

Texas Water Development Board



WATER *Conditions*

RESERVOIR STORAGE

January 2010

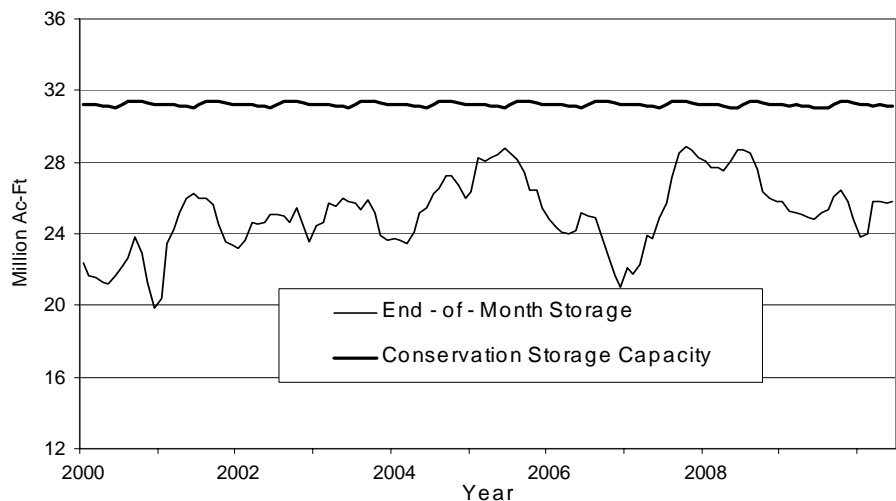
Total storage in the state's major reservoirs remains virtually unchanged compared to that in December. Near the end of the month, the 109 reservoirs monitored for this report held 25.79 million acre-feet in conservation storage*, or 83 percent of the conservation storage capacity of the state's major water supply reservoirs.

Storage was at 100% in 52 reservoirs, seven more than last month, mainly in the Upper Coast, East and North Central Regions. There were six lakes at or below 10% full, one less than last month: O C Fisher Lake and Palo Duro Reservoir were effectively empty, Lake Meredith (Texas share), Lake J. B. Thomas and E.V. Spence Reservoir were at 5%, and White River Lake was 9% full.

Three regions had combined storage above 90%: Upper Coast 100%, East and North Central 95%. The High Plains (6%) and Trans-Pecos regions (24%) remained very low. Storage decreased in 2 regions and increased in 6 over the month. Compared to last January, storage increased in 4 regions but decreased in 5 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.

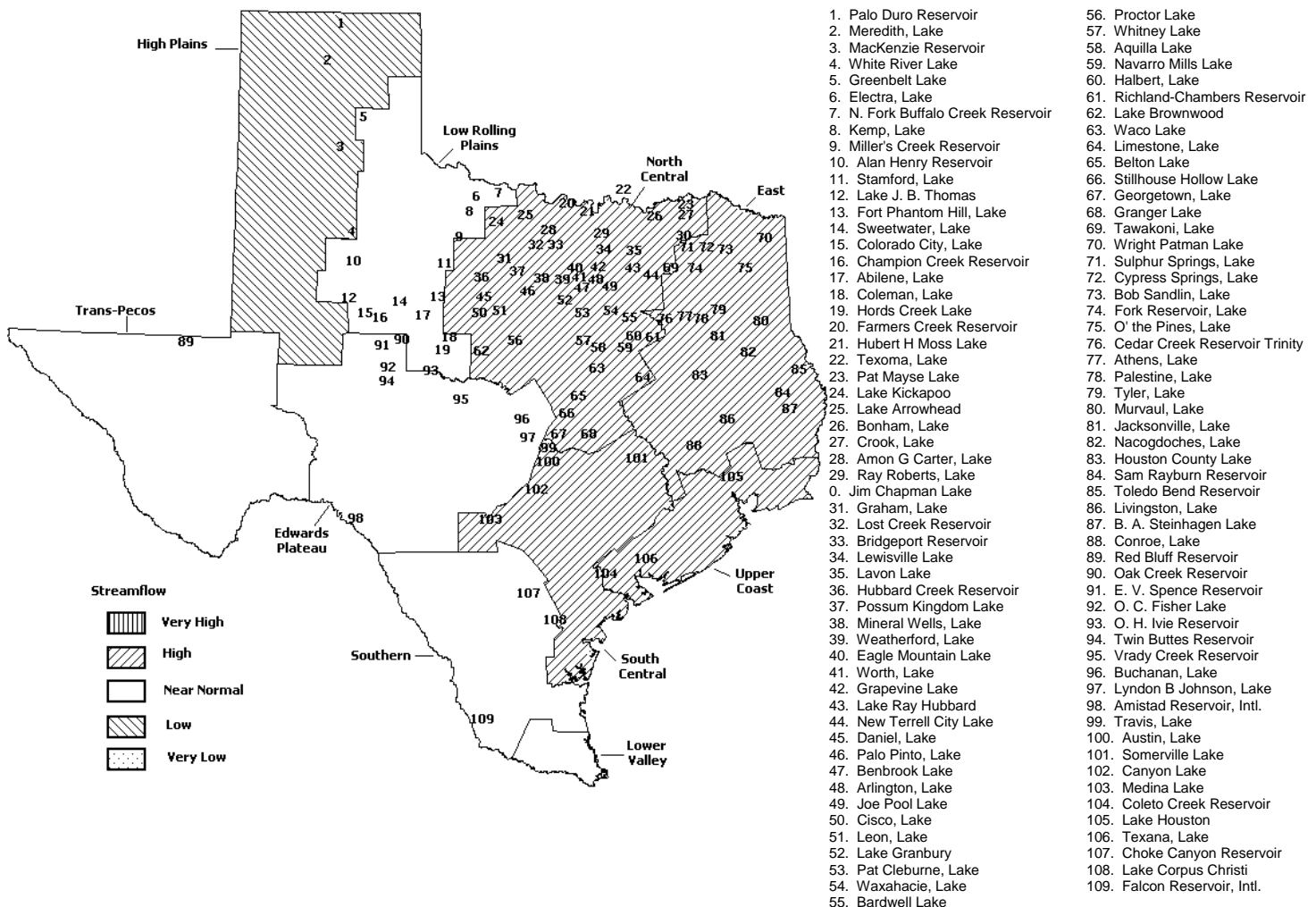
STREAMFLOW

Of 29 reporting index stations in January, computed 30-day mean flows were very high (<5% exceedance frequency) at 1 station, high (5% - 30%) at 14 stations, low (70% - 95%) at 3 stations, and near normal (30% - 70%) at the remaining 11 stations. Compared to December, flows have increased at 16 index stations and decreased at 13 stations.

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

JANUARY STREAMFLOW CONDITIONS

Reservoirs Shown on Map



CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage		Change since Late December 2009		Change since Late January 2009		
		Capacity (acre-feet)	Late Jan. (acre-feet)	2010 (%)	(acre-feet)	(%)	(acre-feet)	(%)
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	282	0	-59	0	-751	-1
Meredith, Lake (Texas)	2	500,000	26,770	5	-1,535	0	-35,611	-7
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	26,770	3	-1,535	0	-35,611	-5
MacKenzie Reservoir	3	46,429	5,708	12	-47	0	-42	0
White River Lake	4	29,880	2,821	9	-157	-1	-3,838	-13
TOTAL		637,206	35,581	6	-1,798	0	-40,242	-6
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	15,330	26	132	0	-3,020	-5
*Electra, Lake	6	5,626	607	11	108	2	-315	-6
N. Fork Buffalo Crk Reservoir	7	15,400	5,519	36	974	6	1,559	10
Kemp, Lake	8	245,308	174,552	71	11,414	5	7,433	3
Millers Creek Reservoir	9	27,888	13,544	49	1,151	4	-2,531	-9
Alan Henry Reservoir	10	94,808	86,850	92	-101	0	-5,916	-6
Stamford, Lake	11	51,570	38,269	74	2,951	6	2,991	6
J B Thomas, Lake	12	199,931	9,158	5	-265	0	-7,004	-4
Fort Phantom Hill, Lake	13	70,030	50,086	72	3,901	6	-11,957	-17
Sweetwater, Lake	14	10,006	5,956	60	61	1	-1,511	-15
Colorado City, Lake	15	31,793	17,477	55	-110	0	-4,235	-13
Champion Creek Reservoir	16	41,618	7,673	18	5	0	-1,252	-3
Abilene, Lake	17	6,099	1,975	32	176	3	-1,700	-28
Coleman, Lake	18	38,076	22,877	60	1,412	4	-4,924	-13
Hords Creek Lake	19	5,684	1,379	24	-17	0	-1,422	-25
TOTAL		903,337	451,252	50	21,792	2	-33,804	-4
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	20	21,445	20,257	94	470	2	3,401	16
Hubert H Moss Lake	21	24,058	24,058	100	0	0	3,190	13
Texoma, Lake (Texas)	22	1,209,709	1,209,709	100	-37,720	-3	0	0
Texoma, Lake (Texas & Oklahoma)	(22)	2,419,418	2,419,418	100	-75,440	-3	0	0
*Pat Mayse Lake	23	118,100	118,100	100	0	0	12,491	11
Kickapoo, Lake	24	85,825	51,471	60	5,709	7	12,379	14
Arrowhead, Lake	25	235,997	157,311	67	4,806	2	458	0
Bonham, Lake	26	11,026	11,026	100	83	1	3,019	27
Crook, Lake	27	9,195	9,195	100	0	0	486	5
Amon G Carter, Lake	28	19,903	19,903	100	1,191	6	3,954	20
Ray Roberts, Lake	29	798,758	798,758	100	0	0	76,154	10
Jim Chapman Lake (Cooper)	30	260,332	260,332	100	0	0	105,856	41
Graham, Lake	31	45,260	38,536	85	1,643	4	-1,983	-4
*Lost Creek Reservoir	32	11,950	11,950	100	0	0	1,634	14
Bridgeport, Lake	33	366,236	280,639	77	9,993	3	7,056	2
Lewisville Lake	34	543,988	543,988	100	0	0	118,769	22
Lavon Lake	35	443,844	443,844	100	0	0	83,503	19
Hubbard Creek Reservoir	36	318,067	212,504	67	3,062	1	-44,792	-14
Possum Kingdom Lake	37	540,340	468,575	87	9,148	2	-28,730	-5
*Mineral Wells, Lake	38	7,065	7,065	100	389	6	1,934	27
Weatherford, Lake	39	18,645	17,355	93	1,877	10	5,335	29
Eagle Mountain Lake	40	182,500	182,245	100	8,657	5	38,683	21
Worth, Lake	41	24,500	21,334	87	462	2	3,093	13
Grapevine Lake	42	164,702	164,702	100	0	0	46,250	28
Ray Hubbard, Lake	43	452,040	452,040	100	0	0	36,883	8
New Terrell City Lake	44	8,583	8,583	100	0	0	1,306	15
Daniel, Lake	45	9,435	4,268	45	-39	0	-2,304	-24
Palo Pinto, Lake	46	27,150	22,067	81	2,484	9	7,694	28
Benbrook Lake	47	85,648	85,648	100	0	0	24,608	29
Arlington, Lake	48	38,740	38,740	100	3,601	9	12,627	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 December 2009		Change since Late January 2009		
			Late Jan. (acre-feet)	2010 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
NORTH CENTRAL (Continue)									
Joe Pool Lake	49	142,861	142,861	100	0	0	18,649	13	
*Cisco, Lake	50	26,000	16,682	64	72	0	-2,447	-9	
Leon, Lake	51	26,421	17,938	68	316	1	-2,890	-11	
Granbury, Lake	52	128,046	123,968	97	-831	-1	15,443	12	
Pat Cleburne, Lake	53	25,730	25,730	100	0	0	6,238	24	
Waxahachie, Lake	54	10,779	10,779	100	0	0	488	5	
Bardwell Lake	55	46,122	46,122	100	0	0	9,819	21	
Proctor Lake	56	55,457	34,691	63	6,316	11	-975	-2	
Whitney, Lake	57	553,349	532,966	96	65,028	12	168,824	31	
Aquilla Lake	58	45,092	45,092	100	0	0	11,488	25	
Navarro Mills Lake	59	55,817	55,817	100	0	0	14,656	26	
*Halbert, Lake	60	6,033	5,959	99	569	9	2,663	44	
Richland-Chambers Reservoir	61	1,103,816	1,103,816	100	0	0	194,277	18	
*Brownwood, Lake	62	131,429	90,409	69	2,169	2	-11,721	-9	
Waco, Lake	62	198,943	198,943	100	0	0	24,613	12	
Limestone, Lake	64	208,015	208,015	100	0	0	32,372	16	
Belton Lake	65	435,225	435,225	100	18,804	4	35,555	8	
Stillhouse Hollow Lake	66	227,771	227,771	100	0	0	31,946	14	
Georgetown, Lake	67	36,823	36,823	100	0	0	19,476	53	
Granger Lake	68	52,525	52,525	100	0	0	13,479	26	
Tawakoni, Lake	69	888,126	888,126	100	0	0	179,134	20	
TOTAL		10,487,421	9,984,461	95	108,259	1	1,294,041	12	
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	2,909	16	
Cypress Springs, Lake	72	67,689	67,689	100	0	0	725	1	
Bob Sandlin, Lake	73	200,579	200,579	100	0	0	0	0	
Fork Reservoir, Lake	74	604,927	604,927	100	528	0	23,495	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	80,244	12	
Athens, Lake	77	29,435	29,435	100	0	0	807	3	
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	230	1	
Nacogdoches, Lake	82	39,521	39,521	100	0	0	4,124	10	
Houston County Lake	83	17,113	17,113	100	0	0	0	0	
Sam Rayburn Reservoir	84	2,857,077	2,634,320	92	-93,461	-3	456,038	16	
Toledo Bend Reservoir (Texas)	85	2,236,450	1,935,274	87	-231,278	-10	-2,474	0	
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	3,870,549	87	-462,556	-10	-4,947	0	
*Livingston, Lake	86	1,741,867	1,741,867	100	0	0	0	0	
B A Steinhagen Lake	87	66,966	52,342	78	1,311	2	3,321	5	
Conroe, Lake	88	416,188	416,188	100	0	0	23,024	6	
TOTAL		9,814,609	9,276,052	95	-322,900	-3	592,443	6	
TRANS-PECOS									
Red Bluff Reservoir	89	289,670	69,841	24	2,159	1	-9,875	-3	
TOTAL		289,670	69,841	24	2,159	1	-9,875	-3	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

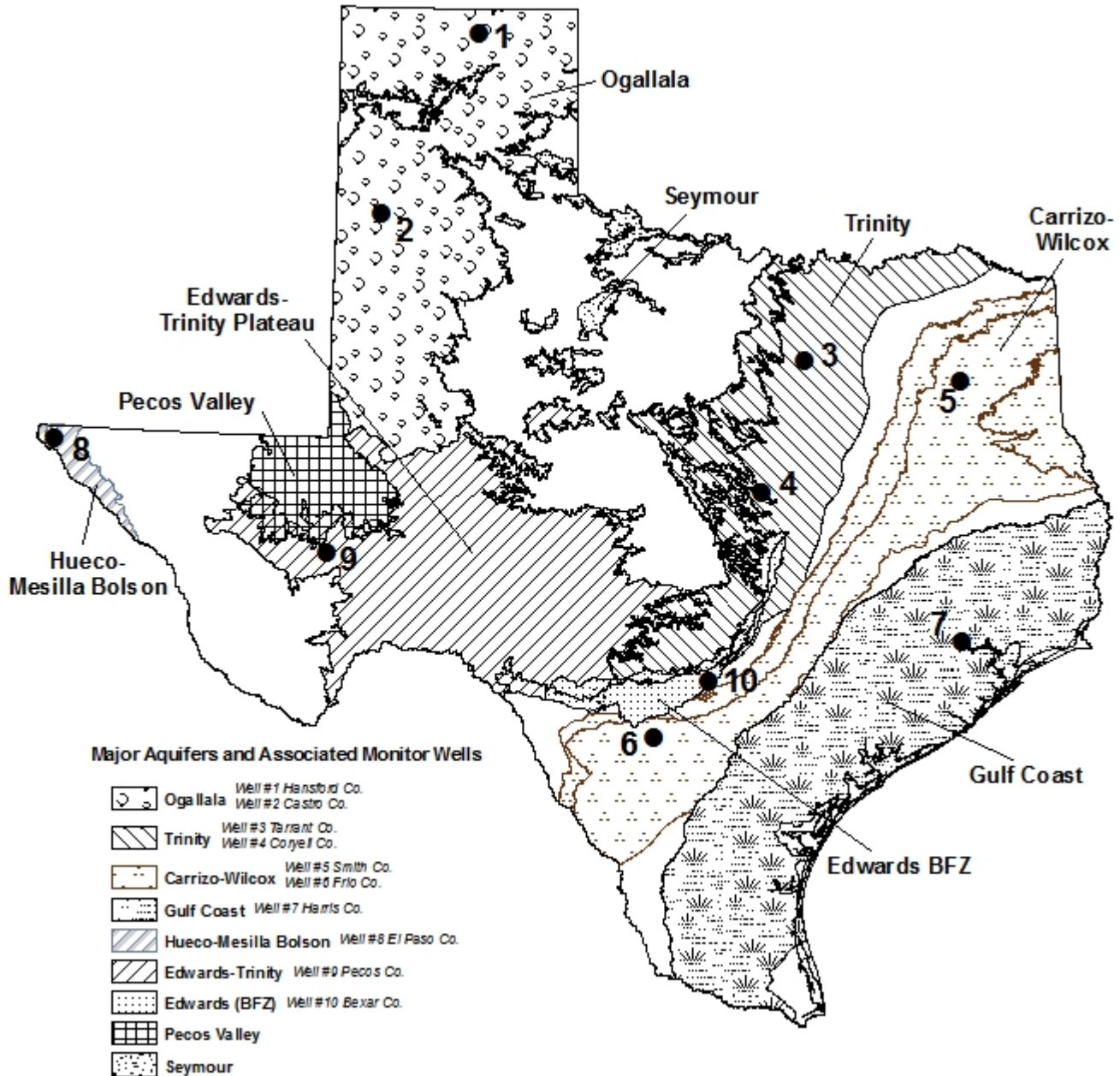
Name of Lake or Reservoir	No. on Map	Conservation Storage Capacity (acre-feet)	Conservation Storage		Change since Late December 2009		Change since Late January 2009		
			Late Jan. (acre-feet)	2010 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
EDWARDS PLATEAU									
Oak Creek Reservoir	90	39,260	23,549	60	176	0	-6,468	-16	
E V Spence Reservoir	91	517,272	24,076	5	-830	0	-27,432	-5	
O C Fisher Lake	92	79,483	0	0	0	0	0	0	
*O H Ivie Reservoir	93	554,335	234,974	42	1,154	0	-67,658	-12	
Twin Buttes Reservoir	94	177,850	30,498	17	1,891	1	-15,726	-9	
Brady Creek Reservoir	95	29,110	15,502	53	659	2	1,393	5	
Buchanan, Lake	96	875,610	495,572	57	58,746	7	-77,587	-9	
Lyndon B Johnson, Lake	97	113,690	112,275	99	-450	0	-579	-1	
*Amistad Reservoir (Texas)	98	1,840,849	1,732,000	94	4,000	0	-147,000	-8	
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	3,157,000	96	9,000	0	-118,532	-4	
TOTAL		4,227,459	2,668,446	63	65,346	2	-341,057	-8	
SOUTH CENTRAL									
Travis, Lake	99	1,113,902	808,813	73	102,432	9	110,858	10	
*Austin, Lake	100	21,804	21,123	97	257	1	151	1	
Somerville Lake	101	147,104	147,104	100	0	0	31,860	22	
Canyon Lake	102	378,781	324,817	86	19,412	5	32,615	9	
Medina Lake	103	254,823	67,295	26	2,082	1	-69,154	-27	
*Coletto Creek Reservoir	104	31,040	31,040	100	0	0	7,776	25	
TOTAL		1,947,454	1,400,192	72	124,183	6	114,106	6	
UPPER COAST									
Houston, Lake	105	128,863	128,863	100	0	0	0	0	
Texana, Lake	106	153,246	153,246	100	0	0	43,698	29	
TOTAL		282,109	282,109	100	0	0	43,698	15	
SOUTHERN									
Choke Canyon Reservoir	107	695,262	482,629	69	9,401	1	-76,609	-11	
Corpus Christi, Lake	108	256,961	119,679	47	34,051	13	-45,176	-18	
*Falcon Reservoir (Texas)	109	1,551,034	1,016,000	66	25,000	2	-614,000	-40	
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	1,737,000	66	37,000	1	-909,817	-34	
TOTAL		2,503,257	1,618,308	65	68,452	3	-735,785	-29	
STATE TOTAL		31,092,522	25,786,242	83	65,493	0	883,525	3	

* 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.

GROUNDWATER LEVELS IN OBSERVATION WELLS

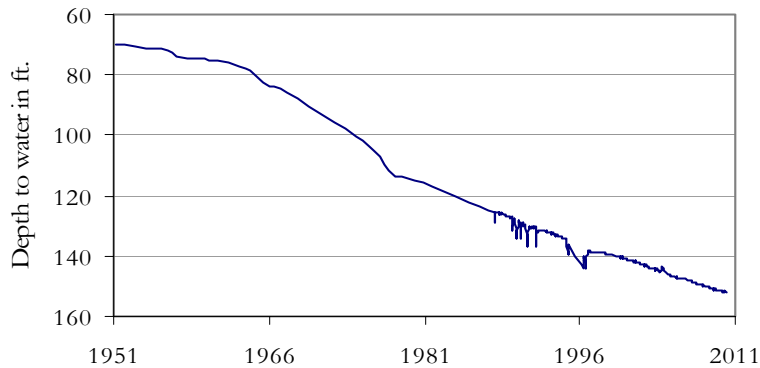


January, 2010

Water level measurements were available for all ten key monitoring wells. Water levels rose in seven of the ten monitoring wells since the beginning of January, ranging from 0.10 feet in the El Paso County Hueco-Mesilla well to 9.66 feet in the Frio County Carrizo-Wilcox well. Water levels declined in the remaining monitoring wells, ranging from 0.20 feet in the Hansford County Ogallala well to 0.26 feet in the Castro County Ogallala well. The J-17 well in San Antonio recorded a water level of 55.77 feet below land surface, 5.63 feet above last month's measurement. This water level is 15.23 feet above the Stage 1 critical management level.

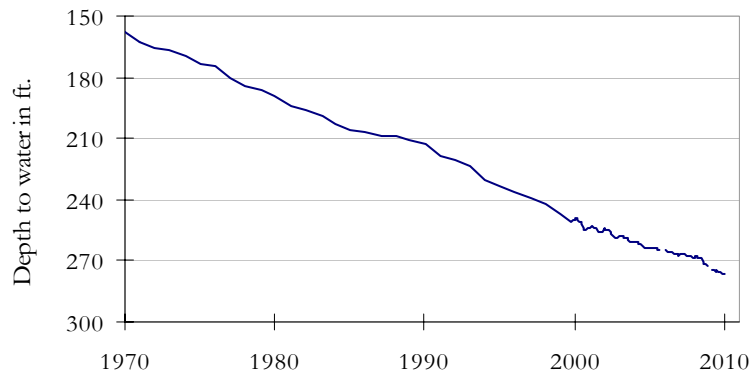
JANUARY GROUNDWATER LEVELS IN OBSERVATION WELLS

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



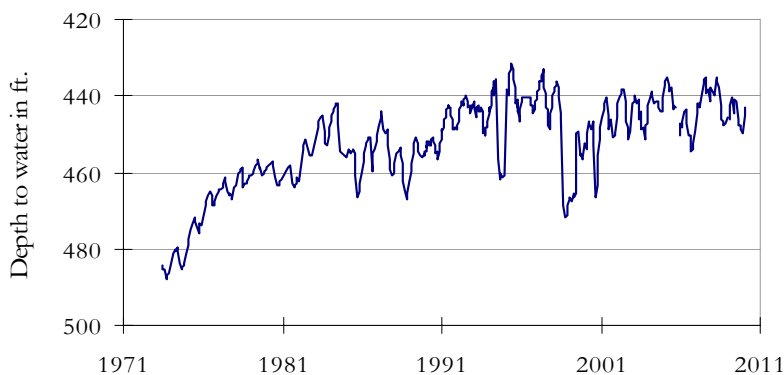
The late January water level measurement in this Ogallala Aquifer well, elevation 2,962 feet above sea level, was 151.87 feet below land surface. This measurement was 0.20 feet below last month's measurement, 0.85 feet below last year's measurement, and 81.75 feet below the initial measurement recorded in 1951.

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



The late January water level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 276.49 feet below land surface. This measurement was 0.26 feet below last month's measurement, and 120.49 feet below the initial measurement recorded in 1968.

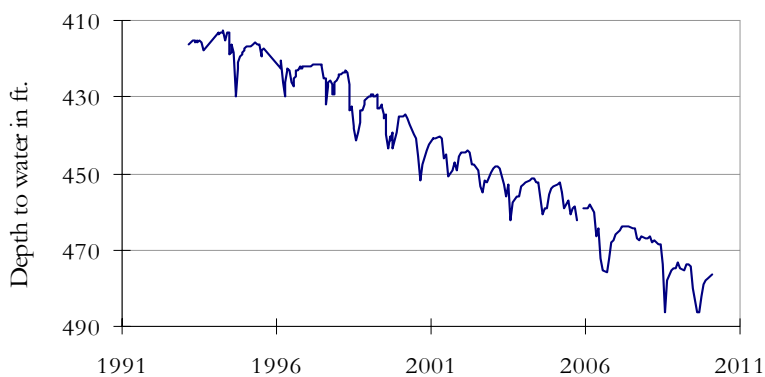
**(3) State Well ID 32-15-504
Near Hurst, Tarrant County
Paluxy Formation-Trinity Aquifer**



The late January water level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 443.22 feet below land surface. This measurement was 2.00 feet above last month's measurement, 3.12 feet above last year's measurement, and 65.22 feet below the initial measurement recorded in 1955.

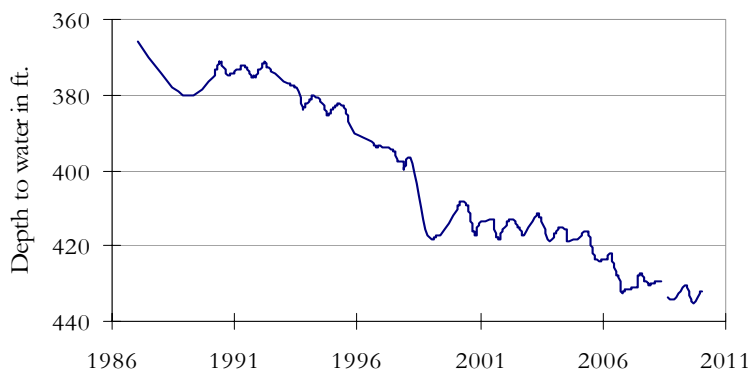
* ID is used in this publication to differentiate between the monitoring well number (1 - 10) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.

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



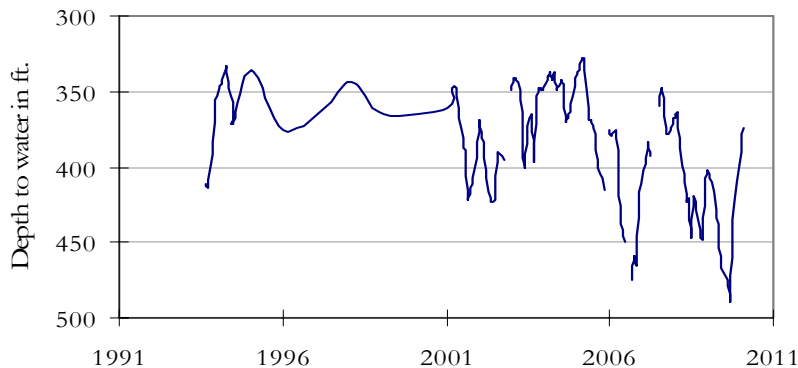
The late January water level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 476.46 feet above land surface. This water level was 0.92 feet above last month's measurement, 1.62 feet below last year's measurement, and 184.46 feet below the initial measurement recorded in 1955.

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



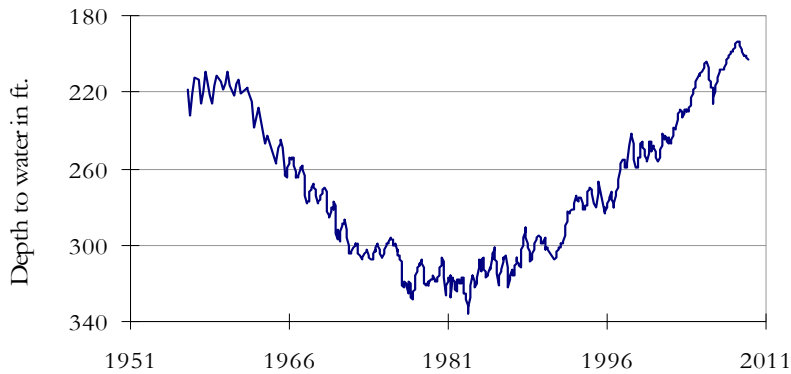
The late January water level measurement in this Carrizo-Wilcox Aquifer well, elevation 555 feet above sea level, was 431.82 feet below land surface. This water level was 0.09 feet above last month's measurement, 0.98 feet above last year's measurement, and 66.82 feet below the initial measurement recorded in 1987.

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



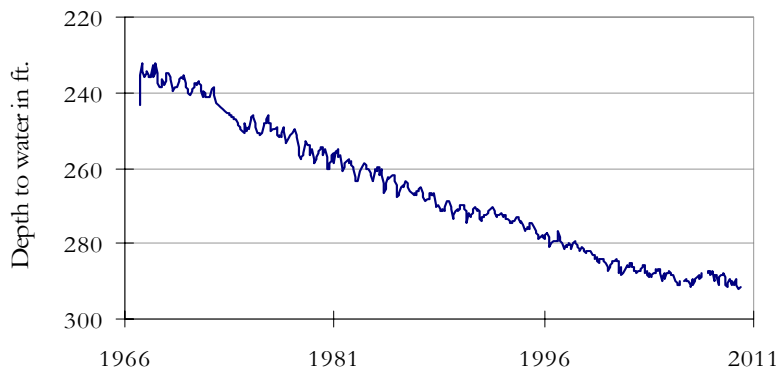
The late January water level measurement in this Carrizo-Wilcox Aquifer well, elevation 652 feet above sea level, was 374.44 feet below land surface. This was 9.66 feet above last month's measurement, 30.21 feet above last year's measurement, and 94.44 feet below the initial measurement recorded in 1963.

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



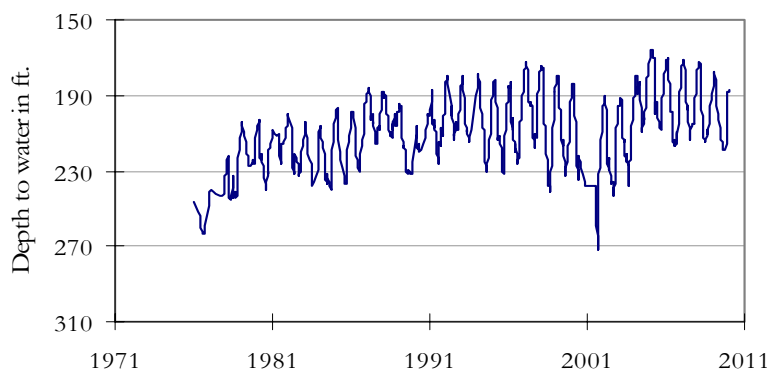
The late January water level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 204.79 feet below land surface. This was 3.36 feet below last year's measurement, and 69.29 feet below the initial measurement recorded in 1947.

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



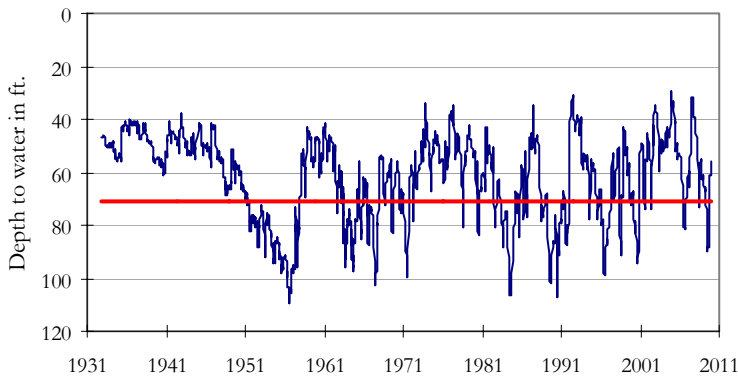
The late January water level measurement in this Hueco-Mesilla Bolson Aquifer well, elevation 3,882 feet above sea level, was 291.45 feet below land surface. This water level was 0.10 feet above last month's measurement, 0.08 feet below last year's measurement, and 59.55 feet below the initial measurement recorded in 1964.

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

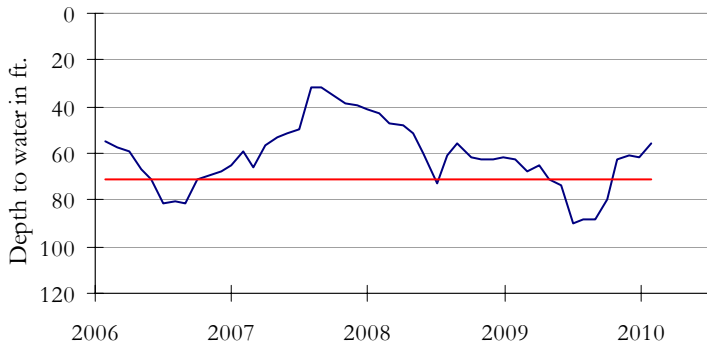


The late January water level measurement in this Edwards-Trinity Plateau Aquifer well, elevation 3,199 feet above sea level, was 187.04 feet below land surface. This water level was 1.01 feet above last month's measurement, 9.10 feet below last year's measurement, and 59.84 feet above the initial measurement recorded in 1976.

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

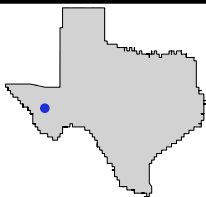


The late January water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 55.77 feet below land surface. This was 5.63 feet above last month's measurement, 6.46 feet above last year's measurement, and 9.13 feet below the initial measurement recorded in 1932.



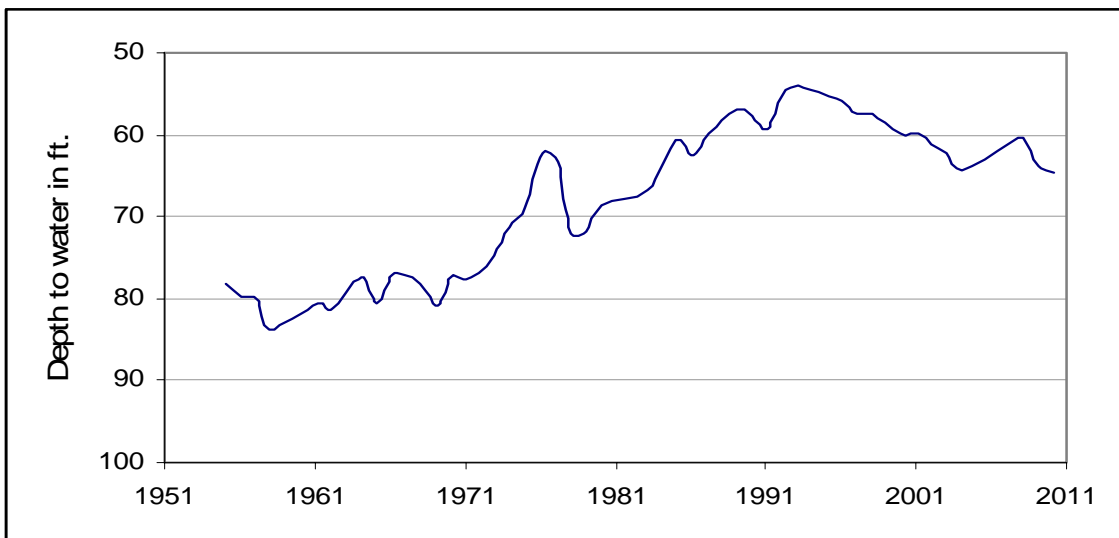
***** Water levels below the red line indicate Edwards Aquifer Authority Stage 1 drought restrictions. *****

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 51-27-302
Jeff Davis County**



This water level observation well, located 9 miles west of Valentine, at an elevation of 4,254 feet above sea level, was completed in the Igneous Aquifer. Water from the Igneous Aquifer is primarily used to meet municipal needs for the cities of Alpine, Fort Davis, and Marfa, as well as some agricultural and livestock needs. No significant water level declines have been observed in this aquifer.

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