

Texas Water Development Board



Water **Conditions**

RESERVOIR STORAGE

December 2007

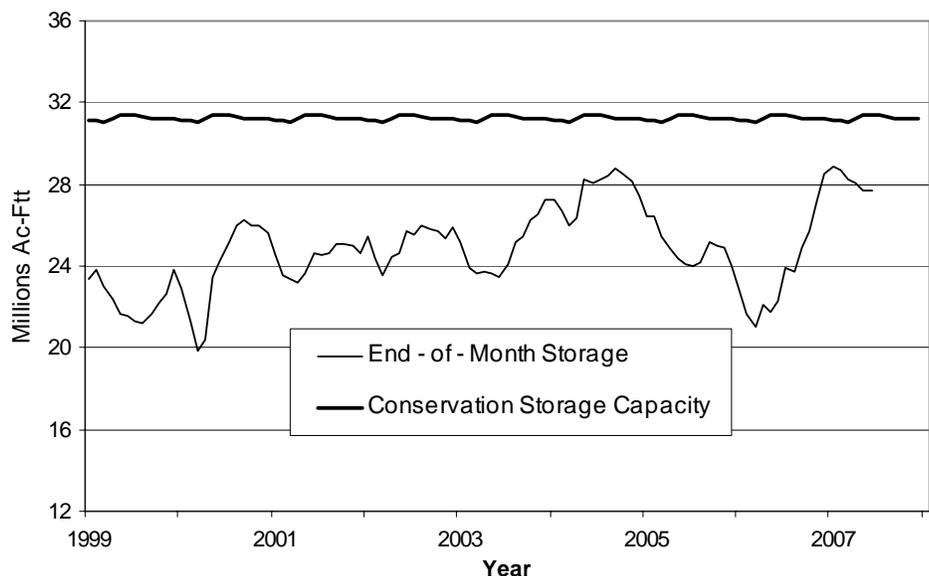
Near the end of December, the 109 reservoirs monitored for this report held 27.72 million acre-feet* in conservation storage, or 89 percent of the conservation storage capacity of the state's 175 major water supply reservoirs.

Storage was at 100% in 18 reservoirs. Four regions, East (90%), North Central (94%), Upper Coast (96%), and South Central (99%) had storage above 90% of capacity; the High Plains Region reservoirs were only 10% full with the Trans-Pecos Region at 36%.

Regionally, storage decreased in five out of nine regions and increased in the other four regions. Compared to this time last year, storage increased in seven regions and decreased in two regions. Statewide, storage decreased during the month by 0.05 million acre-feet, but increased near 5.5 million acre-feet (18%) over the past 12 months.

* Only the water belonging to Texas 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.

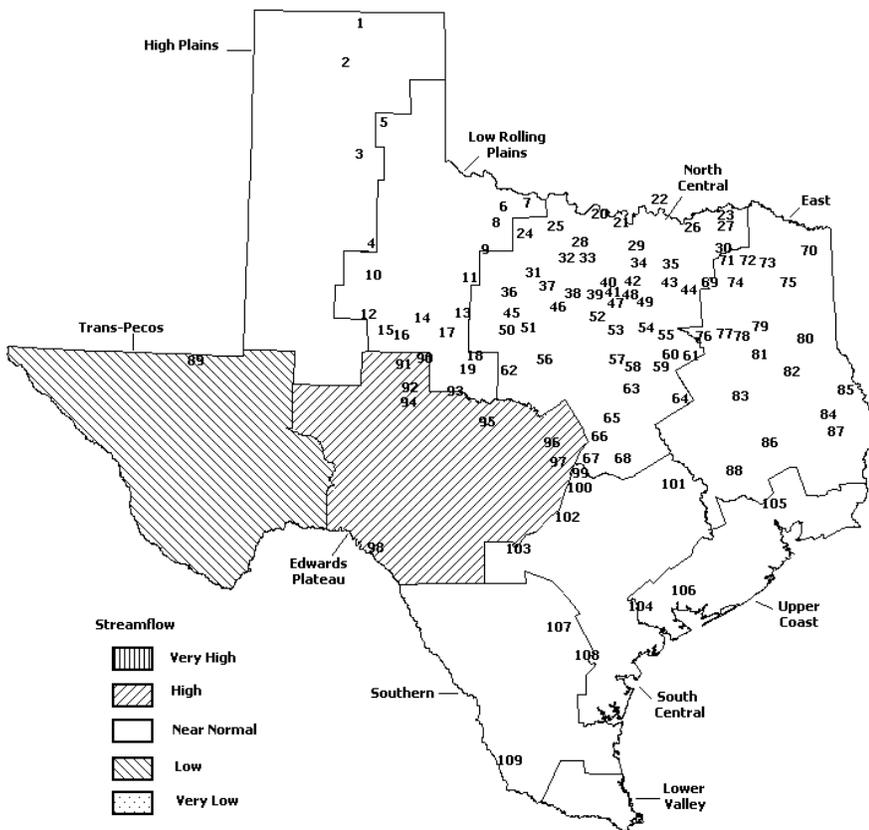
STREAMFLOW

Of 29 reporting index stations in December, computed 30-day mean flows were high (5% - 30%) at 5 stations, low (70% - 95%) at 1 station, very low (> 95%) at 1 station, and near normal (30% - 70%) at the remaining 22 stations. Compared to November, flows have increased at 15 index stations and decreased at 14 stations.

On a regional basis, flows in December were high in the Edwards Plateau Region, low in the Trans-Pecos Region, but normal in all other regions. Streamflow in the Lower Valley Region is not monitored.

DECEMBER 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 November 2007		Change since Late December 2006		
		Capacity (acre-feet)	Late Dec. (acre-feet)	2007 (%)	(acre-feet)	(%)	(acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	868	1	-50	0	-374	-1
Meredith, Lake (Texas)	2	500,000	51,293	10	-1,643	0	-16,740	-3
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	51,293	6	-1,643	0	-16,740	-2
MacKenzie Reservoir	3	46,429	7,413	15	-60	0	-512	-1
White River Lake	4	29,880	1,517	5	-135	0	-908	-3
TOTAL		637,206	61,091	10	-1,888	0	-18,534	-3
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	21,899	36	299	1	3,622	6
*Electra, Lake	6	5,626	1,764	31	-26	0	1,219	22
N. Fork Buffalo Crk Reservoir	7	15,400	5,002	32	-30	0	2,895	19
Kemp, Lake	8	245,308	245,308	100	0	0	47,712	19
Millers Creek Reservoir	9	27,888	23,417	83	-304	-1	4,051	15
Alan Henry Reservoir	10	94,808	92,017	97	53	0	-2,630	-3
Stamford, Lake	11	51,570	50,578	98	-645	-1	17,576	34
J B Thomas, Lake	12	199,931	26,290	13	-1,443	-1	-3,758	-2
Fort Phantom Hill, Lake	13	70,030	67,025	95	-1,695	-2	29,916	43
Sweetwater, Lake	14	10,006	7,467	74	132	1	7,467	75
Colorado City, Lake	15	31,793	27,411	86	-162	-1	4,218	13
Champion Creek Reservoir	16	41,618	9,452	22	51	0	5,186	12
Abilene, Lake	17	6,099	5,638	92	-63	-1	3,175	52
Coleman, Lake	18	38,076	35,150	92	-351	-1	7,473	20
Hords Creek Lake	19	5,684	4,873	85	-94	-2	2,700	47
TOTAL		903,337	623,291	69	-4,278	0	130,823	14
NORTH CENTRAL								
Farmers Creek Reservoir (Nocona)	20	21,445	19,552	91	-117	-1	5,004	23
Hubert H Moss Lake	21	24,058	22,583	93	73	0	1,614	7
Texoma, Lake (Texas)	22	1,262,640	1,212,733	96	-7,829	-1	42,835	3
Texoma, Lake (Texas & Oklahoma)	(22)	2,525,281	2,425,467	96	-15,658	-1	85,672	3
*Pat Mayse Lake	23	118,100	118,100	100	1,516	1	36,918	31
Kickapoo, Lake	24	85,825	61,139	71	-2,016	-2	8,556	10
Arrowhead, Lake	25	235,997	208,871	88	-2,529	-1	51,903	22
Bonham, Lake	26	11,026	10,059	91	268	2	-967	-9
Crook, Lake	27	9,195	9,143	99	444	5	-52	-1
Amon G Carter, Lake	28	19,903	18,321	92	-203	-1	7,047	35
*Ray Roberts, Lake	29	798,758	787,398	98	-4,078	-1	192,753	24
Jim Chapman Lake (Cooper)	30	295,787	295,787	100	7,187	2	207,198	70
Graham, Lake	31	45,260	39,158	86	-714	-2	4,958	11
*Lost Creek Reservoir	32	11,950	11,337	94	-109	-1	699	6
Bridgeport, Lake	33	366,236	328,884	89	-2,905	-1	139,449	38
*Lewisville Lake	34	543,988	528,029	97	2,031	0	201,562	37
Lavon Lake	35	443,844	379,883	85	2,309	1	203,960	46
Hubbard Creek Reservoir	36	318,067	281,627	88	-3,358	-1	135,438	43
Possum Kingdom Lake	37	540,340	514,634	95	1,621	0	14,779	3
*Mineral Wells, Lake	38	7,065	6,120	86	-217	-3	1,488	21
Weatherford, Lake	39	18,645	16,044	86	-182	-1	6,170	33
Eagle Mountain Lake	40	182,500	160,548	87	-3,152	-2	47,171	26
Worth, Lake	41	24,500	21,536	87	-539	-2	4,892	20
Grapevine Lake	42	164,702	156,824	95	-1,484	-1	61,329	37
Ray Hubbard, Lake	43	452,040	452,040	100	5,786	1	69,714	15
New Terrell City Lake	44	8,583	8,337	97	34	0	4,081	48
Daniel, Lake	45	9,435	7,792	82	-436	-5	7,593	80
Palo Pinto, Lake	46	27,150	22,308	82	-655	-2	10,168	37
Benbrook Lake	47	85,648	85,648	100	4,914	6	19,567	23
Arlington, Lake	48	38,740	35,457	91	-1,802	-5	-3,283	-8

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 November 2007		Change since Late December 2006		
			Late Dec. (acre-feet)	2007 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
NORTH CENTRAL (Continue)									
Joe Pool Lake	49	142,861	134,112	93	1,439	1	1,151	1	
*Cisco, Lake	50	26,000	21,270	81	-221	-1	9,486	36	
Leon, Lake	51	26,421	24,841	94	-247	-1	7,838	30	
Granbury, Lake	52	128,046	117,936	92	-1,462	-1	-878	-1	
Pat Cleburne, Lake	53	25,730	24,331	94	-46	0	-1,086	-4	
Waxahachie, Lake	54	10,779	10,016	92	374	3	-431	-4	
Bardwell Lake	55	46,122	45,348	98	248	1	5,390	12	
Proctor Lake	56	55,457	54,344	97	-445	-1	29,101	52	
Whitney, Lake	57	553,349	431,172	77	-10,385	-2	51,808	9	
Aquilla Lake	58	45,092	42,513	94	0	0	18,649	41	
Navarro Mills Lake	59	55,817	51,852	92	-98	0	29,447	53	
*Halbert, Lake	60	6,033	4,840	80	0	0	3,222	53	
Richland-Chambers Reservoir	61	1,103,816	1,041,959	94	-4,069	0	342,358	31	
*Brownwood, Lake	62	131,429	122,805	93	-1,380	-1	30,043	23	
Waco, Lake	62	198,943	198,943	100	0	0	82,903	42	
Limestone, Lake	64	208,015	187,736	90	-713	0	475	0	
Belton Lake	65	435,225	435,225	100	0	0	84,646	19	
Stillhouse Hollow Lake	66	227,771	227,771	100	0	0	20,929	9	
Georgetown, Lake	67	36,823	35,376	96	-1,167	-3	19,390	53	
Granger Lake	68	52,525	52,525	100	0	0	2,827	5	
Tawakoni, Lake	69	888,126	822,747	92	4,705	1	319,160	36	
TOTAL		10,575,807	9,907,554	94	-19,609	0	2,538,970	24	
EAST									
Wright Patman Lake	70	122,593	122,593	100	0	0	0	0	
*Sulphur Springs, Lake	71	17,838	17,163	96	1,280	7	601	3	
Cypress Springs, Lake	72	67,689	67,689	100	1,105	2	14,271	21	
Bob Sandlin, Lake	73	200,579	193,923	96	2,842	1	75,795	38	
Fork Reservoir, Lake	74	604,927	596,215	98	3,168	1	103,779	17	
O the Pines, Lake	75	238,933	238,933	100	0	0	74,169	31	
Cedar Creek Reservoir in Trinity	76	644,686	614,465	95	5,043	1	160,149	25	
Athens, Lake	77	29,435	29,435	100	144	0	6,659	23	
Palestine, Lake	78	370,907	370,907	100	6,520	2	80,878	22	
Tyler, Lake	79	73,256	70,271	95	1,838	3	29,021	40	
Murvaul, Lake	80	38,284	34,289	89	818	2	-3,176	-8	
Jacksonville, Lake	81	30,300	30,300	100	270	1	0	0	
Nacogdoches, Lake	82	39,521	35,909	90	553	1	-123	0	
Houston County Lake	83	17,113	16,859	98	51	0	-254	-1	
Sam Rayburn Reservoir	84	2,857,077	2,297,997	80	12,047	0	-543,364	-19	
Toledo Bend Reservoir (Texas)	85	2,236,450	1,913,013	85	39,843	2	47,054	2	
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	3,826,026	85	79,686	2	94,108	2	
*Livingston, Lake	86	1,741,867	1,741,867	100	0	0	0	0	
B A Steinhagen Lake	87	66,966	60,615	90	-3,629	-5	57,296	86	
Conroe, Lake	88	416,188	404,300	97	4,482	1	-11,888	-3	
TOTAL		9,814,609	8,856,743	90	76,375	1	90,867	1	
TRANS-PECOS									
Red Bluff Reservoir	89	289,670	104,487	36	2,072	1	-777	0	
TOTAL		289,670	104,487	36	2,072	1	-777	0	

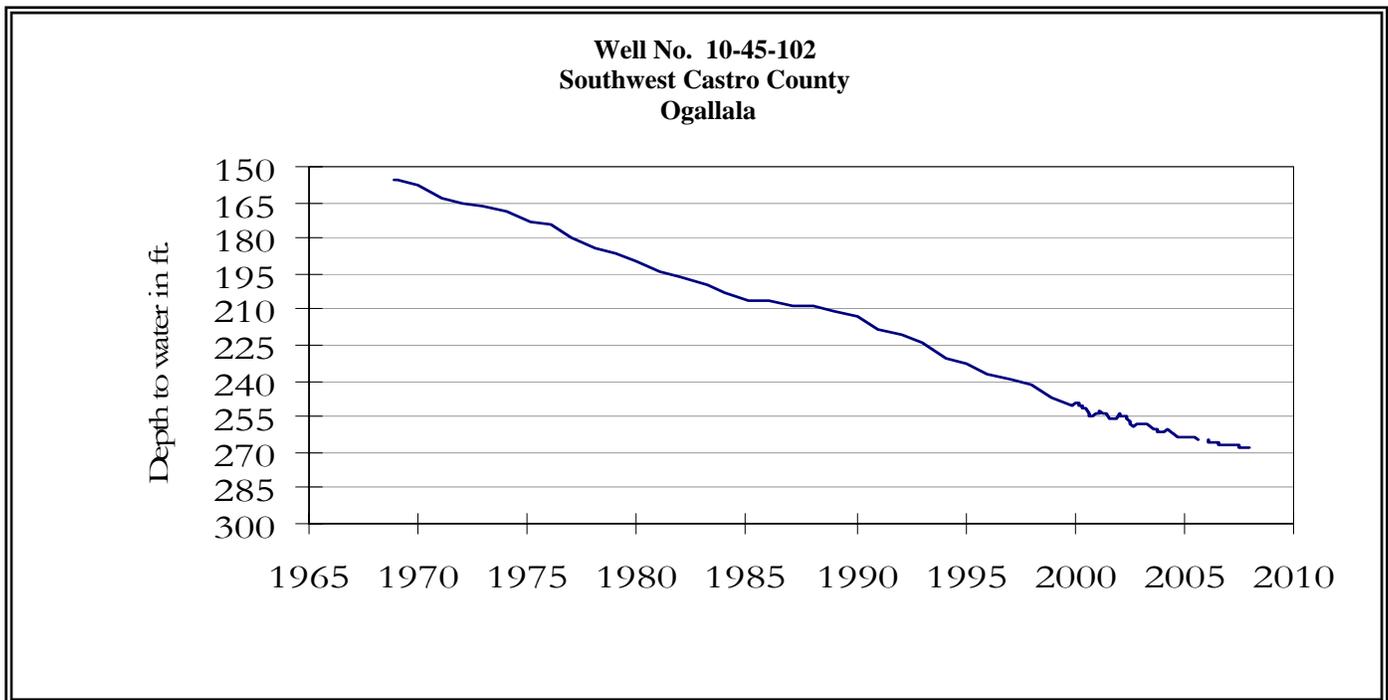
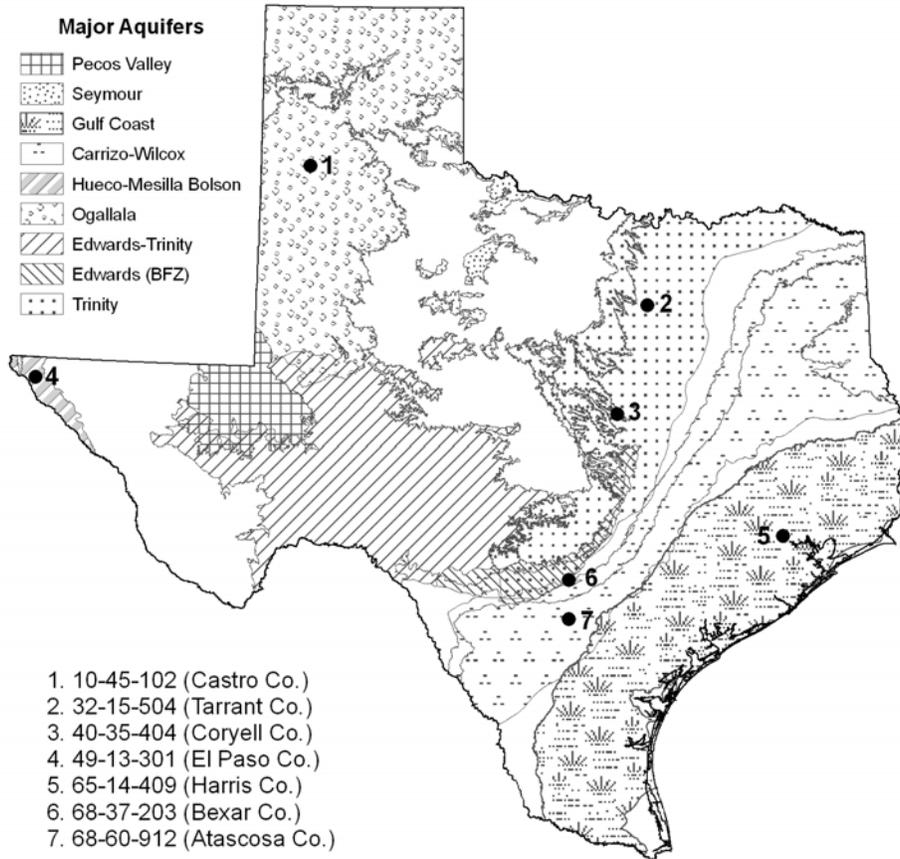
CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage		Change since Late November 2007		Change since Late December 2006		
			Late Dec. (acre-feet)	2007 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
EDWARDS PLATEAU									
Oak Creek Reservoir	90	39,260	38,229	97	-92	0	31,419	80	
E V Spence Reservoir	91	517,272	75,594	14	-1,055	0	6,716	1	
O C Fisher Lake	92	79,483	0	0	0	0	0	0	
*O H Ivie Reservoir	93	554,335	371,551	67	-437	0	151,800	27	
Twin Buttes Reservoir	94	177,850	67,108	37	2,024	1	40,460	23	
Brady Creek Reservoir	95	29,110	15,680	53	-228	-1	3,001	10	
Buchanan, Lake	96	885,507	839,935	94	4,793	1	374,516	42	
Lyndon B Johnson, Lake	97	113,690	112,725	99	-322	0	-387	0	
*Amistad Reservoir (Texas)	98	1,840,849	2,264,000	123	13,000	1	411,000	22	
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	2,825,000	86	24,000	1	260,000	8	
TOTAL		4,237,356	3,784,822	89	17,683	0	1,018,526	24	
SOUTH CENTRAL									
Travis, Lake	99	1,113,902	1,105,753	99	5,186	0	541,550	49	
*Austin, Lake	100	21,804	21,002	96	212	1	90	0	
Somerville Lake	101	147,104	146,357	99	-747	-1	-747	-1	
Canyon Lake	102	378,781	378,781	100	0	0	56,550	15	
Medina Lake	103	254,823	251,507	98	-3,316	-1	157,461	62	
*Coletto Creek Reservoir	104	31,040	30,617	98	-399	-1	7,029	23	
TOTAL		1,947,454	1,934,017	99	936	0	761,934	39	
UPPER COAST									
Houston, Lake	105	128,863	128,863	100	0	0	0	0	
Texana, Lake	106	153,246	143,014	93	-9,498	-6	3,731	2	
TOTAL		282,109	271,877	96	-9,498	-3	3,731	1	
SOUTHERN									
Choke Canyon Reservoir	107	695,262	688,799	99	4,136	1	174,565	25	
Corpus Christi, Lake	108	256,961	252,624	98	-1,626	-1	156,230	61	
*Falcon Reservoir (Texas)	109	1,551,034	1,238,000	80	-14,000	-1	618,000	40	
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	1,763,000	67	-5,000	0	705,000	27	
TOTAL		2,503,257	2,179,423	87	-11,490	0	948,795	38	
STATE TOTAL		31,190,805	27,723,305	89	50,303	0	5,474,333	18	

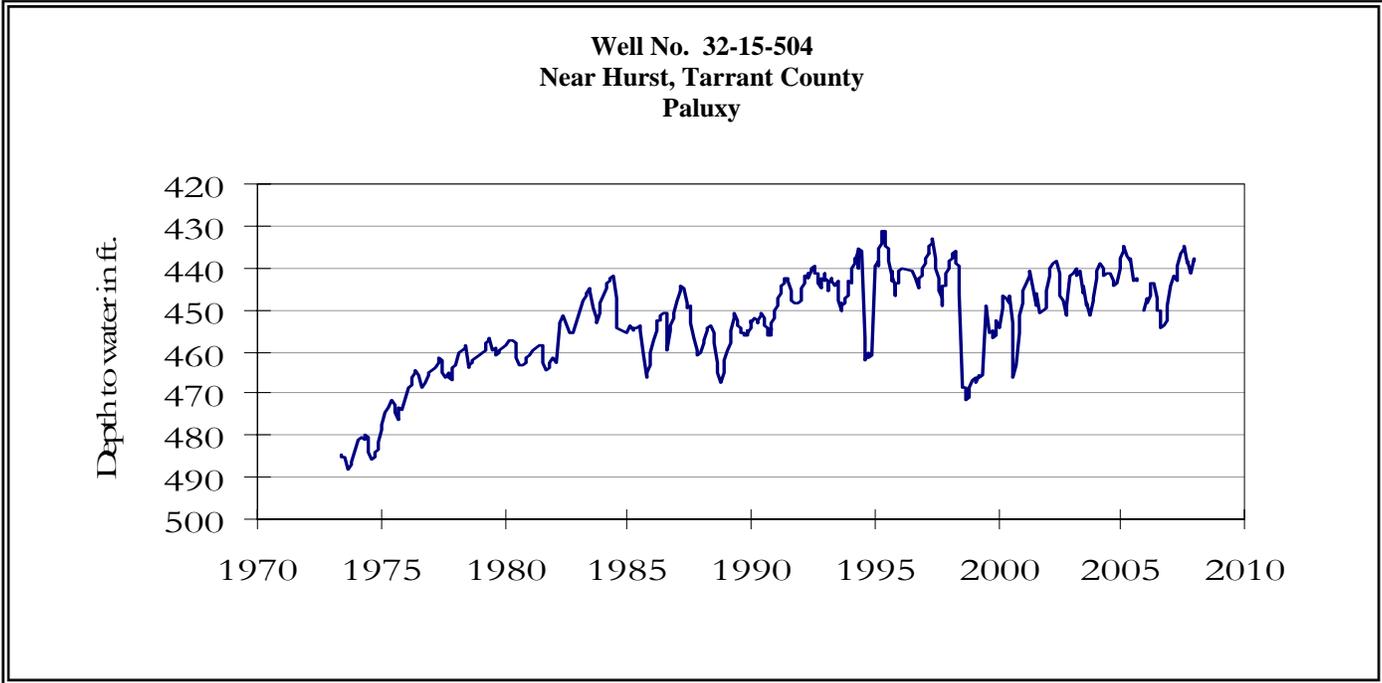
Note

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.

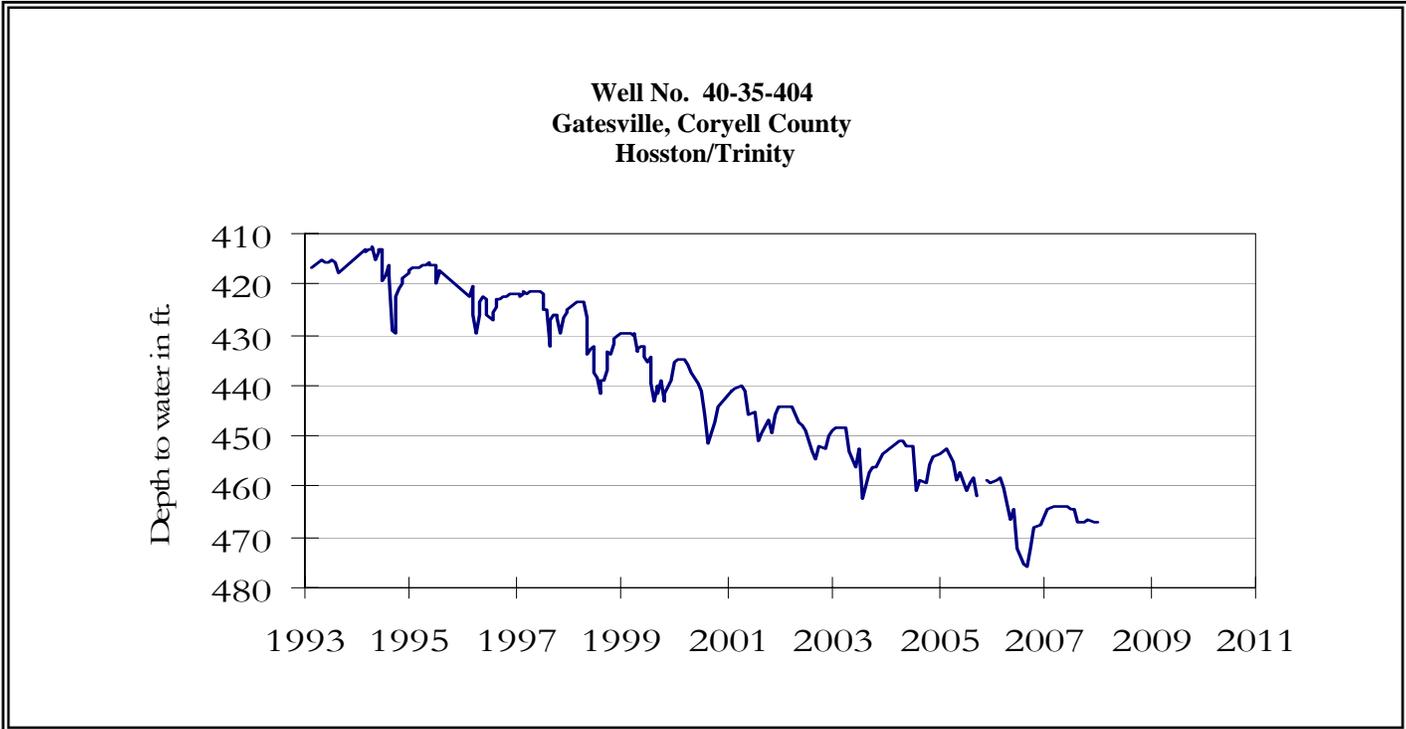
DECEMBER GROUND WATER LEVELS IN OBSERVATION WELLS



The late December water-level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 268.20 feet below land surface. This measurement was 0.16 feet above last month's measurement, 0.99 feet below last year's measurement, and 112.20 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.

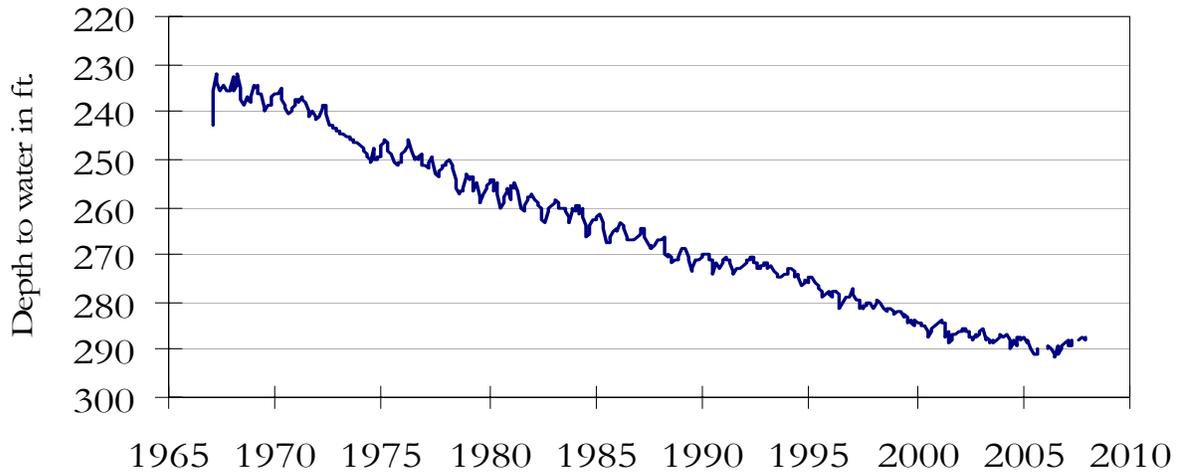


The late December water-level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 438.65 feet below land surface. This measurement was 0.79 feet below last month's measurement, 5.75 feet above last year's measurement, and 60.65 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.



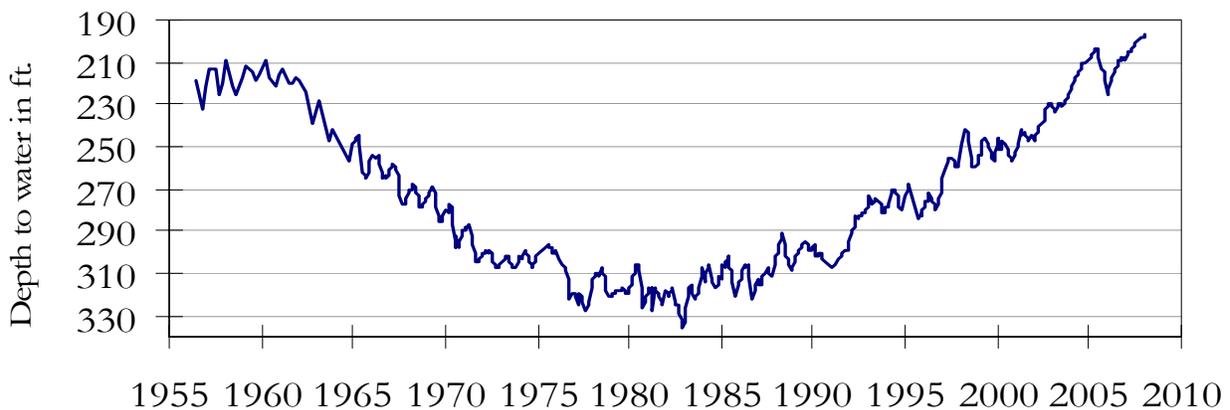
The late December water-level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 466.79 feet below land surface. This water level was 0.41 feet above last month's measurement, 0.91 feet below last year's measurement, and 174.79 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.

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



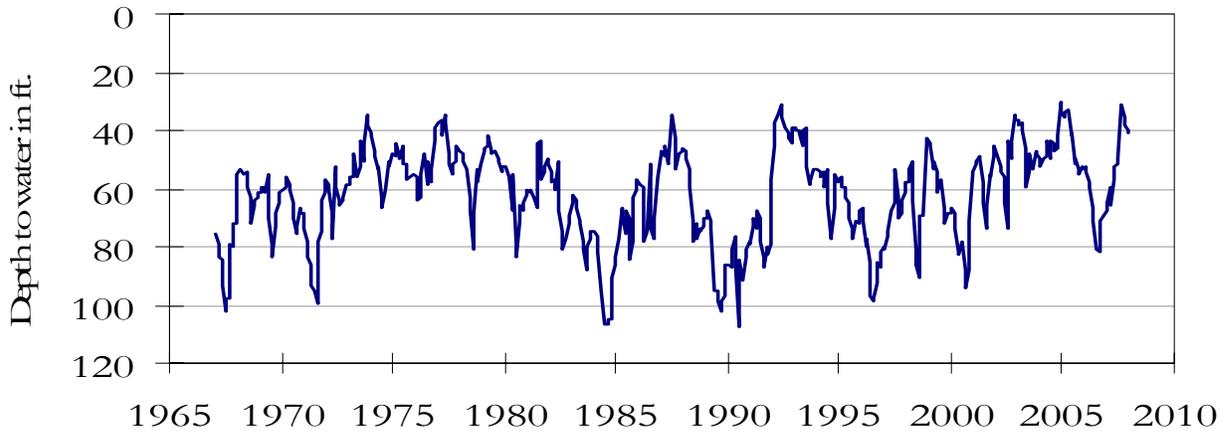
The late December water-level measurement in this Hueco Bolson Aquifer well, elevation 3,882 feet above sea level, was 287.65 feet below land surface. This water level was 0.53 feet above last month's measurement, 1.05 feet above last year's measurement, and 55.75 feet below the initial measurement in 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**



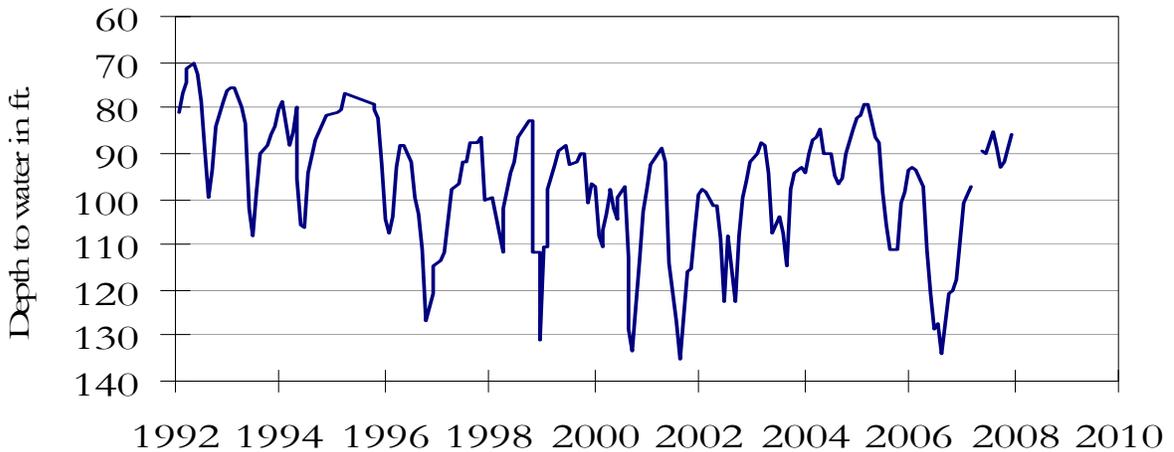
The late December water-level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 197.16 feet below land surface. This was 0.82 feet above last month's measurement, 11.39 feet above last year's measurement, and 61.66 feet below the initial measurement recorded in 1947.

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



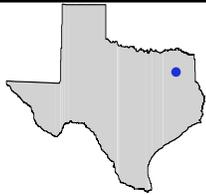
The late December water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 40.80 feet below land surface. This was 1.23 feet below last month's measurement, 24.16 feet above last year's measurement, and 5.84 feet above the initial measurement recorded in 1962.

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



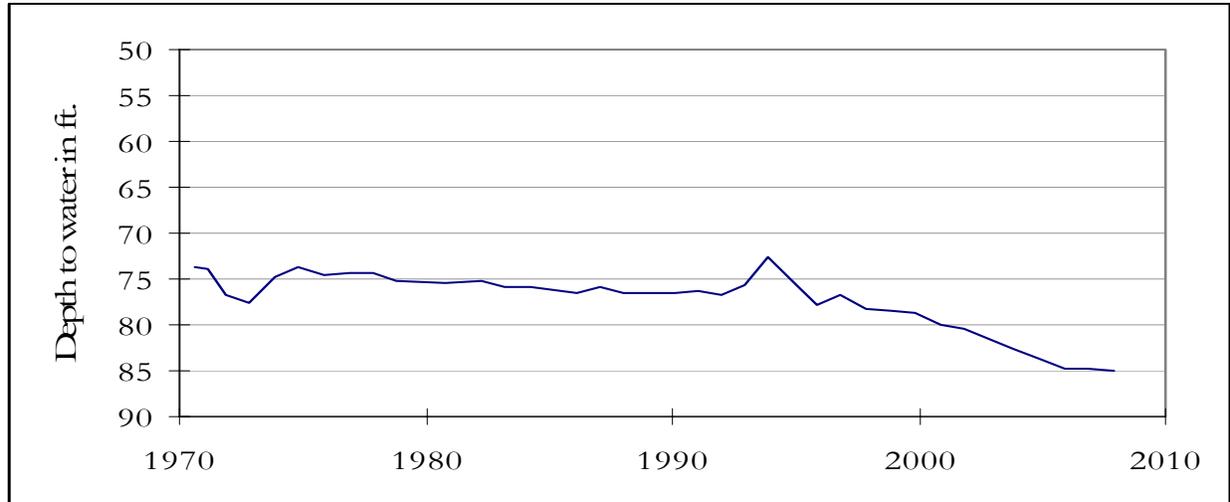
The late December water-level measurement in this Carrizo Aquifer well, elevation 446 feet above sea level, was 85.83 feet below land surface. This measurement was 3.33 feet above last month's measurement, 23.65 feet above last year's measurement, and 50.47 feet below the initial measurement recorded in 1965. No water level measurements were recorded for March and April 2007.

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 18-15-902 Fannin County



This water level observation well, located 10 miles north of Bonham, at an elevation of 558 feet ASL, was completed in the Woodbine Aquifer. The aquifer provides water for municipal, industrial, domestic, livestock, and small irrigation supplies.

December, 2007

Water level measurements were available for all seven key monitoring wells. Water levels rose in five of the seven monitoring wells since the beginning of December, ranging from 0.16 feet in the Castro Co. Ogallala well to 3.33 feet in the Atascosa Co. Carrizo well. Water levels declined in the remaining monitoring wells, ranging from 0.79 feet in the Tarrant Co. Trinity well to 1.23 feet in the Bexar Co. Edwards well. The J-17 well recorded a water level of 40.80 feet below land surface, 1.23 feet below last month's measurement. This water level is 39.20 feet above the Stage 1 critical management level.

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