

Texas Water Development Board



W *Conditions* **A** **T** **T** **E** **R**

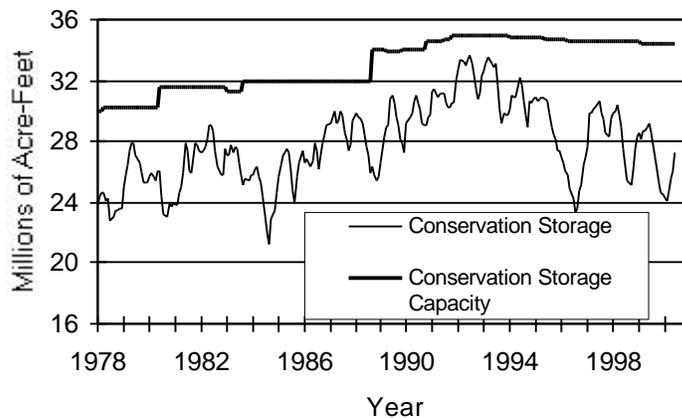
RESERVOIR STORAGE

June 2000

Near the end of June, the 77 reservoirs monitored for this report held 27.2 million acre-feet in conservation storage, or 78.8 percent of the conservation storage capacity of the State's major reservoirs. This is the third-lowest percentage of capacity for a June in 23 years of record (after 1996 and 1984). Storage increased by 1.15 million acre-feet (3.3% of conservation storage capacity) during the month. Compared to June 1999, storage is down 2.00 million acre-feet (-5.8%).

Conservation storage during the month increased in the North Central (+7.4%), Southern (+2.6%), Edwards Plateau (+2.1%), Low Rolling Plains (+1.8%), East (+1.0%), and High Plains (+0.3%) regions. Storage decreased in the Trans-Pecos (-1.3%), Upper Coast (-1.0%), and South Central (-0.7%) regions. Twenty-three monitored reservoirs, primarily in the North Central and East regions, held 100 percent of conservation storage near the end of June.

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.

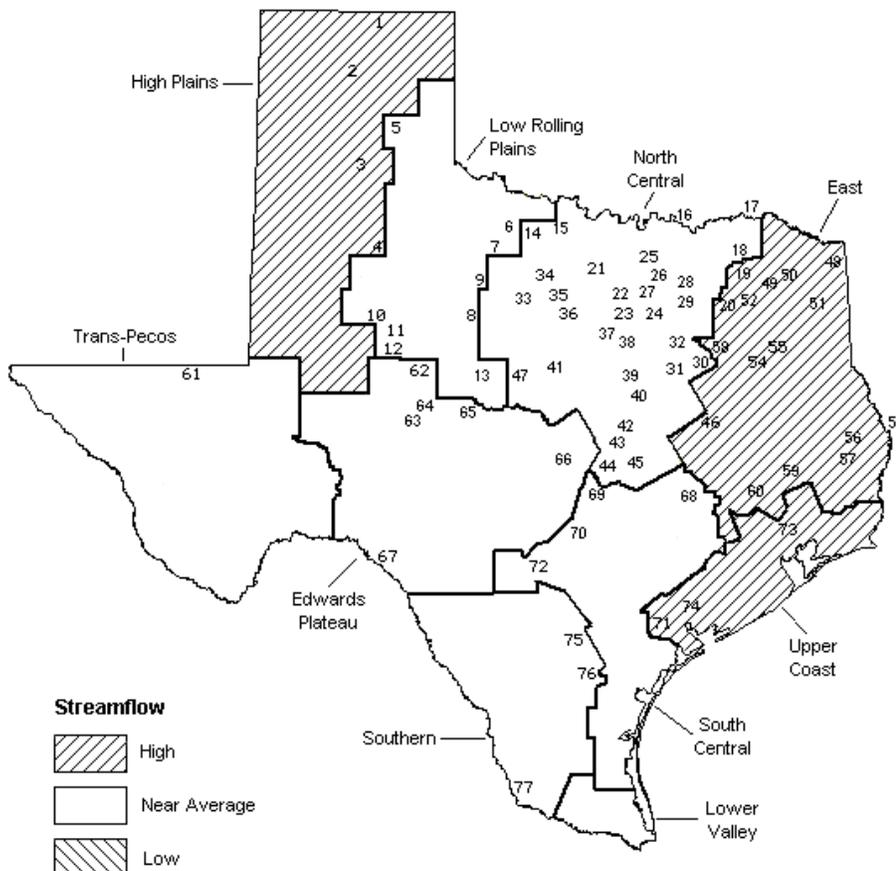
STREAMFLOW

Of 25 reporting index stations in June, computed 30-day mean flows were very high (0% - 5% exceedance) at 2 stations, high (5% - 30% exceedance) at 10 stations, near normal (30% - 70% exceedance) at 11 stations, and low (70% - 95% exceedance) at 2 stations. The two low-flow stations were at Denton Creek near Justin (North Central Region) and Village Creek near Kountze (East Region). In comparison to May, flows increased at 15 index stations and decreased at 7 stations.

Flows in June were above normal in the High Plains, Low Rolling Plains, and Southern regions, and near normal elsewhere. All three reporting index stations in the Low Rolling Plains region reported high flow. Stations that reported zero flows in May (Elm Creek at Ballinger, Hubbard Creek below Albany, and North Concho River near Carlsbad) were flowing again in June. No stations reported zero flows this month.

JUNE STREAMFLOW CONDITIONS

Reservoirs Show on Map



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

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 June 2000 (acre-feet)	(%)	Late May 2000 (acre-feet)	(%)	Late June 1999 (acre-feet)	(%)	
HIGH PLAINS									
Palo Duro Reservoir	1	60,900	22,840	38	8,830	14	-9,892	-16	
Lake Meredith (Texas)	2	500,000	381,700	76	-6,800	-1	-33,700	-7	
Lake Meredith (Texas and Oklahoma)	(2)	779,560	381,700	49	-6,800	-1	-33,700	-4	
MacKenzie Reservoir	3	46,250	9,290	20	350	1	-1,118	-2	
White River Lake	4	31,850	14,960	47	-330	-1	-15,650	-49	
TOTAL		639,000	428,790	67	2,050	0	-60,360	-9	
LOW ROLLING PLAINS									
Greenbelt Reservoir	5	58,200	27,050	46	2,000	3	-2,320	-4	
Lake Kemp	6	319,600	157,800	49	-600	0	-86,700	-27	
Miller's Creek Reservoir	7	27,890	8,630	31	-1,630	-6	-6,730	-24	
Fort Phantom Hill Reservoir	8	70,030	22,930	33	1,160	2	-6,600	-9	
Lake Stamford	9	52,700	10,280	20	1,590	3	-1,210	-2	
Lake J. B. Thomas	10	202,300	35,200	17	9,290	5	-9,780	-5	
Lake Colorado City	11	30,800	26,900	87	520	2	10,690	35	
Champion Creek Reservoir	12	41,600	5,400	13	460	1	-5,550	-13	
Hords Creek Lake	13	8,600	4,320	50	1,710	20	-339	-4	
TOTAL		811,720	298,510	37	14,500	2	-108,539	-13	
NORTH CENTRAL									
Lake Kickapoo	14	106,000	48,553	46	-1,576	-1	-20,299	-19	
Lake Arrowhead	15	262,100	113,800	43	-4,600	-2	-64,600	-25	
Lake Texoma	16	2,722,300	2,689,357	99	147,862	5	-32,943	-1	
Pat Mayse Lake	17	124,500	123,747	99	788	1	4,547	4	
Cooper Lake	18	273,000	273,000	100	0	0	17,912	7	
Lake Sulphur Springs	19	17,710	17,710	100	109	1	127	1	
Lake Tawakoni	20	936,200	936,200	100	168,100	18	0	0	
Bridgeport Reservoir	21	374,830	213,240	57	-917	0	-97,825	-26	
Eagle Mountain Reservoir	22	178,380	135,352	76	8,698	5	-25,132	-14	
Benbrook Lake	23	88,200	88,200	100	5,502	6	1,726	2	
Joe Pool Lake	24	175,800	175,800	100	16,916	10	0	0	
Ray Roberts Lake	25	798,760	553,897	69	-3,816	0	-168,380	-21	
Lewisville Lake	26	555,000	343,400	62	-7,191	-1	-127,098	-23	
Grapevine Lake	27	187,700	131,000	70	-442	0	-34,285	-18	
Lavon Lake	28	443,800	443,800	100	78,371	18	9,496	2	
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	124,511	11	0	0	
Navarro Mills Lake	31	55,810	55,810	100	1,452	3	0	0	
Bardwell Lake	32	53,580	53,580	100	0	0	0	0	
Hubbard Creek Reservoir	33	317,800	174,900	55	-2,900	-1	-75,100	-24	
Lake Graham	34	45,000	37,700	84	-1,120	-2	-7,300	-16	
Poosum Kingdom Lake	35	551,820	486,300	88	14,800	3	83,855	15	
Lake Palo Pinto	36	42,200	27,363	65	2,260	5	-14,837	-35	
Lake Granbury	37	135,680	132,451	98	13,276	10	563	0	
Lake Pat Cleburne	38	25,300	25,300	100	10,666	42	1,065	4	
Whitney Lake	39	622,800	616,400	99	203,200	33	127,900	21	
Waco Lake	40	144,500	144,500	100	23,611	16	0	0	
Proctor Lake	41	55,590	16,170	29	1,161	2	-23,587	-42	
Belton Lake	42	434,500	408,000	94	30,925	7	-26,500	-6	
Stillhouse Hollow Lake	43	226,060	221,707	98	1,861	1	-4,353	-2	
Lake Georgetown	44	37,010	23,530	64	1,198	3	-13,480	-36	
Granger Lake	45	54,280	54,280	100	0	0	0	0	
Lake Limestone	46	215,750	215,100	100	21,800	10	-650	0	
Lake Brownwood	47	143,400	104,100	73	30,320	21	-8,100	-6	
TOTAL		11,922,600	10,601,487	89	884,825	7	-497,278	-4	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage		Change since Late May 2000		Change since Late June 1999		
			Late June 2000 (acre-feet)	(%)	(acre-feet)	(%)	(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	20,900	3	0	0	
Toledo Bend Reservoir	53	4,472,900	4,410,000	99	34,000	1	59,000	1	
Lake Palestine	54	411,300	411,300	100	0	0	0	0	
Lake Tyler	55	73,700	71,174	97	-89	0	-2,526	-3	
Sam Rayburn Reservoir	56	2,876,300	2,369,000	82	14,000	0	-507,300	-18	
B. A. Steinhagen Lake	57	94,200	79,332	84	-4,402	-5	-4,277	-5	
Cedar Creek Reservoir	58	637,050	637,050	100	53,961	8	15,350	2	
Lake Livingston	59	1,750,000	1,750,000	100	0	0	0	0	
Lake Conroe	60	429,900	374,000	87	-3,900	-1	-44,000	-10	
TOTAL		12,044,350	11,400,856	95	114,470	1	-483,753	-4	
TRANS-PECOS									
Red Bluff Reservoir	61	307,000	66,870	22	-3,970	-1	-14,980	-5	
TOTAL		307,000	66,870	22	-3,970	-1	-14,980	-5	
EDWARDS PLATEAU									
E. V. Spence Reservoir	62	484,800	99,230	20	1,890	0	23,010	5	
Twin Buttes Reservoir	63	177,800	7,919	4	4,821	3	-11,808	-7	
O.C. Fisher Lake	64	119,200	11,570	10	-670	-1	276	0	
O. H. Ivie Reservoir	65	554,340	334,200	60	53,200	10	-62,500	-11	
Lake Buchanan	66	896,980	660,900	74	69,599	8	-209,571	-23	
Amistad Reservoir (Texas)	67	1,771,030	962,000	54	-43,000	-2	-29,000	-2	
Amistad Reservoir (Texas and Mexico)	(67)	3,151,300	1,147,000	36	-17,000	-1	-113,000	-4	
TOTAL		4,004,150	2,075,819	52	85,840	2	-289,593	-7	
SOUTH CENTRAL									
Somerville Lake	68	155,060	136,908	88	3,992	3	-18,152	-12	
Lake Travis	69	1,144,100	700,800	61	-11,526	-1	-355,266	-31	
Canyon Lake	70	385,600	354,600	92	1,533	0	-31,000	-8	
Coletto Creek Reservoir	71	35,060	30,860	88	-990	-3	-1,120	-3	
Medina Lake	72	254,000	150,600	59	-6,300	-2	-86,900	-34	
TOTAL		1,973,820	1,373,768	70	-13,291	-1	-492,438	-25	
UPPER COAST									
Lake Houston	73	128,860	128,860	100	0	0	0	0	
Lake Texana	74	157,900	153,100	97	-2,800	-2	-4,800	-3	
TOTAL		286,760	281,960	98	-2,800	-1	-4,800	-2	

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 2000 (acre-feet)	(%)	Change since Late May 2000 (acre-feet)	(%)	Change since Late June 1999 (acre-feet)	(%)
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SOUTHERN

Choke Canyon Reservoir	75	695,260	273,000	39	0	0	-80,000	-12
Lake Corpus Christi	76	241,240	125,800	52	2,800	1	-56,100	-23
Falcon Reservoir (Texas)	77	1,555,120	257,000	17	62,000	4	84,000	5
Falcon Reservoir (Texas and Mexico)	(77)	2,653,290	305,000	11	80,000	3	-10,000	0
TOTAL		2,491,620	655,800	26	64,800	3	-52,100	-2

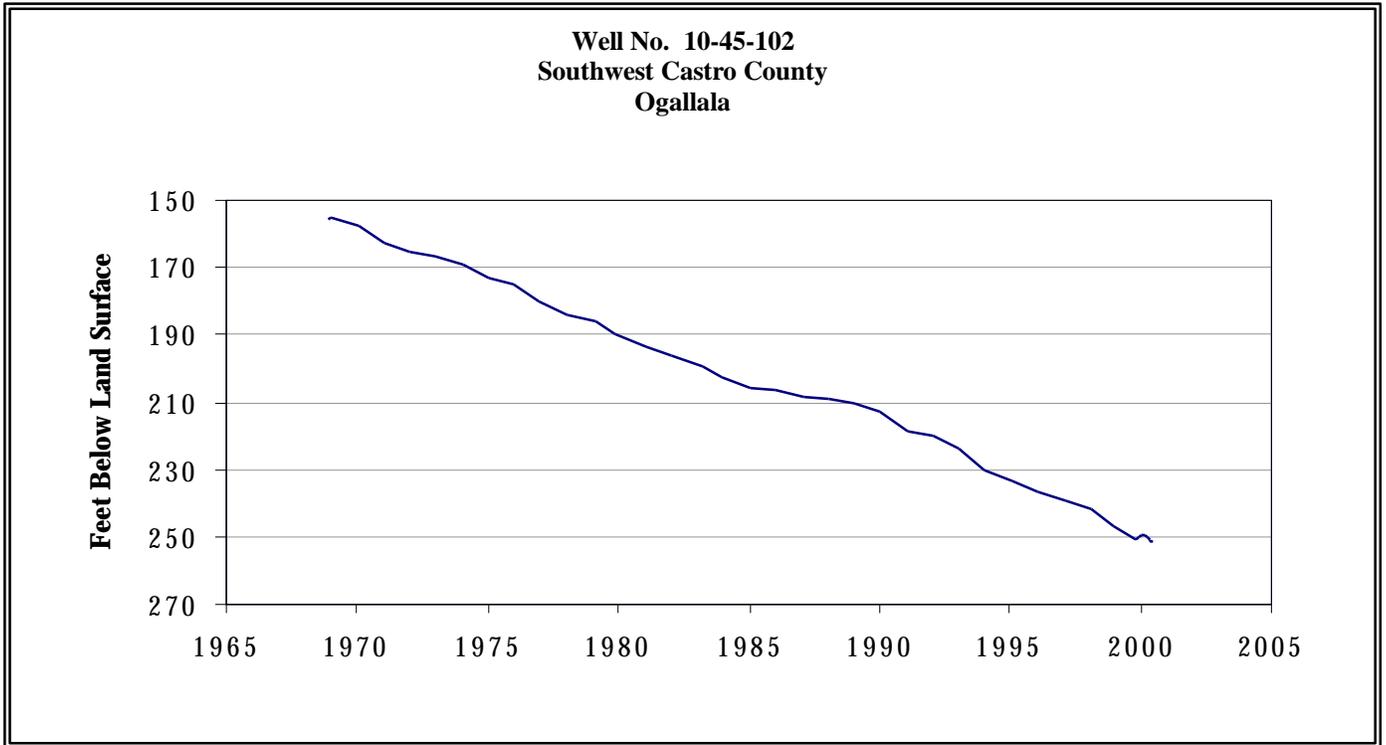
STATE TOTAL		34,481,020	27,183,860	79	1,146,424	3	-2,003,841	-6
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Note:

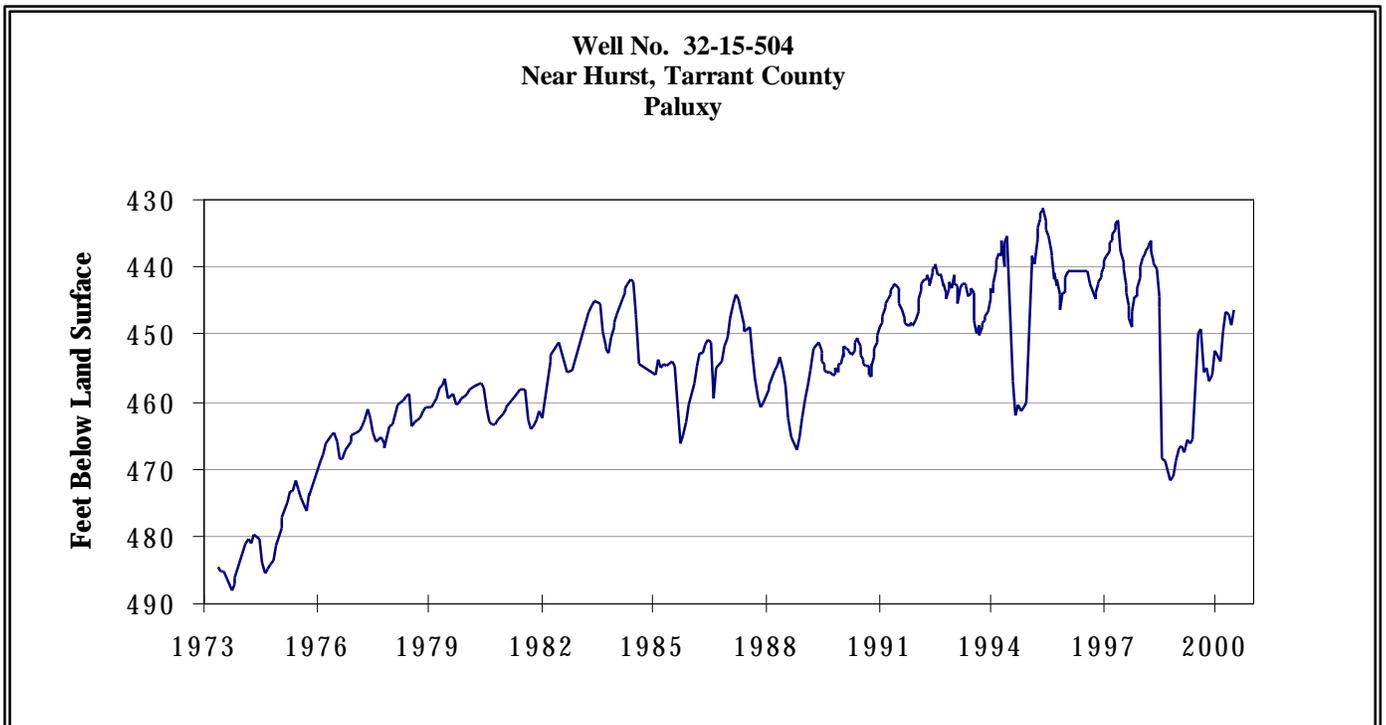
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included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

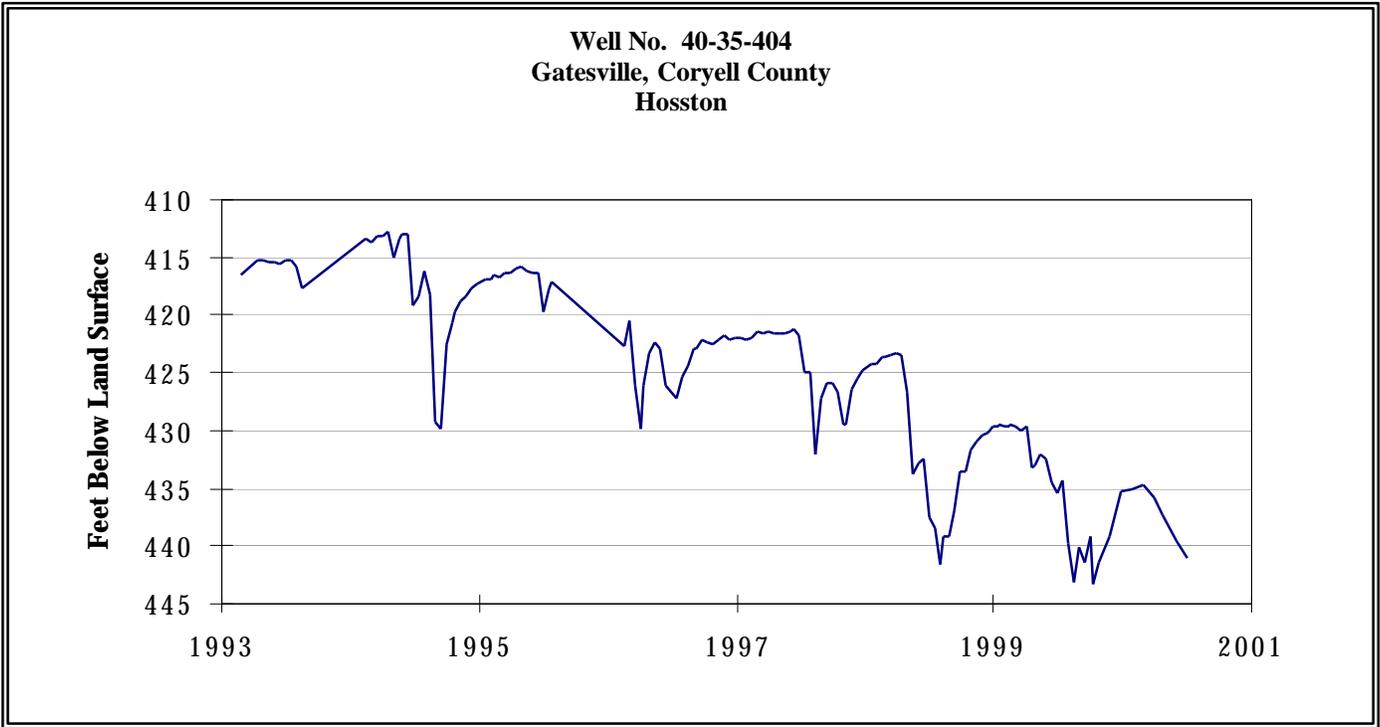
JUNE GROUND WATER LEVELS IN OBSERVATION WELLS



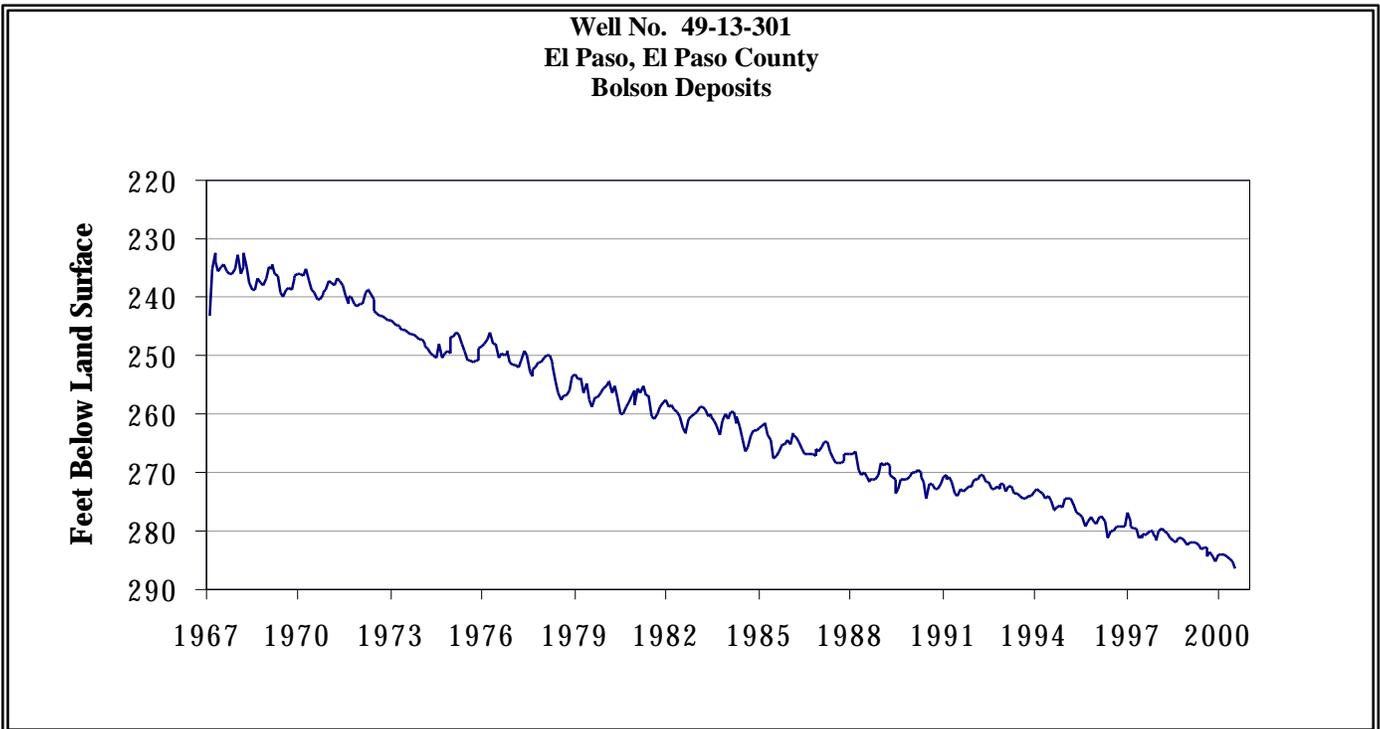
The late June water-level measurement in this Ogallala aquifer well, elevation 3,816 feet above sea level, was 251.5 feet below land surface. This measurement was 0.32 feet below last month's measurement and 95.6 feet below the initial measurement recorded in 1968.



The late June water-level measurement in this Paluxy Formation Trinity aquifer well, elevation 535 feet above sea level, was 446.46 feet below land surface. This measurement was 2.19 feet above last month's measurement, 3.42 feet above last year's measurement, and 53.07 feet below the initial measurement recorded in 1953.

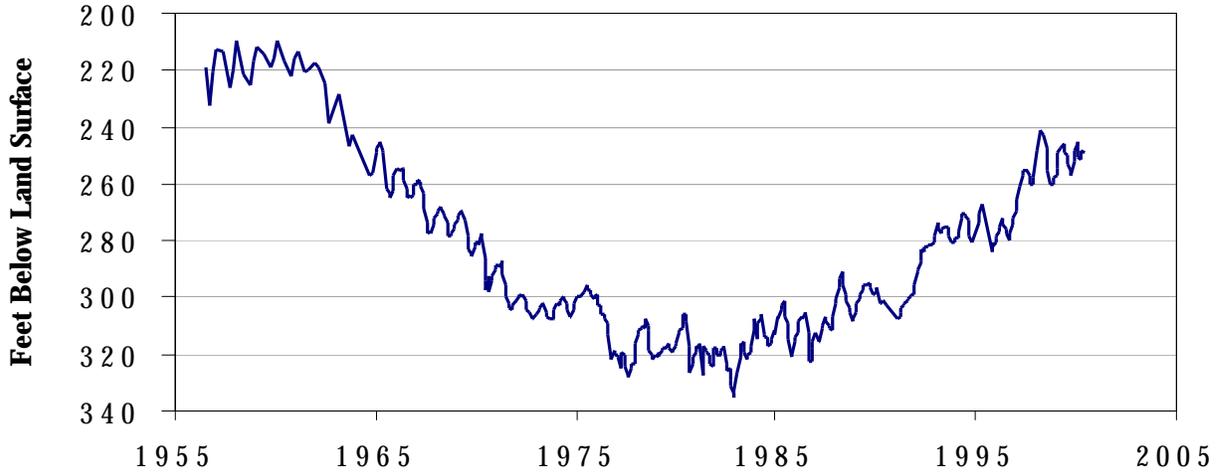


The late June water-level measurement in this Hosston Formation Trinity aquifer well, elevation 823 feet above sea level, was 441.08 feet below land surface. This measurement was 2.51 feet below last month's measurement, 2.63 feet below last year's measurement, and 150.08 feet below the initial measurement recorded in 1955.



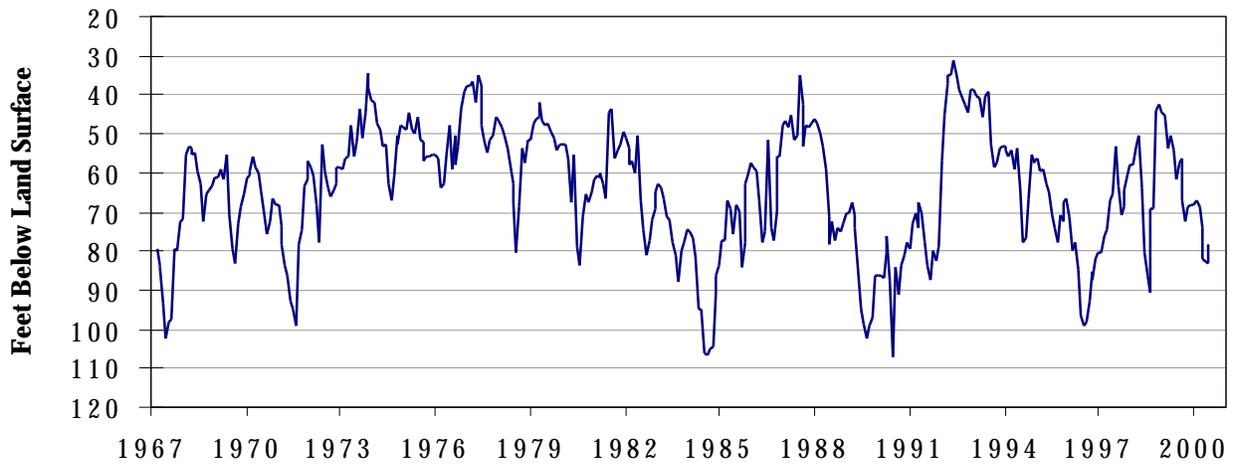
The late June water-level measurement in this Hueco Bolson aquifer well, elevation 3,882 feet above sea level, was 286.37 feet below land surface. This was 1.13 feet below last month's measurement, 3.54 feet below last year's measurement, and 54.47 feet below the initial measurement recorded in 1964.

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



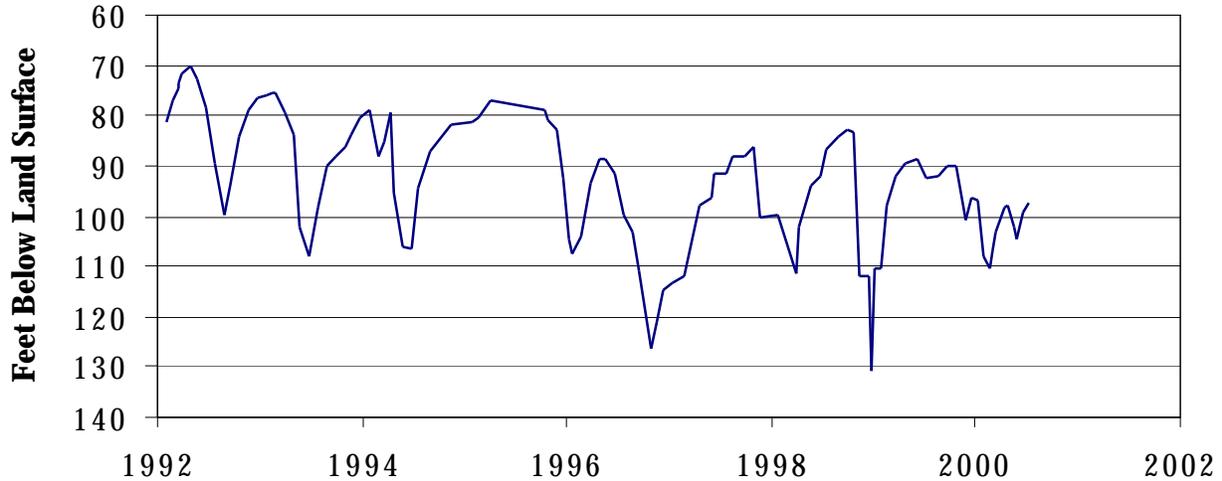
The late June water-level measurement in this Evangeline Formation Gulf Coast aquifer well, elevation 66 feet above sea level, was 249.11 feet below land surface. This was 1.23 feet below last month's measurement, 0.18 feet below last year's measurement, and 145.88 feet below the initial measurement recorded in 1947.

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



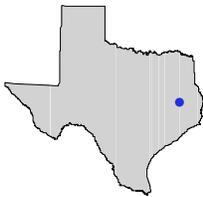
The late June water-level measurement in this Edwards (BFZ) aquifer well, elevation 731 feet above sea level, was 78.43 feet below land surface. This was 4.67 feet above last month's measurement, 18.81 feet below last year's measurement, and 23.48 feet below the initial measurement recorded in 1962.

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



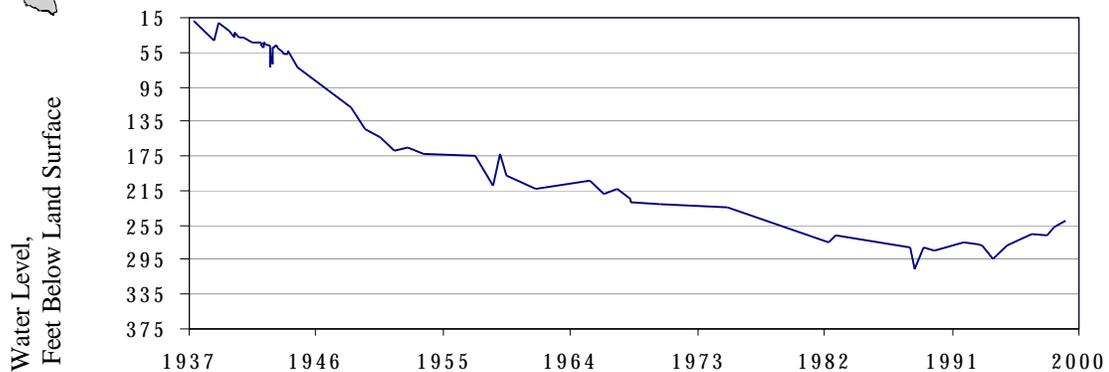
The mid-June water-level measurement in this Carrizo aquifer well, elevation 446 feet above sea level, was 97.23 feet below land surface. This measurement was 2.27 feet above last month's measurement, 3.59 feet above last year's measurement, and 15.98 feet below the initial measurement recorded in 1965.

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 37-27-301
Nacogdoches, Nacogdoches County**



This city of Nacogdoches well was previously used for public supply until the early 90s, but is now abandoned. The well was drilled in 1929 at an altitude of 295 feet above sea level and completed in the Carrizo Aquifer at a depth of 462 feet. Water levels dropped almost 300 feet since 1937 and began recovering after pumping stopped.