

Texas Water Development Board



WATER **Conditions**

RESERVOIR STORAGE

February 2010

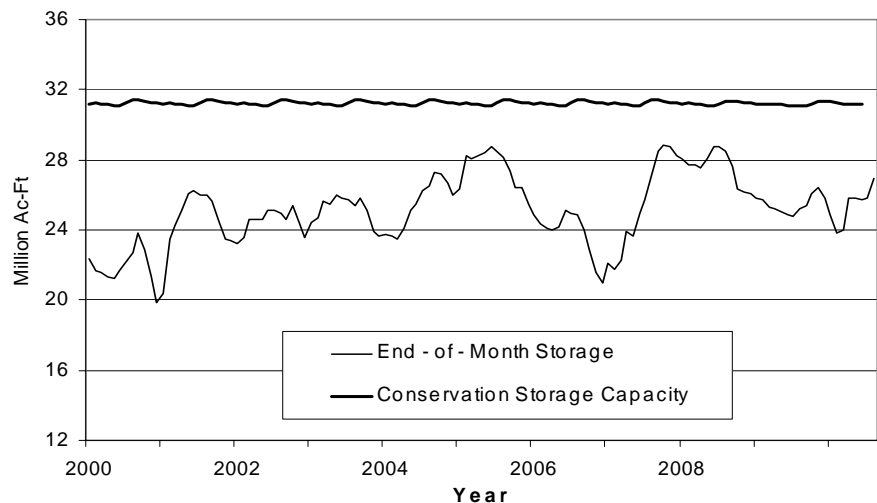
Total storage in the state's major reservoirs went up 4% compared to that in January. Near the end of the month, the 109 reservoirs monitored for this report held 26.9 million acre-feet in conservation storage*, or 87 percent of the conservation storage capacity of the state's major water supply reservoirs.

Storage was at 100% in 57 reservoirs, five more than last month, mainly in the Upper Coast, East, South Central and North Central Regions. There were six lakes at or below 10% full, same as last month: O C Fisher Lake and Palo Duro Reservoir were effectively empty, Lake Meredith (total) at 4%, Lake J. B. Thomas and E.V. Spence Reservoir were at 5%, and White River Lake was 10% full.

Three regions had combined storage above 90%: East and Upper Coast 100%, North Central 96%. The High Plains (6%) and Trans-Pecos regions (25%) remained very low. Storage increased in 8 regions and remained unchanged in 1 region over the month. Compared to last February, storage increased in 5 regions but decreased in 4 regions.

* Only the Texas share of storage in border reservoirs is counted.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Figures are based on the end of the month data at 109 major reservoirs that represent 95 percent of the total conservation storage capacity of the 175 major water supply reservoirs in Texas. Reservoirs with a conservation storage capacity of 5,000 acre-feet or greater are included.

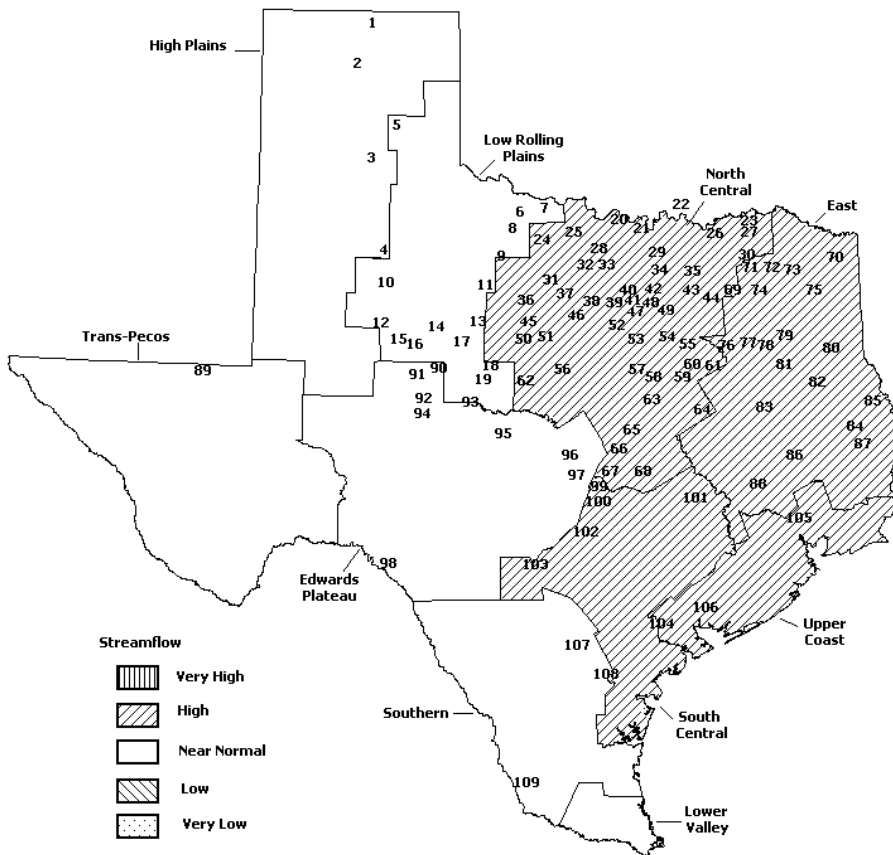
STREAMFLOW

Of 29 reporting index stations in February, computed 30-day mean flows were very high (<5% exceedance frequency) at 6 station, high (5% - 30%) at 14 stations, low (70% - 95%) at 1 stations, and near normal (30% - 70%) at the remaining 8 stations. Compared to January, flows have increased at 26 index stations and decreased at 3 stations.

On a regional basis, flows in February were high in the North Central, East, South Central, and Upper Coast regions, and near normal everywhere else. Streamflow in the Lower Valley Region is not monitored.

FEBRUARY STREAMFLOW CONDITIONS

Reservoirs Shown on Map



- | | |
|------------------------------------|-----------------------------------|
| 1. Palo Duro Reservoir | 56. Proctor Lake |
| 2. Meredith, Lake | 57. Whitney Lake |
| 3. MacKenzie Reservoir | 58. Aquilla Lake |
| 4. White River Lake | 59. Navarro Mills Lake |
| 5. Greenbelt Lake | 60. Halbert, Lake |
| 6. Electra, Lake | 61. Richland-Chambers Reservoir |
| 7. N. Fork Buffalo Creek Reservoir | 62. Lake Brownwood |
| 8. Kemp, Lake | 63. Waco Lake |
| 9. Miller's Creek Reservoir | 64. Limestone, Lake |
| 10. Alan Henry Reservoir | 65. Belton Lake |
| 11. Stamford, Lake | 66. Stillhouse Hollow Lake |
| 12. Lake J. B. Thomas | 67. Georgetown, Lake |
| 13. Fort Phantom Hill, Lake | 68. Granger Lake |
| 14. Sweetwater, Lake | 69. Tawakoni, Lake |
| 15. Colorado City, Lake | 70. Wright Patman Lake |
| 16. Champion Creek Reservoir | 71. Sulphur Springs, Lake |
| 17. Abilene, Lake | 72. Cypress Springs, Lake |
| 18. Coleman, Lake | 73. Bob Sandlin, Lake |
| 19. Hords Creek Lake | 74. Fork Reservoir, Lake |
| 20. Farmers Creek Reservoir | 75. O' the Pines, Lake |
| 21. Hubert H Moss Lake | 76. Cedar Creek Reservoir Trinity |
| 22. Texoma, Lake | 77. Athens, Lake |
| 23. Pat Mayse Lake | 78. Palestine, Lake |
| 24. Lake Kickapoo | 79. Tyler, Lake |
| 25. Lake Arrowhead | 80. Murvaul, Lake |
| 26. Bonham, Lake | 81. Jacksonville, Lake |
| 27. Crook, Lake | 82. Nacogdoches, Lake |
| 28. Amon G Carter, Lake | 83. Houston County Lake |
| 29. Ray Roberts, Lake | 84. Sam Rayburn Reservoir |
| 30. Jim Chapman Lake | 85. Toledo Bend Reservoir |
| 31. Graham, Lake | 86. Livingston, Lake |
| 32. Lost Creek Reservoir | 87. B. A. Steinhagen Lake |
| 33. Bridgeport Reservoir | 88. Conroe, Lake |
| 34. Lewisville Lake | 89. Red Bluff Reservoir |
| 35. Lavon Lake | 90. Oak Creek Reservoir |
| 36. Hubbard Creek Reservoir | 91. E. V. Spence Reservoir |
| 37. Possum Kingdom Lake | 92. O. C. Fisher Lake |
| 38. Mineral Wells, Lake | 93. O. H. Ivie Reservoir |
| 39. Weatherford, Lake | 94. Twin Buttes Reservoir |
| 40. Eagle Mountain Lake | 95. Brady Creek Reservoir |
| 41. Worth, Lake | 96. Buchanan, Lake |
| 42. Grapevine Lake | 97. Lyndon B Johnson, Lake |
| 43. Lake Ray Hubbard | 98. Amistad Reservoir, Intl. |
| 44. New Terrell City Lake | 99. Travis, Lake |
| 45. Daniel, Lake | 100. Austin, Lake |
| 46. Palo Pinto, Lake | 101. Somerville Lake |
| 47. Benbrook Lake | 102. Canyon Lake |
| 48. Arlington, Lake | 103. Medina Lake |
| 49. Joe Pool Lake | 104. Coletto Creek Reservoir |
| 50. Cisco, Lake | 105. Lake Houston |
| 51. Leon, Lake | 106. Texana, Lake |
| 52. Lake Granbury | 107. Choke Canyon Reservoir |
| 53. Pat Cleburne, Lake | 108. Lake Corpus Christi |
| 54. Waxahacie, Lake | 109. Falcon Reservoir, Intl. |
| 55. Bardwell Lake | |

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage		Conservation Storage		Change since Late January		Change since Late February	
		Capacity (acre-feet)	Late Feb. (acre-feet)	2010 (%)	2010 (%)	2010 (%)	2010 (%)	2009 (%)	2009 (%)
HIGH PLAINS									
Palo Duro Reservoir	1	60,897	282	0	0	0	-612	-1	
Meredith, Lake (Texas)	2	500,000	30,730	6	3,960	1	-30,418	-6	
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	30,730	4	3,960	1	-30,418	-4	
MacKenzie Reservoir	3	46,429	5,701	12	-7	0	3	0	
White River Lake	4	29,880	2,937	10	116	0	-3,604	-12	
TOTAL		637,206	39,650	6	4,069	1	-34,631	-5	
LOW ROLLING PLAINS									
Greenbelt Lake	5	59,500	15,750	26	420	1	-2,609	-4	
*Electra, Lake	6	5,626	656	12	49	1	-226	-4	
N. Fork Buffalo Crk Reservoir	7	15,400	5,922	38	403	3	2,039	13	
Kemp, Lake	8	245,308	189,169	77	14,617	6	28,685	12	
Millers Creek Reservoir	9	27,888	14,670	53	1,126	4	-906	-3	
Alan Henry Reservoir	10	94,808	85,008	90	-1,842	-2	-7,355	-8	
Stamford, Lake	11	51,570	42,625	83	4,356	8	8,422	16	
J B Thomas, Lake	12	199,931	10,071	5	913	0	-5,592	-3	
Fort Phantom Hill, Lake	13	70,030	52,906	76	2,820	4	-7,679	-11	
Sweetwater, Lake	14	10,006	6,025	60	69	1	-1,336	-13	
Colorado City, Lake	15	31,793	17,698	56	221	1	-3,732	-12	
Champion Creek Reservoir	16	41,618	7,798	19	125	0	-1,076	-3	
Abilene, Lake	17	6,099	3,174	52	1,199	20	-285	-5	
Coleman, Lake	18	38,076	23,925	63	1,048	3	-3,454	-9	
Hords Creek Lake	19	5,684	1,429	25	50	1	-1,233	-22	
TOTAL		903,337	476,826	53	25,574	3	3,663	0	
NORTH CENTRAL									
Nocona, Lake (Farmers Crk)	20	21,445	21,445	100	1,188	6	4,839	23	
Hubert H Moss Lake	21	24,058	24,058	100	0	0	3,219	13	
Texoma, Lake (Texas)	22	1,185,688	1,185,688	100	-24,021	-2	0	0	
Texoma, Lake (Texas & Oklahoma)	(22)	2,371,376	2,371,376	100	-48,042	-2	0	0	
*Pat Mayse Lake	23	118,100	118,100	100	0	0	12,930	11	
Kickapoo, Lake	24	85,825	56,692	66	5,221	6	18,589	22	
Arrowhead, Lake	25	235,997	165,500	70	8,189	3	11,965	5	
Bonham, Lake	26	11,026	11,026	100	0	0	3,219	29	
Crook, Lake	27	9,195	9,195	100	0	0	496	5	
Amon G Carter, Lake	28	19,903	19,903	100	0	0	4,063	20	
Ray Roberts, Lake	29	798,758	798,758	100	0	0	81,543	10	
Jim Chapman Lake (Cooper)	30	260,332	260,332	100	0	0	108,501	42	
Graham, Lake	31	45,260	42,487	94	3,951	9	2,776	6	
*Lost Creek Reservoir	32	11,950	11,950	100	0	0	1,731	14	
Bridgeport, Lake	33	366,236	331,901	91	51,262	14	64,490	18	
Lewisville Lake	34	543,988	543,988	100	0	0	119,800	22	
Lavon Lake	35	443,844	443,844	100	0	0	85,190	19	
Hubbard Creek Reservoir	36	318,067	215,862	68	3,358	1	-36,394	-11	
Possum Kingdom Lake	37	540,340	519,821	96	51,246	9	28,564	5	
*Mineral Wells, Lake	38	7,065	7,065	100	0	0	2,000	28	
Weatherford, Lake	39	18,645	18,633	100	1,278	7	6,922	37	
Eagle Mountain Lake	40	182,500	182,500	100	255	0	38,099	21	
Worth, Lake	41	24,500	24,500	100	3,166	13	7,454	30	
Grapevine Lake	42	164,702	164,702	100	0	0	48,432	29	
Ray Hubbard, Lake	43	452,040	452,040	100	0	0	43,358	10	
New Terrell City Lake	44	8,583	8,583	100	0	0	1,339	16	
Daniel, Lake	45	9,435	4,363	46	95	1	-1,969	-21	
Palo Pinto, Lake	46	27,150	27,150	100	5,083	19	13,518	50	
Benbrook Lake	47	85,648	85,648	100	0	0	22,905	27	
Arlington, Lake	48	38,740	38,645	100	-95	0	12,890	33	

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 January 2010		Change since Late February 2009		
			Late Feb. (acre-feet)	2010 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
NORTH CENTRAL (Continue)									
Joe Pool Lake	49	142,861	142,861	100	0	0	18,860	13	
*Cisco, Lake	50	26,000	16,740	64	58	0	-2,131	-8	
Leon, Lake	51	26,421	18,608	70	670	3	-1,855	-7	
Granbury, Lake	52	128,046	125,025	98	1,057	1	10,232	8	
Pat Cleburne, Lake	53	25,730	25,730	100	0	0	6,556	25	
Waxahachie, Lake	54	10,779	10,779	100	0	0	1,477	14	
Bardwell Lake	55	46,122	46,122	100	0	0	10,631	23	
Proctor Lake	56	55,457	42,528	77	7,837	14	7,408	13	
Whitney, Lake	57	553,349	519,689	94	-13,277	-2	154,928	28	
Aquilla Lake	58	45,092	45,092	100	0	0	12,049	27	
Navarro Mills Lake	59	55,817	55,817	100	0	0	15,562	28	
*Halbert, Lake	60	6,033	5,390	89	-569	-9	2,221	37	
Richland-Chambers Reservoir	61	1,103,816	1,103,816	100	0	0	204,751	19	
*Brownwood, Lake	62	131,429	93,510	71	3,101	2	-7,068	-5	
Waco, Lake	62	198,943	198,943	100	0	0	25,541	13	
Limestone, Lake	64	208,015	207,771	100	-244	0	33,280	16	
Belton Lake	65	435,225	435,225	100	0	0	37,617	9	
Stillhouse Hollow Lake	66	227,771	227,771	100	0	0	34,015	15	
Georgetown, Lake	67	36,823	36,823	100	0	0	18,965	52	
Granger Lake	68	52,525	48,941	93	-3,584	-7	9,726	19	
Tawakoni, Lake	69	888,126	888,126	100	0	0	177,174	20	
TOTAL		10,463,400	10,089,686	96	105,225	1	1,480,408	14	
EAST									
Wright Patman Lake	70	122,593	122,593	100	0	0	0	0	
*Sulphur Springs, Lake	71	17,838	17,838	100	0	0	2,893	16	
Cypress Springs, Lake	72	67,689	67,689	100	0	0	276	0	
Bob Sandlin, Lake	73	200,579	200,579	100	0	0	0	0	
Fork Reservoir, Lake	74	604,927	604,927	100	0	0	22,175	4	
O the Pines, Lake	75	238,933	238,933	100	0	0	0	0	
Cedar Creek Reservoir in Trinity	76	644,686	644,686	100	0	0	83,272	13	
Athens, Lake	77	29,435	29,435	100	0	0	592	2	
Palestine, Lake	78	370,907	370,907	100	0	0	0	0	
Tyler, Lake	79	73,256	73,256	100	0	0	0	0	
Murvaul, Lake	80	38,284	38,284	100	0	0	0	0	
Jacksonville, Lake	81	30,300	30,300	100	0	0	68	0	
Nacogdoches, Lake	82	39,521	39,521	100	0	0	4,083	10	
Houston County Lake	83	17,113	17,113	100	0	0	0	0	
Sam Rayburn Reservoir	84	2,857,077	2,857,077	100	222,757	8	631,476	22	
Toledo Bend Reservoir (Texas)	85	2,236,450	2,210,462	99	275,188	12	225,434	10	
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	4,420,925	99	550,376	12	450,869	10	
*Livingston, Lake	86	1,741,867	1,741,867	100	0	0	0	0	
B A Steinhagen Lake	87	66,966	51,118	76	-1,224	-2	-2,447	-4	
Conroe, Lake	88	416,188	416,188	100	0	0	22,652	5	
TOTAL		9,814,609	9,772,773	100	496,721	5	990,474	10	
TRANS-PECOS									
Red Bluff Reservoir	89	289,670	72,887	25	3,046	1	-7,090	-2	
TOTAL		289,670	72,887	25	3,046	1	-7,090	-2	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

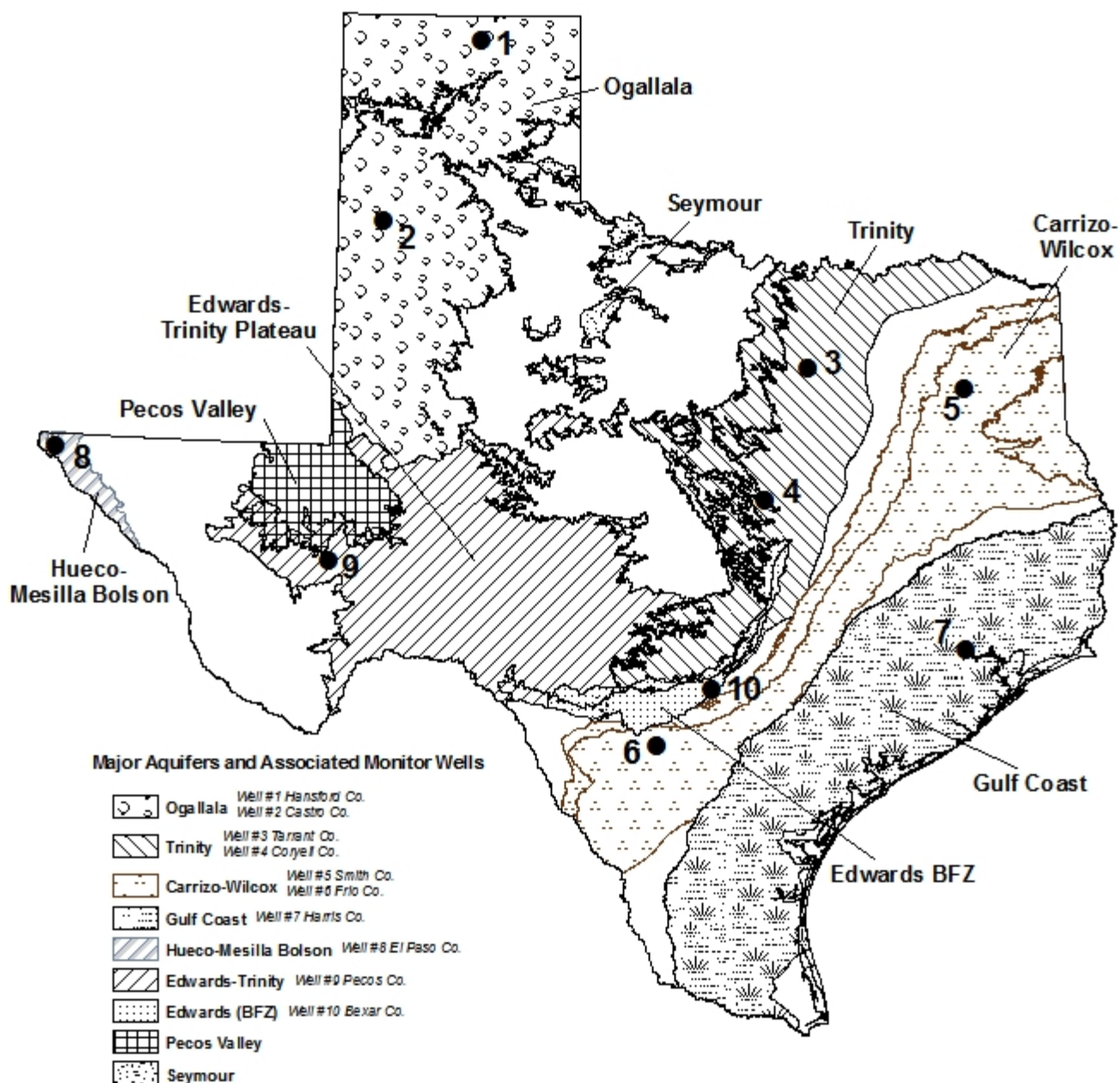
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage		Change since Late January 2010		Change since Late February 2009		
			Late Feb. (acre-feet)	2010 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
EDWARDS PLATEAU									
Oak Creek Reservoir	90	39,260	23,948	61	399	1	-5,550	-14	
E V Spence Reservoir	91	517,272	24,554	5	478	0	-25,694	-5	
O C Fisher Lake	92	79,483	0	0	0	0	0	0	
*O H Ivie Reservoir	93	554,335	241,317	44	6,343	1	-57,137	-10	
Twin Buttes Reservoir	94	177,850	33,576	19	3,078	2	-11,833	-7	
Brady Creek Reservoir	95	29,110	16,863	58	1,361	5	3,052	10	
Buchanan, Lake	96	875,610	592,098	68	96,526	11	19,455	2	
Lyndon B Johnson, Lake	97	113,690	111,954	98	-321	0	-900	-1	
*Amistad Reservoir (Texas)	98	1,840,849	1,735,000	94	3,000	0	-160,000	-9	
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	3,167,000	97	10,000	0	-108,532	-3	
TOTAL		4,227,459	2,779,310	66	110,864	3	-238,607	-6	
SOUTH CENTRAL									
Travis, Lake	99	1,113,902	1,040,633	93	231,820	21	354,977	32	
*Austin, Lake	100	21,804	21,062	97	-61	0	90	0	
Somerville Lake	101	147,104	147,104	100	0	0	33,386	23	
Canyon Lake	102	378,781	378,781	100	53,964	14	88,308	23	
Medina Lake	103	254,823	95,356	37	28,061	11	-35,457	-14	
*Coletto Creek Reservoir	104	31,040	31,040	100	0	0	7,689	25	
TOTAL		1,947,454	1,713,976	88	313,784	16	448,993	23	
UPPER COAST									
Houston, Lake	105	128,863	128,863	100	0	0	0	0	
Texana, Lake	106	153,246	153,246	100	0	0	52,146	34	
TOTAL		282,109	282,109	100	0	0	52,146	18	
SOUTHERN									
Choke Canyon Reservoir	107	695,262	490,158	70	7,529	1	-62,516	-9	
Corpus Christi, Lake	108	256,961	159,786	62	40,107	16	-2,059	-1	
*Falcon Reservoir (Texas)	109	1,551,034	1,039,000	67	23,000	1	-524,000	-34	
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	1,769,000	67	32,000	1	-877,817	-33	
TOTAL		2,503,257	1,688,944	67	70,636	3	-588,575	-24	
STATE TOTAL		31,068,501	26,916,161	87	1,129,919	4	2,106,781	7	

* Conservation volume is used as conservation storage capacity because the dead storage is unknown.

Note

Conservation storage capacity is the space available to store water above the lowest outlet and below the 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 the dead storage. Conservation storage percentage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir on date shown. Percent change is given by $100 * (\text{current conservation storage} - \text{past conservation storage}) / \text{conservation storage capacity}$. Figures shown are for the Texas share of conservation storage in all reservoirs.

GROUNDWATER LEVELS IN OBSERVATION WELLS



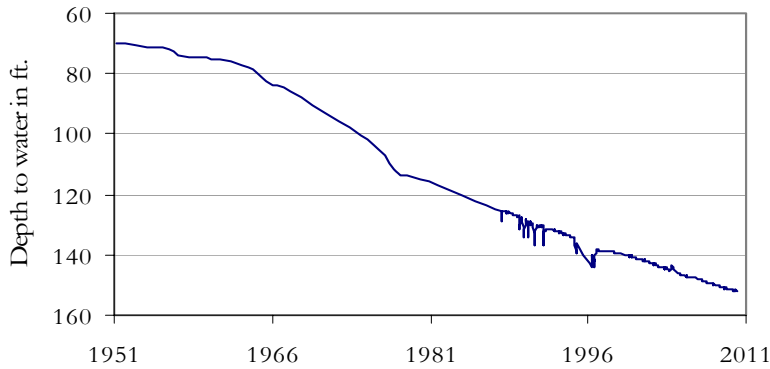
February, 2010

Water level measurements were available for nine out of the ten key monitoring wells. Water levels rose in seven of the nine monitoring wells since the beginning of February, ranging from 0.11 feet in the Hansford County Ogallala well to 9.24 feet in the Frio County Carrizo-Wilcox well. Water levels declined in the remaining monitoring wells, ranging from 0.14 feet in the Castro County Ogallala well to 0.87 feet in the El Paso County Hueco-Mesilla well. The J-17 well in San Antonio recorded a water level of 49.12 feet below land surface, 6.65 feet above last month's measurement. This water level is 21.88 feet above the Stage 1 critical management level.

Note: In the following graphs, "ID" is used to differentiate between the monitoring well number (1 - 10) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.

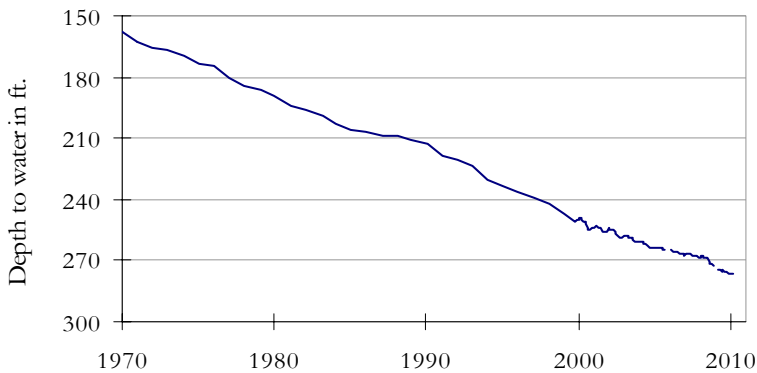
FEBRUARY GROUNDWATER LEVELS IN OBSERVATION WELLS

**(1) State Well ID 03-54-301
Near Spearman, Hansford County
Ogallala Aquifer**



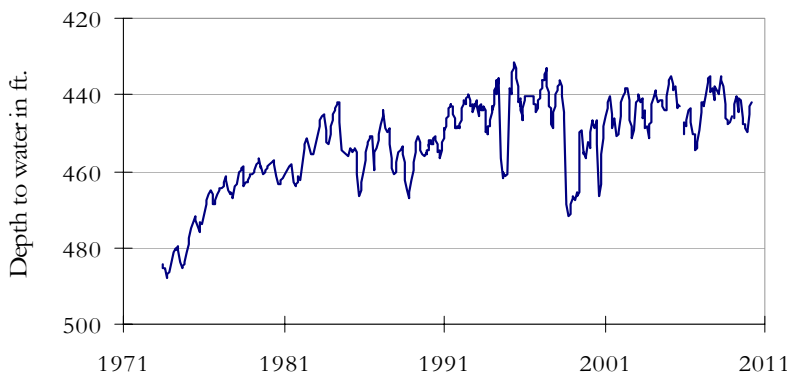
The late February water level measurement in this Ogallala Aquifer well, elevation 2,962 feet above sea level, was 151.76 feet below land surface. This measurement was 0.11 feet above last month's measurement, 0.47 feet below last year's measurement, and 81.64 feet below the initial measurement recorded in 1951.

**(2) State Well ID 10-45-102
Southwest Castro County
Ogallala Aquifer**



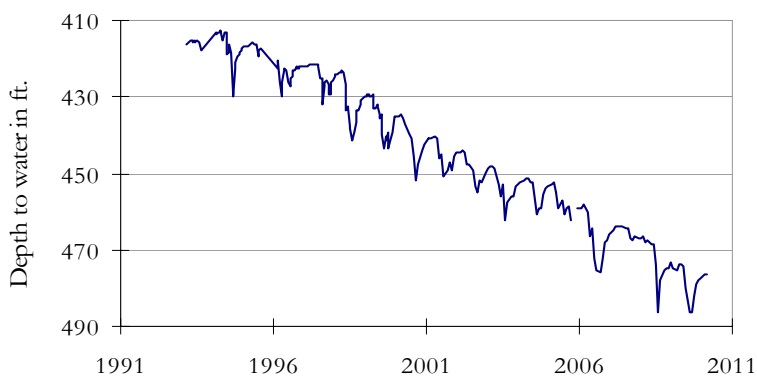
The late February water level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 276.63 feet below land surface. This measurement was 0.14 feet below last month's measurement, 1.91 feet below last year's measurement, and 120.63 feet below the initial measurement recorded in 1968.

**(3) State Well ID 32-15-504
Near Hurst, Tarrant County
Paluxy Formation-Trinity Aquifer**



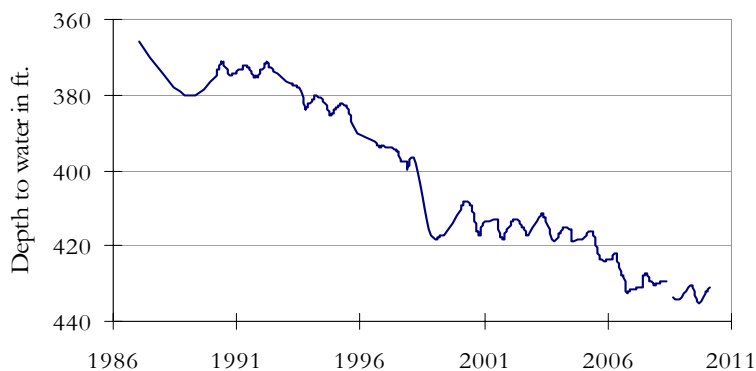
The late February water level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 441.93 feet below land surface. This measurement was 1.29 feet above last month's measurement, 0.73 feet above last year's measurement, and 63.93 feet below the initial measurement recorded in 1955.

**(4) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



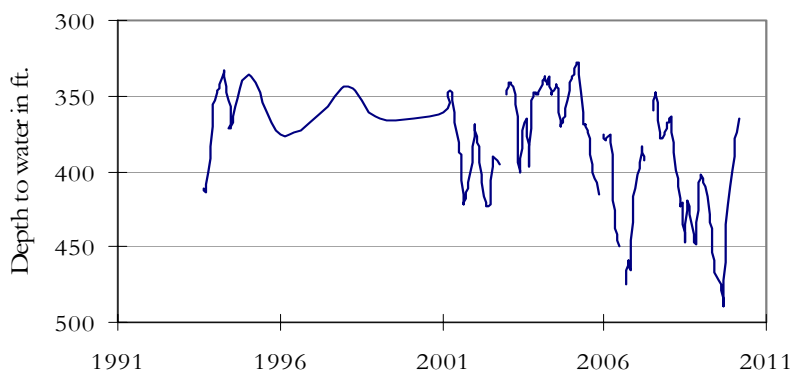
The late February water level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 476.29 feet below land surface. This water level was 0.17 feet above last month's measurement, 1.05 feet below last year's measurement, and 184.29 feet below the initial measurement recorded in 1955.

**(5) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



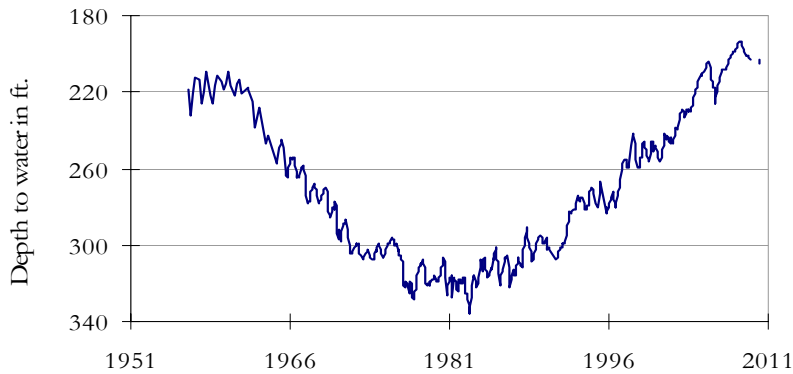
The late February water level measurement in this Carrizo-Wilcox Aquifer well, elevation 555 feet above sea level, was 430.88 feet below land surface. This water level was 0.94 feet above last month's measurement, 1.12 feet above last year's measurement, and 64.88 feet below the initial measurement recorded in 1987.

**(6) State Well ID 77-08-803
Pearsall, Frio County
Carrizo-Wilcox Aquifer**



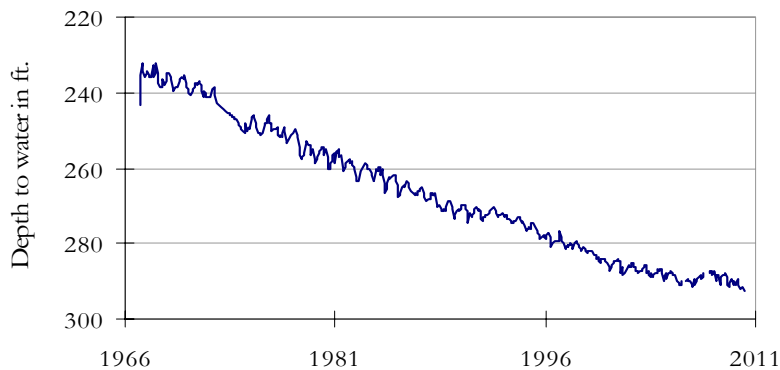
The late February water level measurement in this Carrizo-Wilcox Aquifer well, elevation 652 feet above sea level, was 365.20 feet below land surface. This was 9.24 feet above last month's measurement, 51.52 feet above last year's measurement, and 85.20 feet below the initial measurement recorded in 1963.

**(7) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



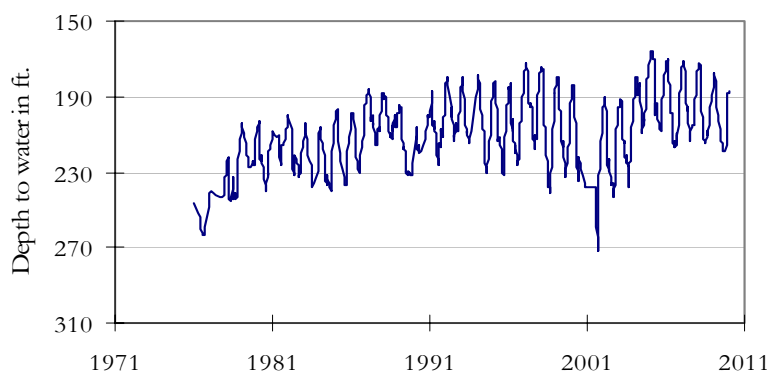
The late February water level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 203.45 feet below land surface. This was 1.34 feet above last month's measurement, 1.76 feet below last year's measurement, and 67.95 feet below the initial measurement recorded in 1947.

**(8) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer**



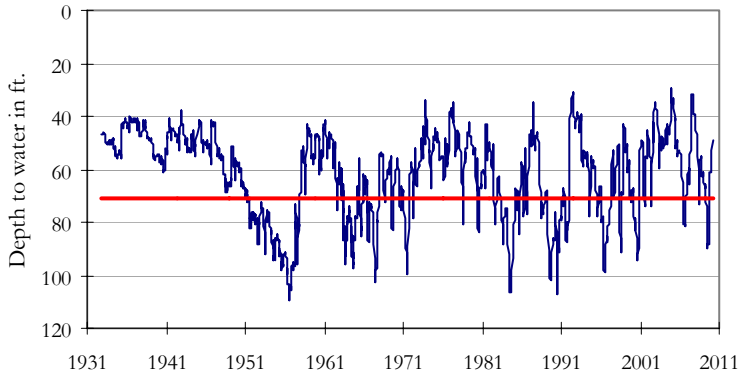
The late February water level measurement in this Hueco-Mesilla Bolson Aquifer well, elevation 3,882 feet above sea level, was 292.32 feet below land surface. This water level was 0.87 feet below last month's measurement, 1.80 feet below last year's measurement, and 60.42 feet below the initial measurement recorded in 1964.

**(9) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer**

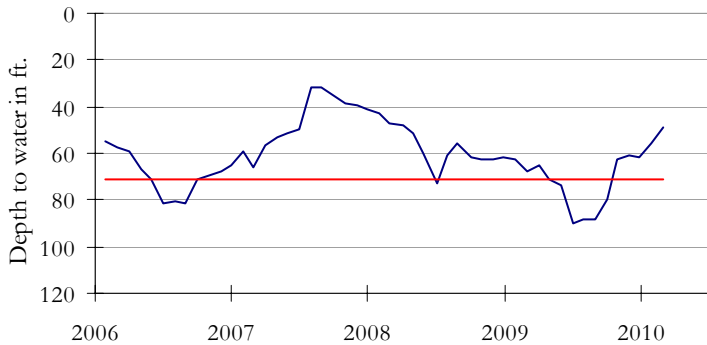


The late February water level measurement in this Edwards-Trinity Plateau Aquifer well, elevation 3,199 feet above sea level was not available. The last reading available, in January 2010, was 187.04 feet below land surface.

**(10) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (BFZ) Aquifer**

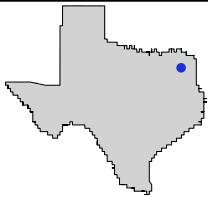


The late February water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 49.12 feet below land surface. This was 6.65 feet above last month's measurement, 18.22 feet above last year's measurement, and 2.48 feet below the initial measurement recorded in 1932.



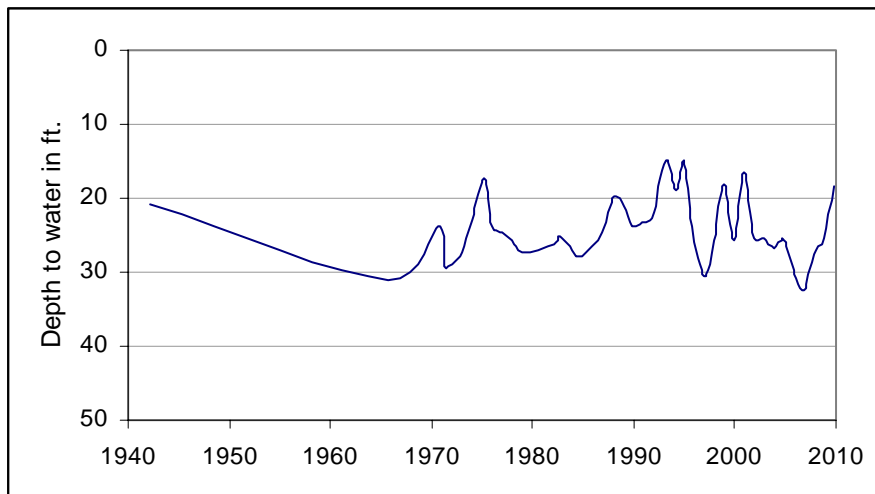
***** Water levels below the red line indicate Edwards Aquifer Authority Stage 1 drought restrictions. *****

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.

**State Well ID 34-13-802
Wood County**



This water level observation well, located 1 mile southeast of Quitman, at an elevation of 435 feet above sea level, was completed in the Queen City Aquifer. Water levels have remained fairly stable over the northern portion of the aquifer. The aquifer is mainly used for municipal and industrial supply in northeast Texas.

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