Texas Water Development Board

WATER Conditions

RESERVOIR STORAGE

January 2011

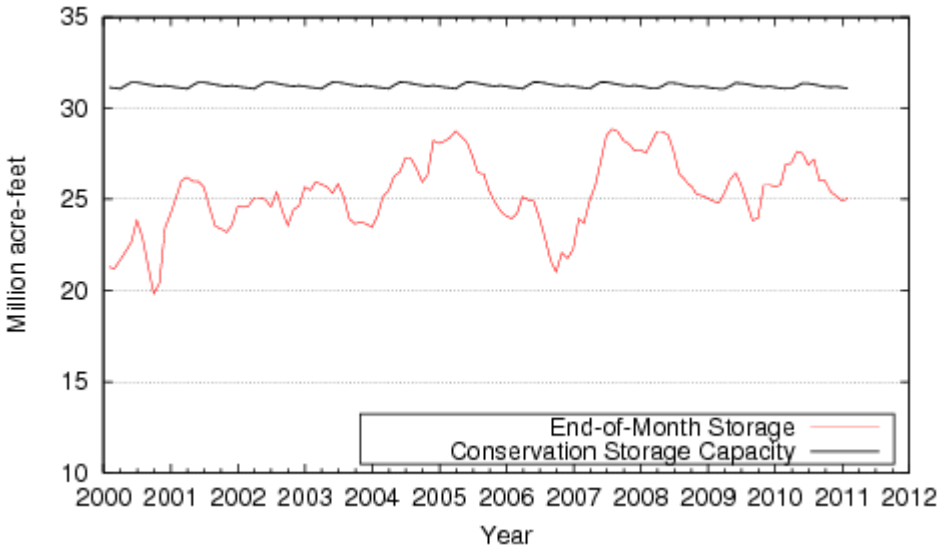
At the end of January, total storage in the state's 109 major reservoirs was at 25.0 million acre-feet, or 81% of the total conservation storage capacity. This is 0.12 million acre-feet more than a month ago.

Storage was at 100% in 11 reservoirs, four more than last month. Six lakes were at or below 10% full: O. C. Fisher Lake Reservoir and Lake Meredith (total) were effectively empty, E.V. Spence Reservoir was at 3%, Lake J. B. Thomas and Hords Creek Lake were at 5%, and Lake Electra was at 7% full.

Two regions had combined storage above 90%: Upper Coast 91%, and Southern 96%. The High Plains (5%) and Trans-Pecos regions (25%) remained very low. Over the month, storage increased in the North Central, East, Trans-Pecos and Upper Coast regions and decreased in the others. Over the 12-month period, storage increased in 5 and 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.

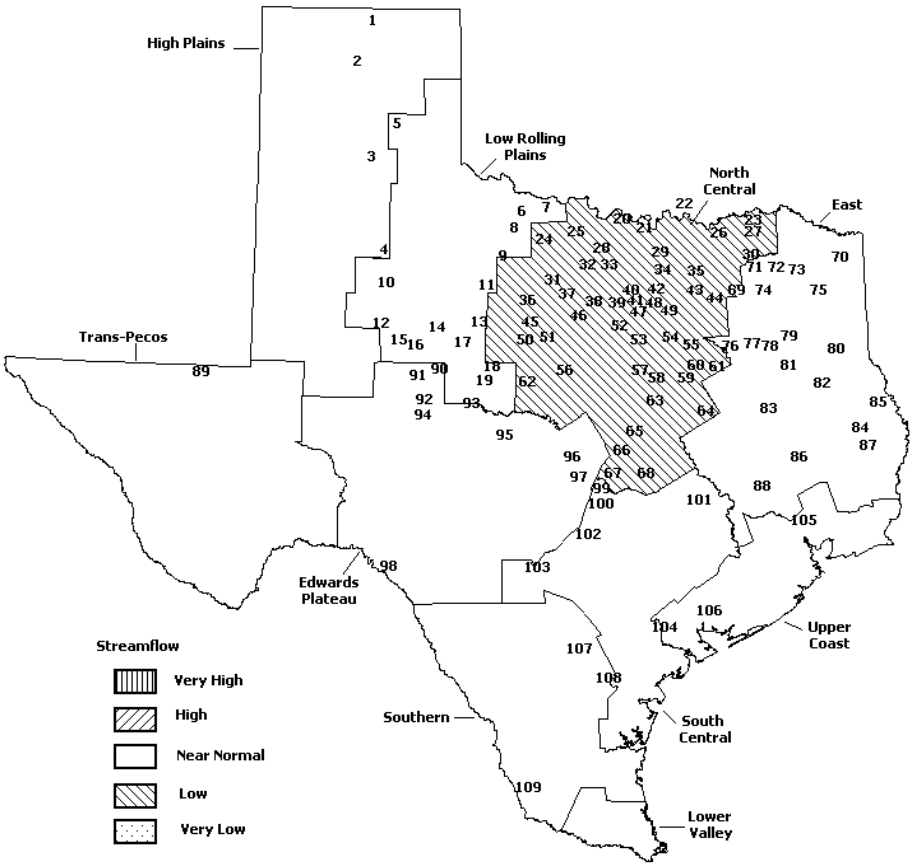
PO BOX 13231 • 1700 N. Congress Avenue • Austin, TX 78711-3231
Telephone (512) 463-7847 • Telefax (512) 475-2053 • 1-800-RELAYTX (for the hearing impaired)

STREAMFLOW

Of 29 reporting index stations in January, computed 30-day mean flows were low (70% - 95%) at 6 stations, high (5% - 30%) at 2 stations, and near normal (30% - 70%) at the remaining 21 stations. Compared to December, flows have increased at 24 index stations and decreased at 4 stations.

On a regional basis, flows in January were low in the North Central region, and near normal everywhere else. Streamflow in the Lower Valley region is not monitored.

JANUARY STREAMFLOW CONDITIONS



Reservoirs Shown on Map

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

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Jan. 2011 (acre-feet)	(%)	Change since Late December 2010 (acre-feet)	(%)	Change since Late January 2010 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	12,132	20	-1,462	-2	11,850	19
Meredith, Lake (Texas)	2	500,000	3,628	1	-207	0	-23,142	-5
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	3,628	0	-207	0	-23,142	-3
MacKenzie Reservoir	3	46,429	6,003	13	-81	0	295	1
White River Lake	4	29,880	10,107	34	-144	0	7,286	24
TOTAL		637,206	31,870	5	-1,894	0	-3,711	-1
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	16,170	27	50	0	840	1
*Electra, Lake	6	5,626	367	7	-26	0	-240	-4
N. Fork Buffalo Crk Reservoir	7	15,400	5,864	38	-164	-1	345	2
Kemp, Lake	8	245,308	239,284	98	-6,024	-2	64,732	26
Millers Creek Reservoir	9	27,888	18,762	67	-435	-2	5,218	19
Alan Henry Reservoir	10	94,808	88,828	94	-878	-1	1,978	2
Stamford, Lake	11	51,570	50,083	97	-1,040	-2	11,814	23
J B Thomas, Lake	12	199,931	10,590	5	-640	0	1,432	1
Fort Phantom Hill, Lake	13	70,030	57,850	83	-1,740	-2	7,764	11
Sweetwater, Lake	14	10,006	5,514	55	-29	0	-442	-4
Colorado City, Lake	15	31,793	14,636	46	-183	-1	-2,841	-9
Champion Creek Reservoir	16	41,618	6,797	16	-86	0	-876	-2
Abilene, Lake	17	6,099	4,678	77	-202	-3	2,703	44
Coleman, Lake	18	38,076	21,001	55	-294	-1	-1,876	-5
Hords Creek Lake	19	5,684	303	5	-75	-1	-1,076	-19
TOTAL		903,337	540,727	60	-11,766	-1	89,475	10
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	20	21,445	18,446	86	-152	-1	-1,811	-8
Hubert H Moss Lake	21	24,058	23,865	99	139	1	-193	-1
Texoma, Lake (Texas)	22	1,209,709	1,191,025	98	-40,564	-3	-18,684	-2
Texoma, Lake (Texas & Oklahoma)	(22)	2,419,418	2,382,051	98	-81,127	-3	-37,367	-2
*Pat Mayse Lake	23	117,844	103,338	88	-2,265	-2	-14,762	-13
Kickapoo, Lake	24	85,825	68,631	80	-1,854	-2	17,160	20
Arrowhead, Lake	25	235,997	191,997	81	-3,876	-2	34,686	15
Bonham, Lake	26	11,026	10,244	93	-247	-2	-782	-7
Crook, Lake	27	9,195	8,192	89	51	1	-1,003	-11
Amon G Carter, Lake	28	19,903	17,480	88	-290	-1	-2,423	-12
Ray Roberts, Lake	29	798,758	761,110	95	-4,275	-1	-37,648	-5
Jim Chapman Lake (Cooper)	30	260,332	145,511	56	-2,645	-1	-114,821	-44
Graham, Lake	31	45,260	42,250	93	-522	-1	3,714	8
*Lost Creek Reservoir	32	11,950	10,986	92	-97	-1	-964	-8
Bridgeport, Lake	33	366,236	323,409	88	-7,709	-2	42,770	12
Lewisville Lake	34	563,228	547,228	97	3,733	1	3,240	1
Lavon Lake	35	443,844	343,691	77	8,207	2	-100,153	-23
Hubbard Creek Reservoir	36	318,067	191,015	60	-2,233	-1	-21,489	-7
Possum Kingdom Lake	37	540,340	515,606	95	-2,594	0	47,031	9
*Mineral Wells, Lake	38	7,065	6,355	90	-61	-1	-710	-10
Weatherford, Lake	39	17,789	14,586	82	-138	-1	-2,769	-16
Eagle Mountain Lake	40	179,880	163,985	91	747	0	-18,260	-10
Worth, Lake	41	24,500	19,313	79	358	1	-2,021	-8
Grapevine Lake	42	164,702	155,095	94	1,153	1	-9,607	-6
Ray Hubbard, Lake	43	452,040	392,652	87	5,759	1	-59,388	-13
New Terrell City Lake	44	8,583	7,252	84	209	2	-1,331	-16
Daniel, Lake	45	9,435	4,464	47	-134	-1	196	2
Palo Pinto, Lake	46	26,827	22,265	83	-565	-2	198	1
Benbrook Lake	47	85,648	82,718	97	1,949	2	-2,930	-3
Arlington, Lake	48	40,156	38,761	97	1,647	4	21	0

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Jan. 2011 (acre-feet)	(%)	Change since Late December 2010 (acre-feet)	(%)	Change since Late January 2010 (acre-feet)	(%)
NORTH CENTRAL (Continue)								
Joe Pool Lake	49	142,861	142,861	100	1,034	1	0	0
*Cisco, Lake	50	26,000	14,162	54	-180	-1	-2,520	-10
Leon, Lake	51	26,421	16,218	61	-179	-1	-1,720	-7
Granbury, Lake	52	128,046	121,552	95	1,715	1	-2,416	-2
Pat Cleburne, Lake	53	26,008	24,568	94	76	0	-1,162	-4
Waxahachie, Lake	54	10,779	8,972	83	164	2	-1,807	-17
Bardwell Lake	55	46,122	46,122	100	1,022	2	0	0
Proctor Lake	56	55,457	32,185	58	-495	-1	-2,506	-5
Whitney, Lake	57	553,349	379,840	69	3,175	1	-153,126	-28
Aquilla Lake	58	44,460	43,212	97	1,574	4	-1,880	-4
Navarro Mills Lake	59	49,826	49,826	100	4,042	8	-5,991	-12
*Halbert, Lake	60	6,033	3,911	65	496	8	-2,048	-34
Richland-Chambers Reservoir	61	1,087,839	1,010,467	93	30,008	3	-93,349	-9
*Brownwood, Lake	62	131,429	79,011	60	-800	-1	-11,398	-9
Waco, Lake	62	198,943	197,692	99	6,418	3	-1,251	-1
Limestone, Lake	64	208,015	180,824	87	17,453	8	-27,191	-13
Belton Lake	65	435,225	399,097	92	4,810	1	-36,128	-8
Stillhouse Hollow Lake	66	227,771	227,771	100	1,788	1	0	0
Georgetown, Lake	67	36,823	34,388	93	-1,075	-3	-2,435	-7
Granger Lake	68	50,779	48,829	96	4,479	9	-3,696	-7
Tawakoni, Lake	69	888,126	781,729	88	3,122	0	-106,397	-12
TOTAL		10,479,954	9,264,707	88	32,378	0	-719,754	-7
EAST								
Wright Patman Lake	70	122,593	122,593	100	0	0	0	0
*Sulphur Springs, Lake	71	17,838	9,965	56	81	0	-7,873	-44
Cypress Springs, Lake	72	66,756	64,422	97	1,113	2	-3,267	-5
Bob Sandlin, Lake	73	200,579	172,360	86	2,687	1	-28,219	-14
Fork Reservoir, Lake	74	604,927	516,464	85	-1,219	0	-88,463	-15
O the Pines, Lake	75	238,933	237,786	100	9,611	4	-1,147	0
Cedar Creek Reservoir in Trinity	76	644,686	561,112	87	14,989	2	-83,574	-13
Athens, Lake	77	29,435	27,659	94	1,231	4	-1,776	-6
Palestine, Lake	78	370,907	336,851	91	20,662	6	-34,056	-9
Tyler, Lake	79	73,256	66,336	91	3,460	5	-6,920	-9
Murvaul, Lake	80	38,284	32,601	85	1,707	4	-5,683	-15
Jacksonville, Lake	81	25,670	23,844	93	947	4	-6,456	-25
Nacogdoches, Lake	82	39,521	29,605	75	612	2	-9,916	-25
Houston County Lake	83	17,113	16,300	95	936	5	-813	-5
Sam Rayburn Reservoir	84	2,857,077	2,017,959	71	34,579	1	-616,361	-22
Toledo Bend Reservoir (Texas)	85	2,236,450	1,617,838	72	57,859	3	-317,436	-14
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	3,235,676	72	115,718	3	-634,873	-14
*Livingston, Lake	86	1,741,867	1,741,867	100	0	0	0	0
B A Steinhagen Lake	87	66,966	53,740	80	2,010	3	1,398	2
Conroe, Lake	88	416,188	388,698	93	5,769	1	-27,490	-7
TOTAL		9,809,046	8,038,000	82	157,034	2	-1,238,052	-13
TRANS-PECOS								
Red Bluff Reservoir	89	289,670	71,842	25	2,425	1	2,001	1
TOTAL		289,670	71,842	25	2,425	1	2,001	1

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late Jan. 2011 (acre-feet)	(%)	Change since Late December 2010 (acre-feet)	(%)	Change since Late January 2010 (acre-feet)	(%)
EDWARDS PLATEAU								
Oak Creek Reservoir	90	39,260	22,741	58	-411	-1	-808	-2
E V Spence Reservoir	91	517,272	14,001	3	-1,483	0	-10,075	-2
O C Fisher Lake	92	79,483	0	0	0	0	0	0
*O H Ivie Reservoir	93	554,335	177,153	32	-3,706	-1	-57,821	-10
Twin Buttes Reservoir	94	177,850	20,063	11	335	0	-10,435	-6
Brady Creek Reservoir	95	29,110	12,865	44	-187	-1	-2,637	-9
Buchanan, Lake	96	875,610	666,737	76	3,266	0	171,165	20
Lyndon B Johnson, Lake	97	113,323	111,683	99	-1,154	-1	-592	-1
*Amistad Reservoir (Texas)	98	1,840,849	1,841,000	100	0	0	109,000	6
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	3,275,532	100	0	0	118,532	4
TOTAL		4,227,092	2,866,243	68	-3,340	0	197,797	5
SOUTH CENTRAL								
Travis, Lake	99	1,113,255	879,894	79	12,089	1	71,081	6
*Austin, Lake	100	21,804	7,223	33	-13,764	-63	-13,900	-64
Somerville Lake	101	147,104	127,643	87	1,551	1	-19,461	-13
Canyon Lake	102	378,781	369,069	97	-565	0	44,252	12
Medina Lake	103	254,823	164,194	64	-5,045	-2	96,899	38
*Coleto Creek Reservoir	104	31,040	31,040	100	1,525	5	0	0
TOTAL		1,946,807	1,579,063	81	-4,209	0	178,871	9
UPPER COAST								
Houston, Lake	105	128,863	128,863	100	0	0	0	0
Texana, Lake	106	153,246	127,713	83	1,369	1	-25,533	-17
TOTAL		282,109	256,576	91	1,369	0	-25,533	-9
SOUTHERN								
Choke Canyon Reservoir	107	695,262	554,032	80	-3,396	0	71,403	10
Corpus Christi, Lake	108	256,961	226,334	88	1,239	0	106,655	42
*Falcon Reservoir (Texas)	109	1,551,034	1,616,000	104	-48,000	-3	600,000	39
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	2,491,000	94	-155,817	-6	754,000	28
TOTAL		2,503,257	2,396,366	96	-50,157	-2	778,058	31
STATE TOTAL		31,078,478	25,045,394	81	121,840	0	-740,848	-2

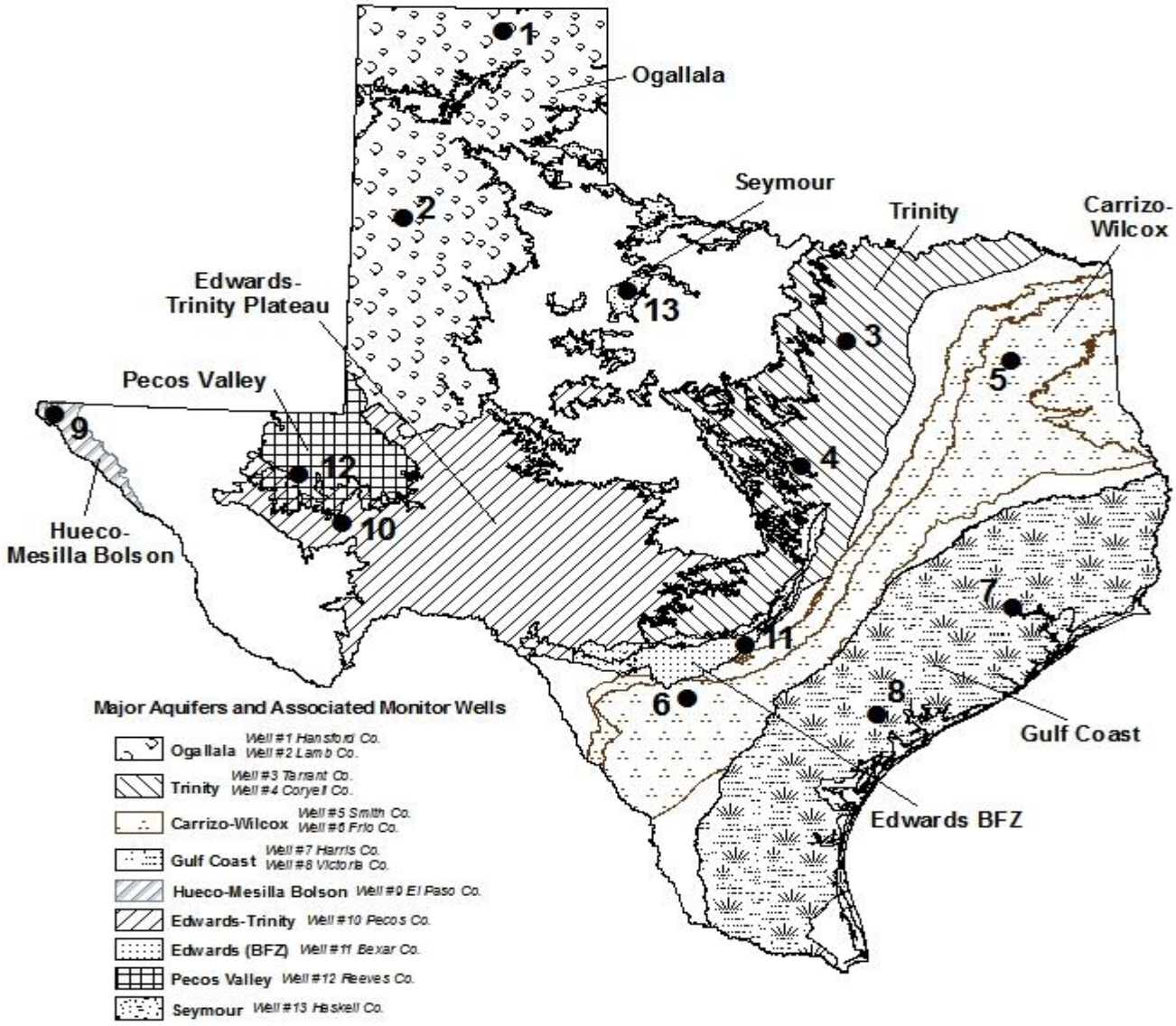
*** Conservation volume is used as conservation storage capacity because the dead storage is unknown.**

Notes:

The large monthly decrease (-63%) in Lake Austin's storage was due to a drawdown of the reservoir for maintenance.

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*(current conservation storage - past conservation storage)/conservation storage capacity. Figures shown are for the Texas share of conservation storage in all reservoirs.

GROUNDWATER LEVELS IN OBSERVATION WELLS



January, 2011

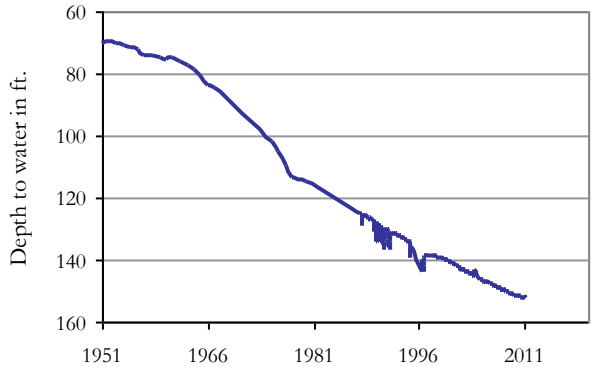
Water level measurements were available for twelve out of the thirteen key monitoring wells. Water levels rose in ten of the twelve monitoring wells since the beginning of January ranging from 0.01 feet in the Lamb County Ogallala Aquifer well to 3.57 feet in the Tarrant County Trinity Aquifer well. Water levels declined in the remaining monitoring wells, ranging from 0.57 feet in the Hansford County Ogallala Aquifer well to 1.35 feet in the El Paso County Hueco-Mesilla Bolson Aquifer well. The J-17 well in San Antonio recorded a water level of 58.91 feet below land surface, 0.75 feet above last month's measurement. This water level is 12.09 feet above the Stage 1 critical management level.

	(1) Hansford 0354301	(2) Lamb 1053602	(3) Tarrant 3215504	(4) Coryell 4035404	(5) Smith 3430907	(6) Frio 7708803	(7) Harris 6514409	(8) Victoria 8017502	(9) El Paso 4913301	(10) Pecos 5216802	(11) Bexar 6837203	(12) Reeves 4644501	(13) Haskell 2135748
January 2011	152.30	139.11	446.80	480.32	432.18	N/A	195.89	32.63	291.51	193.71	58.91	142.53	43.71
December 2010	151.73	139.12	450.37	481.38	433.35	408.90	197.37	33.29	290.16	196.13	59.66	143.85	43.79
Month Change	-0.57	0.01	3.57	1.06	1.17	N/A	1.48	0.66	-1.35	2.42	0.75	1.32	0.08
Year Change	-0.43	-1.77	-3.58	-3.86	-0.36	N/A	8.90	1.32	-0.06	-6.67	-3.14	-1.98	-0.01
Historical Change	-82.18	-110.96	-68.80	-188.32	-66.18	N/A	-60.39	1.37	-59.61	53.17	-12.27	-50.44	-2.38

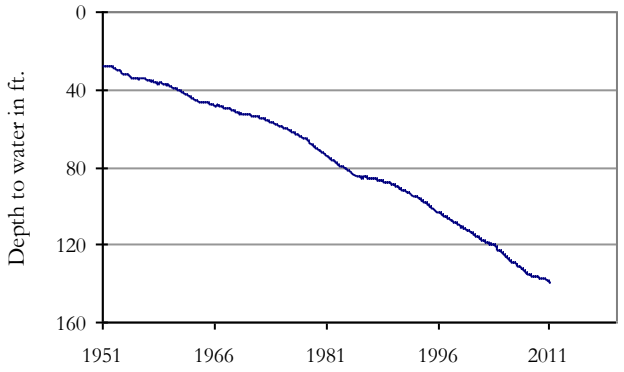
*** ID is used in this publication to differentiate between the monitoring well number (1 - 13) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.**

JANUARY GROUNDWATER LEVELS IN OBSERVATION WELLS

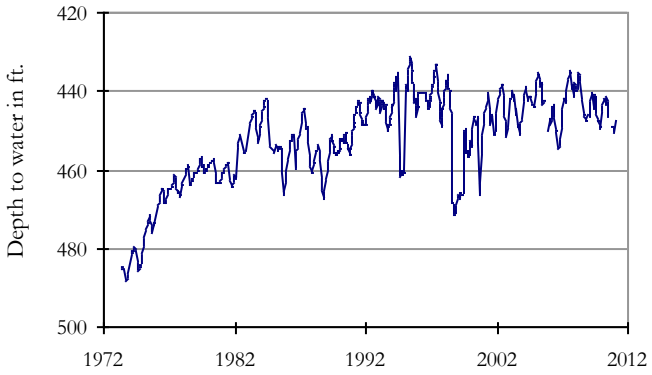
(1) State Well ID 03-54-301
Near Spearman, Hansford County
Ogallala Aquifer



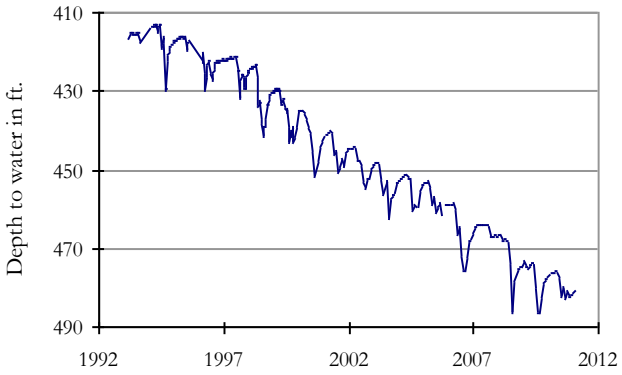
(2) State Well ID 10-53-602
Near Earth, Lamb County
Ogallala Aquifer



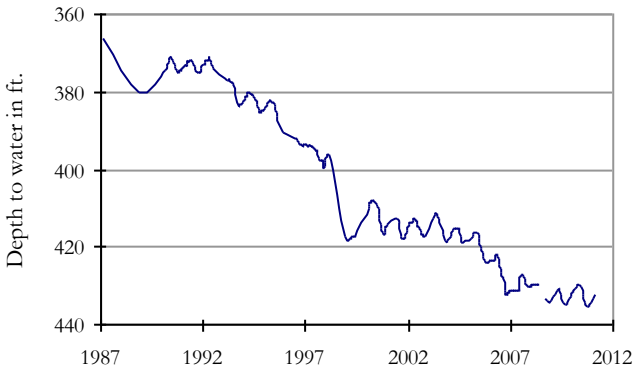
(3) State Well ID 32-15-504
Near Hurst, Tarrant County
Paluxy Formation-Trinity Aquifer



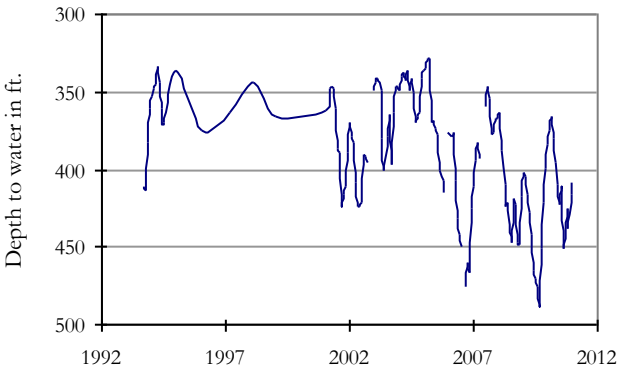
(4) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer



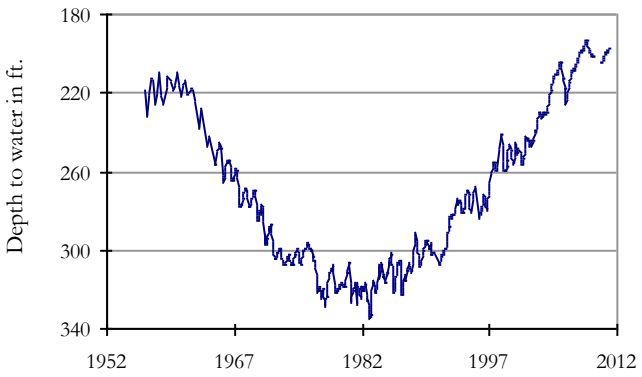
(5) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer



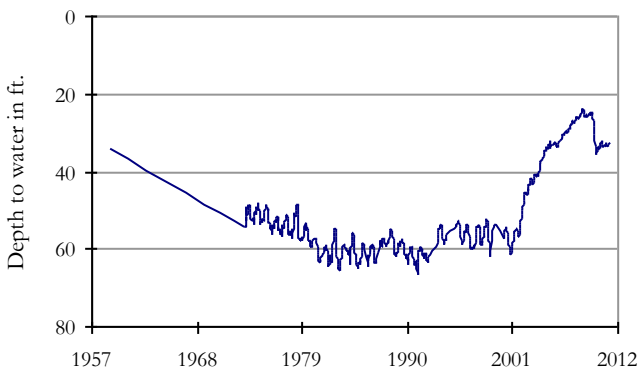
(6) State Well ID 77-08-803
Pearsall, Frio County
Carrizo-Wilcox Aquifer



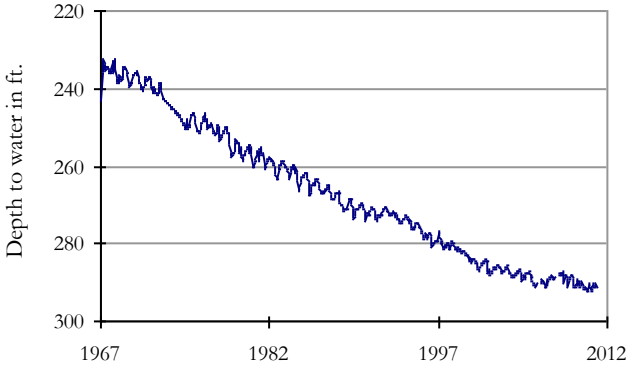
(7) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer



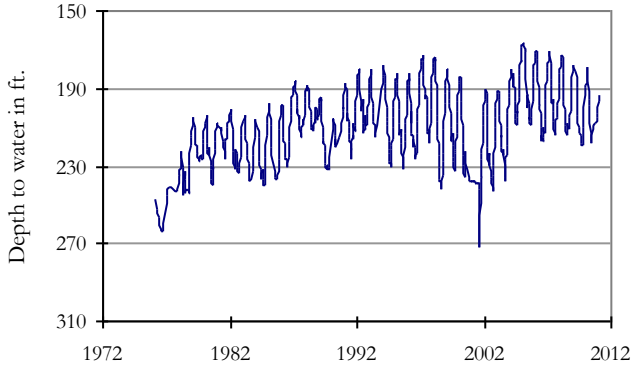
(8) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



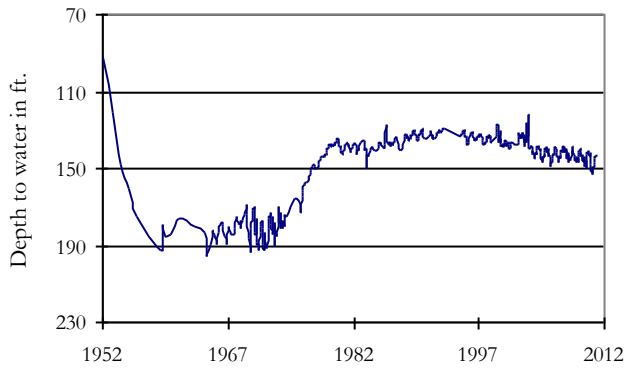
(9) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



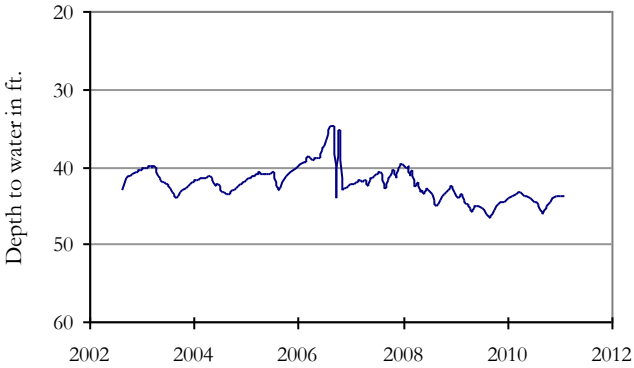
(10) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



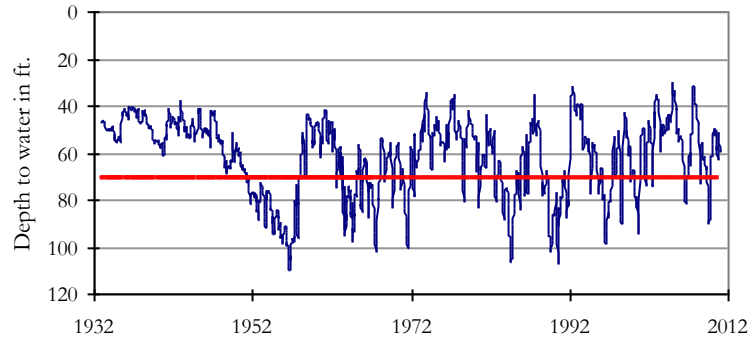
(12) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer

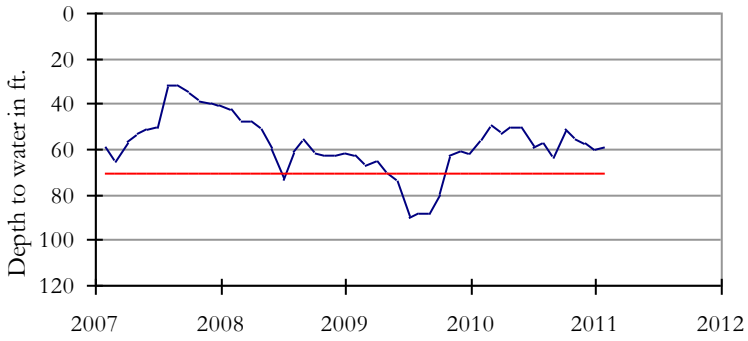


(13) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



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

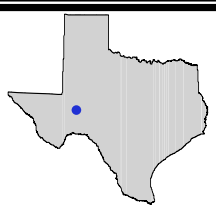




The late January water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 58.91 feet below land surface. This was 0.75 feet above last month's measurement, 3.14 feet below last year's measurement, and 12.27 feet below the initial measurement recorded in 1932.

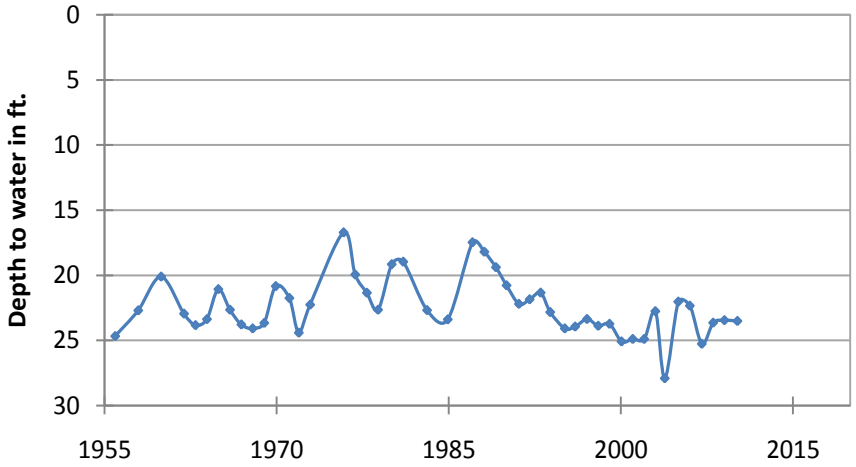
***** Water levels below the red line indicate Edwards Aquifer Authority Stage 1 drought restrictions. *****

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 4562101
Crane County



This Pecos Valley Aquifer water level observation well is located 7 miles southwest of McCamey at an elevation of 2,308 feet above sea level. No significant water level declines have been observed in this well. More than 80 percent of groundwater pumped from the aquifer is used for irrigation, and the rest is withdrawn for municipal and industrial supplies.

TEXAS WATER DEVELOPMENT BOARD
1700 N. CONGRESS AVE.
P.O. BOX 13231
AUSTIN TX 78711-3231