

RESERVOIR STORAGE

September 2012

At the end of the month, total storage in 109 of the state's major water supply reservoirs was at 21.15 million acre-feet*, or 68% of their total conservation storage capacity. This is 0.47 million acre-feet less than a month ago but 2.35 million acre-feet more than storage at this time last year.

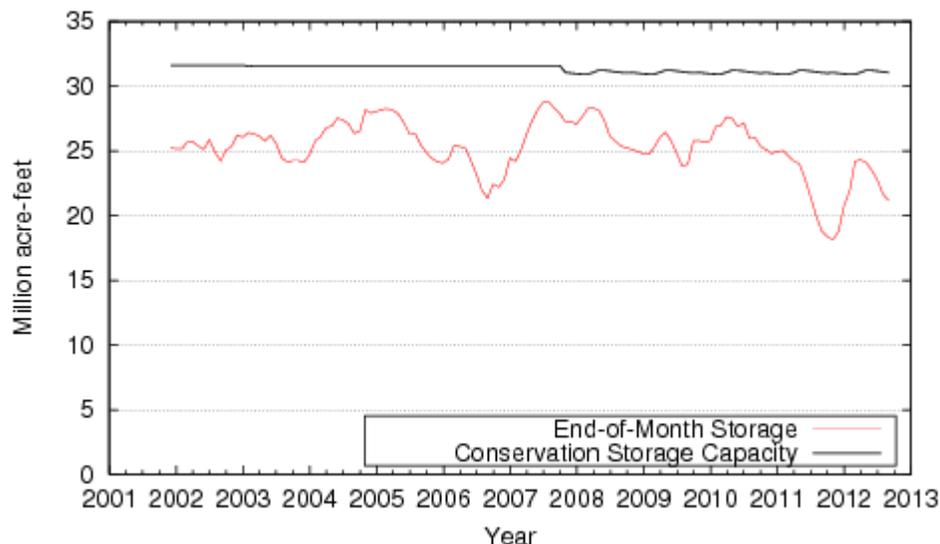
Only two reservoirs, Lake Houston and Houston County lake, held 100% of conservation storage capacity. Thirteen (13) reservoirs were at or below 10% full: E.V. Spence, O. C. Fisher, J. B. Thomas, Electra and Meredith were effectively empty, Twin Buttes was at 1%, Palo Duro was at 3%, Hords Creek Lake was at 6%, Mackenzie and White River were at 7% full, Red Bluff and North Fork Buffalo Creek were at 9%, and Champion Creek Reservoir was at 10% full.

Total combined storage was greater than 70% in the North Central (80%), East (88%), and Upper Coast (95%) regions. The regions with the lowest percentage storage were the High Plains (1%) and Trans-Pecos regions (9%). Storage over the last month declined in 6 regions and increased in 2 regions.

Elephant Butte reservoir held 112,700 acre-feet, or 6% of storage capacity. This is same as a month ago.

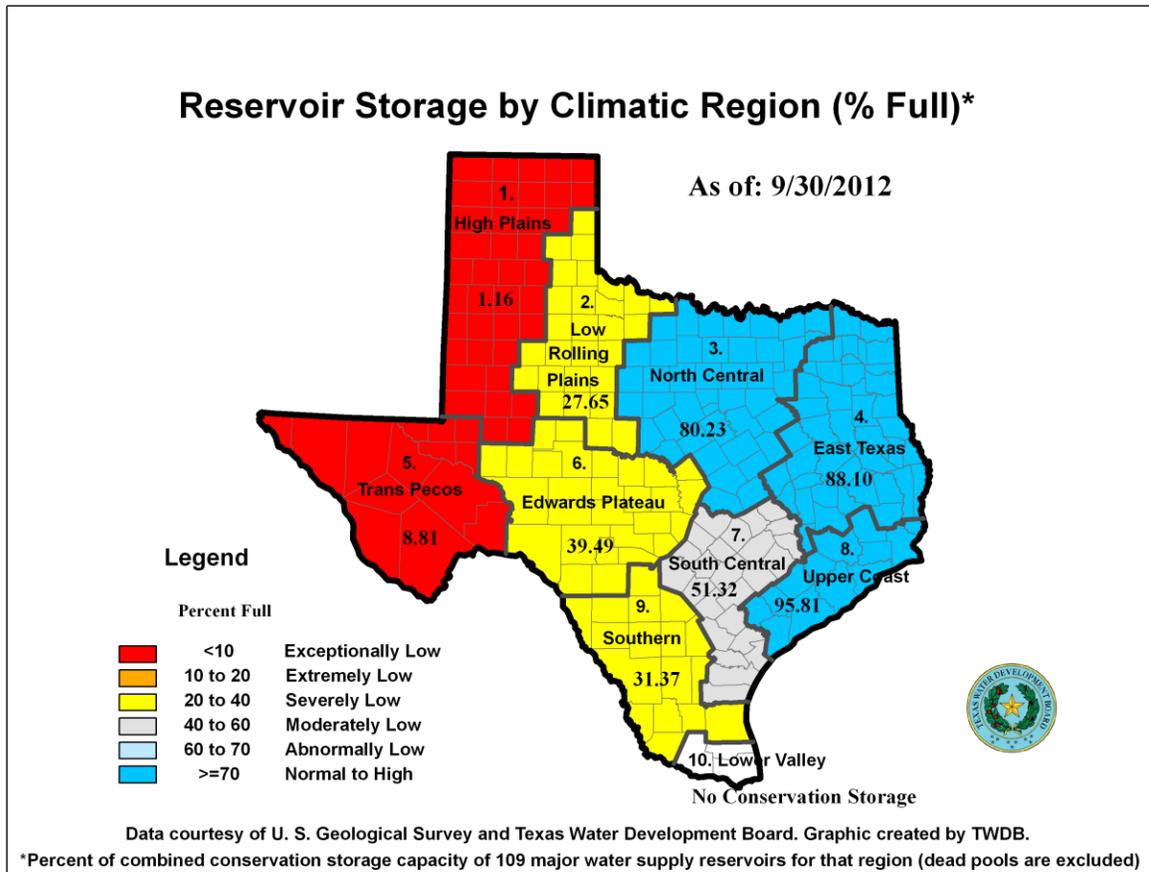
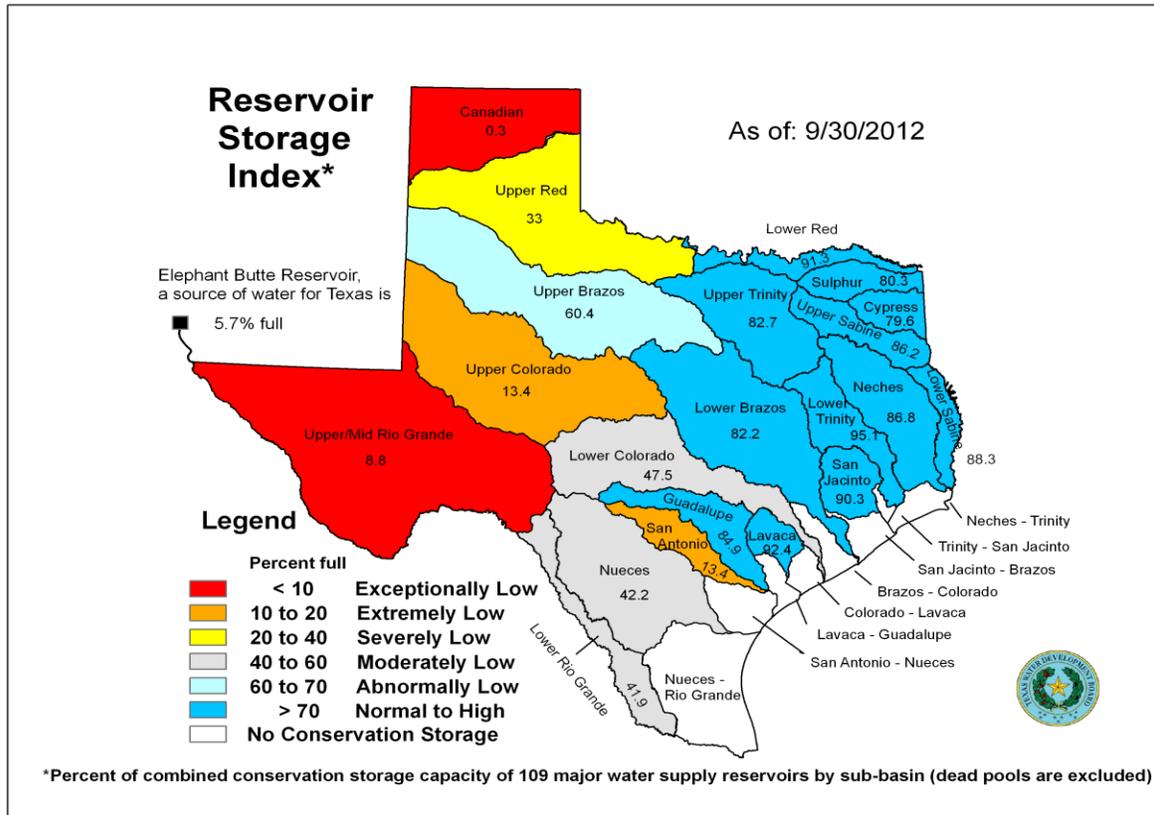
* Only the Texas share of storage in border reservoirs is counted.

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.

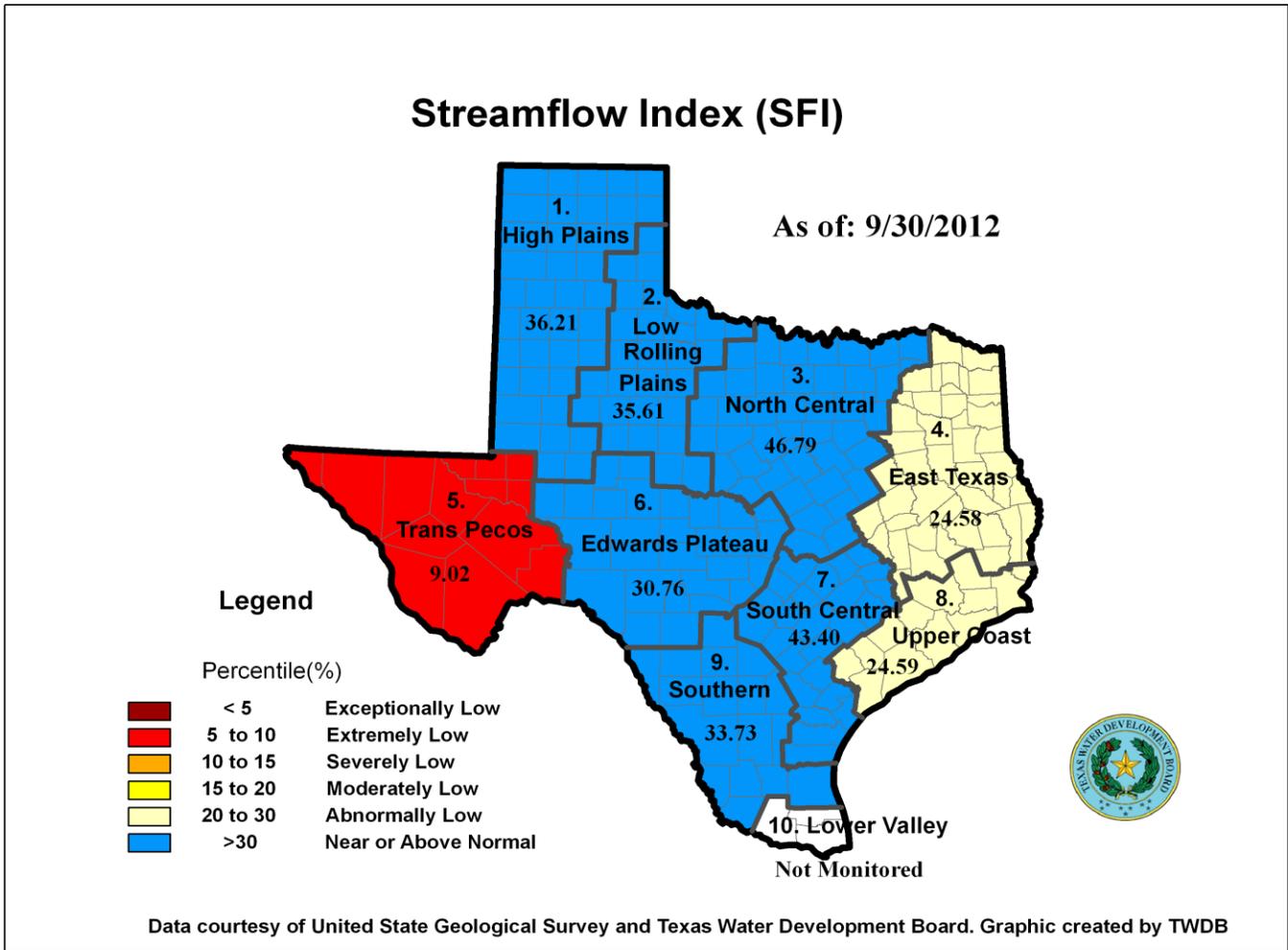
SEPTEMBER RESERVOIR CONDITIONS



SEPTEMBER STREAMFLOW CONDITIONS

Of 29 reporting index stations monitored this month, computed 30-day mean flows were exceptionally low (<5%) at 3 stations, extremely low (5-10%) at 4 stations, severely low (10-15%) at 2 stations, moderately low (15-20%) at 5 stations, abnormally low (20% - 30%) at 3 stations, and near normal (30% - 70%) at the remaining 12 stations. Compared to last month, flows have increased at 19 index stations and decreased at 8 stations.

On a regional basis, flows in this month were extremely low in Trans-Pecos, and abnormally low in East and Upper Coast, 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 Capacity (acre-feet)	Conservation Storage		Change since Late Aug.		Change since Late Sep.		
			Late Sep. (acre-feet)	2012 (%)	2012 (acre-feet)	(%)	2011 (acre-feet)	(%)	
HIGH PLAINS									
Palo Duro Reservoir	1	60,897	1,810	3	-71	0	-2,839	-5	
Meredith, Lake (Texas)	2	500,000	0	0	0	0	0	0	
Meredith, Lake (Texas & Oklahoma)	(2)	779,556	0	0	0	0	0	0	
MacKenzie Reservoir	3	46,429	3,365	7	-54	0	-1,093	-2	
White River Lake	4	29,880	2,221	7	-328	-1	-2,904	-10	
TOTAL		637,206	7,396	1	-453	0	-6,836	-1	
LOW ROLLING PLAINS									
Greenbelt Lake	5	59,500	8,592	14	-418	-1	-2,688	-5	
*Electra, Lake	6	5,626	12	0	-4	0	-13	0	
N. Fork Buffalo Crk Reservoir	7	15,400	1,400	9	-61	0	-1,094	-7	
Kemp, Lake	8	245,308	73,361	30	1,413	1	-16,465	-7	
Millers Creek Reservoir	9	27,888	8,158	29	1,312	5	-2,728	-10	
Alan Henry Reservoir	10	94,808	72,807	77	-590	-1	-4,229	-4	
Stamford, Lake	11	51,570	16,244	31	-597	-1	-12,432	-24	
J B Thomas, Lake	12	199,931	318	0	-474	0	-2,809	-1	
Fort Phantom Hill, Lake	13	70,030	34,048	49	3,883	6	-3,546	-5	
Sweetwater, Lake	14	10,006	1,973	20	14	0	-1,343	-13	
Colorado City, Lake	15	31,793	8,424	26	361	1	-1,973	-6	
Champion Creek Reservoir	16	41,618	4,133	10	126	0	-592	-1	
Abilene, Lake	17	6,099	729	12	159	3	-1,256	-21	
Coleman, Lake	18	38,076	17,273	45	3,872	10	2,125	6	
Hords Creek Lake	19	5,684	369	6	369	6	369	6	
TOTAL		903,337	247,841	27	9,365	1	-48,674	-5	
NORTH CENTRAL									
Nocona, Lake (Farmers Crk)	20	21,445	11,648	54	-288	-1	-1,532	-7	
Hubert H Moss Lake	21	24,058	21,999	91	-552	-2	1,427	6	
Texoma, Lake (Texas)	22	1,239,693	1,150,031	93	-33,254	-3	129,302	10	
Texoma, Lake (Texas & Oklahoma)	(22)	2,479,387	2,300,062	93	-66,508	-3	258,604	10	
*Pat Mayse Lake	23	117,844	103,602	88	-3,485	-3	3,598	3	
Kickapoo, Lake	24	85,825	38,068	44	1,611	2	-5,368	-6	
Arrowhead, Lake	25	235,997	104,152	44	-2,395	-1	-21,628	-9	
Bonham, Lake	26	11,026	8,276	75	-681	-6	916	8	
Crook, Lake	27	9,195	7,171	78	-290	-3	631	7	
Amon G Carter, Lake	28	19,903	13,539	68	-438	-2	1,088	5	
Ray Roberts, Lake	29	798,758	724,491	91	-17,077	-2	44,931	6	
Jim Chapman Lake (Cooper)	30	260,332	184,410	71	-17,360	-7	83,101	32	
Graham, Lake	31	45,260	36,960	82	-1,208	-3	6,744	15	
*Lost Creek Reservoir	32	11,950	10,735	90	-160	-1	1,536	13	
Bridgeport, Lake	33	366,236	233,096	64	-26,585	-7	9,951	3	
Lewisville Lake	34	563,228	440,203	78	-24,585	-4	31,182	6	
Lavon Lake	35	443,844	305,711	69	-30,138	-7	75,673	17	
Hubbard Creek Reservoir	36	318,067	108,034	34	-3,882	-1	-32,274	-10	
Possum Kingdom Lake	37	540,340	418,443	77	-4,480	-1	36,502	7	
*Mineral Wells, Lake	38	7,065	5,421	77	-113	-2	885	13	
Weatherford, Lake	39	17,789	12,367	70	-870	-5	1,751	10	
Eagle Mountain Lake	40	179,880	144,844	81	1,979	1	14,201	8	
Worth, Lake	41	24,500	17,294	71	31	0	1,550	6	
Grapevine Lake	42	164,702	133,714	81	-9,586	-6	-4,417	-3	
Ray Hubbard, Lake	43	452,040	402,612	89	-12,140	-3	65,650	15	
New Terrell City Lake	44	8,583	7,325	85	-322	-4	1,704	20	
Daniel, Lake	45	9,435	3,411	36	-129	-1	1,301	14	
Palo Pinto, Lake	46	26,827	20,010	75	-1,281	-5	3,937	15	
Benbrook Lake	47	85,648	57,431	67	-3,579	-4	22,975	27	
Arlington, Lake	48	40,156	27,772	69	-3,062	-8	5,022	13	

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 Aug. 2012		Change since Late Sep. 2011		
			Late Sep. (acre-feet)	2012 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
NORTH CENTRAL (Continue)									
Joe Pool Lake	49	142,861	129,432	91	-1,153	-1	10,557	7	
*Cisco, Lake	50	26,000	10,645	41	-33	0	-386	-1	
Leon, Lake	51	26,421	19,044	72	-530	-2	8,183	31	
Granbury, Lake	52	128,046	98,122	77	-4,126	-3	16,581	13	
Pat Cleburne, Lake	53	26,008	20,454	79	-759	-3	3,235	12	
Waxahachie, Lake	54	10,779	9,345	87	174	2	1,613	15	
Bardwell Lake	55	46,122	39,050	85	-1,870	-4	5,753	12	
Proctor Lake	56	55,457	38,433	69	-2,075	-4	19,595	35	
Whitney, Lake	57	553,349	401,506	73	-56,968	-10	122,030	22	
Aquilla Lake	58	44,460	36,132	81	-1,703	-4	5,920	13	
Navarro Mills Lake	59	49,826	42,070	84	-1,411	-3	8,746	18	
*Halbert, Lake	60	6,033	4,637	77	-37	-1	2,056	34	
Richland-Chambers Reservoir	61	1,087,839	956,798	88	-23,661	-2	154,960	14	
*Brownwood, Lake	62	131,429	63,631	48	0	0	13,581	10	
Waco, Lake	62	198,943	179,314	90	-4,549	-2	33,525	17	
Limestone, Lake	64	208,015	165,578	80	-2,427	-1	49,568	24	
Belton Lake	65	435,225	386,754	89	-8,793	-2	73,277	17	
Stillhouse Hollow Lake	66	227,771	209,001	92	-1,471	-1	67,942	30	
Georgetown, Lake	67	36,823	20,112	55	-2,988	-8	6,875	19	
Granger Lake	68	50,779	47,436	93	597	1	13,482	27	
Tawakoni, Lake	69	888,126	769,588	87	-22,894	-3	101,911	11	
TOTAL		10,509,938	8,399,852	80	-330,996	-3	1,199,343	11	
EAST									
Wright Patman Lake	70	248,069	211,690	85	-20,098	-8	9,268	4	
*Sulphur Springs, Lake	71	17,838	14,485	81	-723	-4	5,607	31	
Cypress Springs, Lake	72	66,756	61,152	92	-1,000	-1	6,213	9	
Bob Sandlin, Lake	73	200,579	158,839	79	-3,445	-2	26,470	13	
Fork Reservoir, Lake	74	604,927	510,857	84	-9,995	-2	72,049	12	
O the Pines, Lake	75	238,933	183,993	77	-4,869	-2	298	0	
Cedar Creek Reservoir in Trinity	76	644,686	564,744	88	-2,422	0	119,158	18	
Athens, Lake	77	29,435	24,157	82	250	1	2,555	9	
Palestine, Lake	78	370,907	343,862	93	-1,700	0	89,305	24	
Tyler, Lake	79	73,256	56,732	77	83	0	11,934	16	
Murvaul, Lake	80	38,284	35,691	93	0	0	11,511	30	
Jacksonville, Lake	81	25,670	24,491	95	368	1	4,227	16	
Nacogdoches, Lake	82	39,521	31,505	80	1,576	4	11,771	30	
Houston County Lake	83	17,113	17,113	100	2,055	12	4,288	25	
Sam Rayburn Reservoir	84	2,857,077	2,449,172	86	-51,734	-2	799,235	28	
Toledo Bend Reservoir (Texas)	85	2,236,450	1,977,394	88	38,822	2	614,804	27	
Toledo Bend Reservoir (TX & LA)	(85)	4,472,900	3,954,789	88	77,644	2	1,229,608	27	
*Livingston, Lake	86	1,741,867	1,662,000	95	-23,000	-1	199,000	11	
B A Steinhagen Lake	87	66,966	62,228	93	1,915	3	3,326	5	
Conroe, Lake	88	416,188	362,859	87	-1,994	0	53,610	13	
TOTAL		9,934,522	8,752,964	88	-75,911	-1	2,044,629	21	
TRANS-PECOS									
Red Bluff Reservoir	89	130,170	11,382	9	379	0	8,232	6	
TOTAL		130,170	11,382	9	379	0	8,232	6	

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			Late Sep. (acre-feet)	2012 (%)	(acre-feet)	(%)	(acre-feet)	(%)	
EDWARDS PLATEAU									
Oak Creek Reservoir	90	39,260	12,805	33	1,429	4	-2,787	-7	
E V Spence Reservoir	91	517,272	2,200	0	1,121	0	-162	0	
O C Fisher Lake	92	79,483	0	0	0	0	0	0	
*O H Ivie Reservoir	93	554,335	119,226	22	48,710	9	5,078	1	
Twin Buttes Reservoir	94	177,850	2,363	1	2,363	1	1,388	1	
Brady Creek Reservoir	95	29,110	6,710	23	635	2	-915	-3	
Buchanan, Lake	96	824,519	397,154	48	-13,001	-2	65,041	8	
Lyndon B Johnson, Lake	97	113,323	110,772	98	-850	-1	-1,761	-2	
*Amistad Reservoir (Texas)	98	1,840,849	998,000	54	-163,000	-9	-596,000	-32	
*Amistad Reservoir (TX & Mexico)	(98)	3,275,532	1,633,000	50	-160,000	-5	-1,227,000	-37	
TOTAL		4,176,001	1,649,230	39	-122,593	-3	-530,118	-13	
SOUTH CENTRAL									
Travis, Lake	99	1,113,255	466,117	42	-6,166	-1	55,313	5	
*Austin, Lake	100	21,804	20,520	94	-74	0	-29	0	
Somerville Lake	101	147,104	129,505	88	-3,413	-2	68,908	47	
Canyon Lake	102	378,781	323,554	85	-3,279	-1	11,186	3	
Medina Lake	103	254,823	34,112	13	-929	0	-38,893	-15	
*Coletto Creek Reservoir	104	31,040	24,644	79	-1,127	-4	1,552	5	
TOTAL		1,946,807	998,452	51	-14,988	-1	98,037	5	
UPPER COAST									
Houston, Lake	105	128,863	128,863	100	0	0	41,673	32	
Texana, Lake	106	159,640	145,864	91	-1,149	-1	76,118	48	
TOTAL		288,503	274,727	95	-1,149	0	117,791	41	
SOUTHERN									
Choke Canyon Reservoir	107	695,262	359,602	52	-6,454	-1	-86,413	-12	
Corpus Christi, Lake	108	256,961	42,273	16	3,446	1	-67,261	-26	
*Falcon Reservoir (Texas)	109	1,551,034	411,000	26	69,000	4	-379,000	-24	
*Falcon Reservoir (TX & Mexico)	(109)	2,646,817	547,000	21	45,000	2	-679,000	-26	
TOTAL		2,503,257	812,875	32	65,992	3	-532,674	-21	
STATE TOTAL		31,029,741	21,154,719	68	-470,354	-2	2,349,730	8	

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

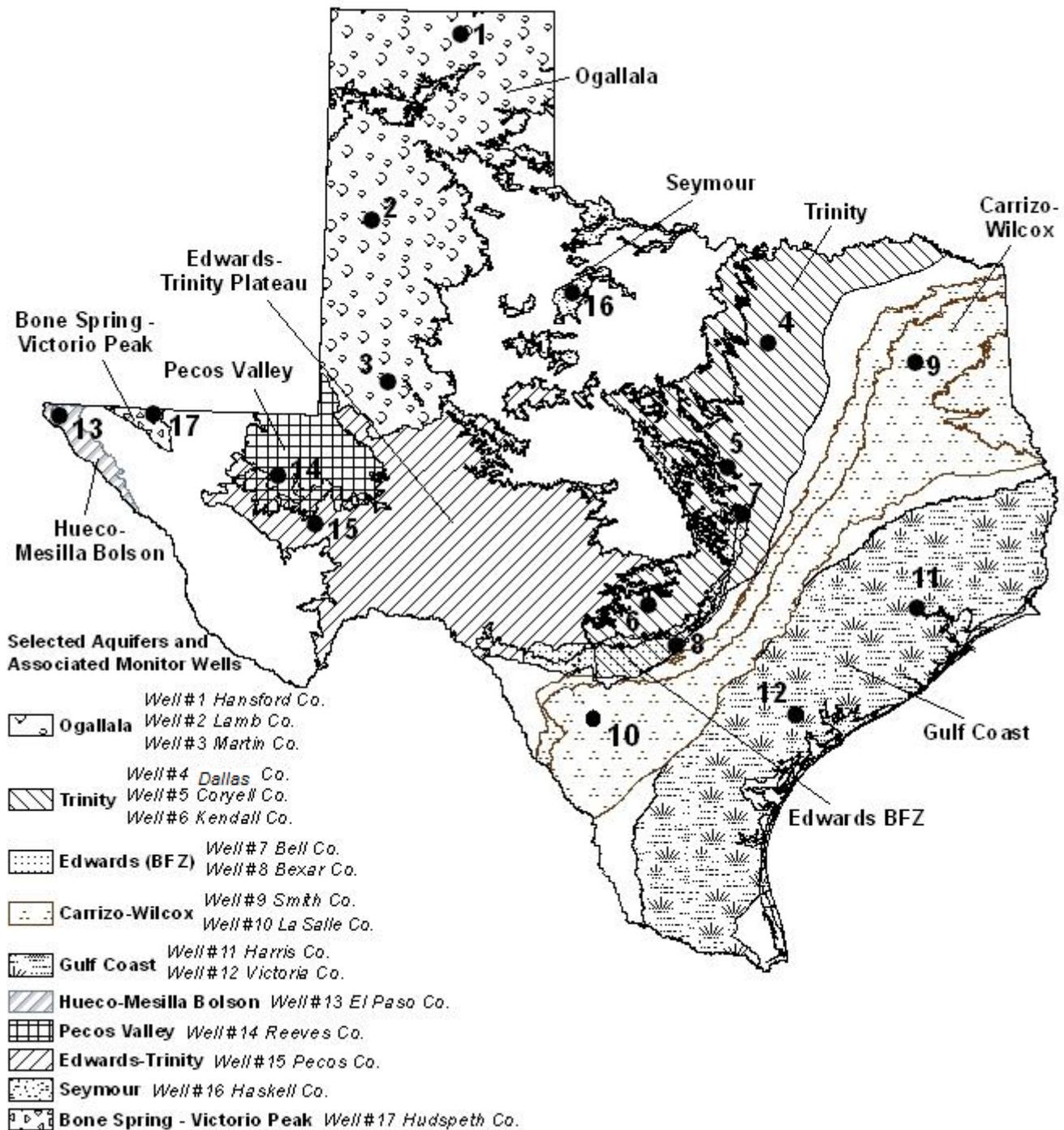
In Addition

Elephant Butte Reservoir	1,975,000	112,688	6	0	0	-88,368	-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 $100 * (\text{current conservation storage} - \text{past conservation storage}) / \text{conservation storage capacity}$. Figures shown are for the Texas share of conservation storage in all reservoirs.

SEPTEMBER 2012 GROUNDWATER LEVELS IN OBSERVATION WELLS



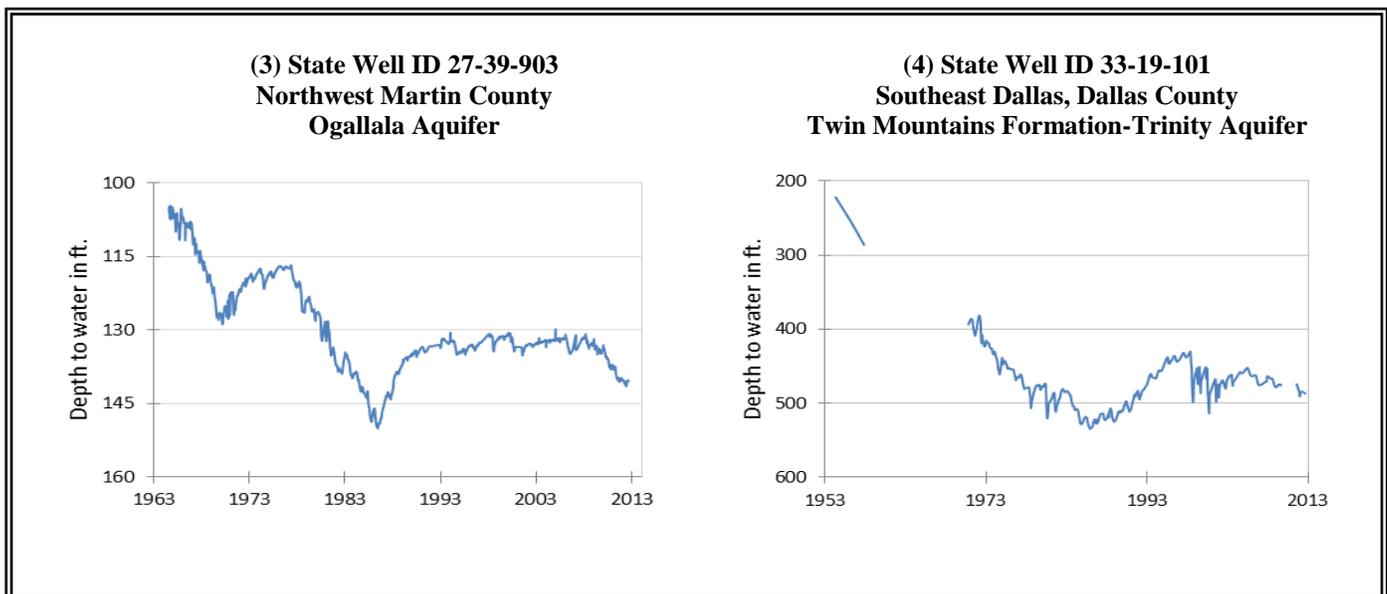
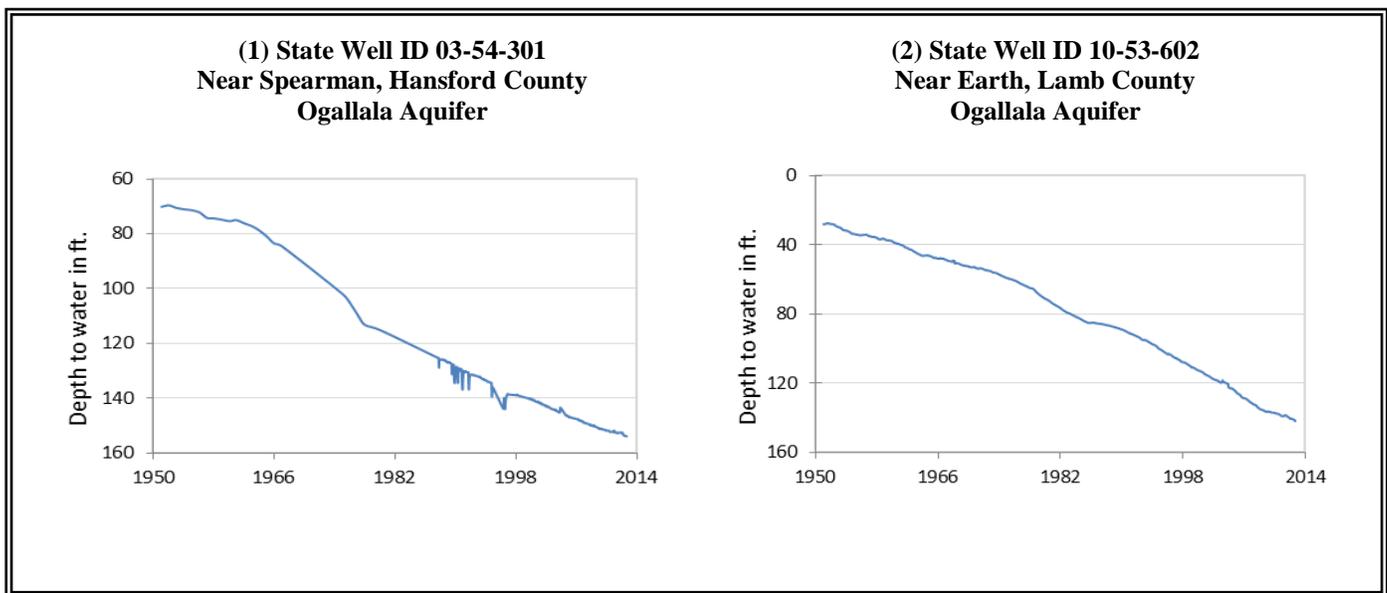
September, 2012

Water level measurements were available for all seventeen key monitoring wells in the state. Water levels rose in six of the monitoring wells since the beginning of September, ranging from 0.54 feet in the Bell County Edwards BFZ Aquifer well to 10.3 foot in the Bexar County Edwards BFZ Aquifer well. Water levels declined in the remaining eleven monitoring wells, ranging from 0.06 feet in the Martin County Ogallala Aquifer well to 7.98 feet in the Kendall County Trinity Aquifer well. The J-17 well in San Antonio recorded a water level of 79.9 feet below land surface or 651.1 feet above mean sea level. This water level is 1.1 feet below the Stage II critical management level in that segment of the Edwards Aquifer. Stage II restrictions were declared by the EAA on September 18th when the ten-day average fell below the 650-foot elevation or 81 feet below land surface.

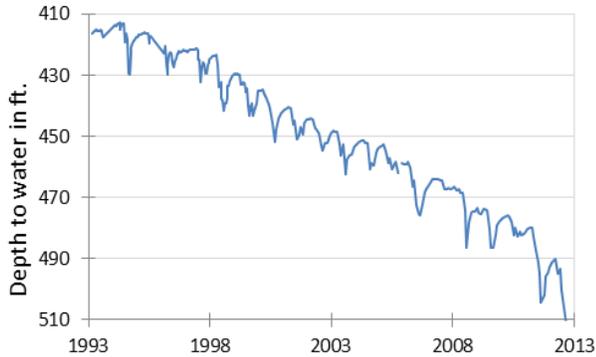
* ID is used in this publication to differentiate between the monitoring well number (1 - 17) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.

Monitoring Well	Sep 2012	Aug 2012	Month Change	Year Change	Historical Change
(1) Hansford 0354301	154.00	153.89	-0.11	-1.57	-83.88
(2) Lamb 1053602	141.78	141.56	-0.22	-2.22	-113.63
(3) Martin 2739903	140.46	140.4	-0.06	0.07	-35.57
(4) Dallas 3319101	489.7	486.96	-2.74	-10.97	-267.7
(5) Coryell 4035404	508.33	511.62	3.29	-6.54	-216.33
(6) Kendall 6802609	147.85	155.83	-7.98	10.79	-87.85
(7) Bell 5804816	125.25	125.79	0.54	1.15	-2.12
(8) Bexar 6837203	79.9	90.2	10.3	8.5	-33.26
(9) Smith 3430907	437.85	436.96	-0.89	-3.08	-71.85
(10) La Salle 7738103	438.51	432.83	-5.68	NA	-185.44
(11) Harris 6514409	201.4	202.52	1.12	6.53	-65.9
(12) Victoria 8017502	37.17	36.9	-0.27	2.14	-3.17
(13) El Paso 4913301	292.47	291.01	-1.46	-1.85	-60.57
(14) Reeves 4644501	149.9	151.04	1.14	5.13	-57.81
(15) Pecos 5216802	233.41	238.17	4.76	6.13	13.47
(16) Haskell 2135748	47.78	48.43	-0.65	-0.91	-6.45
(17) Hudspeth 4807516	150.8	150.06	-0.74	-0.7	-46.88

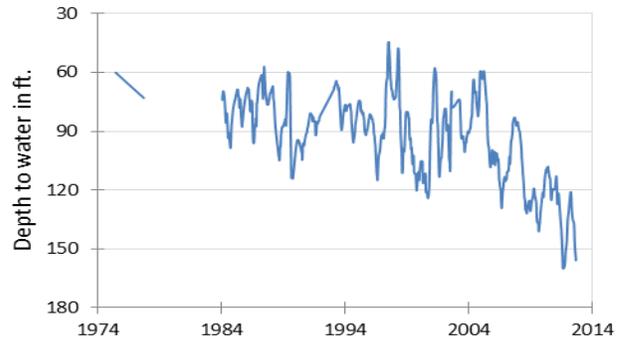
SEPTEMBER GROUNDWATER LEVELS IN OBSERVATION WELLS



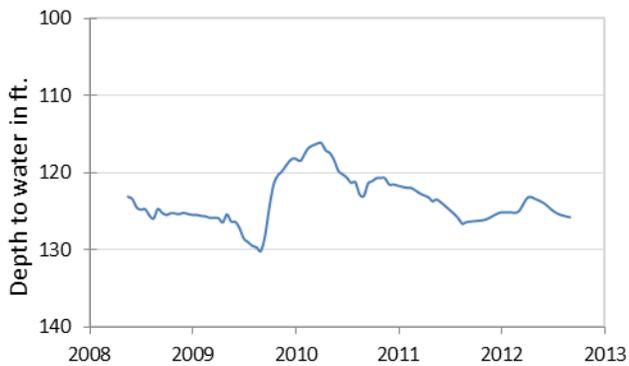
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



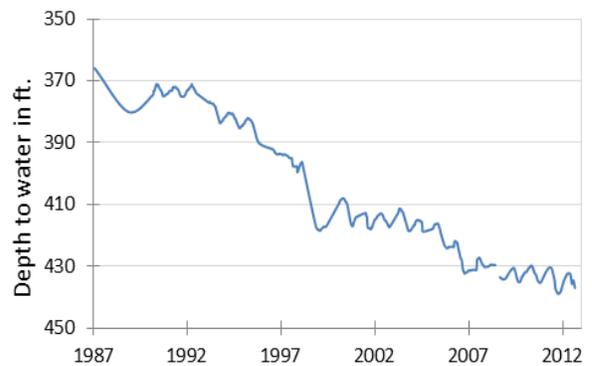
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



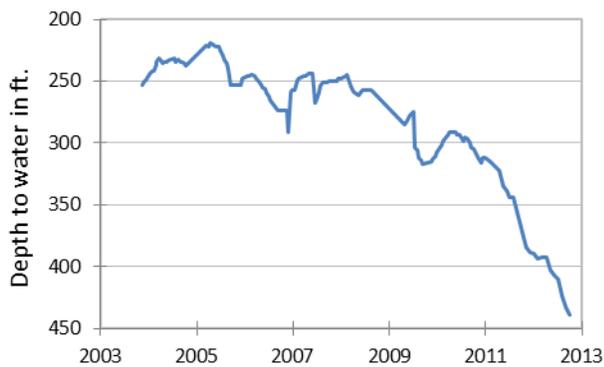
**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer**



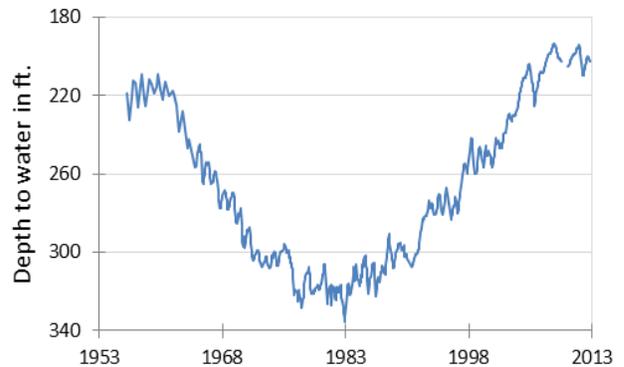
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



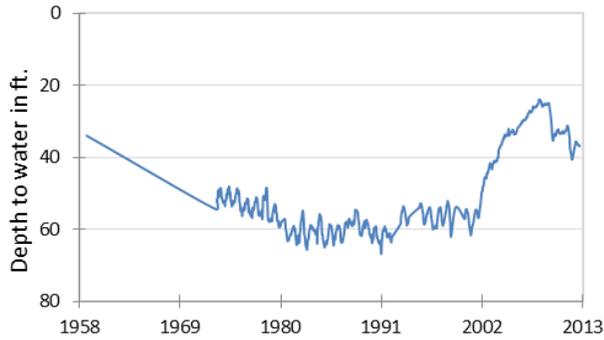
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



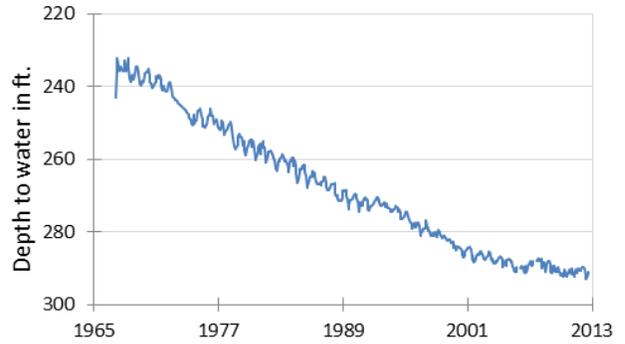
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



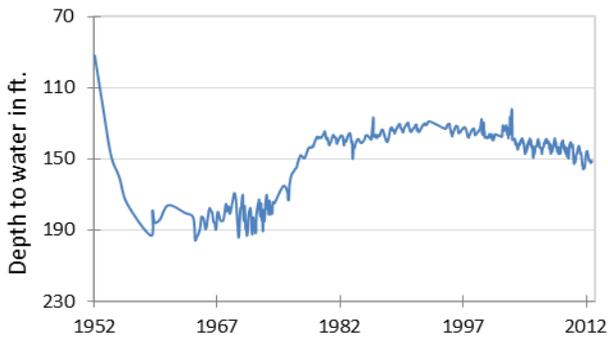
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



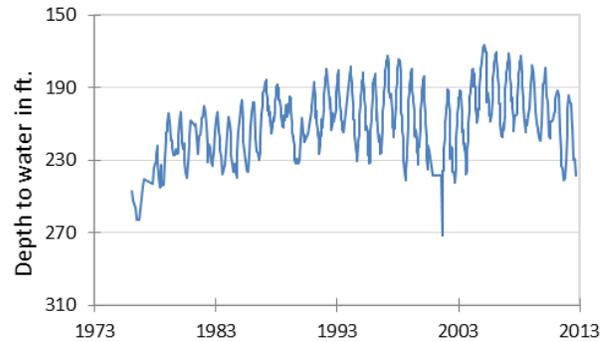
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



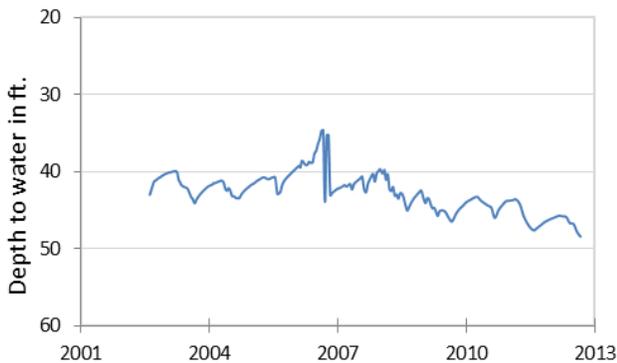
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



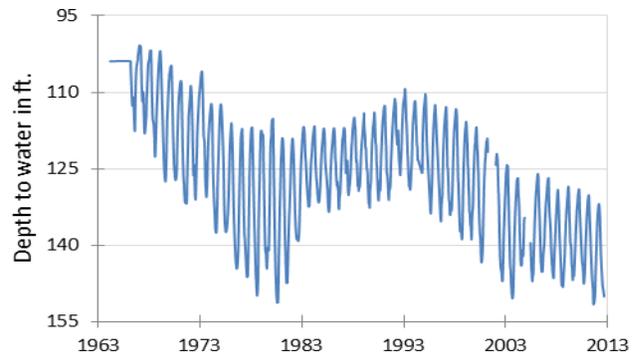
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



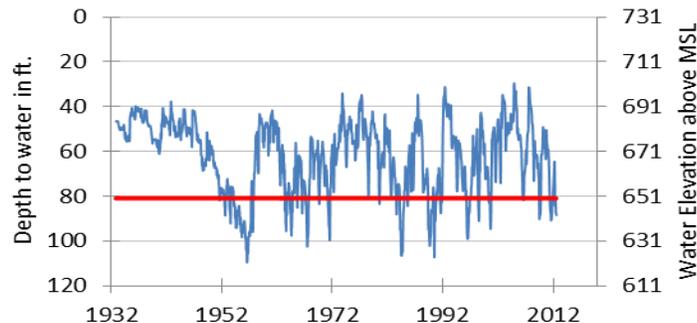
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



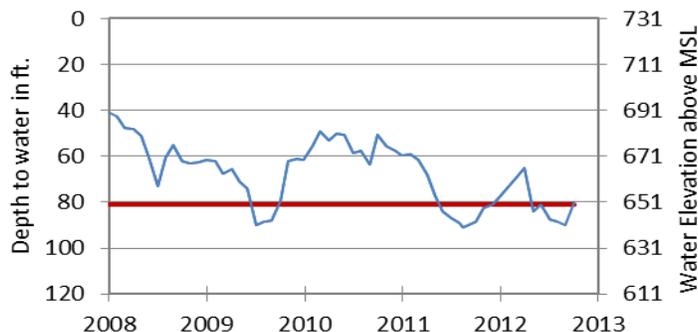
(17) State Well ID 48-07-516
Dell City, Hudspeth County
Bone Spring - Victorio Peak Aquifer



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

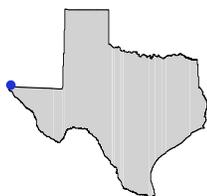


The late September water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 79.9 feet below land surface, or 651.1 feet above mean sea level. This was 10.3 feet above last month's measurement, 8.5 feet below last year's measurement, and 33.26 feet below the initial measurement recorded in 1932.



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

HYDROGRAPH OF THE MONTH

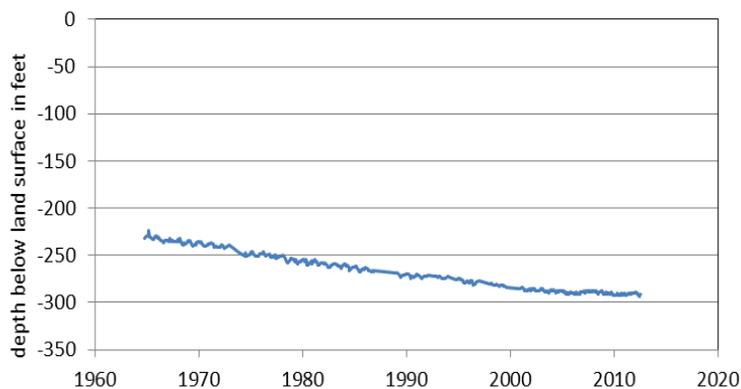


Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.

Hueco (-Mesilla) Bolsons Aquifer

The Hueco-Mesilla Bolsons Aquifer is a major aquifer located east and west of the Franklin Mountains in Far West Texas. The aquifer is composed of basin-fill deposits of silt, sand, gravel, and clay in two basins, or bolsons: the Hueco Bolson and the Mesilla Bolson. These basins are the result of tectonic extension and faulting associated with the Basin and Range province which extends from Mexico to Idaho. While the Bolsons share similar geology, very little water travels between them. The Bolsons contain fresh to slightly saline water, with salinity typically increasing to the south and in the shallower parts of the aquifer. The Hueco Bolson is the principal aquifer for the El Paso area and Ciudad Juarez in Mexico. Nearly 90 percent of the water pumped from the Mesilla and the Hueco Bolsons in Texas is used for public supply. El Paso and Fort Bliss are building the world's largest inland desalination plant in El Paso County. This plant will use brackish groundwater from the Hueco Bolson as its source water. In some wells, water levels have declined several hundred feet from historic levels due to pumping.

Well # 49-13-301, 640' TD
Hueco Bolson Aquifer, El Paso County



Water levels in this now unused well, owned by the City of El Paso, have experienced an overall decline of 60 feet since the initial measurement in 1964. More recently, water levels have remained relatively flat, possibly as a result of conservation measures that have reduced the volume of water pumped in nearby wells.

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