Texas Water Development Board

WATER Conditions

RESERVOIR STORAGE

July 2009

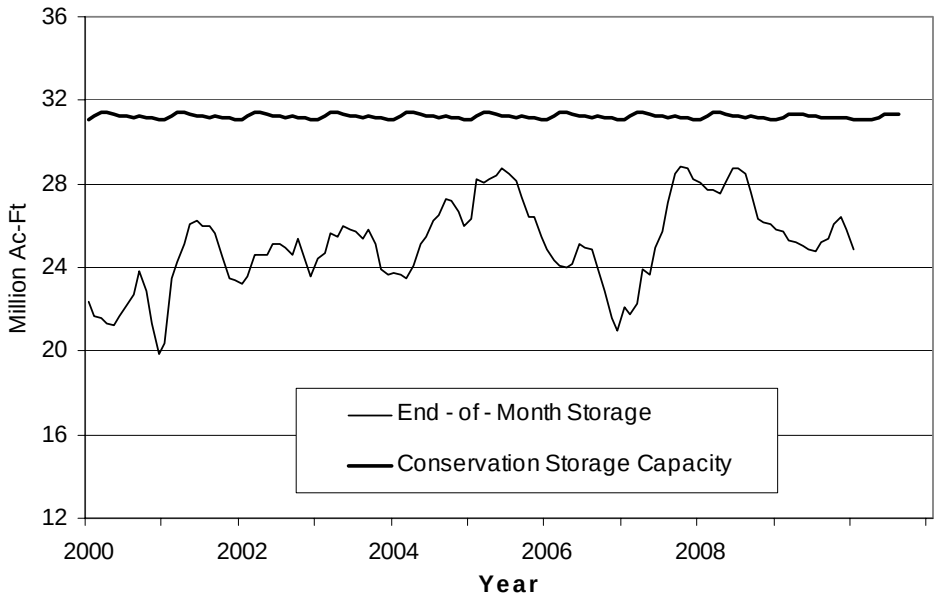
Storage in 109 state's major reservoirs, which comprise about 95% of the total conservation capacity of state's 175 major water supply reservoirs, declined in the past month by 3% to 24.8 million acre-feet* in conservation storage, or 79 percent of their combined conservation storage capacity. This is 960,000 acre-feet less than last month.

Storage was at 100% in 8 reservoirs, mainly in the East region. On the other hand, twelve lakes were below 30% full, five of which were below 10% full: O C Fisher Lake was still effectively empty, Palo Duro (1%) was nearly empty, Lake Meredith was at 5%, J B Thomas was at 6%, and E.V. Spence was at 7% full.

Only the East (93%) region has storage above 90% of capacity; the High Plains (8%) and Trans-Pecos regions (24%) remained very low. Storage decreased in all except the Trans-Pecos region over the month. Since last year, storage increased in the Southern, Trans-Pecos, East and High Plains regions, and decreased everywhere else.

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

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



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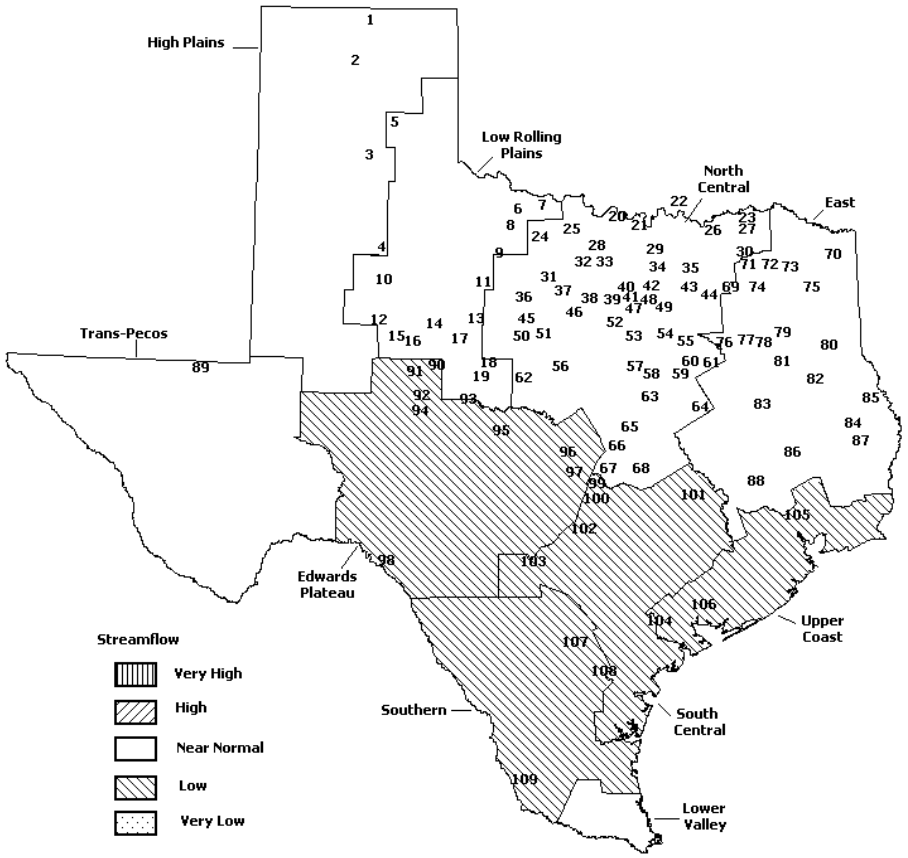
STREAMFLOW

Of 29 reporting index stations in July, computed 30-day mean flows were very high (<5%) at 1 station, high (5% - 30%) at 3 stations, low (70% - 95%) at 15 stations, very low (>95%) at 3 stations, and near normal (30% - 70%) at the remaining 7 stations. Compared to June, flows have increased at 10 index stations and decreased at 16 stations.

On a regional basis, flows in July were low in the Southern, Upper Coast, South Central, and Edwards Plateau regions, and normal in all other regions. Streamflow in the Lower Valley Region is not monitored.

JULY 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. Vrady 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 July 2009 (acre-feet)	(%)	Change since Late June 2009 (acre-feet)	(%)	Change since Late July 2008 (acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	808	1	-223	0	281	0
Meredith, Lake (Texas)	2	500,000	40,002	8	-6,052	-1	6,435	1
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	40,002	5	-6,052	-1	6,435	1
MacKenzie Reservoir	3	46,429	6,218	13	-50	0	-225	0
White River Lake	4	29,880	4,557	15	-467	-2	4,101	14
TOTAL		637,206	51,585	8	-6,792	-1	10,592	2
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	17,255	29	-398	-1	-1,952	-3
*Electra, Lake	6	5,626	629	11	-84	-1	-697	-12
N. Fork Buffalo Crk Reservoir	7	15,400	4,912	32	-360	-2	1,121	7
Kemp, Lake	8	245,308	160,105	65	-23,751	-10	-54,383	-22
Millers Creek Reservoir	9	27,888	14,275	51	-368	-1	-5,006	-18
Alan Henry Reservoir	10	94,808	91,019	96	814	1	1,470	2
Stamford, Lake	11	51,570	37,870	73	80	0	-2,305	-4
J B Thomas, Lake	12	199,931	12,267	6	115	0	-3,118	-2
Fort Phantom Hill, Lake	13	70,030	52,367	75	-1,252	-2	-10,245	-15
Sweetwater, Lake	14	10,006	6,496	65	-179	-2	-2,069	-21
Colorado City, Lake	15	31,793	19,388	61	-476	-1	-4,055	-13
Champion Creek Reservoir	16	41,618	8,371	20	-173	0	-750	-2
Abilene, Lake	17	6,099	2,544	42	-54	-1	-2,314	-38
Coleman, Lake	18	38,076	24,266	64	-682	-2	-7,552	-20
Hords Creek Lake	19	5,684	1,911	34	-145	-3	-1,793	-32
TOTAL		903,337	453,675	50	-26,913	-3	-93,648	-10
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	20	21,445	20,178	94	-694	-3	1,111	5
Hubert H Moss Lake	21	24,058	22,916	95	-522	-2	250	1
Texoma, Lake (Texas)	22	1,300,076	1,297,384	100	-36,910	-3	67,637	5
Texoma, Lake (Texas & Oklahoma)	(22)	2,600,152	2,594,768	100	-73,821	-3	135,274	5
*Pat Mayse Lake	23	118,100	116,992	99	-1,108	-1	3,148	3
Kickapoo, Lake	24	85,825	43,082	50	-788	-1	-6,377	-7
Arrowhead, Lake	25	235,997	166,450	71	-2,732	-1	-12,882	-5
Bonham, Lake	26	11,026	9,820	89	-486	-4	157	1
Crook, Lake	27	9,195	8,492	92	-186	-2	124	1
Amon G Carter, Lake	28	19,903	17,262	87	-798	-4	-407	-2
Ray Roberts, Lake	29	798,758	785,360	98	-13,398	-2	10,571	1
Jim Chapman Lake (Cooper)	30	260,332	240,963	93	-10,165	-4	6,513	3
Graham, Lake	31	45,260	36,602	81	-336	-1	-5,126	-11
*Lost Creek Reservoir	32	11,950	9,659	81	-148	-1	-1,561	-13
Bridgeport, Lake	33	366,236	259,581	71	-13,293	-4	-72,772	-20
Lewisville Lake	34	543,988	510,666	94	-26,068	-5	24,400	4
Lavon Lake	35	443,844	408,402	92	-22,835	-5	19,119	4
Hubbard Creek Reservoir	36	318,067	229,167	72	-4,734	-1	-60,588	-19
Possum Kingdom Lake	37	540,340	475,161	88	-5,143	-1	-19,912	-4
*Mineral Wells, Lake	38	7,065	5,843	83	752	11	53	1
Weatherford, Lake	39	18,645	13,709	74	145	1	-1,875	-10
Eagle Mountain Lake	40	182,500	144,782	79	-6,156	-3	-17,302	-9
Worth, Lake	41	24,500	17,948	73	716	3	-3,689	-15
Grapevine Lake	42	164,702	148,962	90	-1,741	-1	-622	0
Ray Hubbard, Lake	43	452,040	443,361	98	-6,405	-1	14,966	3
New Terrell City Lake	44	8,583	8,023	93	-305	-4	50	1
Daniel, Lake	45	9,435	5,040	53	-211	-2	-3,197	-34
Palo Pinto, Lake	46	27,150	8,380	31	-1,504	-6	-12,779	-47
Benbrook Lake	47	85,648	70,485	82	-10,915	-13	-644	-1
Arlington, Lake	48	38,740	32,998	85	-3,713	-10	3,625	9

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late July 2009 (acre-feet)	(%)	Change since Late June 2009 (acre-feet)	(%)	Change since Late July 2008 (acre-feet)	(%)
NORTH CENTRAL (Continue)								
Joe Pool Lake	49	142,861	137,178	96	-2,140	-1	1,624	1
*Cisco, Lake	50	26,000	17,624	68	-551	-2	-3,698	-14
Leon, Lake	51	26,421	18,814	71	109	0	-5,775	-22
Granbury, Lake	52	128,046	104,496	82	-6,116	-5	-9,932	-8
Pat Cleburne, Lake	53	25,730	20,561	80	-1,199	-5	-2,155	-8
Waxahachie, Lake	54	10,779	8,463	79	-900	-8	-1,009	-9
Bardwell Lake	55	46,122	40,769	88	-1,717	-4	-1,415	-3
Proctor Lake	56	55,457	30,918	56	-3,410	-6	-12,585	-23
Whitney, Lake	57	553,349	335,086	61	-36,659	-7	-111,762	-20
Aquilla Lake	58	45,092	39,774	88	-2,417	-5	309	1
Navarro Mills Lake	59	55,817	49,615	89	-2,967	-5	-1,313	-2
*Halbert, Lake	60	6,033	3,191	53	-339	-6	-1,426	-24
Richland-Chambers Reservoir	61	1,103,816	955,885	87	-21,062	-2	-81,596	-7
*Brownwood, Lake	62	131,429	93,457	71	-1,604	-1	-15,155	-12
Waco, Lake	62	198,943	188,982	95	-6,376	-3	1,950	1
Limestone, Lake	64	208,015	181,515	87	-11,926	-6	-1,843	-1
Belton Lake	65	435,225	372,313	86	-33,649	-8	-45,057	-10
Stillhouse Hollow Lake	66	227,771	210,227	92	-6,030	-3	-10,284	-5
Georgetown, Lake	67	36,823	16,116	44	-2,317	-6	-5,615	-15
Granger Lake	68	52,525	39,417	75	-2,899	-6	-8,443	-16
Tawakoni, Lake	69	888,126	830,709	94	-29,790	-3	-11,524	-1
TOTAL		10,577,788	9,252,778	87	-343,640	-3	-394,713	-4
EAST								
Wright Patman Lake	70	277,486	277,486	100	-15,182	-5	310	0
*Sulphur Springs, Lake	71	17,838	17,838	100	438	2	456	3
Cypress Springs, Lake	72	67,689	67,689	100	483	1	690	1
Bob Sandlin, Lake	73	200,579	200,579	100	1,267	1	4,969	2
Fork Reservoir, Lake	74	604,927	604,927	100	0	0	528	0
O the Pines, Lake	75	267,672	267,672	100	3,493	1	6,015	2
Cedar Creek Reservoir in Trinity	76	644,686	614,144	95	-20,254	-3	3,787	1
Athens, Lake	77	29,435	28,341	96	-574	-2	233	1
Palestine, Lake	78	370,907	355,693	96	-4,130	-1	-4,564	-1
Tyler, Lake	79	73,256	68,204	93	-2,756	-4	-1,286	-2
Murvaul, Lake	80	38,284	37,362	98	34	0	3,473	9
Jacksonville, Lake	81	30,300	29,031	96	-472	-2	325	1
Nacogdoches, Lake	82	39,521	35,217	89	-1,388	-4	-323	-1
Houston County Lake	83	17,113	15,622	91	-602	-4	-411	-2
Sam Rayburn Reservoir	84	2,857,077	2,525,073	88	-68,299	-2	27,319	1
Toledo Bend Reservoir (Texas)	85	2,236,450	1,999,446	89	-116,880	-5	-8,481	0
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	3,998,892	89	-233,761	-5	-16,962	0
*Livingston, Lake	86	1,741,867	1,725,000	99	-16,867	-1	13,000	1
B A Steinhagen Lake	87	66,966	65,353	98	3,831	6	4,032	6
Conroe, Lake	88	416,188	391,303	94	-9,294	-2	-3,536	-1
TOTAL		9,998,241	9,325,980	93	-247,152	-2	46,536	0
TRANS-PECOS								
Red Bluff Reservoir	89	289,670	70,756	24	6,899	2	121	0
TOTAL		289,670	70,756	24	6,899	2	121	0

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

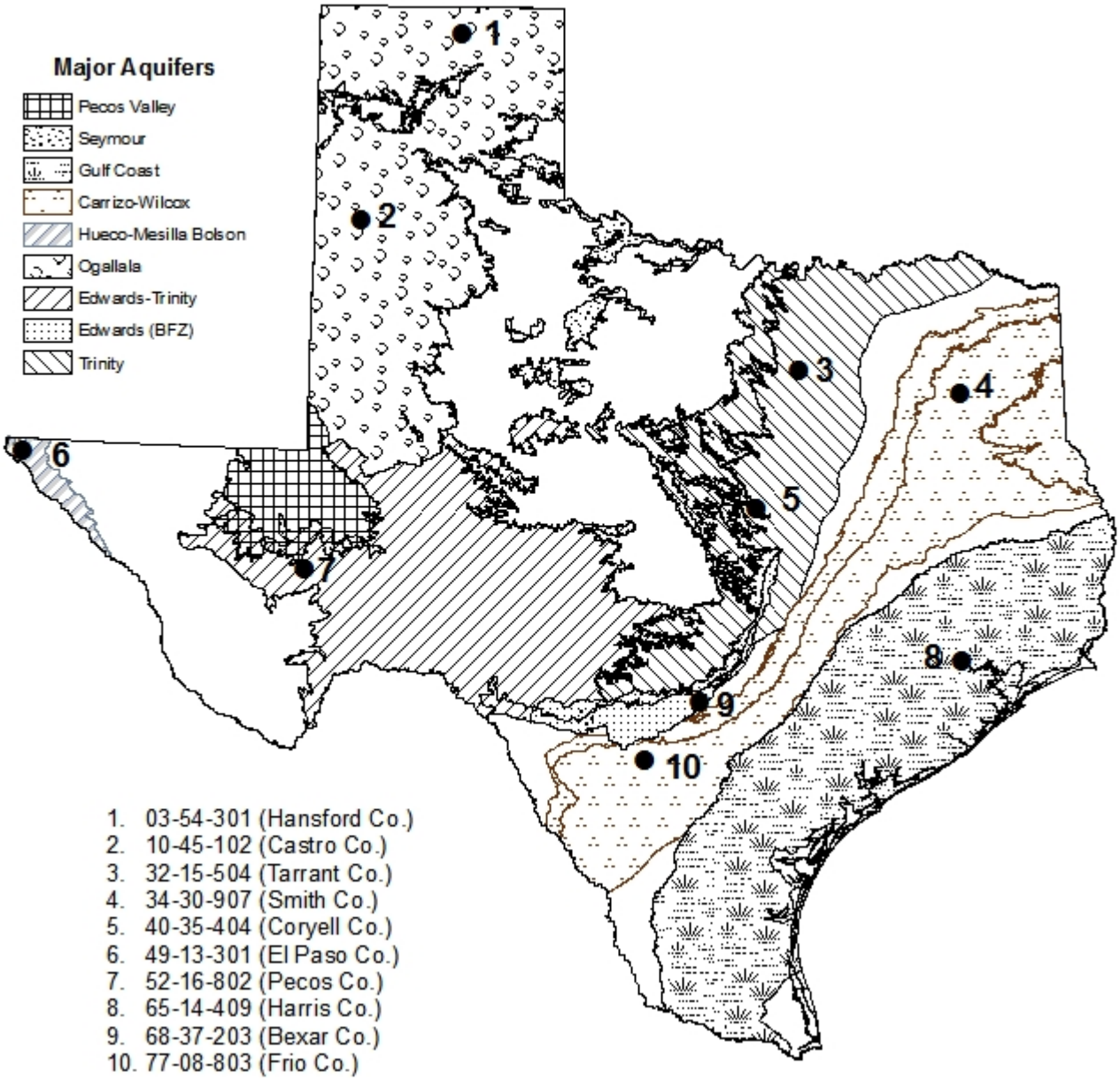
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage Late July 2009 (acre-feet)	(%)	Change since Late June 2009 (acre-feet)	(%)	Change since Late July 2008 (acre-feet)	(%)
EDWARDS PLATEAU								
Oak Creek Reservoir	90	39,260	26,356	67	-511	-1	-7,689	-20
E V Spence Reservoir	91	517,272	36,122	7	-3,056	-1	-27,489	-5
O C Fisher Lake	92	79,483	0	0	0	0	0	0
*O H Ivie Reservoir	93	554,335	263,175	47	-7,750	-1	-78,882	-14
Twin Buttes Reservoir	94	177,850	32,846	18	-5,265	-3	-22,702	-13
Brady Creek Reservoir	95	29,110	14,395	49	-461	-2	-3,302	-11
Buchanan, Lake	96	824,519	443,336	54	-61,709	-7	-308,417	-37
Lyndon B Johnson, Lake	97	113,690	110,668	97	514	0	-322	0
*Amistad Reservoir (Texas)	98	1,840,849	1,810,000	98	-37,000	-2	-280,000	-15
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	3,242,000	99	-33,000	-1	1,027,000	31
TOTAL		4,176,368	2,736,898	66	-115,238	-3	-728,803	-17
SOUTH CENTRAL								
Travis, Lake	99	1,113,902	487,733	44	-70,664	-6	-344,565	-31
*Austin, Lake	100	21,804	20,972	96	91	0	91	0
Somerville Lake	101	147,104	113,146	77	-7,751	-5	-19,979	-14
Canyon Lake	102	378,781	270,383	71	-8,584	-2	-67,985	-18
Medina Lake	103	254,823	78,223	31	-14,235	-6	-108,808	-43
*Coleto Creek Reservoir	104	31,040	23,049	74	-733	-2	-2,216	-7
TOTAL		1,947,454	993,506	51	-101,876	-5	-543,462	-28
UPPER COAST								
Houston, Lake	105	128,863	128,863	100	0	0	0	0
Texana, Lake	106	153,246	93,075	61	-8,392	-5	-24,221	-16
TOTAL		282,109	221,938	79	-8,392	-3	-24,221	-9
SOUTHERN								
Choke Canyon Reservoir	107	695,262	494,763	71	-17,973	-3	-128,332	-18
Corpus Christi, Lake	108	256,961	91,758	36	-17,776	-7	-115,598	-45
*Falcon Reservoir (Texas)	109	1,551,034	1,149,000	74	-82,000	-5	442,000	28
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	1,866,000	70	-83,000	-3	1,007,000	38
TOTAL		2,503,257	1,735,521	69	-117,749	-5	198,070	8
STATE TOTAL		31,315,430	24,842,637	79	-960,853	-3	-1,529,528	-5

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

GROUND WATER LEVELS IN OBSERVATION WELLS

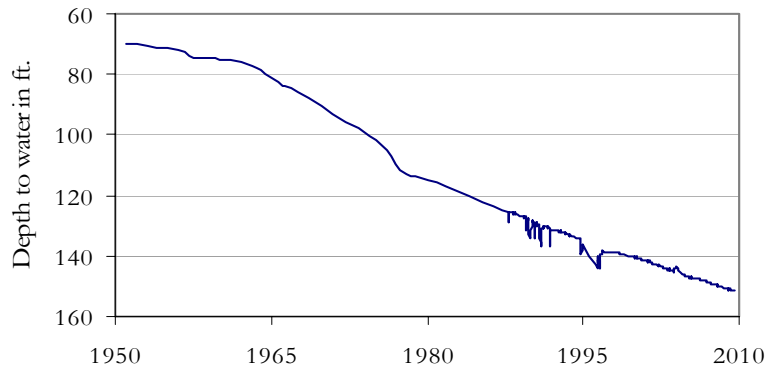


July, 2009

Water level measurements were available for nine out of the ten key monitoring wells. Water levels rose in only one of the ten monitoring wells since the beginning of July. The Bexar Co. Edwards BFZ well recorded a rise of 1.72 feet. Water levels declined in the remaining monitoring wells, ranging from 0.11 feet in the Hansford Co. Ogallala well to 6.31 feet in the Coryell Co. Trinity well. The J-17 well in San Antonio recorded a water level of 88.39 feet below land surface, 1.72 feet above last month's measurement. This water level is 2.61 feet above the Stage 3 critical management level. Stage 2 drought restrictions are currently in place.

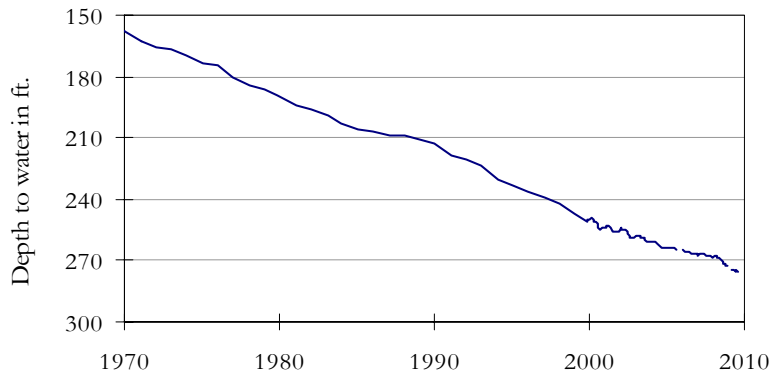
JULY GROUNDWATER LEVELS IN OBSERVATION WELLS

Well No. 03-54-301
Near Spearman, Hansford County
Ogallala



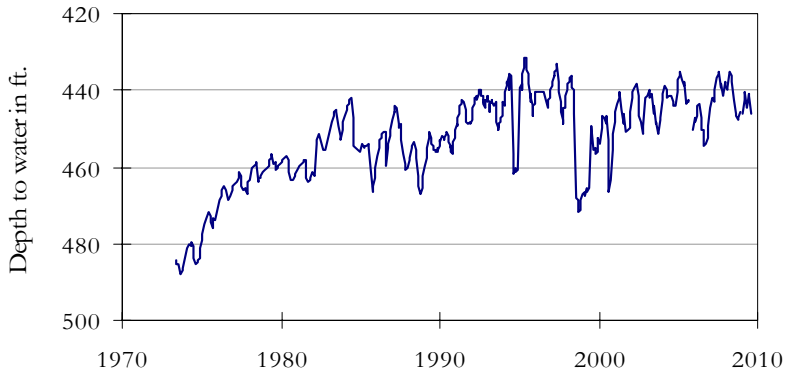
The late July water level measurement in this Ogallala Aquifer well, elevation 2,962 feet above sea level, was 151.45 feet below land surface. This measurement was 0.11 feet below last month's measurement, 1.04 feet below last year's measurement, and 81.33 feet below the initial measurement recorded in 1951.

Well No. 10-45-102
Southwest Castro County
Ogallala



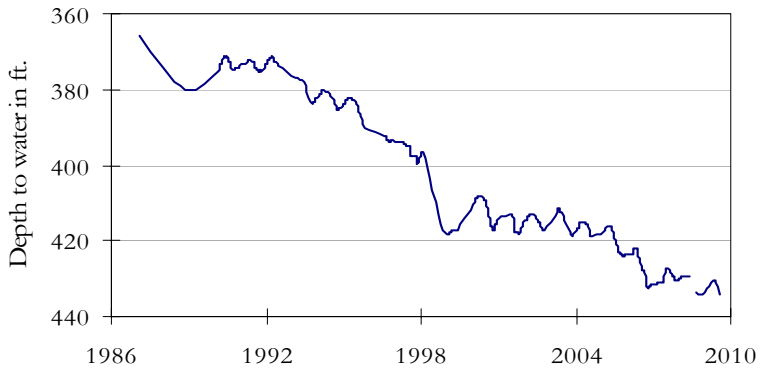
The late July water level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 275.02 feet below land surface. This measurement was 0.36 feet below last month's measurement, 4.54 feet below last year's measurement, and 119.02 feet below the initial measurement recorded in 1968.

Well No. 32-15-504
Near Hurst, Tarrant County
Paluxy



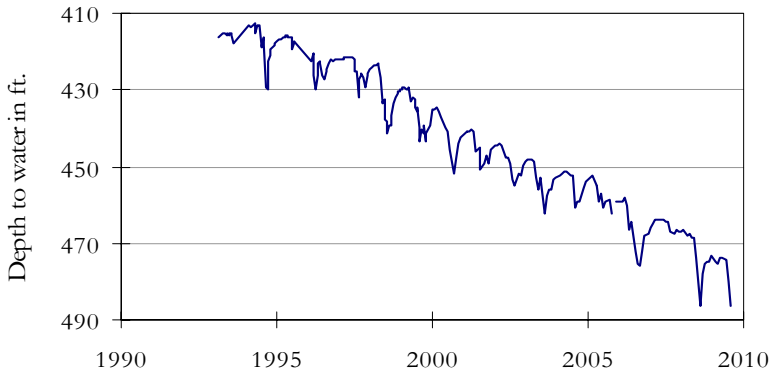
The late July water level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 446.01 feet below land surface. This measurement was 4.42 feet below last month's measurement, 0.10 feet below last year's measurement, and 68.16 feet below the initial measurement recorded in 1955.

Well No. 34-30-907
Red Springs, Smith County
Carrizo Sand



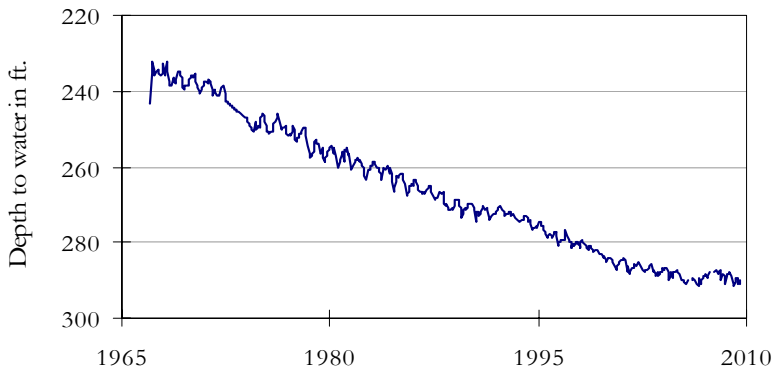
The late July water level measurement in this Carrizo-Wilcox Aquifer well, elevation 555 feet above sea level, was 434.16 feet below land surface. This water level was 2.01 feet below last month's measurement and 68.16 feet below the initial measurement recorded in 1987.

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



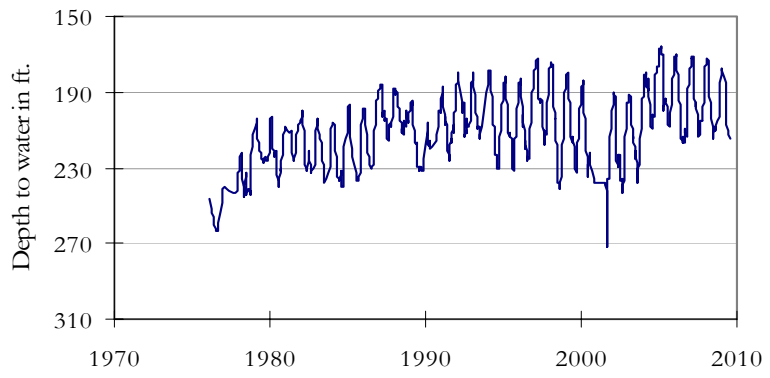
The late July water level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 486.43 feet below land surface. This water level was 6.31 feet below last month's measurement, 0.15 feet above last year's measurement, and 194.43 feet below the initial measurement recorded in 1955.

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



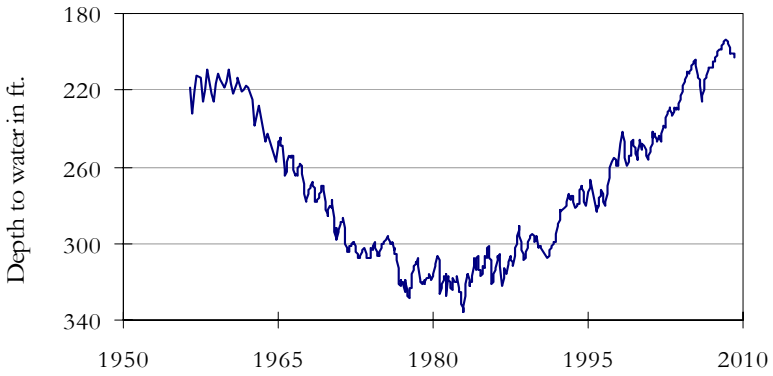
The late July water level measurement in this Hueco Bolson Aquifer well, elevation 3,882 feet above sea level, was 291.14 feet below land surface. This water level was 1.34 feet below last month's measurement, 2.17 feet below last year's measurement, and 59.30 feet below the initial measurement in 1964.

Well No. 52-16-802
Fort Stockton, Pecos County
Edwards and Associated Limestones



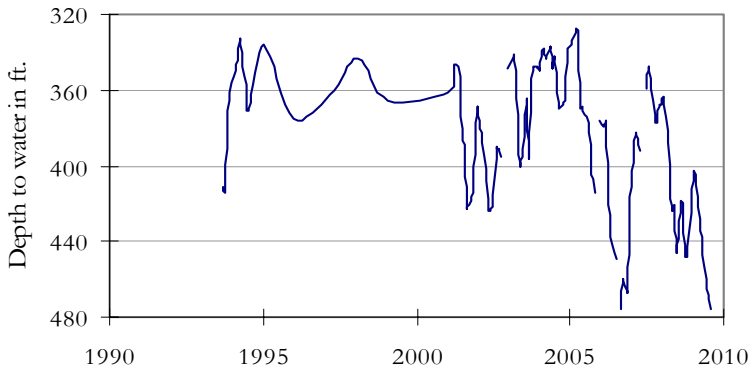
The late July water level measurement in this Edwards-Trinity Plateau Aquifer well, elevation 3,199 feet above sea level, was 214.20 feet below land surface. This water level was 1.70 feet below last month's measurement, 6.36 feet below last year's measurement, and 32.68 feet above the initial measurement in 1976.

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



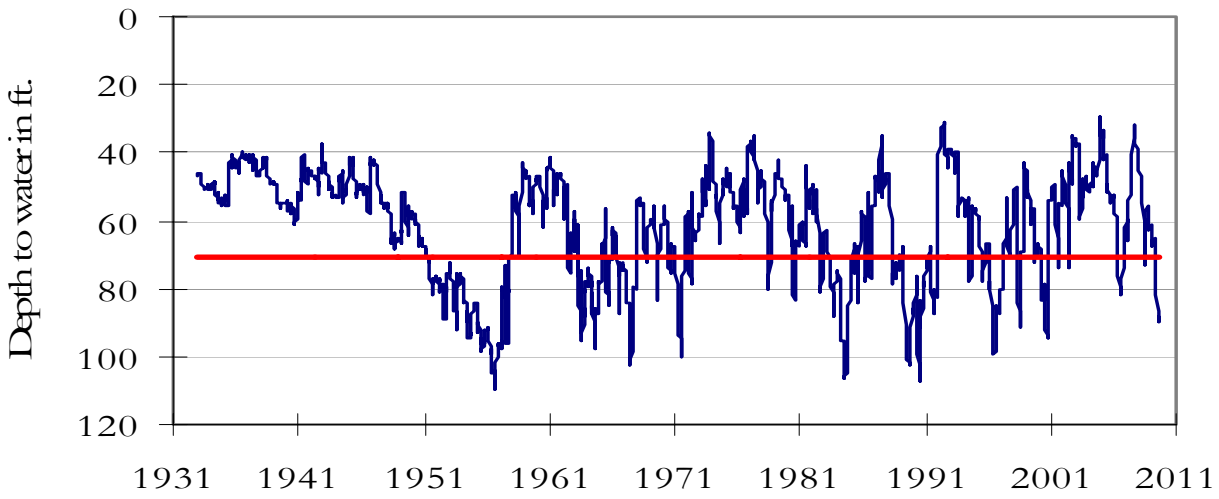
The late July water level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level was not available.

Well No. 77-08-803
Pearsall, Frio County
Carrizo Sand



The late July water level measurement in this Carrizo-Wilcox Aquifer well, elevation 652 feet above sea level, was 475.26 feet below land surface. This was 5.12 feet below last month's measurement, 56.34 feet below last year's measurement, and 195.26 feet below the initial measurement recorded in 1963.

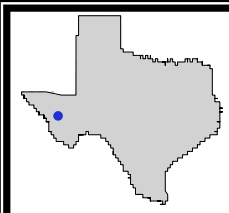
Well No. 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards and Associated Limestones



The late July water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 88.39 feet below land surface. This was 1.72 feet above last month's measurement, 27.60 feet below last year's measurement, and 41.75 feet below the initial measurement recorded in 1932. Stage 2 drought restrictions are still in place.

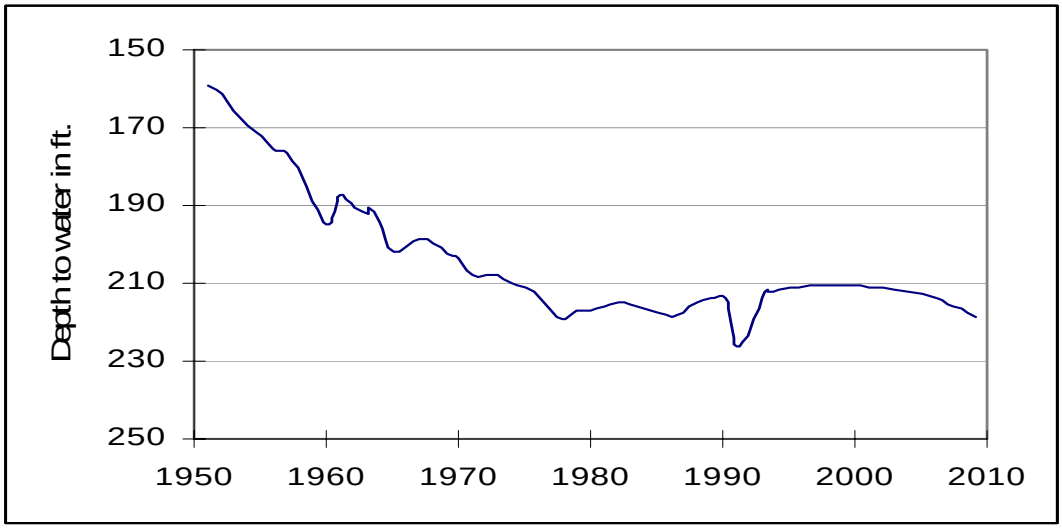
***** Water levels below the red line indicate Edwards Aquifer Authority Stage 1 drought restrictions. *****

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.

Well No 51-19-203
Jeff Davis County



This water level observation well, located 22 miles southeast of Van Horn, at an elevation of 4102 feet ASL, was completed in the West Texas Bolson Aquifer. The aquifer is mainly used for irrigation and livestock purposes, along with several cities in the region. Water level declines have been observed in areas of concentrated irrigation.

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