	2,721,920 95	94,990 3	-154,380 -5
B. A. Steinhagen Lake	57	94,200	89,190 95	39,180 42	4,800 5
Cedar Creek Reservoir	58	637,050	579,700 91	75,000 12	-57,200 -9
Lake Livingston	59	1,750,000	1,431,000 82	-1,000 0	-319,000 -18
Lake Conroe	60	429,900	353,700 82	4,600 1	-63,900 -15
TOTAL		12,044,350	10,627,110 88	695,090 6	-1,083,920 -9
TRANS-PECOS					
Red Bluff Reservoir	61	307,000	128,600 42	-900 0	-1,270 0
TOTAL		307,000	128,600 42	-900 0	-1,270 0
EDWARDS PLATEAU					
E. V. Spence Reservoir	62	488,760	89,640 18	-620 0	12,430 3
Twin Buttes Reservoir	63	177,800	53,930 30	2,380 1	15,110 8
O.C. Fisher Lake	64	119,200	12,880 11	-290 0	5,540 5
O. H. Ivie Reservoir	65	554,340	287,400 52	1,100 0	-31,000 -6
Lake Buchanan	66	896,980	732,210 82	-13,980 -2	-156,090 -17
Amistad Reservoir (Texas)	67	1,771,030	2,171,000 123	-74,000 -4	-427,000 -24
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	2,643,000 84	-70,000 -2	-324,000 -10
TOTAL		4,008,110	3,347,060 84	-85,410 -2	-581,010 -14
SOUTH CENTRAL					
Somerville Lake	68	155,060	128,760 83	3,490 2	-26,300 -17
Lake Travis	69	1,144,100	877,200 77	-6,000 -1	-266,900 -23
Canyon Lake	70	385,600	354,110 92	-1,500 0	-25,150 -7
Coletto Creek Reservoir	71	35,060	23,870 68	-800 -2	-8,170 -23
Medina Lake	72	254,000	174,800 69	-10,200 -4	-79,200 -31
TOTAL		1,973,820	1,558,740 79	-15,010 -1	-405,720 -21
UPPER COAST					
Lake Houston	73	128,860	128,860 100	0 0	0 0
Lake Texana	74	157,900	123,380 78	-4,960 -3	-33,180 -21
TOTAL		286,760	252,240 88	-4,960 -2	-33,180 -12
SOUTHERN					
Choke Canyon Reservoir	75	695,260	599,000 86	-7,000 -1	-92,000 -13
Lake Corpus Christi	76	241,240	116,400 48	-11,500 -5	-124,840 -52
Falcon Reservoir (Texas)	77	1,555,120	867,000 56	-32,000 -2	-11,000 -1
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	1,493,000 56	-51,000 -2	-361,000 -14
TOTAL		2,491,620	1,582,400 64	-50,500 -2	-227,840 -9
STATE TOTAL		34,470,430	28,266,490 82	1,163,630 3	-3,336,700 -10

Note:

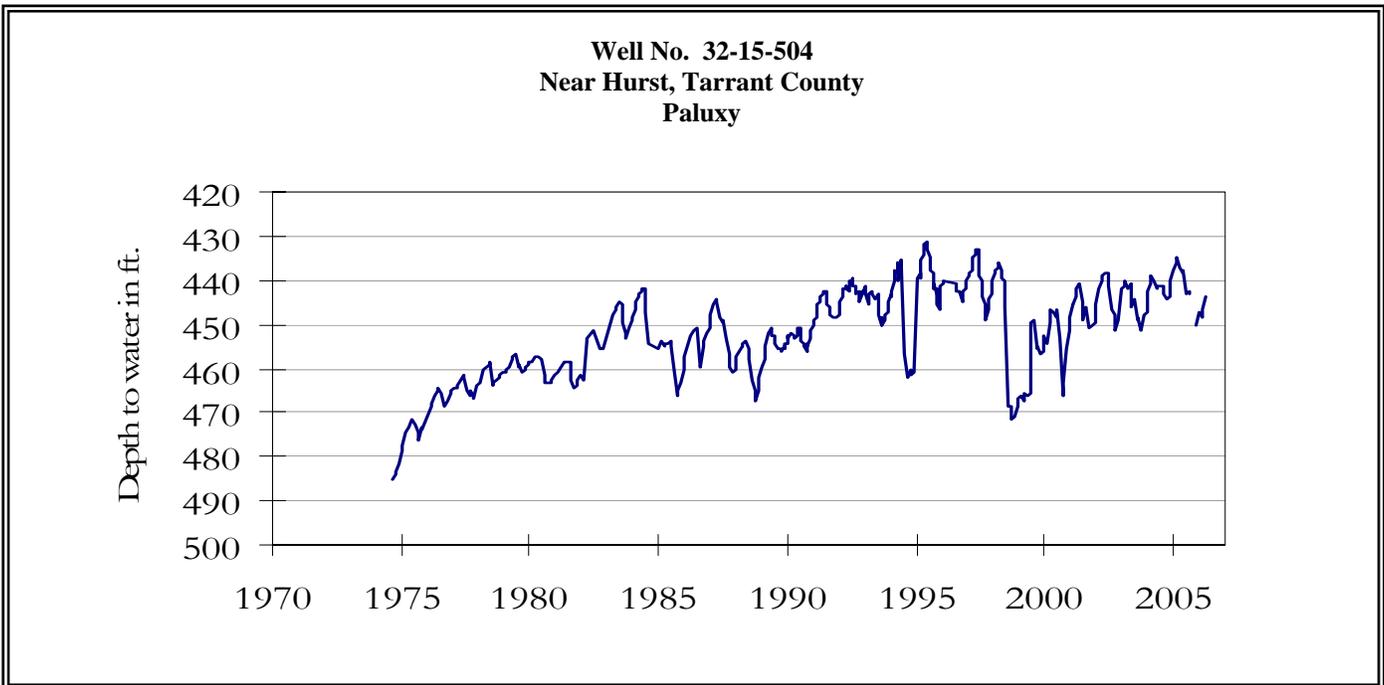
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

MARCH GROUND WATER LEVELS IN OBSERVATION WELLS

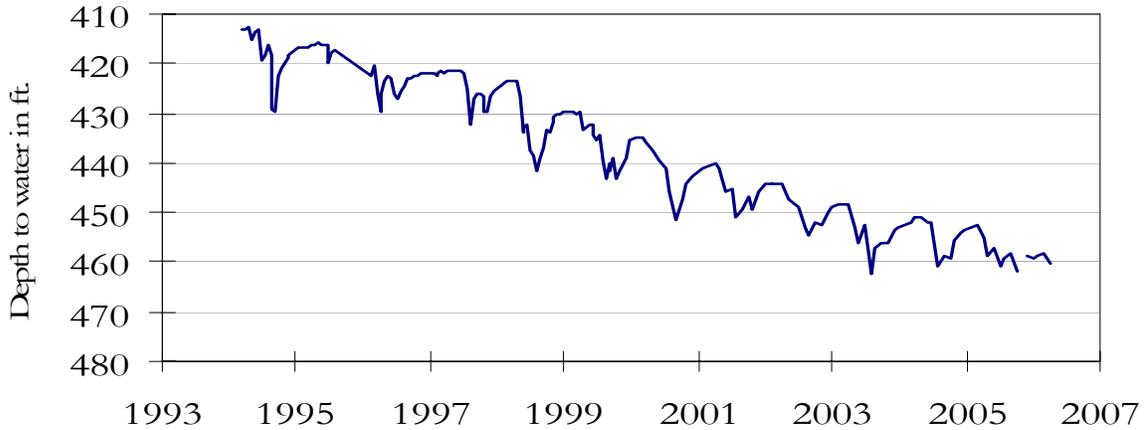


The water-level measurement is not available this month for this Ogallala aquifer well (recorder under repair). The graph presented is from last month's report.



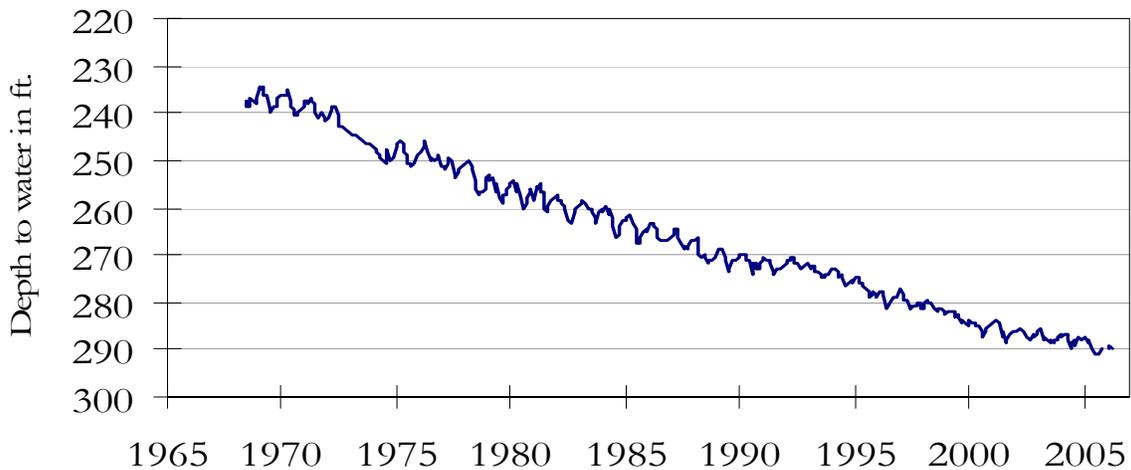
The late March water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 443.82 feet below land surface. This measurement was 3.08 feet above last month's measurement, 6.38 feet below last year's measurement, and 65.82 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.

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



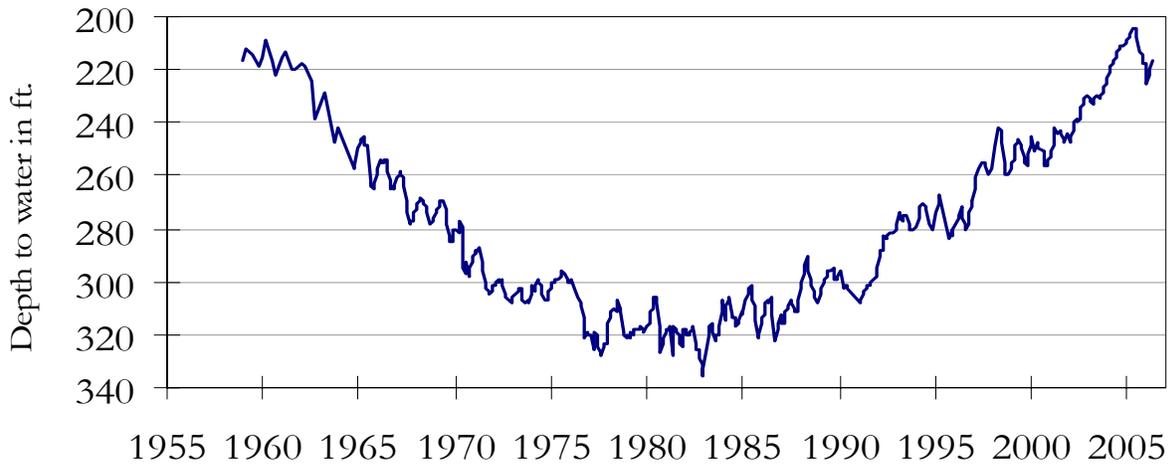
The late March water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 460.40 feet below land surface. This water level was 2.09 feet below last month's measurement, 5.50 feet below last year's measurement, and 168.40 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

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



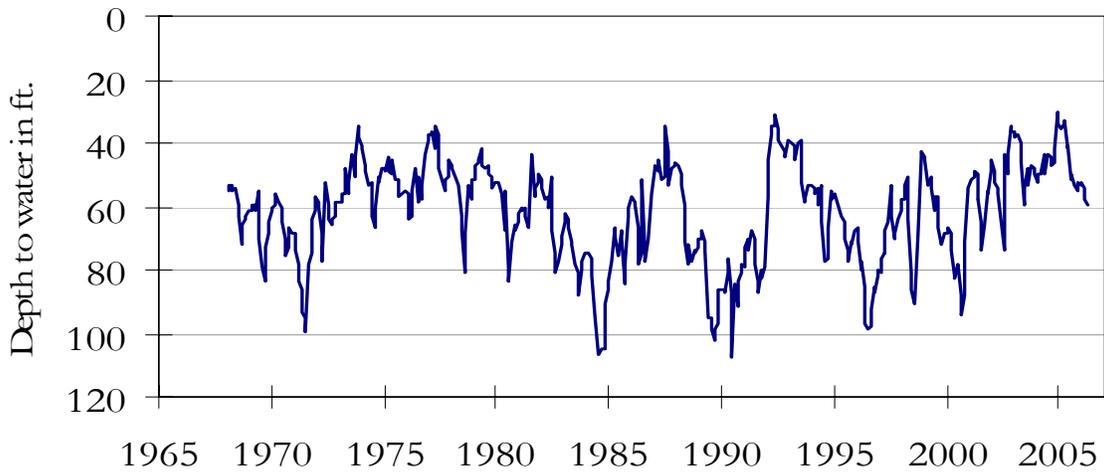
The late March water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 290.02 feet below land surface. This was 0.62 feet below last month's measurement, 1.41 feet below last year's measurement, and 58.12 feet below the initial measurement in 1964. No water level measurements were recorded for October or December 2005.

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



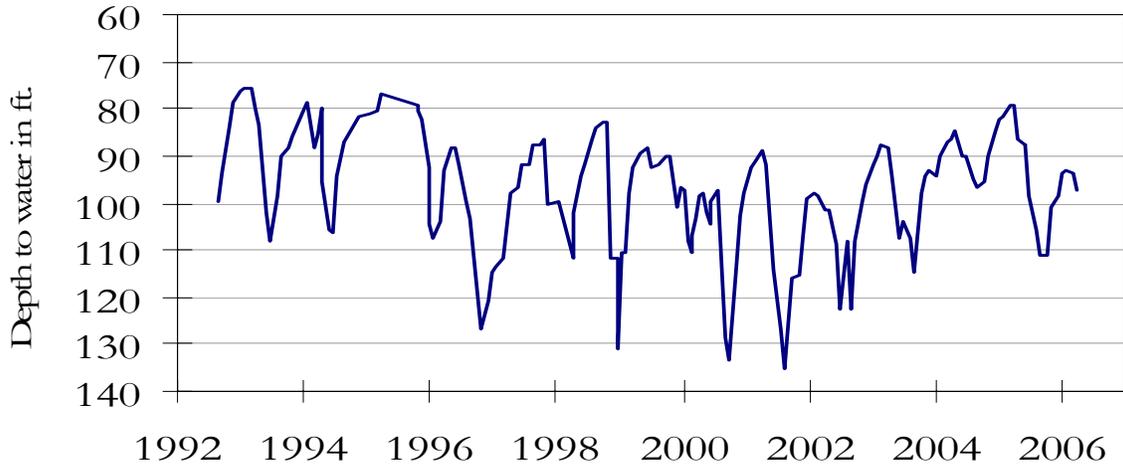
The late March water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 216.74 feet below land surface. This was 2.57 feet above last month's measurement, 12.01 feet below last year's measurement, and 81.24 feet below the initial measurement recorded in 1947.

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



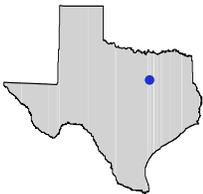
The late March water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 59.18 feet below land surface. This was 1.66 feet below last month's measurement, 26.10 feet below last year's measurement, and 12.54 feet below the initial measurement recorded in 1962.

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



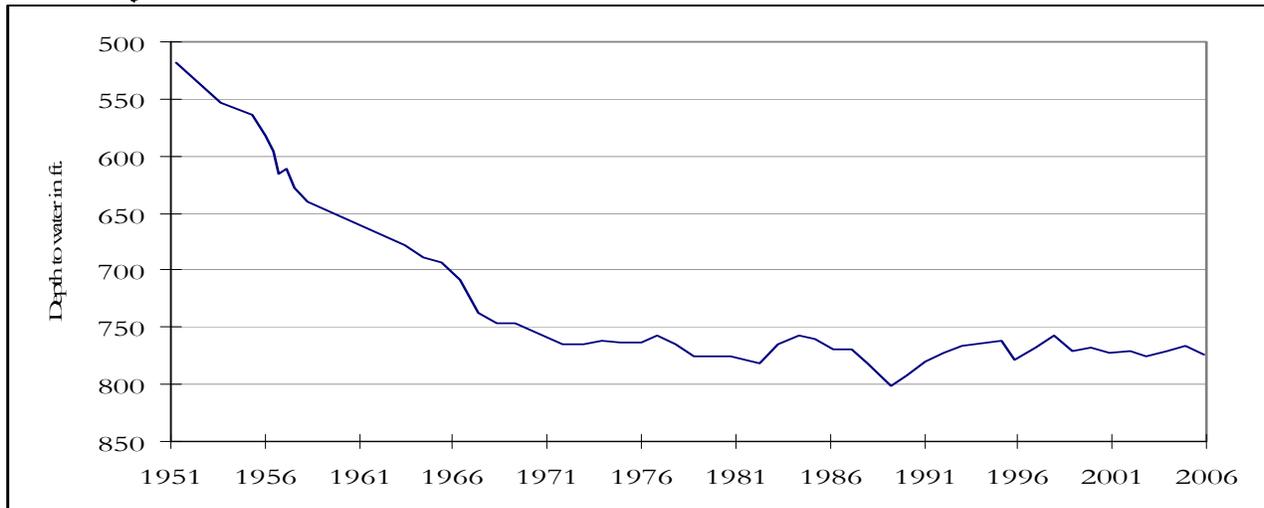
The late March water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 97.47 feet below land surface. This measurement was 4.06 feet below last month's measurement, 18.10 feet below last year's measurement, and 62.11 feet below the initial measurement recorded in 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. 32-13-601
Tarrant County**



This water level observation well, located 4 miles north of Fort Worth, at an elevation of 760 feet ASL, was completed in the Trinity aquifer. Water levels in the Trinity aquifer have historically declined by as much as 550 feet in the Dallas-Fort Worth area.

March, 2006

Water level measurements were available for six of the seven key monitoring wells. Water levels declined in four of the monitoring wells since the beginning of March, ranging from 0.62 feet in the El Paso Co. (Bolson Deposits) well to 4.06 feet in the Atascosa Co. Carrizo well. Water levels rose in the remaining two monitoring wells, ranging from 2.57 feet in the Harris Co. Evangeline well to 3.08 feet in the Tarrant Co. Paluxy well. The J-17 well recorded a water level of 59.18 feet below land surface. This water level is approximately twenty-one (21) feet above the Stage 1 critical management level.

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