

RESERVOIR STORAGE

March 2012

At the end of the month, total storage in 109 of the state's major water supply reservoirs was at 24.19 million acre-feet*, or 78% of their total conservation storage capacity. This is 2.25 million acre-feet **more** than a month ago and 20% higher than the record lowest total storage (58%) set last November, but 0.44 million acre-feet lower below the storage at this time last year.

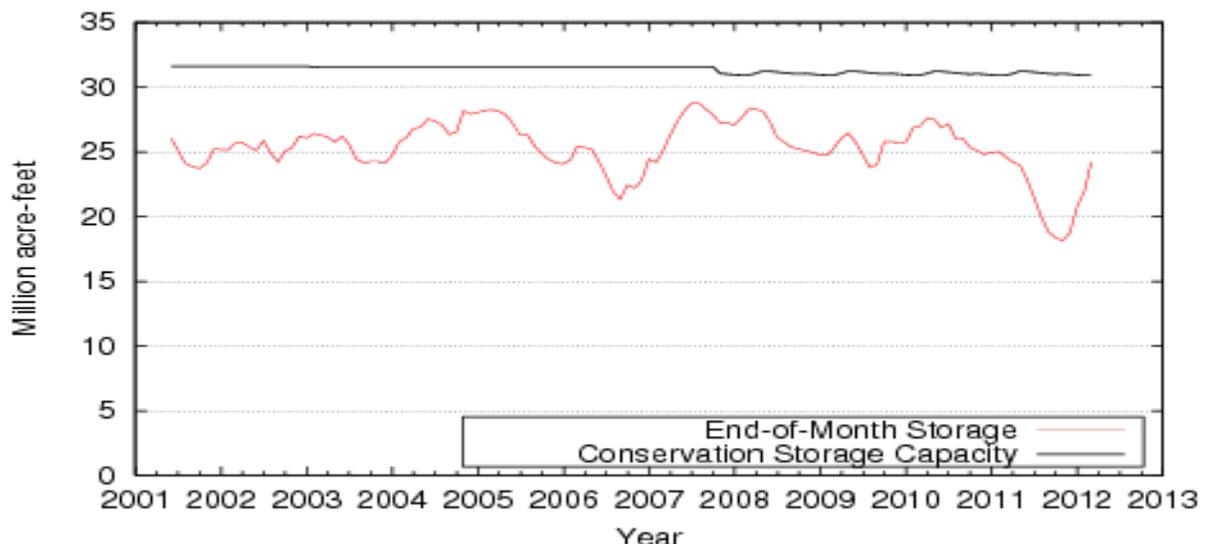
Fourty-six (46) reservoirs, located primarily in the North Central and East regions of the state, held 100% of conservation storage capacity. Ten (10) reservoirs were at or below 10% full: E.V. Spence, O. C. Fisher, Twin Buttes, Hords Creek Lake, and Meredith were effectively empty, Electra and J. B. Thomas at 1%, Palo Duro at 5%, Red Bluff at 8%, and Mackenzie at 9% full.

Total combined storage increased to greater than 70% in the North Central (94%), East (96%), and Upper Coast (100%) regions. The regions with the lowest percentage storage were the High Plains (2%) and Trans-Pecos regions (8%). Storage over the last month declined in the High Plains and Low Rolling Plains regions and increased in the remaining 7 regions.

Elephant Butte reservoir held 387,519 acre-feet, or 20.0% of storage capacity. This is 22,700 acre-ft more than a month ago.

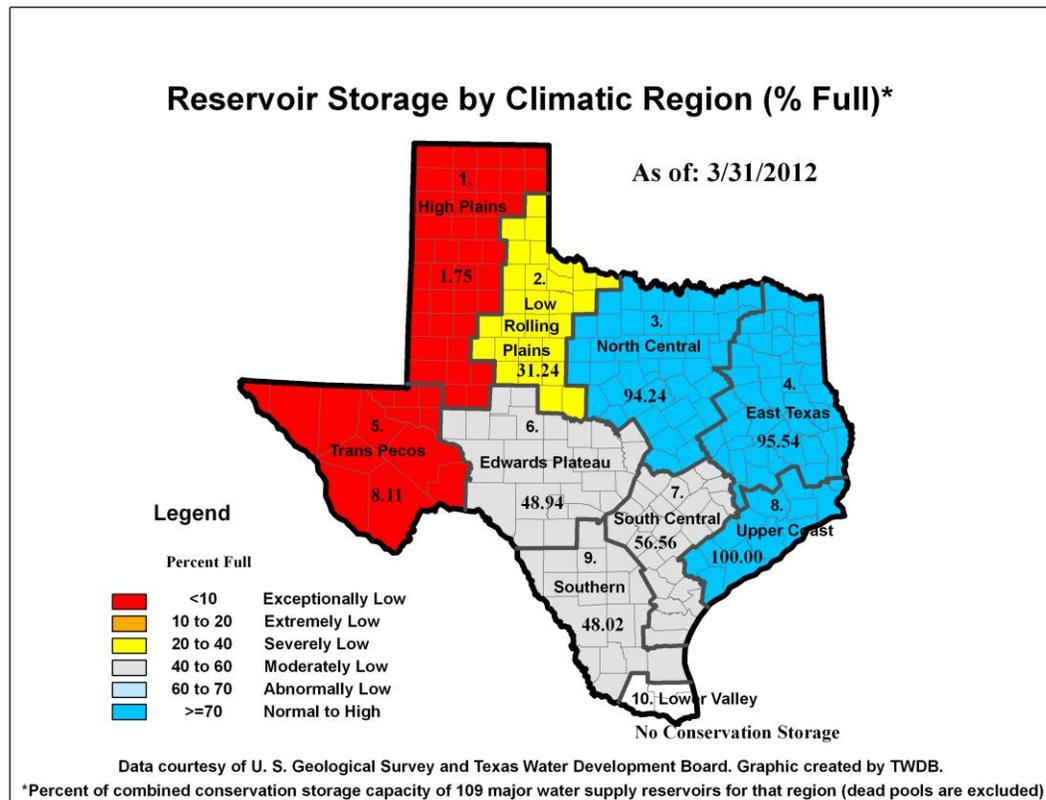
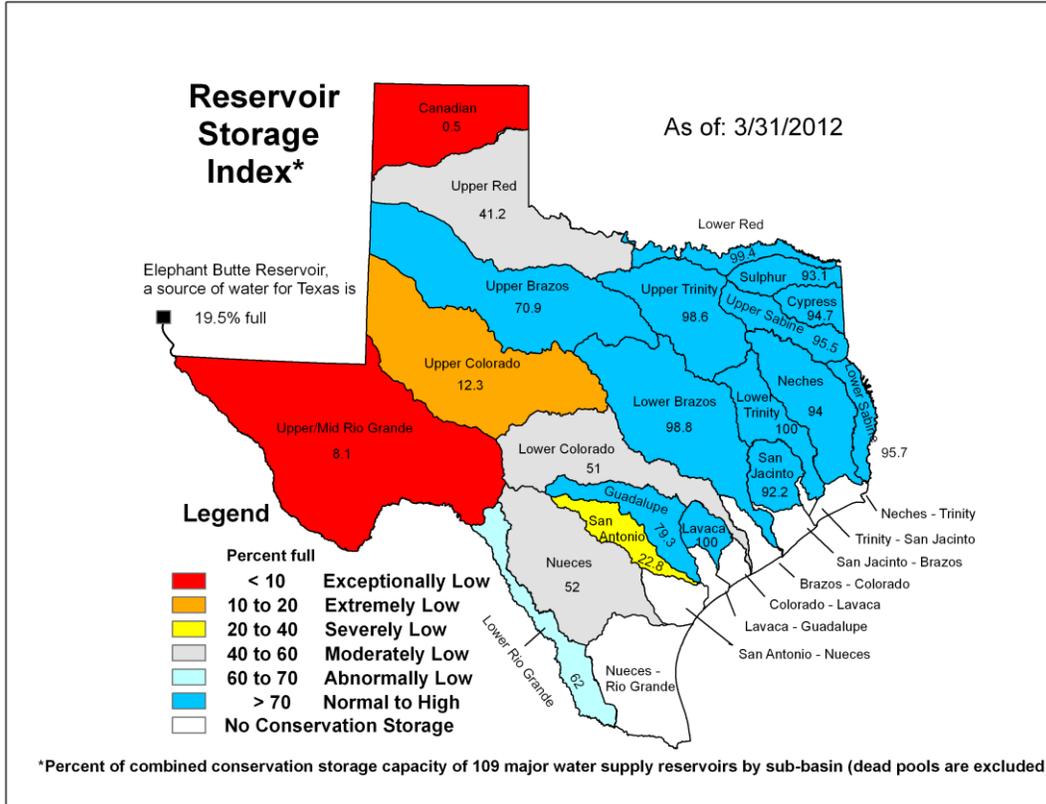
* Only the Texas share of storage in border reservoirs is counted.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Figures are based on the end of the month data at 109 major reservoirs that represent 96 percent of the total conservation storage capacity of the 175 major water supply reservoirs in Texas. Major reservoirs are defined as having a conservation storage capacity of 5,000 acre-feet or greater.

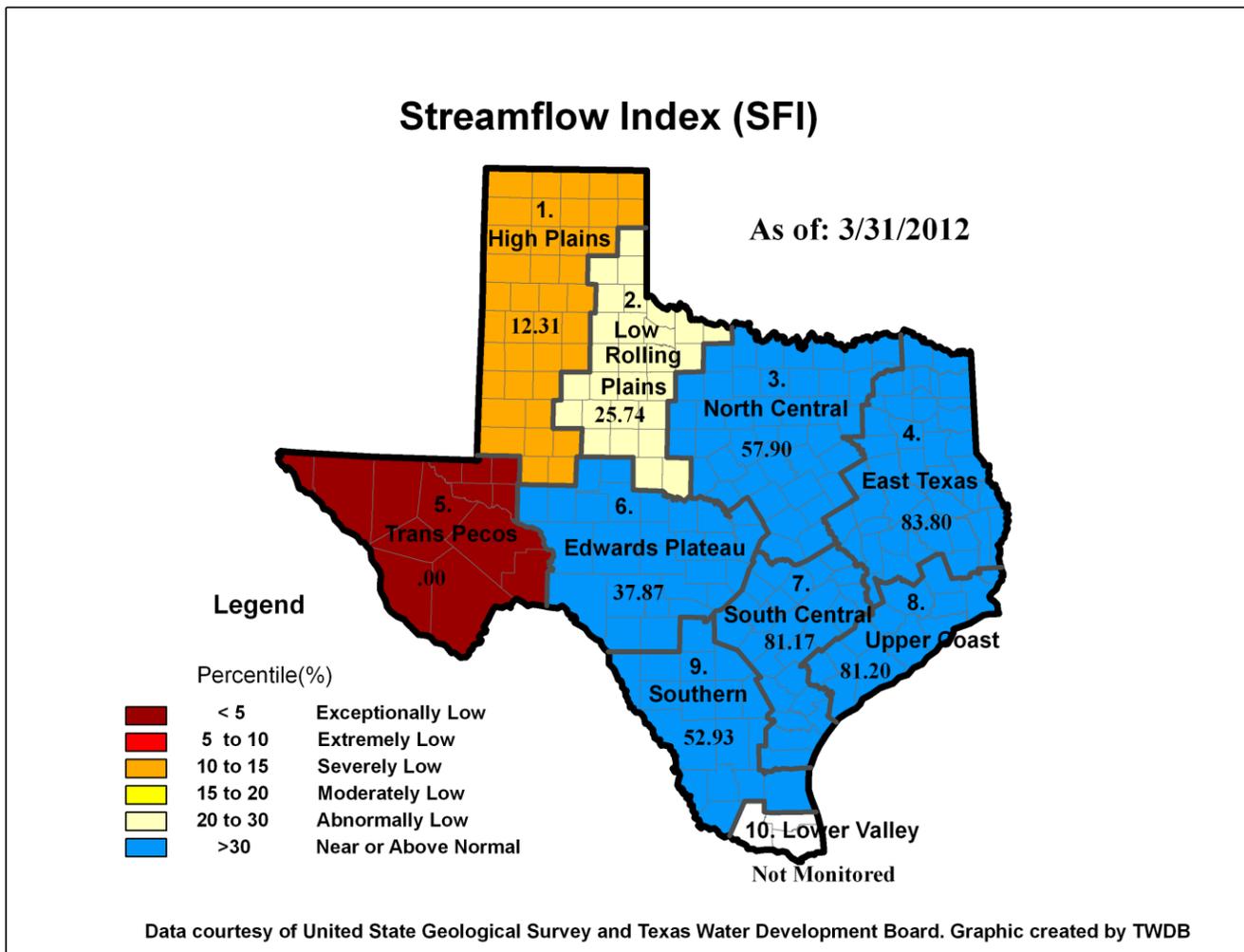
MARCH RESERVOIR CONDITIONS



MARCH STREAMFLOW CONDITIONS

Of 29 reporting index stations monitored this month, computed 30-day mean flows were exceptionally low (<5%) at 5 stations, extremely low (5-10%) at 1 station, severely low (10-15%) at 1 station, abnormally low at 2 stations (20% - 30%), and near normal (30% - 70%) at the remaining 20 stations. Compared to last month, flows have increased at 16 index stations and decreased at 10 stations.

On a regional basis, flows in this month were exceptionally low in the Trans-Pecos region, severely low in High Plains region, abnormally low in Low Rolling Plains region, and near normal in all other regions. Streamflow in the Lower Valley region is not monitored.



CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	No. on Map	Conservation Storage		Change since		Change since		
		Capacity (acre-feet)	Late March (acre-feet)	2012 (%)	Late Feb. 2012 (acre-feet) (%)	Late March 2011 (acre-feet) (%)	Late March 2011 (acre-feet) (%)	
HIGH PLAINS								
Palo Duro Reservoir	1	60,897	3,048	5	-165	0	-7,431	-12
Meredith, Lake (Texas)	2	500,000	0	0	0	0	-3,480	-1
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	0	0	0	0	-3,480	0
MacKenzie Reservoir	3	46,429	4,156	9	-57	0	-1,681	-4
White River Lake	4	29,880	3,935	13	-124	0	-5,699	-19
TOTAL		637,206	11,139	2	-346	0	-18,291	-3
LOW ROLLING PLAINS								
Greenbelt Lake	5	59,500	10,687	18	90	0	-5,383	-9
*Electra, Lake	6	5,626	46	1	-3	0	-259	-5
N. Fork Buffalo Crk Reservoir	7	15,400	2,363	15	33	0	-3,044	-20
Kemp, Lake	8	245,308	86,163	35	637	0	-139,582	-57
Millers Creek Reservoir	9	27,888	9,818	35	-193	-1	-8,024	-29
Alan Henry Reservoir	10	94,808	73,329	77	-499	-1	-14,059	-15
Stamford, Lake	11	51,570	25,919	50	-582	-1	-21,686	-42
J B Thomas, Lake	12	199,931	1,493	1	-305	0	-7,797	-4
Fort Phantom Hill, Lake	13	70,030	37,900	54	-260	0	-17,794	-25
Sweetwater, Lake	14	10,006	2,937	29	-89	-1	-2,446	-24
Colorado City, Lake	15	31,793	9,741	31	-182	-1	-4,330	-14
Champion Creek Reservoir	16	41,618	4,896	12	-82	0	-1,707	-4
Abilene, Lake	17	6,099	1,323	22	-137	-2	-3,126	-51
Coleman, Lake	18	38,076	15,249	40	-41	0	-5,036	-13
Hords Creek Lake	19	5,684	0	0	0	0	-158	-3
TOTAL		903,337	281,864	31	-1,613	0	-234,431	-26
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	20	21,445	13,774	64	729	3	-4,209	-20
Hubert H Moss Lake	21	24,058	24,058	100	705	3	289	1
Texoma, Lake (Texas)	22	1,185,688	1,185,688	100	0	0	42,971	4
Texoma, Lake (Texas & Oklahoma)	(22)	2,371,376	2,371,376	100	0	0	85,942	4
*Pat Mayse Lake	23	117,844	117,844	100	0	0	16,138	14
Kickapoo, Lake	24	85,825	44,855	52	276	0	-21,351	-25
Arrowhead, Lake	25	235,997	137,562	58	1,750	1	-48,006	-20
Bonham, Lake	26	11,026	11,026	100	52	0	1,196	11
Crook, Lake	27	9,195	9,195	100	166	2	393	4
Amon G Carter, Lake	28	19,903	16,191	81	2,427	12	-839	-4
Ray Roberts, Lake	29	798,758	798,758	100	55,529	7	45,280	6
Jim Chapman Lake (Cooper)	30	260,332	232,446	89	86,671	33	95,400	37
Graham, Lake	31	45,260	45,260	100	122	0	3,840	8
*Lost Creek Reservoir	32	11,950	11,950	100	0	0	1,108	9
Bridgeport, Lake	33	366,236	304,815	83	33,157	9	-11,281	-3
Lewisville Lake	34	563,228	563,228	100	20,267	4	35,262	6
Lavon Lake	35	443,844	443,844	100	87,064	20	103,618	23
Hubbard Creek Reservoir	36	318,067	145,729	46	-2,124	-1	-39,697	-12
Possum Kingdom Lake	37	540,340	460,021	85	17,933	3	-47,165	-9
*Mineral Wells, Lake	38	7,065	7,065	100	0	0	861	12
Weatherford, Lake	39	17,789	17,789	100	2,484	14	3,942	22
Eagle Mountain Lake	40	179,880	179,880	100	947	1	21,968	12
Worth, Lake	41	24,500	24,500	100	1,482	6	6,292	26
Grapevine Lake	42	164,702	164,702	100	0	0	8,198	5
Ray Hubbard, Lake	43	452,040	452,040	100	37,288	8	62,565	14
New Terrell City Lake	44	8,583	8,583	100	1,089	13	1,202	14
Daniel, Lake	45	9,435	5,625	60	141	1	1,620	17
Palo Pinto, Lake	46	26,827	26,827	100	0	0	6,074	23
Benbrook Lake	47	85,648	85,648	100	0	0	2,243	3
Arlington, Lake	48	40,156	40,156	100	0	0	3,815	10

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 Feb. 2012		Change since Late March 2011		
			Late March (acre-feet)	2012 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
NORTH CENTRAL (Continue)									
Joe Pool Lake	49	142,861	142,861	100	0	0	2,067	1	
*Cisco, Lake	50	26,000	11,516	44	-11	0	-2,221	-9	
Leon, Lake	51	26,421	22,911	87	3,515	13	7,321	28	
Granbury, Lake	52	128,046	126,233	99	830	1	2,265	2	
Pat Cleburne, Lake	53	26,008	26,008	100	0	0	2,480	10	
Waxahachie, Lake	54	10,779	10,779	100	0	0	1,416	13	
Bardwell Lake	55	46,122	46,122	100	0	0	155	0	
Proctor Lake	56	55,457	55,457	100	0	0	25,444	46	
Whitney, Lake	57	553,349	553,349	100	45,512	8	179,223	32	
Aquilla Lake	58	44,460	44,460	100	0	0	1,096	2	
Navarro Mills Lake	59	49,826	49,826	100	0	0	0	0	
*Halbert, Lake	60	6,033	5,407	90	0	0	1,811	30	
Richland-Chambers Reservoir	61	1,087,839	1,087,839	100	111,885	10	96,321	9	
*Brownwood, Lake	62	131,429	78,116	59	8,186	6	1,930	1	
Waco, Lake	62	198,943	198,943	100	0	0	751	0	
Limestone, Lake	64	208,015	208,015	100	17,902	9	33,639	16	
Belton Lake	65	435,225	435,225	100	45,404	10	38,648	9	
Stillhouse Hollow Lake	66	227,771	207,501	91	60,208	26	-20,142	-9	
Georgetown, Lake	67	36,823	36,823	100	14,831	40	6,035	16	
Granger Lake	68	50,779	50,779	100	4,733	9	0	0	
Tawakoni, Lake	69	888,126	870,598	98	116,072	13	98,582	11	
TOTAL		10,455,933	9,847,827	94	777,222	7	768,548	7	
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	6,706	38	
Cypress Springs, Lake	72	66,756	66,756	100	7,945	12	3,666	5	
Bob Sandlin, Lake	73	200,579	172,360	86	27,742	14	-3,121	-2	
Fork Reservoir, Lake	74	604,927	553,026	91	84,561	14	31,930	5	
O the Pines, Lake	75	238,933	238,933	100	40,181	17	0	0	
Cedar Creek Reservoir in Trinity	76	644,686	644,686	100	88,418	14	84,483	13	
Athens, Lake	77	29,435	27,169	92	2,880	10	-1,100	-4	
Palestine, Lake	78	370,907	370,907	100	53,894	15	31,719	9	
Tyler, Lake	79	73,256	62,787	86	9,463	13	-3,505	-5	
Murvault, Lake	80	38,284	38,284	100	1,692	4	6,070	16	
Jacksonville, Lake	81	25,670	25,670	100	2,425	9	1,402	5	
Nacogdoches, Lake	82	39,521	32,371	82	9,867	25	3,623	9	
Houston County Lake	83	17,113	17,100	100	2,590	15	457	3	
Sam Rayburn Reservoir	84	2,857,077	2,673,113	94	533,274	19	600,914	21	
Toledo Bend Reservoir (Texas)	85	2,236,450	2,145,094	96	374,066	17	523,590	23	
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	4,290,188	96	748,132	17	1,047,179	23	
*Livingston, Lake	86	1,741,867	1,741,867	100	0	0	1,867	0	
B A Steinhagen Lake	87	66,966	61,623	92	-1,411	-2	6,572	10	
Conroe, Lake	88	416,188	373,376	90	37,599	9	-12,902	-3	
TOTAL		9,809,046	9,385,553	96	1,275,186	13	1,282,371	13	
TRANS-PECOS									
Red Bluff Reservoir	89	130,170	10,556	8	896	1	-36,057	-28	
TOTAL		130,170	10,556	8	896	1	-36,057	-28	

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 Feb.		Change since Late March		
			Late March (acre-feet)	2012 (%)	2012 (acre-feet)	(%)	2011 (acre-feet)	(%)	
EDWARDS PLATEAU									
Oak Creek Reservoir	90	39,260	14,395	37	-315	-1	-7,682	-20	
E V Spence Reservoir	91	517,272	2,276	0	-76	0	-8,833	-2	
O C Fisher Lake	92	79,483	0	0	0	0	0	0	
*O H Ivie Reservoir	93	554,335	97,176	18	-1,817	0	-70,086	-13	
Twin Buttes Reservoir	94	177,850	0	0	0	0	-18,835	-11	
Brady Creek Reservoir	95	29,110	7,708	26	258	1	-4,510	-15	
Buchanan, Lake	96	875,610	437,983	50	42,062	5	-222,230	-25	
Lyndon B Johnson, Lake	97	113,323	111,379	98	-121	0	-850	-1	
*Amistad Reservoir (Texas)	98	1,840,849	1,395,000	76	-29,000	-2	-446,000	-24	
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	2,145,000	65	-184,000	-6	-1,130,532	-35	
TOTAL		4,227,092	2,065,917	49	10,991	0	-779,026	-18	
SOUTH CENTRAL									
Travis, Lake	99	1,113,255	522,197	47	94,352	8	-296,811	-27	
*Austin, Lake	100	21,804	20,790	95	136	1	-408	-2	
Somerville Lake	101	147,104	147,104	100	29,004	20	23,210	16	
Canyon Lake	102	378,781	325,116	86	18,499	5	-35,196	-9	
Medina Lake	103	254,823	58,123	23	4,364	2	-93,960	-37	
*Coletto Creek Reservoir	104	31,040	27,910	90	1,702	5	-2,403	-8	
TOTAL		1,946,807	1,101,240	57	148,057	8	-405,568	-21	
UPPER COAST									
Houston, Lake	105	128,863	128,863	100	0	0	0	0	
Texana, Lake	106	153,246	153,246	100	30,986	20	40,602	26	
TOTAL		282,109	282,109	100	30,986	11	40,602	14	
SOUTHERN									
Choke Canyon Reservoir	107	695,262	418,030	60	-194	0	-125,817	-18	
Corpus Christi, Lake	108	256,961	78,268	30	-2,226	-1	-133,589	-52	
*Falcon Reservoir (Texas)	109	1,551,034	707,000	46	11,000	1	-798,000	-51	
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	1,288,000	49	179,000	7	-1,236,000	-47	
TOTAL		2,503,257	1,203,298	48	8,580	0	-1,057,406	-42	
STATE TOTAL		30,894,957	24,189,503	78	2,249,959	7	-439,258	-1	

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

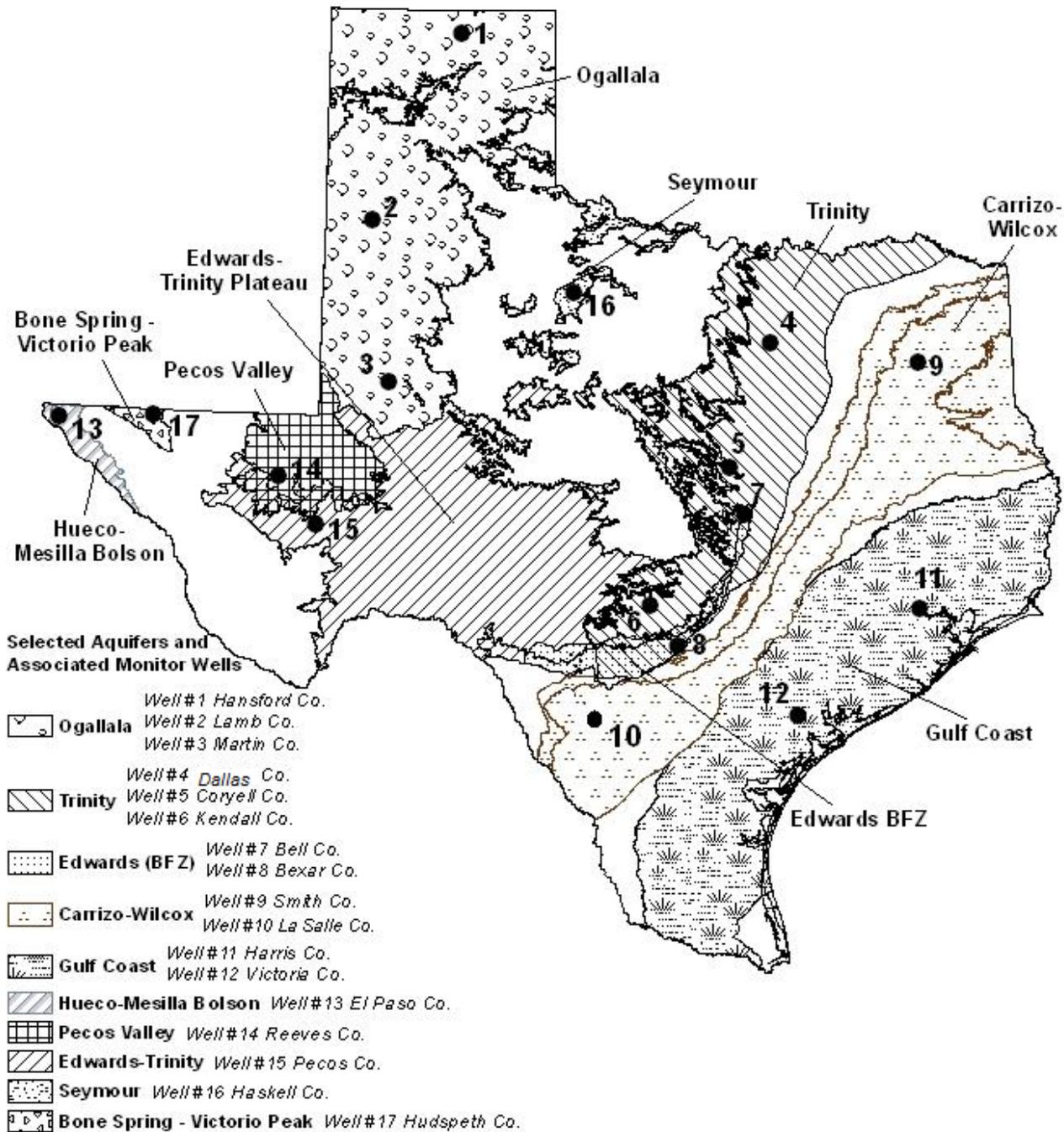
In Addition

Elephant Butte Reservoir	1,975,000	387,519	20	22,700	1	-78,867	-4
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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.

MARCH 2012 GROUNDWATER LEVELS IN OBSERVATION WELLS



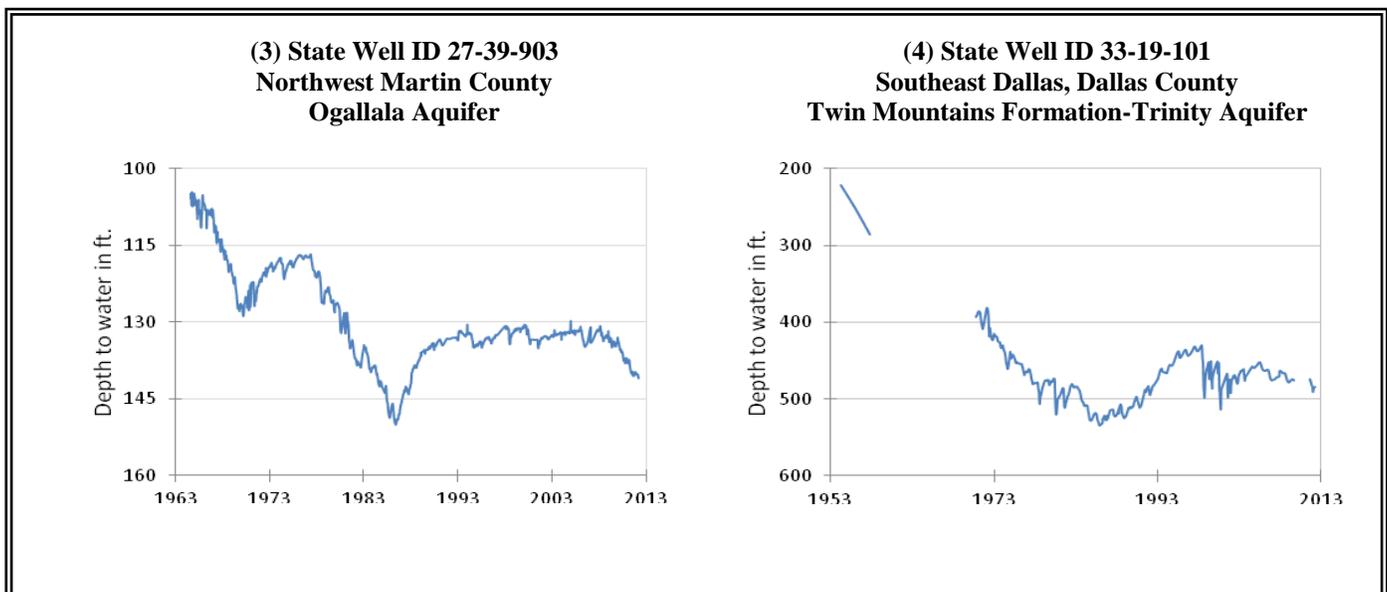
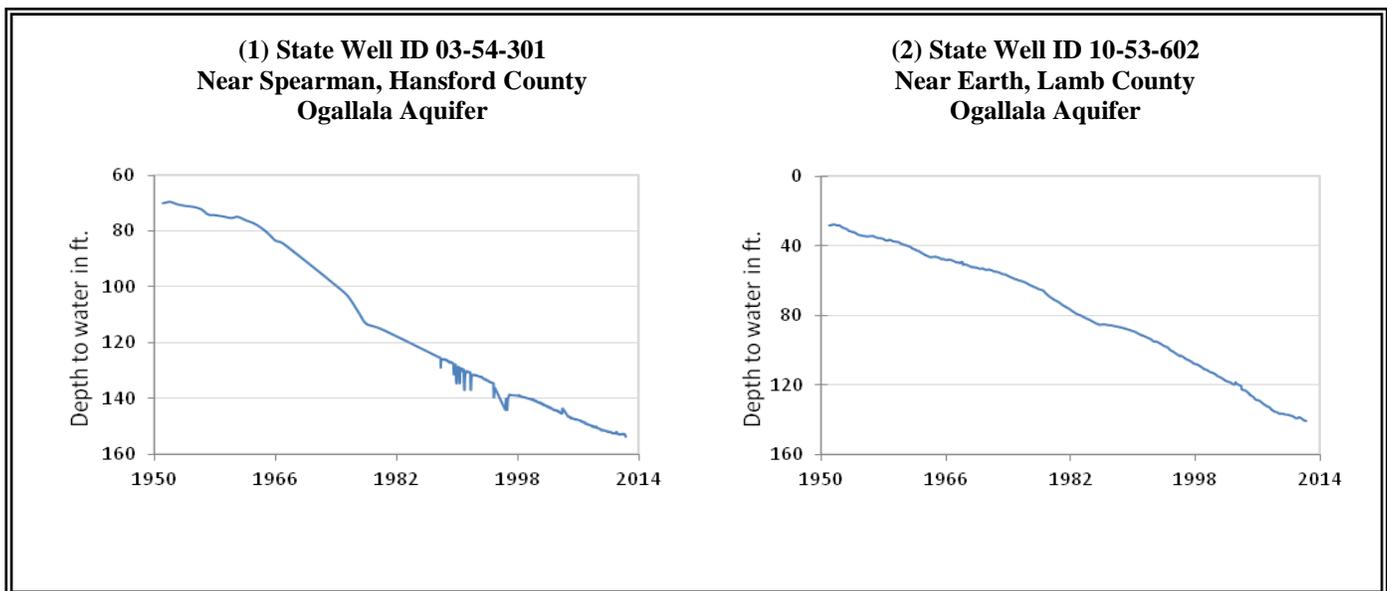
March, 2012

Water level measurements were available for all 17 key monitoring wells in the state. Water levels rose in eight of the monitoring wells since the beginning of March, ranging from 0.65 feet in the Coryell County Trinity Aquifer well to 3.89 feet in the Bexar County Edwards (BFZ) Aquifer well. Water levels declined in eight monitoring wells, ranging from 0.08 feet in the Haskell County Seymour Aquifer well to 2.91 feet in the Hudspeth County Bone Spring- Victorio Peak Aquifer well. The J-17 well in San Antonio recorded a water level of 64.99 feet below land surface. This water level is 6.01 feet above the Stage I critical management level in that segment of the Edwards Aquifer. The Edwards Aquifer Authority implements Stage I restrictions when the 10-day average of the well's water levels is below the 660-foot elevation, equivalent to 71 feet below land surface.

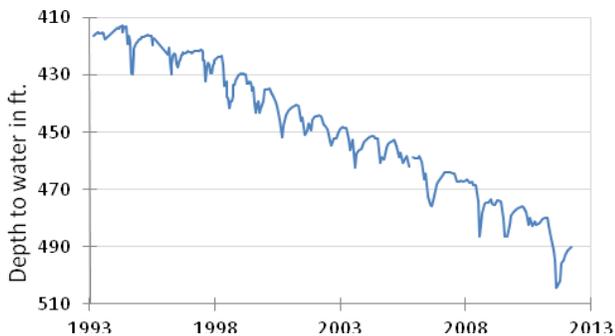
* ID is used in this publication to differentiate between the monitoring well number (1 - 17) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.

Monitoring Well	Mar 2012	Feb 2012	Month Change	Year Change	Historical Change
(1) Hansford 0354301	153.52	N/A	N/A	N/A	-83.40
(2) Lamb 1053602	140.68	140.58	-0.1	-1.93	-112.53
(3) Martin 2739903	140.98	140.31	-0.67	-3.58	-36.09
(4) Dallas 3319101	484.16	484.84	0.68	N/A	-262.16
(5) Coryell 4035404	490.04	490.69	0.65	-10.14	-198.04
(6) Kendall 6802609	121.2	124.51	3.31	0.53	-61.2
(7) Bell 5804816	123.23	125.04	1.81	-0.27	-0.1
(8) Bexar 6837203	64.99	68.88	3.89	3.31	-18.35
(9) Smith 3430907	432.4	433.44	1.04	-1.84	-66.4
(10) La Salle 7738103	392.77	392.03	-0.74	-79.2	-139.7
(11) Harris 6514409	203.39	204.37	0.98	-7.59	-67.89
(12) Victoria 8017502	35.58	36.8	1.22	-3.65	-1.58
(13) El Paso 4913301	290.06	289.66	-0.4	2.18	-58.16
(14) Reeves 4644501	148.97	146.92	-2.05	-1.88	-56.88
(15) Pecos 5216802	198.69	198.09	-0.6	-4.52	48.19
(16) Haskell 2135748	45.8	45.72	-0.08	-1.52	-4.47
(17) Hudspeth 4807516	134.86	131.95	-2.91	0.34	-30.94

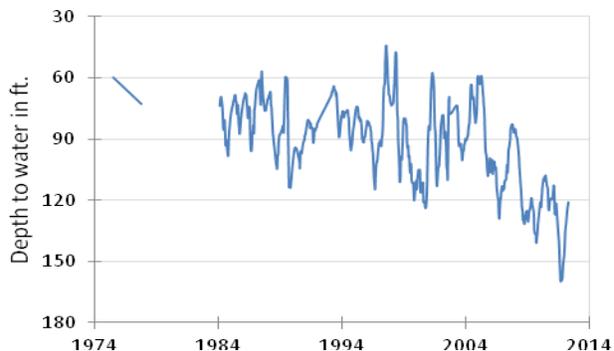
MARCH GROUNDWATER LEVELS IN OBSERVATION WELLS



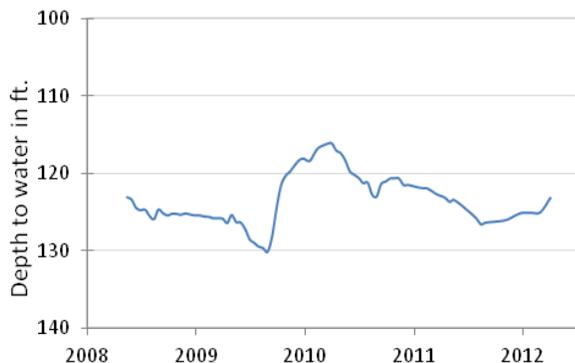
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



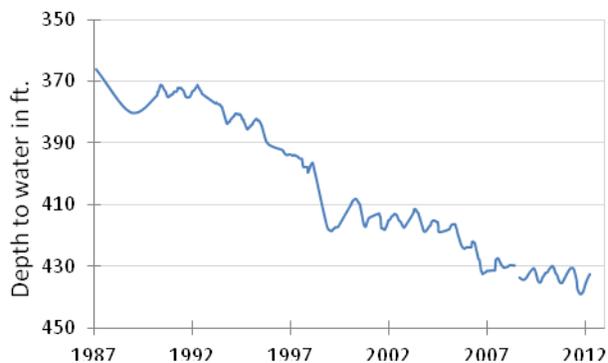
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer**



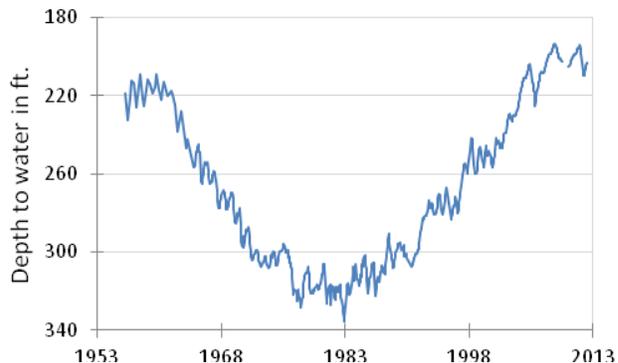
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



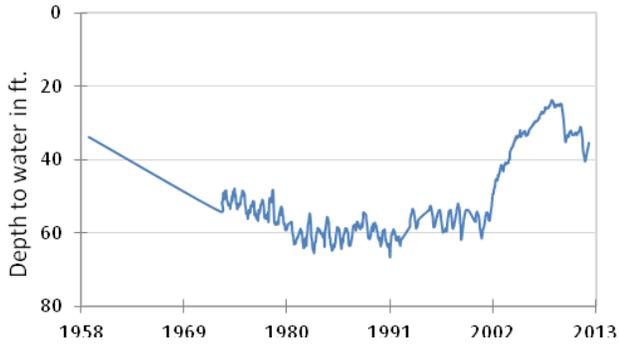
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



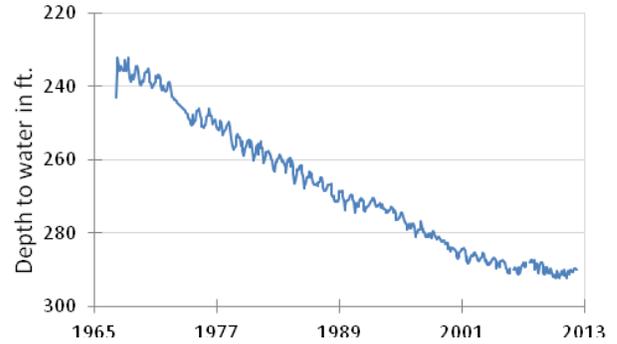
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



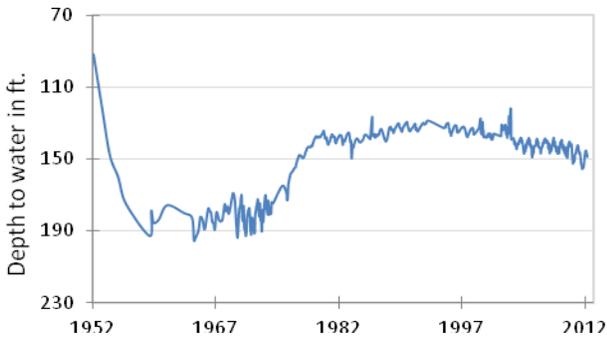
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



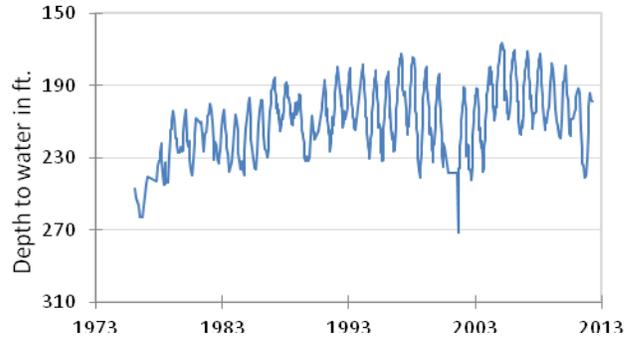
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



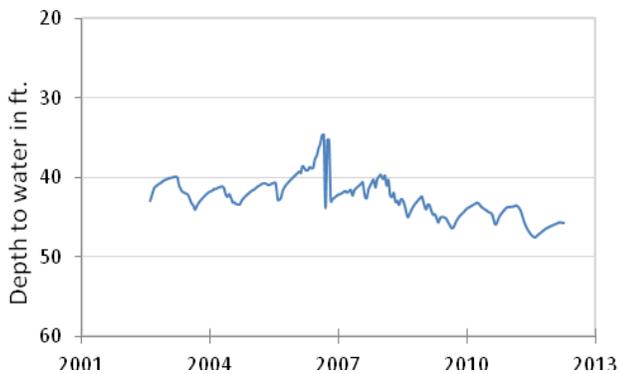
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



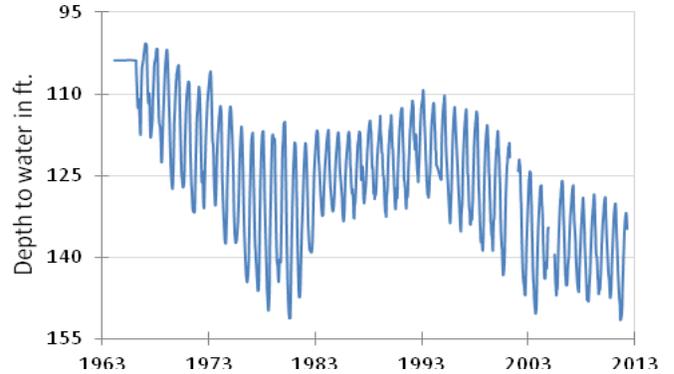
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



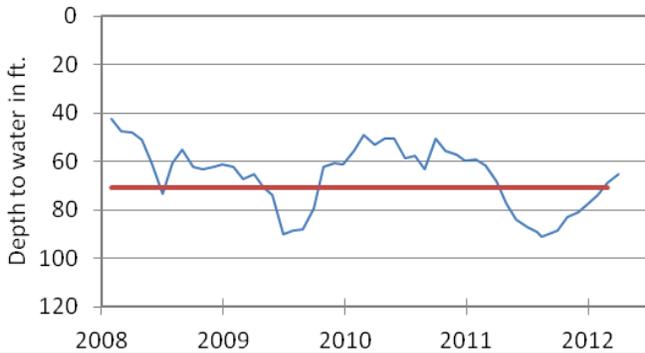
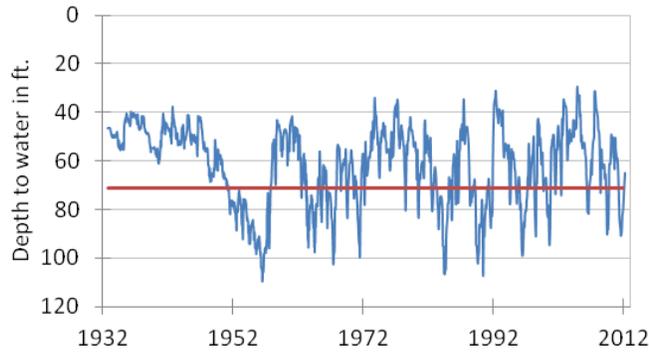
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



(17) State Well ID 48-07-516
Dell City, Hudspeth County
Bone Spring - Victorio Peak Aquifer



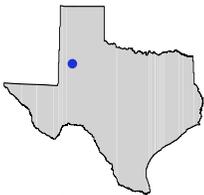
**(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (BFZ) Aquifer**



The late March water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 64.99 feet below land surface. This was 3.89 feet above last month's measurement, 3.31 feet below last year's measurement, and 18.35 feet below the initial measurement recorded in 1932.

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

HYDROGRAPH OF THE MONTH

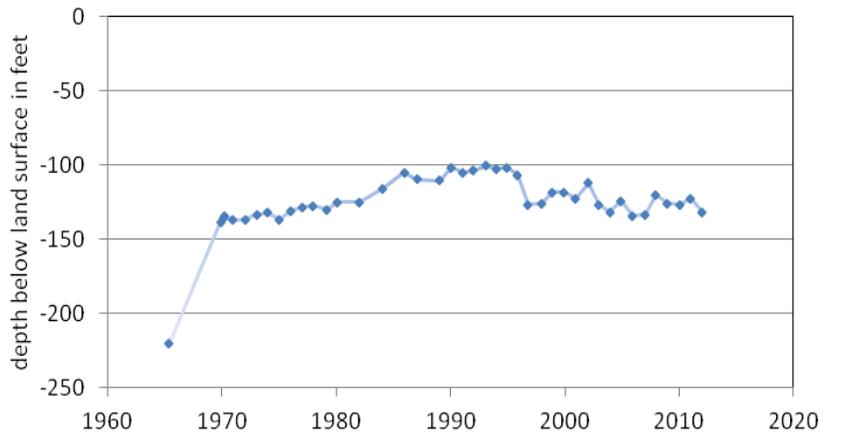


Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.

**Edwards Trinity
High Plains Aquifer**

The High Plains segment of the Edwards-Trinity (High Plains) Aquifer is located in West Texas and underlies portions of 14 counties in the southern panhandle of Texas. The aquifer consists of sandstone in the Antlers Formation of the Trinity Group and limestone of the Comanche Peak and Edwards Formations. This portion of the Edwards aquifer is a thin limb of the larger Cretaceous province that covered most of Texas during the last high stand of eustatic sea level. Its thin wedge of sediments was deposited in a shallow sea that extended far inland over the North American Continent. The aquifer is entirely overlain by the Ogallala Formation and only outcrops on the surface at eroded margins to the southeast. Water in the aquifer is primarily used for irrigation and is fresh to moderately saline, with total dissolved solids ranging from 400 to 8,000 milligrams per liter. The water quality is poorer than the overlying Ogallala Aquifer and in excess of 20,000 milligrams per liter where overlain by saline lakes or the gypsum-rich Tahoka and Double Lakes formations.

Well #23-44-208
northwest Garza County



This unused irrigation well, at a total depth of 271 feet and elevation of 3,015 feet, has been used as a water-level observation wells since 1970.

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