

Texas Water Development Board



Water **Conditions**

RESERVOIR STORAGE

July 2008

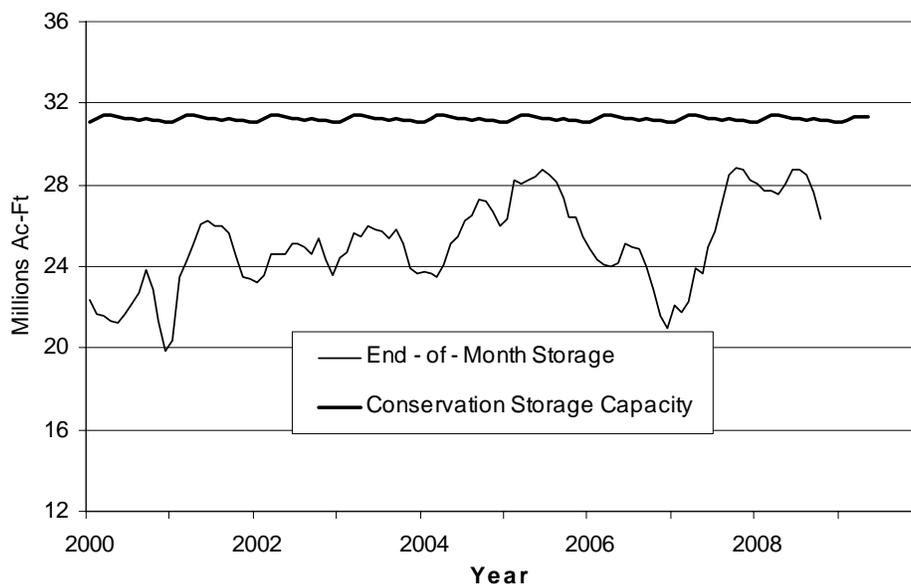
Near the end of July, the 109 reservoirs monitored for this report were 84* percent full, on average, holding 26.37 million acre-feet in conservation storage.

Storage was at 100% in 1 reservoir. Two regions, East (93%) and North Central Regions (91%) had storage at or above 90% of capacity; however, the High Plains Region (6%) and the Trans-Pecos Region (24%) remain very low. Lake Meredith, the largest reservoir in the High Plains Region, is holding 4% of its total conservation capacity.

Regionally, storage decreased in eight of nine regions, and slightly increased in one. Compared to this time last year, storage decreased in all nine regions. State total storage went down 1.27 million acre-feet during the month and 2.49 million acre-feet over the past 12 months.

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

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Figures are based on 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. By definition, a major reservoir has a conservation storage capacity of 5,000 acre-feet or greater.

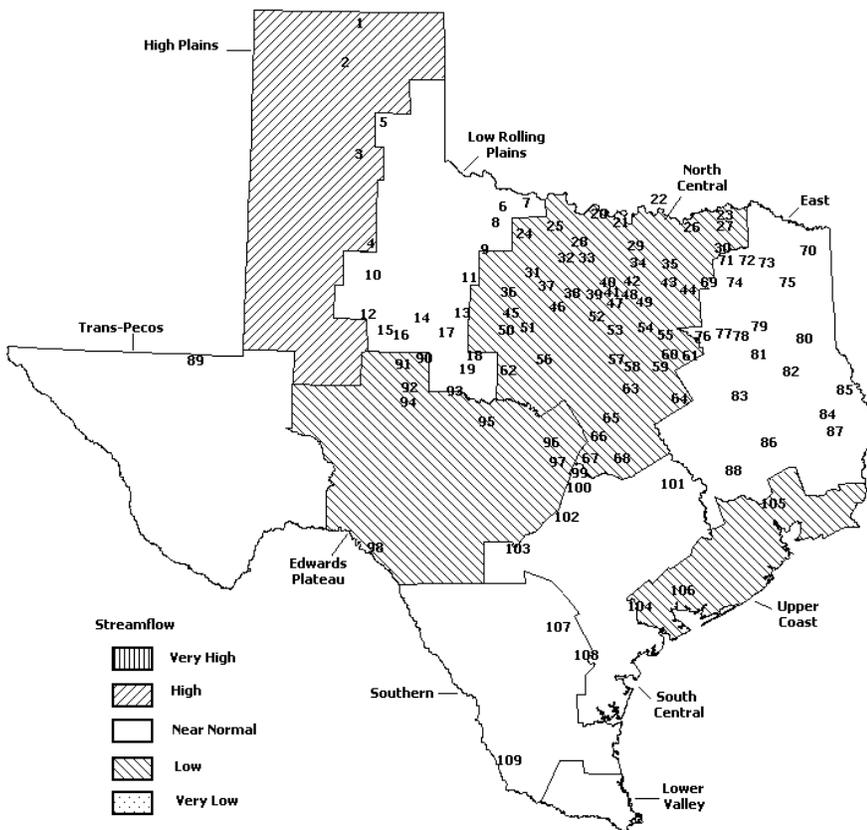
STREAMFLOW

Of 28 reporting index stations in July, computed 30-day mean flows were high (5% - 30%) at 3 stations, low (70% - 95%) at 14 stations, and near normal (30% - 70%) at the remaining 11 stations. Compared to June, flows increased at 11 index stations, decreased at 16 stations, and were unchanged at 1 station.

On a regional basis, flows in July were low in the Edwards Plateau, North Central and Upper Coast Regions, high in the High Plains Region 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. Waxahacie, 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. Vradly 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. Coletto 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		Change since Late June 2008		Change since Late July 2007		
		Capacity (acre-feet)	Late Jul. (acre-feet)	2008 (%)	(acre-feet) (%)	(acre-feet) (%)	(acre-feet) (%)	
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	527	0	258	0	-1,223	-2
Meredith, Lake (Texas)	2	500,000	33,567	6	4,494	1	-38,507	-8
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	33,567	4	4,494	1	-38,507	-5
MacKenzie Reservoir	3	46,429	6,443	13	-177	0	-1,812	-4
White River Lake	4	29,880	456	1	-103	0	-2,179	-7
TOTAL		637,206	40,993	6	4,472	1	-43,721	-7
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	19,207	32	-1,057	-2	-4,791	-8
*Electra, Lake	6	5,626	1,326	23	-171	-3	-1,036	-18
N. Fork Buffalo Crk Reservoir	7	15,400	3,791	24	-387	-3	-2,653	-17
Kemp, Lake	8	245,308	214,488	87	-22,236	-9	-30,820	-13
Millers Creek Reservoir	9	27,888	19,281	69	-1,348	-5	-8,607	-31
Alan Henry Reservoir	10	94,808	89,549	94	-551	-1	-5,232	-6
Stamford, Lake	11	51,570	40,175	77	-3,359	-7	-11,395	-22
J B Thomas, Lake	12	199,931	15,385	7	-1,129	-1	-15,170	-8
Fort Phantom Hill, Lake	13	70,030	62,612	89	-3,951	-6	-4,876	-7
Sweetwater, Lake	14	10,006	8,565	85	-642	-6	8,565	86
Colorado City, Lake	15	31,793	23,443	73	-918	-3	-1,699	-5
Champion Creek Reservoir	16	41,618	9,121	21	-372	-1	3,557	9
Abilene, Lake	17	6,099	4,858	79	-527	-9	923	15
Coleman, Lake	18	38,076	31,818	83	-1,348	-4	-5,735	-15
Hords Creek Lake	19	5,684	3,704	65	-269	-5	-1,980	-35
TOTAL		903,337	547,323	61	-38,265	-4	-80,948	-9
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	20	21,445	19,067	88	-602	-3	-2,378	-11
Hubert H Moss Lake	21	24,058	22,666	94	-793	-3	-1,242	-5
Texoma, Lake (Texas)	22	1,300,076	1,229,747	94	-83,016	-6	-104,547	-8
Texoma, Lake (Texas & Oklahoma)	(22)	2,600,152	2,459,494	94	-166,033	-6	-209,095	-8
*Pat Mayse Lake	23	118,100	113,844	96	-4,256	-4	-4,256	-4
Kickapoo, Lake	24	85,825	49,459	57	-3,657	-4	-26,154	-30
Arrowhead, Lake	25	235,997	179,332	75	-10,396	-4	-56,665	-24
Bonham, Lake	26	11,026	9,663	87	-992	-9	-1,363	-12
Crook, Lake	27	9,195	8,368	91	-692	-8	-827	-9
Amon G Carter, Lake	28	19,903	17,669	88	-1,145	-6	-2,234	-11
Ray Roberts, Lake	29	798,758	774,789	96	-16,687	-2	-23,969	-3
Jim Chapman Lake (Cooper)	30	260,332	234,450	90	-24,319	-9	-61,337	-24
Graham, Lake	31	45,260	41,728	92	-2,946	-7	-3,142	-7
*Lost Creek Reservoir	32	11,950	11,220	93	-364	-3	-730	-6
Bridgeport, Lake	33	366,236	332,353	90	-21,844	-6	-33,883	-9
Lewisville Lake	34	543,988	486,266	89	-41,473	-8	-57,722	-11
Lavon Lake	35	443,844	389,283	87	-39,433	-9	-54,561	-12
Hubbard Creek Reservoir	36	318,067	289,755	91	-11,572	-4	-19,262	-6
Possum Kingdom Lake	37	540,340	495,073	91	-23,613	-4	-10,361	-2
*Mineral Wells, Lake	38	7,065	5,790	81	-511	-7	-1,213	-17
Weatherford, Lake	39	18,645	15,584	83	-1,582	-8	-2,888	-15
Eagle Mountain Lake	40	182,500	162,084	88	-8,773	-5	-20,416	-11
Worth, Lake	41	24,500	21,637	88	-572	-2	-2,358	-10
Grapevine Lake	42	164,702	149,584	90	-11,322	-7	-15,118	-9
Ray Hubbard, Lake	43	452,040	428,395	94	-18,892	-4	-23,645	-5
New Terrell City Lake	44	8,583	7,973	92	-542	-6	-610	-7
Daniel, Lake	45	9,435	8,237	87	-735	-8	-1,198	-13
Palo Pinto, Lake	46	27,150	21,159	77	-1,505	-6	-4,588	-17
Benbrook Lake	47	85,648	71,129	83	-10,621	-12	-14,519	-17
Arlington, Lake	48	38,740	29,373	75	-5,155	-13	-9,367	-24

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 June 2008		Change since Late July 2007	
			Late Jul. (acre-feet)	2008 (%)	(acre-feet)	(%)	(acre-feet)	(%)
NORTH CENTRAL (Continue)								
Joe Pool Lake	49	142,861	135,554	94	-5,535	-4	-7,307	-5
*Cisco, Lake	50	26,000	21,322	82	-740	-3	-1,320	-5
Leon, Lake	51	26,421	24,589	93	-1,568	-6	-1,568	-6
Granbury, Lake	52	128,046	114,428	89	-5,774	-5	-9,994	-8
Pat Cleburne, Lake	53	25,730	22,716	88	-1,630	-6	-3,014	-12
Waxahachie, Lake	54	10,779	9,472	87	874	8	-1,307	-12
Bardwell Lake	55	46,122	42,184	91	-2,978	-6	-3,938	-9
Proctor Lake	56	55,457	43,503	78	-5,539	-10	-11,954	-22
Whitney, Lake	57	553,349	446,848	80	-22,243	-4	-106,501	-19
Aquilla Lake	58	45,092	39,465	87	-2,054	-5	-5,627	-12
Navarro Mills Lake	59	55,817	50,928	91	-3,447	-6	-4,889	-9
*Halbert, Lake	60	6,033	4,617	76	-350	-6	-1,325	-22
Richland-Chambers Reservoir	61	1,103,816	1,037,481	93	-32,222	-3	-66,335	-6
*Brownwood, Lake	62	131,429	108,612	82	-5,465	-4	-22,817	-17
Waco, Lake	62	198,943	187,032	94	-9,160	-5	-11,911	-6
Limestone, Lake	64	208,015	183,358	88	-13,435	-6	-24,657	-12
Belton Lake	65	435,225	417,370	95	-13,037	-3	-17,855	-4
Stillhouse Hollow Lake	66	227,771	220,511	96	-4,961	-2	-7,260	-3
Georgetown, Lake	67	36,823	21,731	59	-3,830	-10	-15,092	-41
Granger Lake	68	52,525	47,860	91	-3,430	-7	-4,665	-9
Tawakoni, Lake	69	888,126	842,233	94	-45,130	-5	-45,893	-5
TOTAL		10,577,788	9,647,491	91	-529,664	-5	-935,779	-9
EAST								
Wright Patman Lake	70	277,486	277,176	99	-15,492	-6	-15,492	-6
*Sulphur Springs, Lake	71	17,838	17,382	97	-456	-3	-456	-3
Cypress Springs, Lake	72	67,689	66,999	98	-690	-1	-690	-1
Bob Sandlin, Lake	73	200,579	195,610	97	-4,969	-2	-1,712	-1
Fork Reservoir, Lake	74	604,927	604,399	99	-528	0	-528	0
O the Pines, Lake	75	267,672	261,657	97	-6,015	-2	22,724	8
Cedar Creek Reservoir in Trinity	76	644,686	610,357	94	-25,970	-4	-34,329	-5
Athens, Lake	77	29,435	28,108	95	-1,327	-5	-1,327	-5
Palestine, Lake	78	370,907	360,257	97	-10,650	-3	-10,650	-3
Tyler, Lake	79	73,256	69,490	94	-3,766	-5	-3,766	-5
Murvault, Lake	80	38,284	33,889	88	-2,202	-6	-4,327	-11
Jacksonville, Lake	81	30,300	28,706	94	-1,256	-4	-1,594	-5
Nacogdoches, Lake	82	39,521	35,540	89	-1,741	-4	-3,126	-8
Houston County Lake	83	17,113	16,033	93	-927	-5	-1,080	-6
Sam Rayburn Reservoir	84	2,857,077	2,497,754	87	-163,506	-6	-359,323	-13
Toledo Bend Reservoir (Texas)	85	2,236,450	2,007,927	89	-155,937	-7	-228,523	-10
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	4,015,854	89	-311,874	-7	-457,046	-10
*Livingston, Lake	86	1,741,867	1,712,000	98	-29,867	-2	-29,867	-2
B A Steinhagen Lake	87	66,966	61,321	91	6,358	9	5,571	8
Conroe, Lake	88	416,188	394,839	94	-11,215	-3	-20,569	-5
TOTAL		9,998,241	9,279,444	93	-430,156	-4	-689,064	-7
TRANS-PECOS								
Red Bluff Reservoir	89	289,670	70,635	24	-7,226	-2	-18,621	-6
TOTAL		289,670	70,635	24	-7,226	-2	-18,621	-6

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

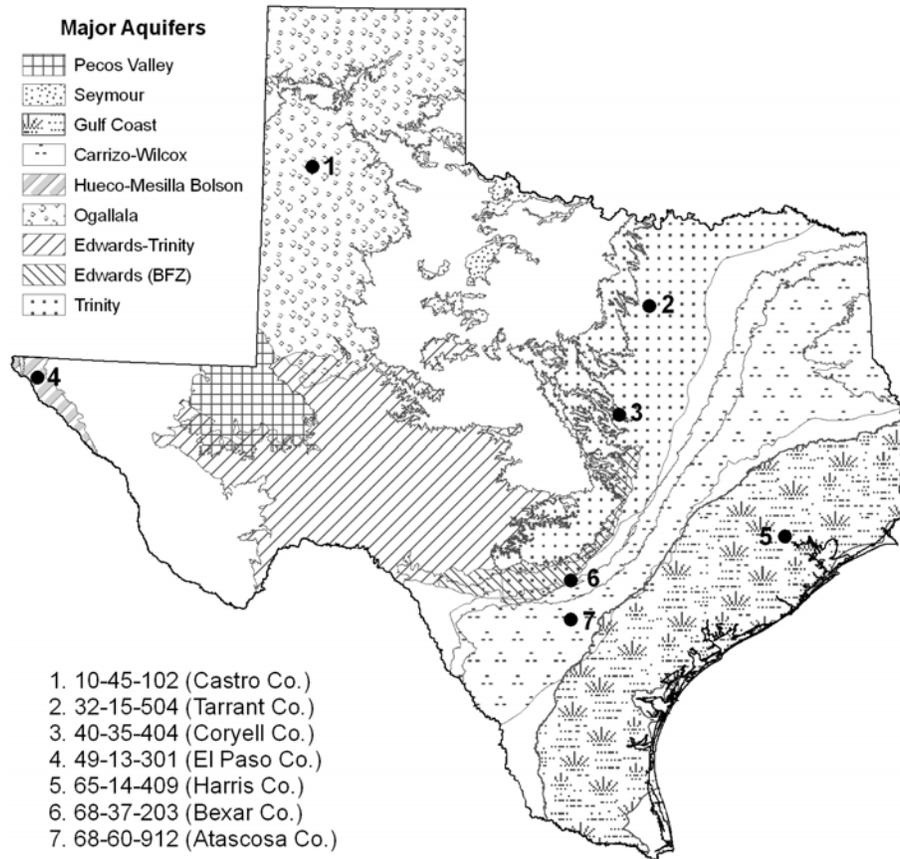
Name of Lake or Reservoir	No. on Map	Conservation Storage		Change since Late June 2008		Change since Late July 2007		
		Capacity (acre-feet)	Late Jul. (acre-feet)	2008 (%)	2008 (acre-feet)	(%)	2007 (acre-feet)	(%)
EDWARDS PLATEAU								
Oak Creek Reservoir	90	39,260	34,045	86	-1,589	-4	22,106	56
E V Spence Reservoir	91	517,272	63,611	12	-2,746	-1	-7,618	-1
O C Fisher Lake	92	79,483	0	0	0	0	0	0
*O H Ivie Reservoir	93	554,335	342,057	61	-12,761	-2	-7,512	-1
Twin Buttes Reservoir	94	177,850	55,548	31	-6,928	-4	-31,540	-18
Brady Creek Reservoir	95	29,110	17,697	60	-1,288	-4	-91	0
Buchanan, Lake	96	824,519	751,753	91	-49,943	-6	-82,083	-10
Lyndon B Johnson, Lake	97	113,690	110,990	97	65	0	64	0
*Amistad Reservoir (Texas)	98	1,840,849	2,090,000	114	-39,000	-2	-24,000	-1
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	2,215,000	68	-19,000	-1	-493,000	-15
TOTAL		4,176,368	3,465,701	83	-114,190	-3	-130,674	-3
SOUTH CENTRAL								
Travis, Lake	99	1,113,902	832,298	74	-64,523	-6	-281,604	-25
*Austin, Lake	100	21,804	20,881	95	-196	-1	302	1
Somerville Lake	101	147,104	133,125	90	-6,404	-4	-13,979	-10
Canyon Lake	102	378,781	338,368	89	-13,873	-4	-40,413	-11
Medina Lake	103	254,823	187,031	73	-10,635	-4	-67,792	-27
*Coletto Creek Reservoir	104	31,040	25,265	81	-1,257	-4	-5,775	-19
TOTAL		1,947,454	1,536,968	79	-96,888	-5	-409,261	-21
UPPER COAST								
Houston, Lake	105	128,863	128,863	100	0	0	0	0
Texana, Lake	106	153,246	117,296	76	-5,714	-4	-34,208	-22
TOTAL		282,109	246,159	87	-5,714	-2	-34,208	-12
SOUTHERN								
Choke Canyon Reservoir	107	695,262	623,095	89	-8,769	-1	-72,167	-10
Corpus Christi, Lake	108	256,961	207,356	80	-1,039	0	-49,605	-19
*Falcon Reservoir (Texas)	109	1,551,034	707,000	46	-43,000	-3	-22,000	-1
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	859,000	32	-29,000	-1	-193,000	-7
TOTAL		2,503,257	1,537,451	61	-52,808	-2	-143,772	-6
STATE TOTAL		31,315,430	26,372,165	84	-1,270,439	-4	-2,486,049	-8

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

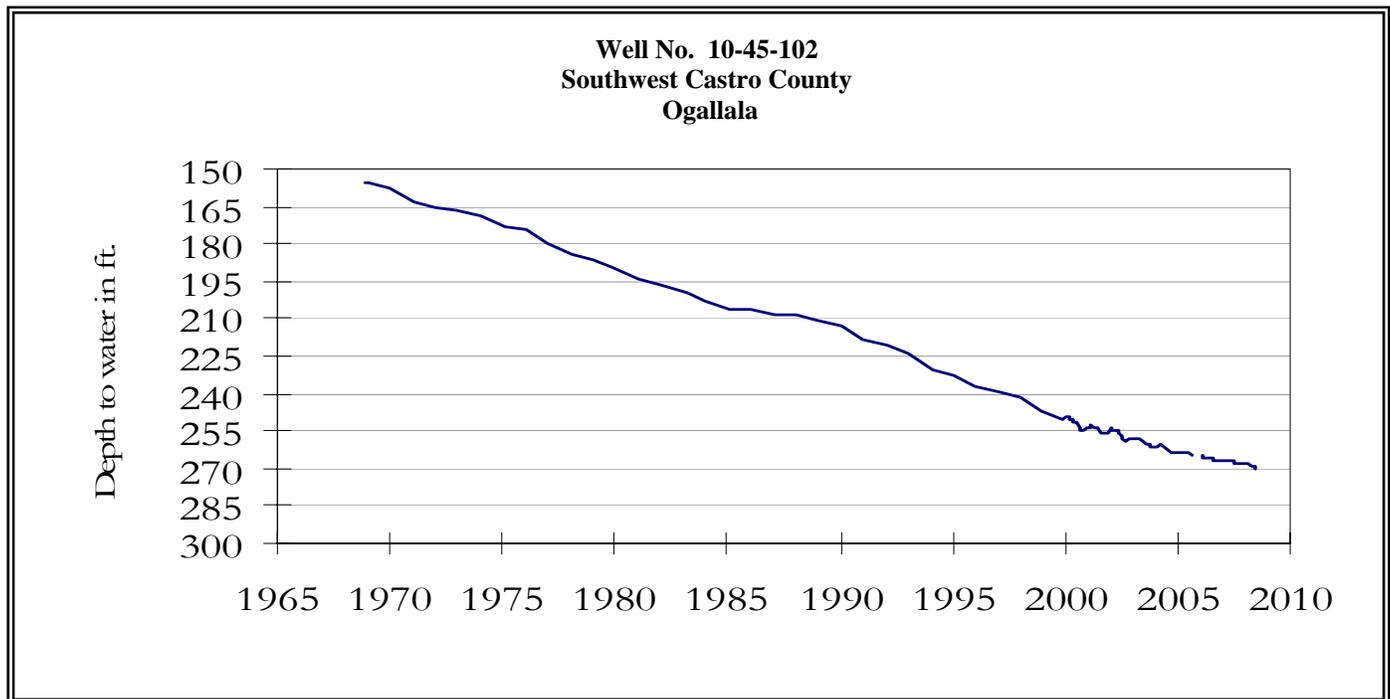
Note

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 $100 \times (\text{current conservation storage} - \text{past conservation storage}) / \text{conservation storage capacity}$. Figures shown are for the Texas share of conservation storage in all reservoirs.

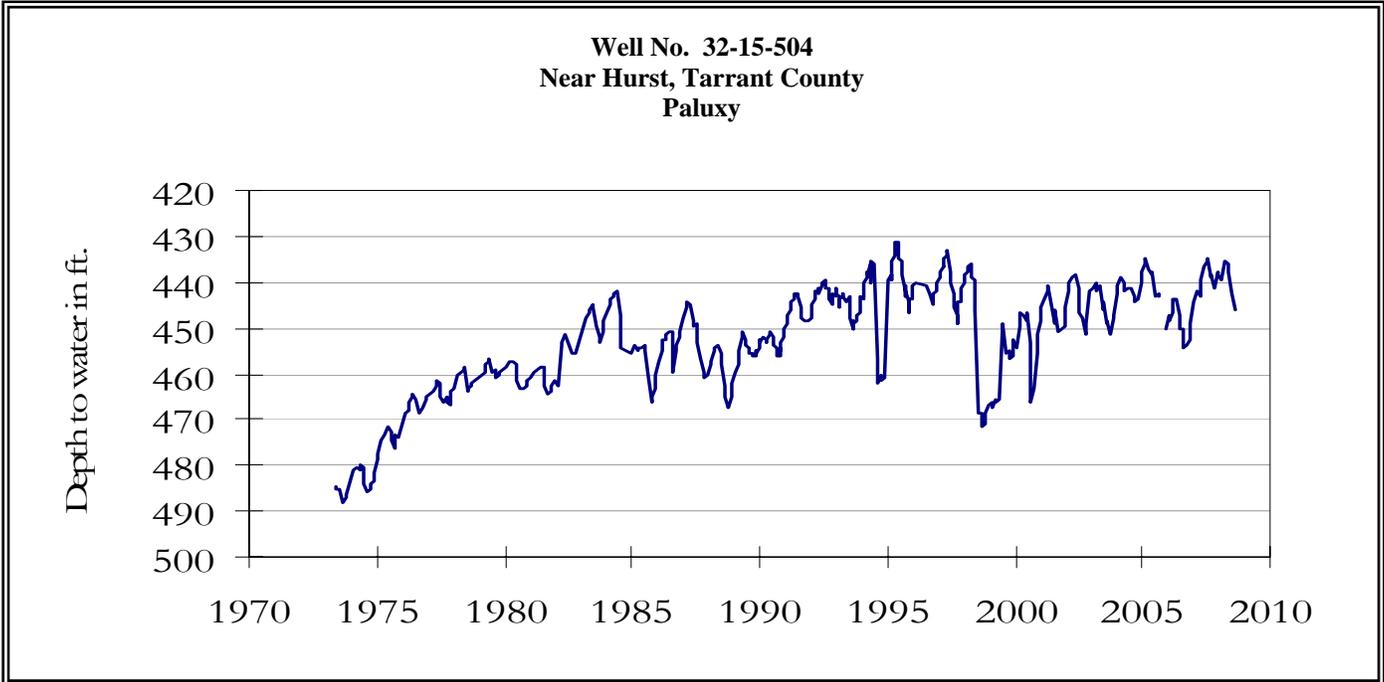
GROUND WATER LEVELS IN OBSERVATION WELLS



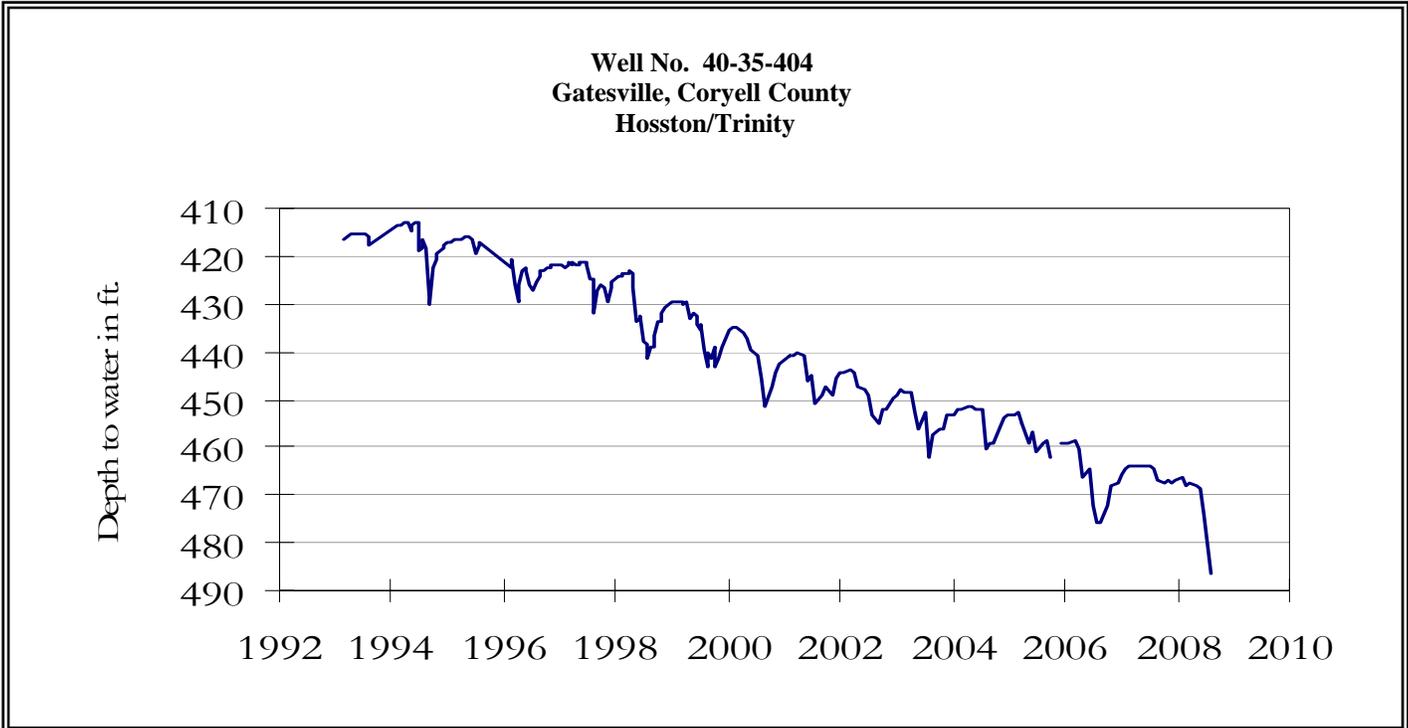
JULY GROUND WATER LEVELS IN OBSERVATION WELLS



The late July water-level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 270.48 feet below land surface. This measurement was 0.22 feet below last month's measurement, 2.92 feet below last year's measurement, and 114.48 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.

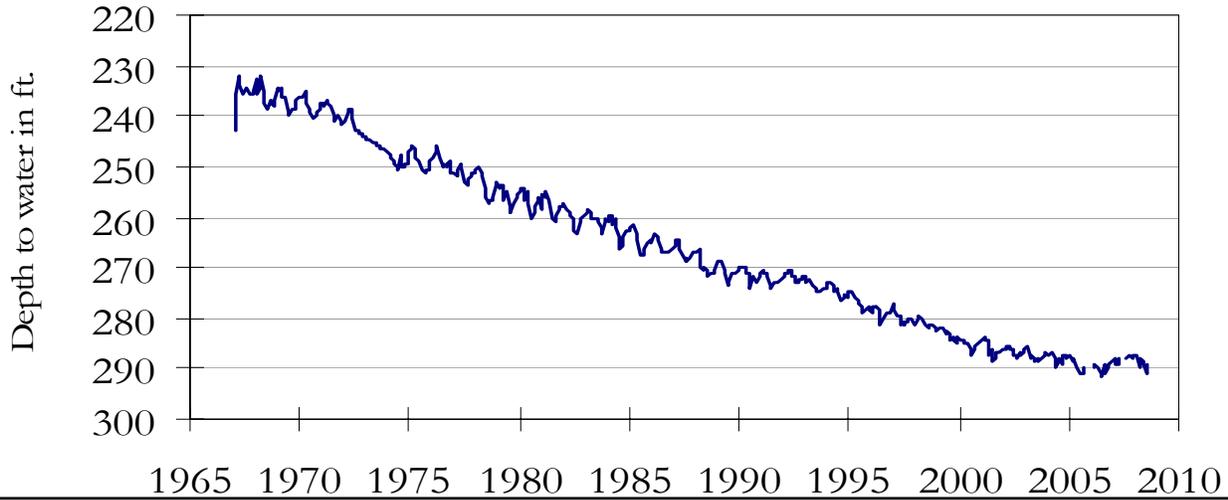


The late July water-level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 445.91 feet below land surface. This measurement was 3.28 feet below last month's measurement, 10.93 feet below last year's measurement, and 67.91 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.



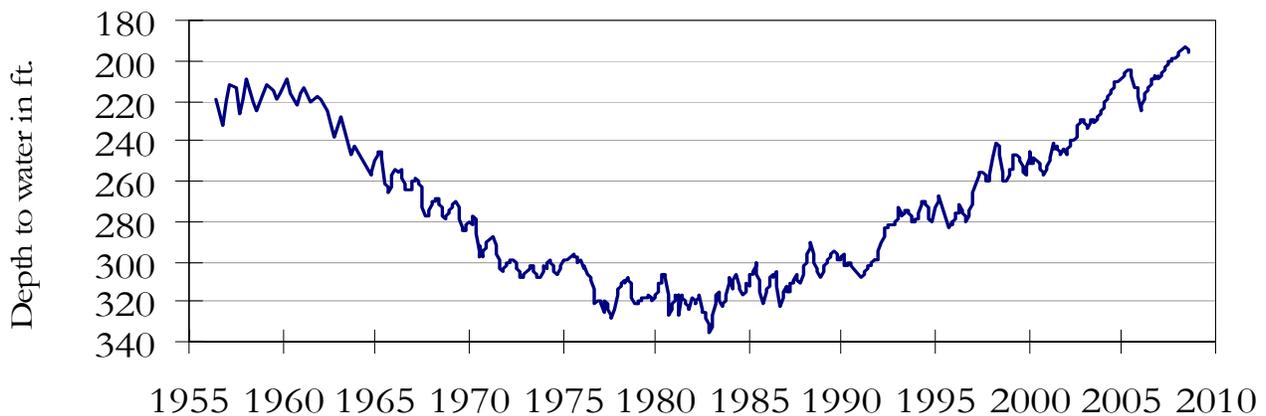
The late July water-level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 486.58 feet below land surface. This water level was 12.58 feet below last month's measurement, 22.12 feet below last year's measurement, and 194.58 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

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



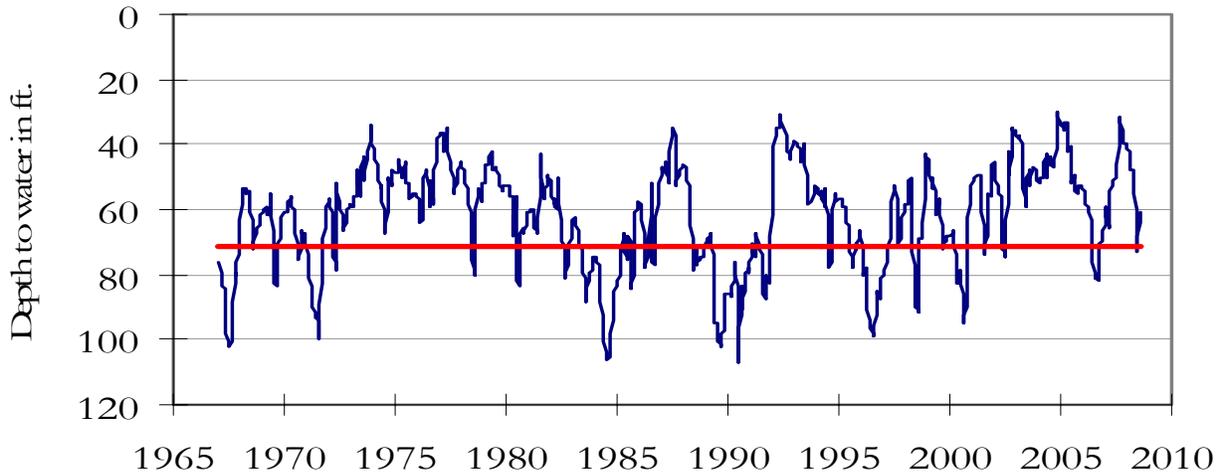
The late July water-level measurement in this Hueco Bolson Aquifer well, elevation 3,882 feet above sea level, was 289.03 feet below land surface. This water level was 1.97 feet above last month's measurement, and 57.13 feet below the initial measurement in 1964. No water level measurements were recorded for May through July 2007, and October or December 2005.

**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 195.87 feet below land surface. This was 1.48 feet below last month's measurement, 3.95 feet above last year's measurement, and 60.37 feet below the initial measurement recorded in 1947.

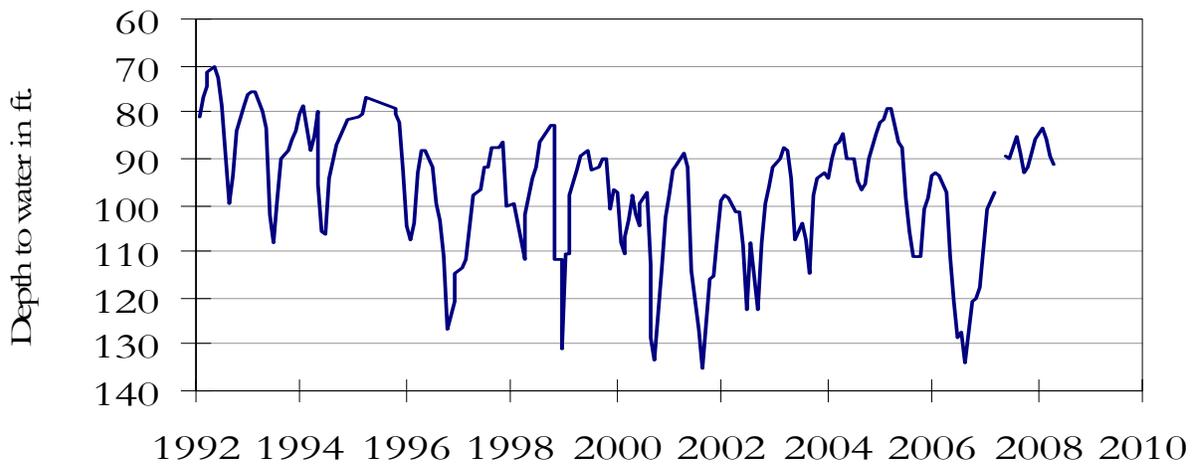
Well No. 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards and Associated Limestones



The late July water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 60.79 feet below land surface. This was 12.41 feet above last month's measurement, 29.39 feet below last year's measurement, and 14.15 feet below the initial measurement recorded in 1962.

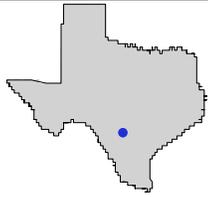
***** Water levels below the red line indicate Edwards Aquifer Authority Stage 1 drought restrictions. *****

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



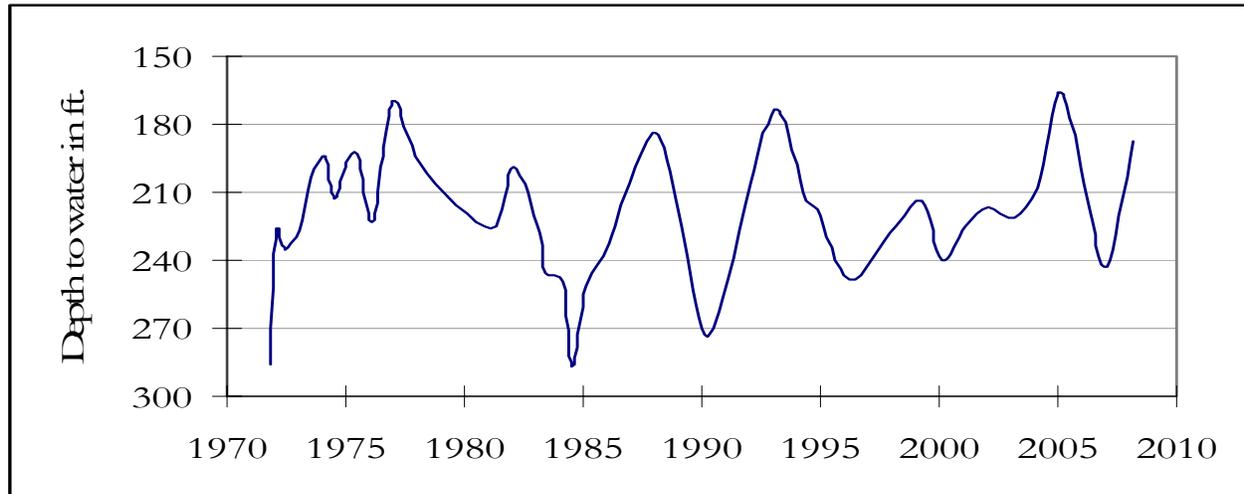
The TWDB has taken this recorder offline and is in the process of installing a new recorder in Atascosa County.

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 69-44-301 Uvalde County



This water level observation well, located 4 miles northwest of Sabinal, at an elevation of 1003 feet ASL, was completed in the Edwards (BFZ) Aquifer. Due to its highly permeable nature, this aquifer responds quickly to changes and extremes in stress placed on the system. This is indicated by significant fluctuations in the water level over relatively short periods of time.

July, 2008

Water level measurements were available for six out of the seven key monitoring wells. Water levels rose in two of the reporting monitoring wells since the beginning of July, ranging from 1.97 feet in the El Paso Co. Hueco Bolson well to 12.41 feet in the Bexar Co. Edwards well. Water levels declined in the remaining monitoring wells, ranging from 0.22 feet in the Castro Co. Ogallala well to 12.58 feet in the Coryell Co. Trinity Well. The J-17 well in San Antonio recorded a water level of 60.79 feet below land surface, 12.41 feet above last month's measurement. This water level is 10.21 feet above the Stage 1 critical management level. The Edwards Aquifer Authority discontinued Stage 1 drought restrictions on July 23.

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