

RESERVOIR STORAGE

September 2014

At the end of the month, total storage in 114 of the state's major water supply reservoirs was at 20.06 million acre-feet*, or 64% of their total conservation storage capacity. This is 232,883 acre-feet less than a month ago but 1.23 million acre-feet more than the storage at this time last year. Electra has been empty since the end of October, 2012.

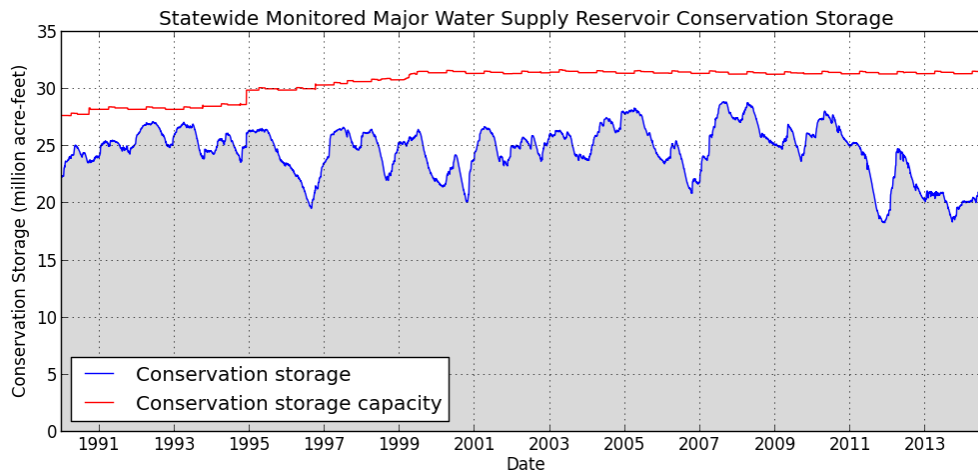
Five reservoirs held 100% of conservation storage capacity. Thirteen (13) reservoirs were below 10% full: Electra (0%), North Fork Buffalo Creek (0%), O. C. Fisher (1%), Palo Duro (2%), E.V. Spence (3%), Meredith (3%), Abilene (3%), Medina (4%), Twin Buttes (4%), White River (6%), Champion Creek (6%), Millers Creek (8%), and Mackenzie (8%).

Total combined storage was greater than 70% in the Trans-Pecos (100%), Upper Coast (91%) and East (91%) regions. The regions with the lowest percentage storage were the High Plains (5%) and Southern regions (28%). Storage declined in 3 regions and increased in 6 regions over the past month.

Elephant Butte reservoir held 171,959 acre-feet, or 9% of storage capacity. This is 18,342 acre-feet more than a month ago.

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

CONSERVATION STORAGE DATA FOR



Figures are based on the end of the month data at 114 major reservoirs that represent 96 percent of the total conservation storage capacity of the 188 major water supply reservoirs in Texas. Major reservoirs are defined as having a conservation storage capacity of 5,000 acre-feet or greater.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of Sep		Change since end of Aug 2014		Change since end of Sep 2013		
		2014 (acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)	(%)	
HIGH PLAINS								
Palo Duro Reservoir	61,066	1,333	2	-175	-0	-2,271	-4	
Meredith, Lake (Texas)	500,000	26,097	5	3,114	1	26,097	5	
Meredith, Lake (Texas & Oklahoma)	779,556	26,097	3	3,114	0	26,097	3	
MacKenzie Reservoir	46,450	3,494	8	-26	-0	885	2	
White River Lake	29,880	1,882	6	771	3	1,882	6	
TOTAL	637,396	32,806	5	3,684	1	26,593	4	
LOW ROLLING PLAINS								
Greenbelt Lake	59,968	7,570	13	-272	-0	-1,251	-2	
*Electra, Lake	5,626	No Data						
N. Fork Buffalo Crk Reservoir	15,400	61	0	-42	-0	-148	-1	
Kemp, Lake	268,811	71,046	26	-510	-0	647	0	
Millers Creek Reservoir	26,768	2,098	8	-159	-1	-3,059	-11	
Alan Henry Reservoir	94,808	72,895	77	19,444	21	9,130	10	
Stamford, Lake	51,570	6,106	12	-11	-0	-3,337	-6	
J B Thomas, Lake	199,931	93,559	47	91,709	46	90,551	45	
Fort Phantom Hill, Lake	70,030	23,741	34	-1,329	-2	-10,079	-14	
Sweetwater, Lake	12,267	1,784	15	-59	-0	-966	-8	
Colorado City, Lake	30,758	7,664	25	444	1	-926	-3	
Champion Creek Reservoir	41,580	2,624	6	66	0	-568	-1	
Abilene, Lake	7,900	268	3	1	0	-296	-4	
Coleman, Lake	38,075	12,644	33	-416	-1	-3,692	-10	
Hords Creek Lake	8,443	3,249	38	-108	-1	441	5	
TOTAL	926,309	305,309	33	108,758	12	84,017	9	
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	21,444	7,407	35	-83	-0	-1,808	-8	
Hubert H Moss Lake	24,058	20,116	84	-304	-1	-97	-0	
Texoma, Lake (Texas)	1,258,113	1,056,463	84	-13,799	-1	-71,520	-6	
Texoma, Lake (Texas & Oklahoma)	2,525,281	1,056,463	42	-13,799	-1	-71,520	-3	
*Pat Mayse Lake	113,683	100,375	88	7,523	7	13,578	12	
Kickapoo, Lake	86,345	23,890	28	-1,599	-2	-7,720	-9	
Arrowhead, Lake	230,359	45,123	20	-2,242	-1	-22,499	-10	
Bonham, Lake	11,027	8,107	74	52	0	-678	-6	
Crook, Lake	9,195	9,049	98	73	1	1,461	16	
Amon G Carter, Lake	19,266	9,991	52	-473	-2	233	1	
Ray Roberts, Lake	788,167	605,359	77	-13,975	-2	-10,585	-1	
Jim Chapman Lake (Cooper)	260,332	99,633	38	-14,707	-6	16,262	6	
Graham, Lake	45,288	18,164	40	-1,042	-2	-7,622	-17	
*Lost Creek Reservoir	11,950	7,492	63	-199	-2	-1,441	-12	
Bridgeport, Lake	366,236	142,900	39	-4,590	-1	-25,209	-7	
Lewisville Lake	563,228	398,250	71	-23,451	-4	35,400	6	
Lavon Lake	406,388	190,708	47	-11,939	-3	-10,813	-3	
Hubbard Creek Reservoir	318,067	48,726	15	-3,238	-1	-39,269	-12	
Possum Kingdom Lake	540,340	325,623	60	2,193	0	-45,129	-8	
*Mineral Wells, Lake	6,760	3,421	51	-163	-2	-716	-11	
Weatherford, Lake	17,812	9,651	54	-863	-5	-480	-3	
Eagle Mountain Lake	179,880	101,800	57	-12,053	-7	-24,187	-13	
Worth, Lake	33,495	22,433	67	-230	-1	143	0	
Grapevine Lake	164,703	98,830	60	-4,255	-3	-11,626	-7	
Ray Hubbard, Lake	452,040	267,003	59	-18,711	-4	-58,762	-13	
New Terrell City Lake	8,583	6,791	79	-361	-4	1,053	12	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of Sep 2014 (acre-feet)	(%)	Change since end of Aug 2014 (acre-feet)	(%)	Change since end of Sep 2013 (acre-feet)	(%)
(North Central Continue)							
Palo Pinto, Lake	26,827	3,463	13	-686	-3	-7,226	-27
Benbrook Lake	85,648	59,523	69	-176	-0	850	1
Arlington, Lake	40,188	26,811	67	-4,055	-10	-2,316	-6
Joe Pool Lake	175,358	163,874	93	-4,621	-3	1,512	1
*Cisco, Lake	25,895	12,224	47	-355	-1	-3,236	-12
Leon, Lake	26,476	16,840	64	-739	-3	-6,221	-23
Granbury, Lake	128,046	74,916	59	-7,445	-6	-4,430	-3
Pat Cleburne, Lake	26,008	18,017	69	-984	-4	1,912	7
Waxahachie, Lake	10,780	7,843	73	-866	-8	133	1
Bardwell Lake	46,122	40,553	88	-1,624	-4	8,521	18
Proctor Lake	55,457	16,986	31	-818	-1	-11,025	-20
Whitney, Lake	553,344	366,318	66	-16,904	-3	25,632	5
Aquilla Lake	44,460	39,810	90	-1,783	-4	12,886	29
Navarro Mills Lake	49,827	42,807	86	-2,142	-4	6,586	13
*Halbert, Lake	6,033	3,849	64	-68	-1	-190	-3
Richland-Chambers Reservoir	1,087,839	720,257	66	-31,292	-3	13,942	1
*Brownwood, Lake	128,839	62,066	48	-2,310	-2	-15,745	-12
Waco, Lake	189,567	167,438	88	-8,632	-5	35,752	19
Limestone, Lake	208,014	186,638	90	-7,497	-4	57,243	28
Belton Lake	435,225	310,089	71	-9,116	-2	16,142	4
Stillhouse Hollow Lake	227,771	160,784	71	-4,127	-2	-11,315	-5
Georgetown, Lake	36,823	19,715	54	96	0	1,368	4
Granger Lake	50,779	50,779	100	1,342	3	6,711	13
Tawakoni, Lake	871,685	515,921	59	-22,286	-3	-67,625	-8
Mountain Creek, Lake	22,850	22,691	99	-159	-1	-159	-1
Squaw Creek, Lake	151,250	148,203	98	-562	-0	-3,047	-2
TOTAL	10,647,870	6,885,720	65	-246,245	-2	-215,376	-2
EAST							
Wright Patman Lake	231,496	231,496	100	0	0	0	0
*Sulphur Springs, Lake	17,747	15,818	89	-616	-3	1,715	10
Cypress Springs, Lake	66,756	64,925	97	-96	-0	6,030	9
Bob Sandlin, Lake	190,822	169,548	89	-4,745	-2	33,891	18
Caddo, Lake	29,898	18,121	61	-3,161	-11	1,551	5
Martin, Lake	75,116	66,504	89	-4,416	-6	12,015	16
Monticello, Lake	34,740	34,617	100	1,442	4	-123	-0
Fork Reservoir, Lake	605,061	464,137	77	-22,956	-4	-2,042	-0
O the Pines, Lake	268,566	241,011	90	-10,692	-4	58,250	22
Cedar Creek Reservoir in Trinity	644,686	482,354	75	-22,149	-3	26,038	4
Athens, Lake	29,435	26,613	90	-1,059	-4	3,622	12
Palestine, Lake	373,199	350,175	94	-8,411	-2	6,207	2
Tyler, Lake	73,161	67,550	92	-958	-1	17,333	24
Murvaul, Lake	38,285	35,811	94	-1,076	-3	1,329	3
Jacksonville, Lake	25,670	24,559	96	-580	-2	707	3
Nacogdoches, Lake	39,522	36,288	92	-1,117	-3	2,434	6
Houston County Lake	17,113	16,663	97	355	2	2,382	14
Sam Rayburn Reservoir	2,857,077	2,627,417	92	-118,992	-4	438,801	15
Toledo Bend Reservoir (Texas)	2,245,752	2,058,186	92	-74,590	-3	182,294	8
Toledo Bend Reservoir (TX & LA)	4,472,900	2,058,186	46	-74,590	-2	182,294	4
*Livingston, Lake	1,785,348	1,732,764	97	-25,867	-1	78,491	4
B A Steinhagen Lake	66,961	61,072	91	-202	-0	-1,728	-3
Conroe, Lake	416,177	406,131	98	1,359	0	56,639	14
TOTAL	10,132,588	9,231,760	91	-298,527	-3	925,836	9

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of Sep 2014 (acre-feet)	(%)	Change since end of Aug 2014 (acre-feet)	(%)	Change since end of Sep 2013 (acre-feet)	(%)
TRANS-PECOS							
Red Bluff Reservoir	151,110	151,110	100	73,329	49	94,192	62
TOTAL	151,110	151,110	100	73,329	49	94,192	62
EDWARDS PLATEAU							
Oak Creek Reservoir	39,210	6,504	17	-234	-1	-2,361	-6
E V Spence Reservoir	517,272	14,873	3	7,080	1	-10,126	-2
O C Fisher Lake	119,445	1,676	1	-233	-0	764	1
*O H Ivie Reservoir	554,340	92,802	17	-2,680	-0	5,574	1
Twin Buttes Reservoir	182,454	7,833	4	-1,600	-1	7,833	4
Brady Creek Reservoir	28,808	8,297	29	-244	-1	-585	-2
Buchanan, Lake	816,904	294,658	36	-12,770	-2	8,514	1
Inks, Lake	13,962	12,900	92	-15	-0	-60	-0
Lyndon B Johnson, Lake	115,056	109,843	95	-853	-1	-2,698	-2
*Amistad Reservoir (Texas)	1,840,849	1,100,005	60	116,705	6	228,512	12
*Amistad Reservoir (TX & Mexico)	3,275,532	1,100,005	34	116,705	4	228,512	7
TOTAL	4,228,300	1,649,391	39	105,156	2	235,367	6
SOUTH CENTRAL							
Travis, Lake	1,113,348	371,229	33	4,930	0	30,349	3
*Austin, Lake	23,972	22,942	96	216	1	-108	-0
Somerville Lake	147,104	139,600	95	212	0	60,078	41
Canyon Lake	378,781	295,455	78	-2,938	-1	5,682	2
Medina Lake	254,823	9,533	4	-643	-0	-1,435	-1
*Coleta Creek Reservoir	31,040	22,143	71	-1,381	-4	-626	-2
TOTAL	1,949,068	860,902	44	396	0	93,940	5
UPPER COAST							
Houston, Lake	120,686	120,686	100	1,215	1	0	0
Texana, Lake	159,566	134,378	84	-4,885	-3	4,141	3
TOTAL	280,252	255,064	91	-3,670	-1	4,141	1
SOUTHERN							
Choke Canyon Reservoir	695,262	187,685	27	-3,918	-1	-62,173	-9
Corpus Christi, Lake	256,961	135,617	53	-5,087	-2	71,874	28
*Falcon Reservoir (Texas)	1,551,007	367,193	24	33,241	2	-27,420	-2
*Falcon Reservoir (TX & Mexico)	2,646,817	367,193	14	33,241	1	-27,420	-1
TOTAL	2,503,230	690,495	28	24,236	1	-17,719	-1
STATE TOTAL	31,456,123	20,062,557	64	-232,883	-1	1,230,991	4
* Conservation volume is used as conservation storage capacity because the dead storage is unknown.							
** No reading available. Last valid reading was near empty. Percentage estimated assuming current storage is zero.							
Elephant Butte Reservoir	1,973,358	171,959	9	18,342	1	8,915	0

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*(current conservation storage - past conservation storage)/conservation storage capacity. Figures shown are for the Texas share of conservation storage in all reservoirs.

SEPTEMBER RESERVOIR CONDITIONS

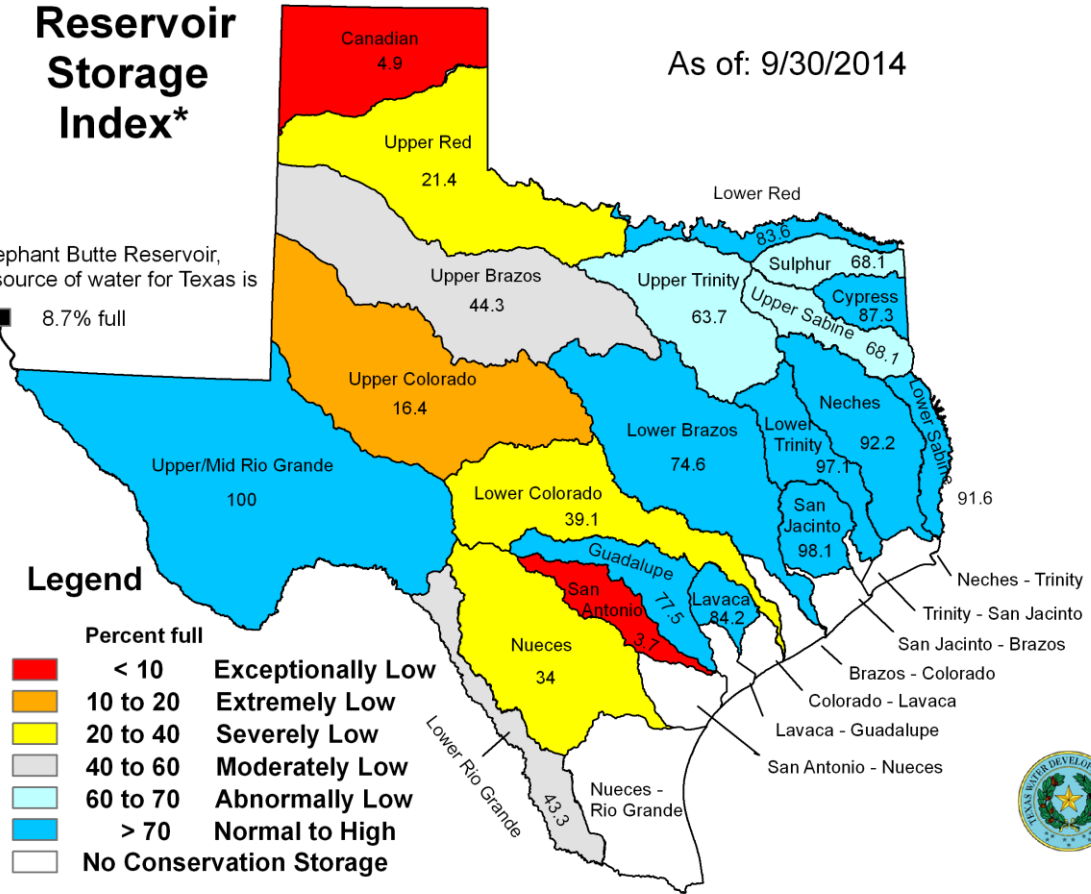
As of: 9/30/2014

Reservoir Storage Index*

Elephant Butte Reservoir, a source of water for Texas is 8.7% full

Legend

Percent full	Exceptionally Low
< 10	Exceptionally Low
10 to 20	Extremely Low
20 to 40	Severely Low
40 to 60	Moderately Low
60 to 70	Abnormally Low
> 70	Normal to High
No Conservation Storage	

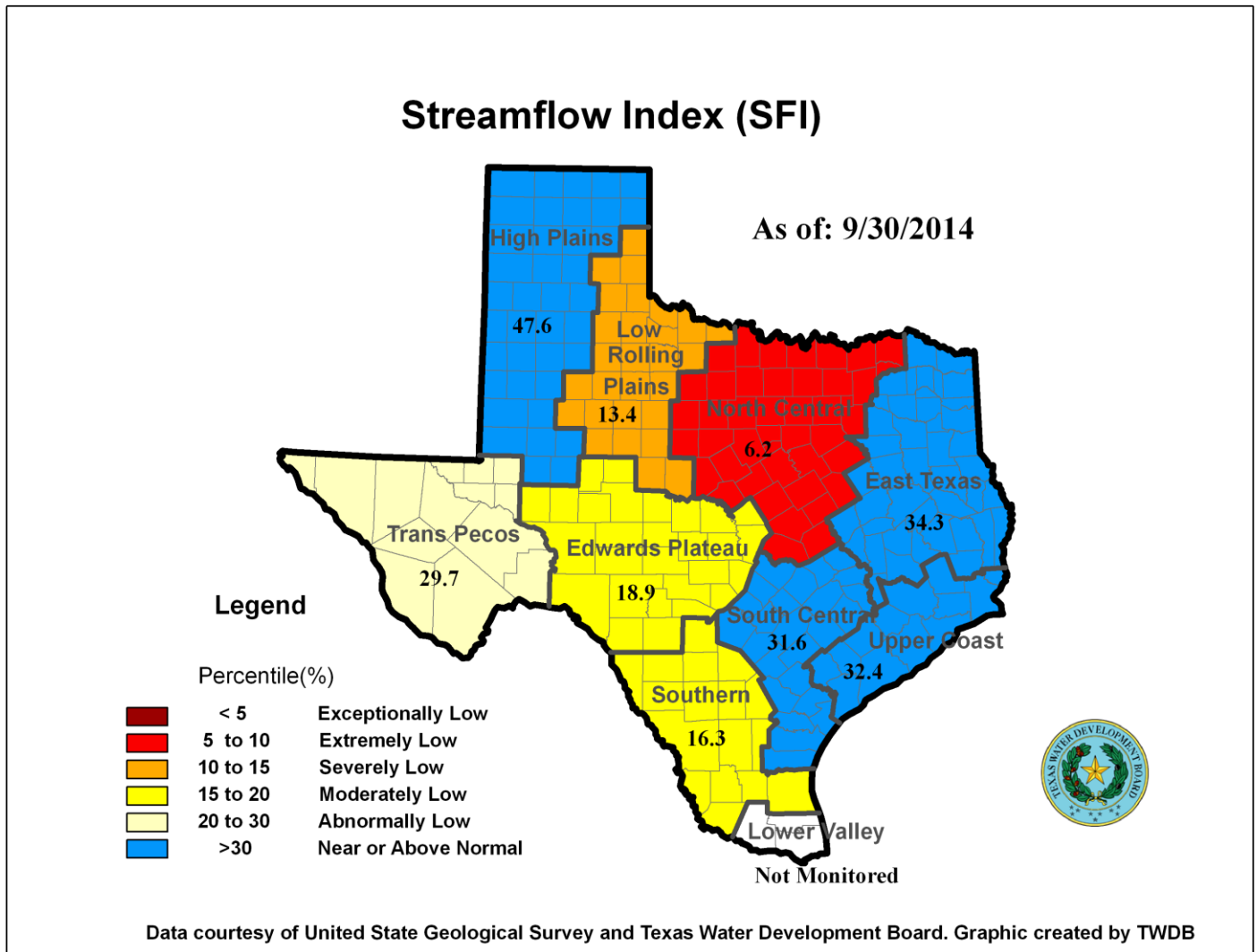


*Percent of combined conservation storage capacity of 114 major water supply reservoirs by sub-basin (dead pools are excluded)

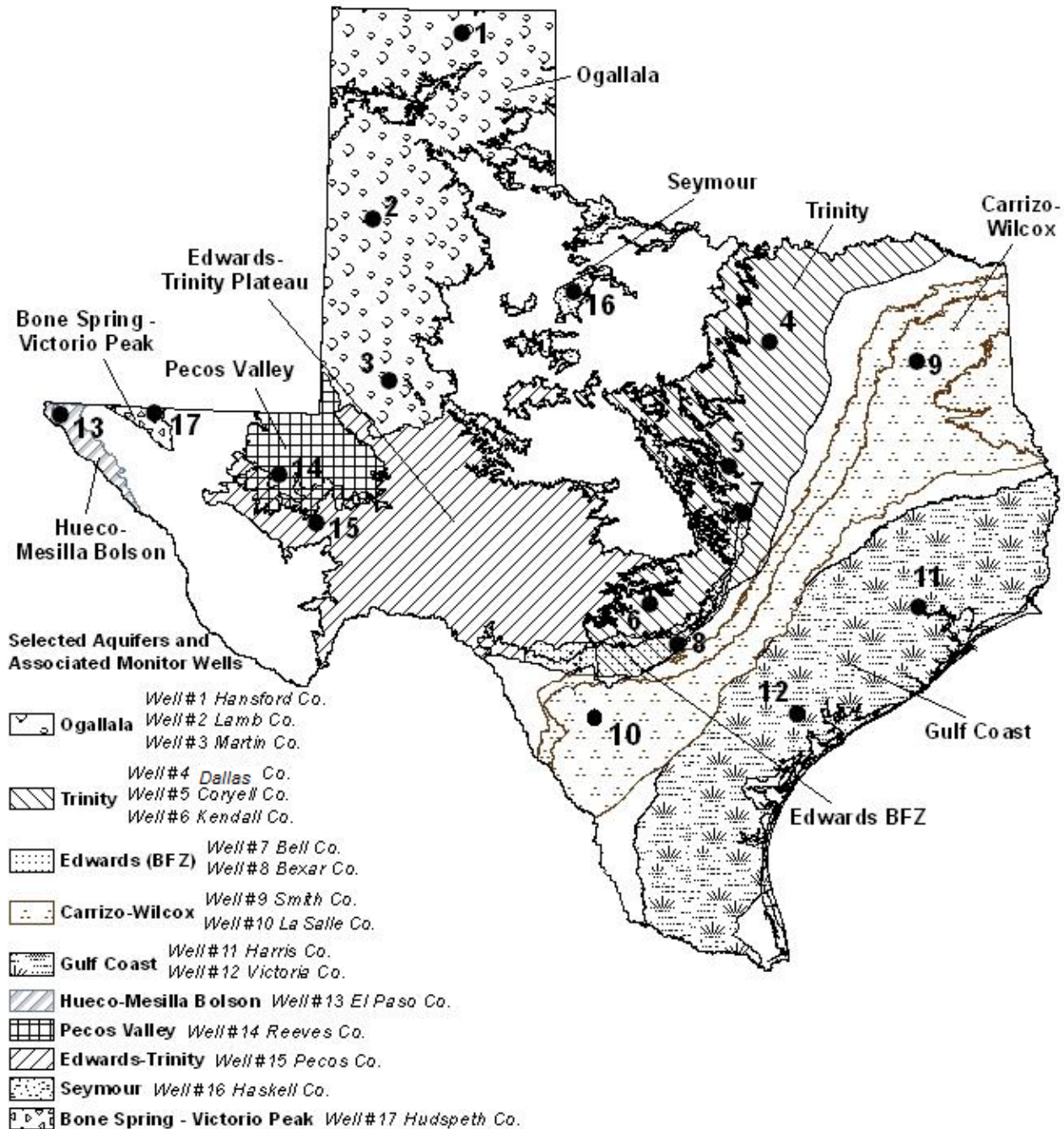
SEPTEMBER STREAMFLOW CONDITIONS

Of 29 reporting index stations monitored this month, computed 30-day mean flows were exceptionally low (<5%) at 7 stations, extremely low (5-10%) at 5 stations, severely low (10-15%) at 3 stations, moderately low (15-20%) at 0 station, abnormally low (20-30%) at 4 stations, and near normal (30% - 70%) at the remaining 10 stations. Compared to last month, flows have increased at 7 index stations and decreased at 18 stations.

On a regional basis, flows in this month at index stations were extremely low in the North Central region, severely in the Low Rolling Plains region, moderately low in the Edwards Plateau and Southern regions, and abnormally low in Trans-Pecos region, but near or above normal in all other regions. Streamflow in the Lower Valley region is not monitored.



SEPTEMBER 2014 GROUNDWATER LEVELS IN OBSERVATION WELLS



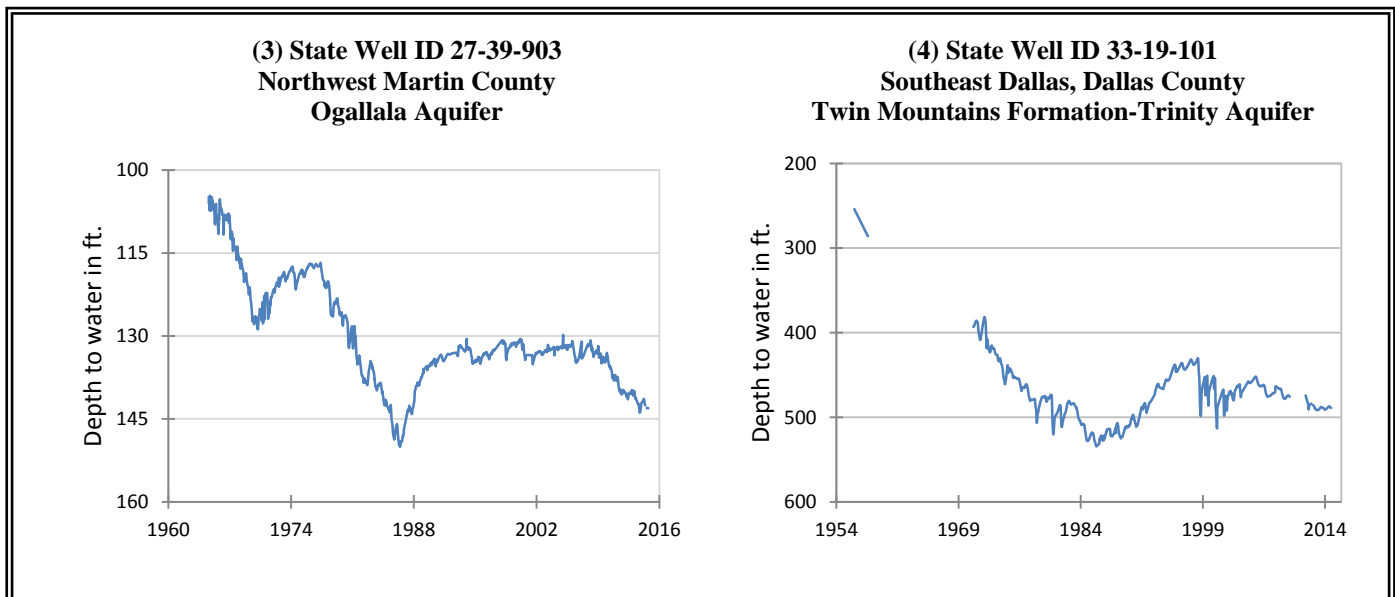
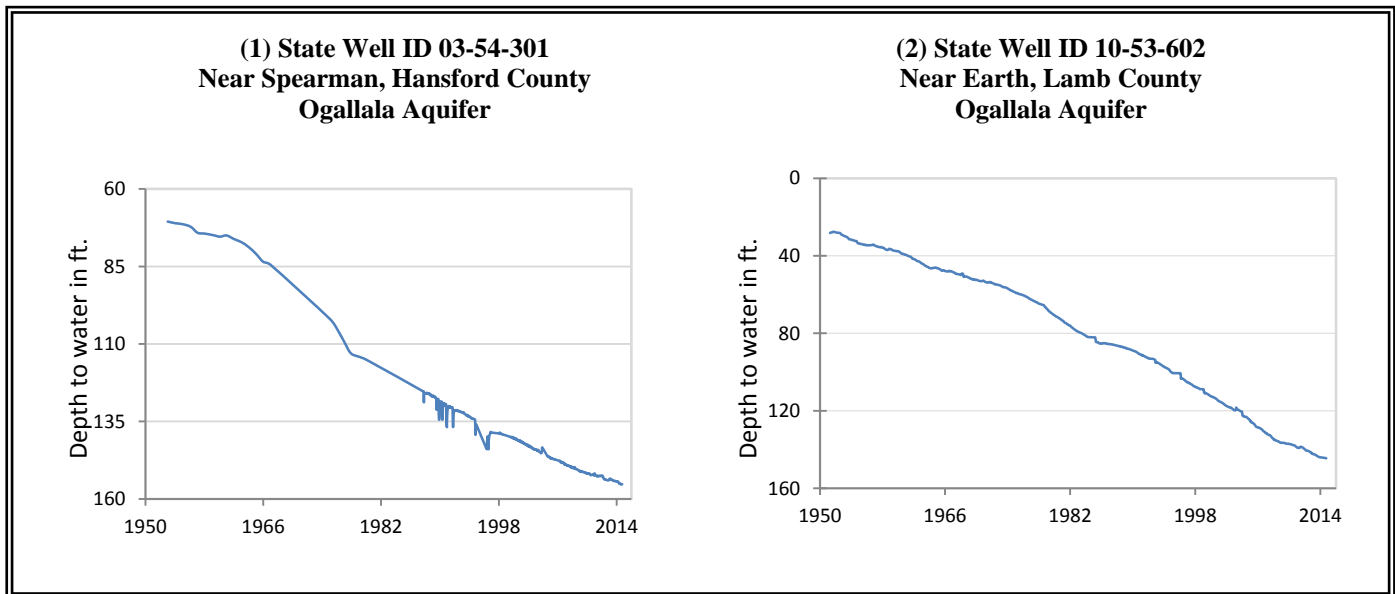
September, 2014

Water level measurements were available for all of the seventeen key monitoring wells in the state. Water levels rose in nine of the monitoring wells since the beginning of September, ranging from 0.1 feet in the Hansford County Ogallala Aquifer well to 19.76 feet in the Pecos County Edwards-Trinity (Plateau) Aquifer well. Water levels declined in eight monitoring wells, ranging from 0.05 feet in the Martin County Ogallala Aquifer well to 5.83 feet in the Kendall County Trinity Aquifer well. The J-17 well in San Antonio recorded a water level of 100.4 feet below land surface or 630.6 feet above mean sea level. This water level is 9.4 feet below the Stage III critical management level in that segment of the Edwards Aquifer. Stage III restrictions were declared by the EAA when the ten-day average fell below the 640-foot elevation, or 91 feet below land surface.

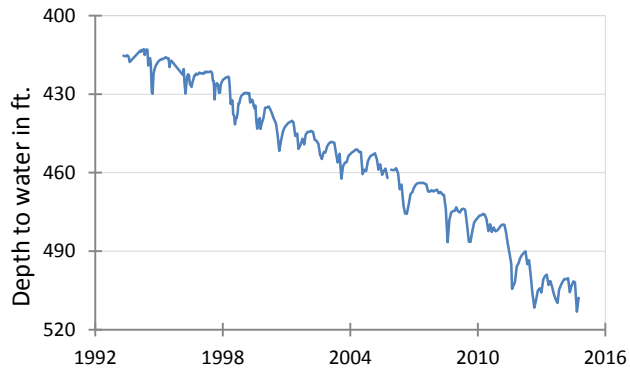
* ID is used in this publication to differentiate between the monitoring well number (1 - 17) as displayed on the aquifer map and the TWDB's six- or seven-digit state well "identification" number.

Monitoring Well	September	August	month change	year change	historical change	first measured
(1) Hansford 0354301	255.24	155.34	0.1	-1.04	-85.12	1951
(2) Lamb 1053602	144.85	144.7	-0.15	-0.8	-116.7	1951
(3) Martin 2739903	143.06	143.01	-0.05	0.62	-38.17	1964
(4) Dallas 3319101	488.96	488.5	-0.46	0.49	-266.96	1954
(5) Coryell 4035404	507.88	513.14	5.26	-3.2	-215.88	1955
(6) Kendall 6802609	159.95	154.12	-5.83	-23.64	-99.95	1975
(7) Bell 5804816	128.73	129.52	0.79	-2.99	-5.6	2008
(8) Bexar 6837203	100.4	105	4.6	-11.8	-53.76	1932
(9) Smith 3430907	440.65	440.13	-0.52	1.25	-74.65	1987
(10) La Salle 7738103	510.46	510.24	-0.22	-20.91	-257.39	2003
(11) Harris 6514409	194.55	194.8	0.25	3.83	-59.05	1956
(12) Victoria 8017502	37.84	37.23	-0.61	1.43	-3.84	1958
(13) El Paso 4913301	295.18	295	-0.18	-0.46	-63.28	1967
(14) Reeves 4644501	157.11	166.61	9.5	-2.48	-65.02	1952
(15) Pecos 5216802	227.82	247.58	19.76	0.49	19.06	1976
(16) Haskell 2135748	49.23	49.51	0.28	-0.76	-7.9	2002
(17) Hudspeth 4807516	148.17	149.8	1.63	-4.51	-44.25	1964

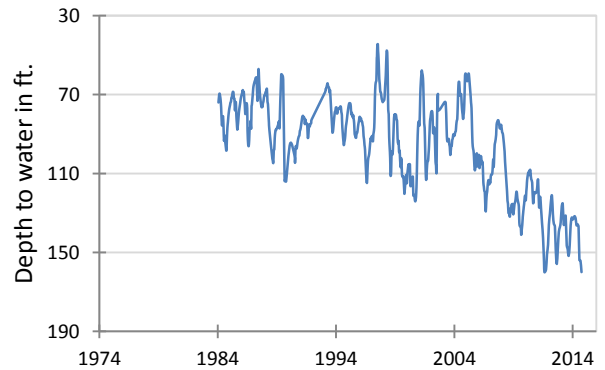
SEPTEMBER GROUNDWATER LEVELS IN OBSERVATION WELLS



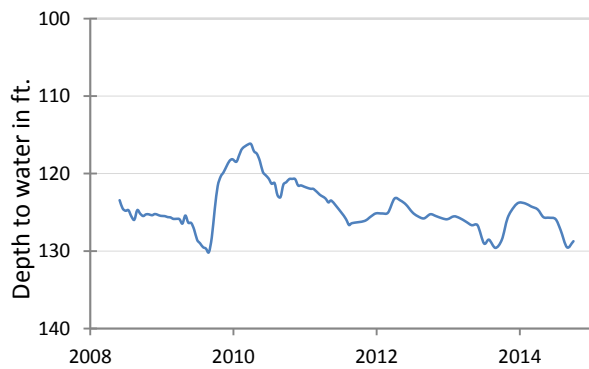
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



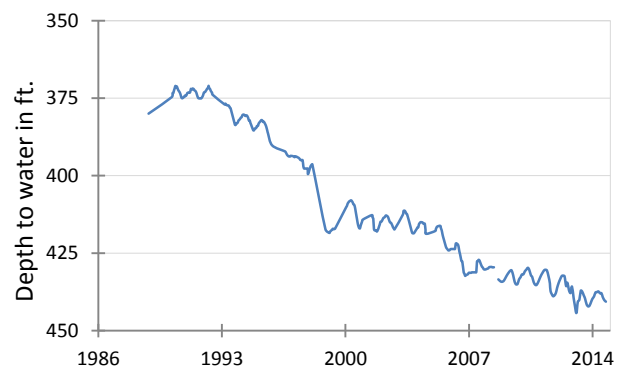
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



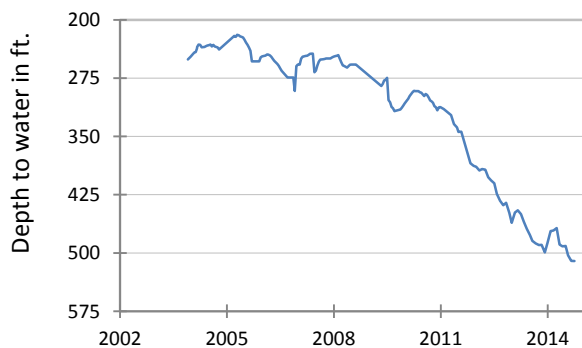
**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer**



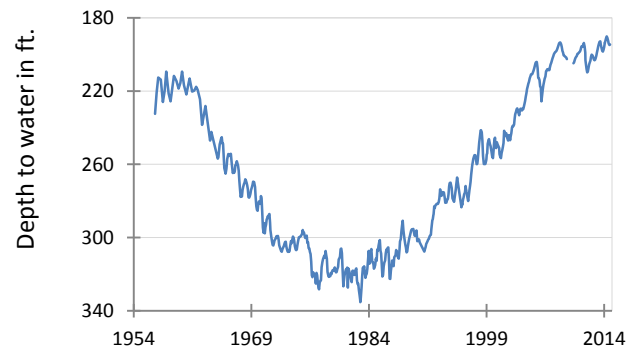
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



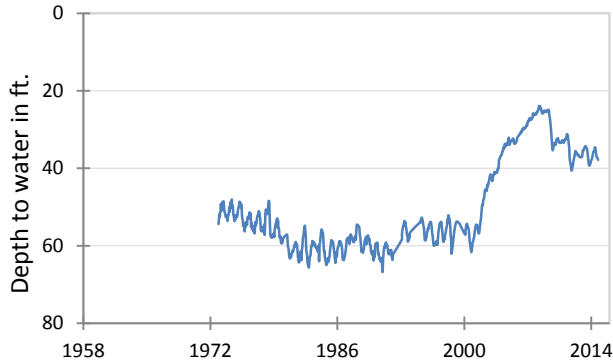
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



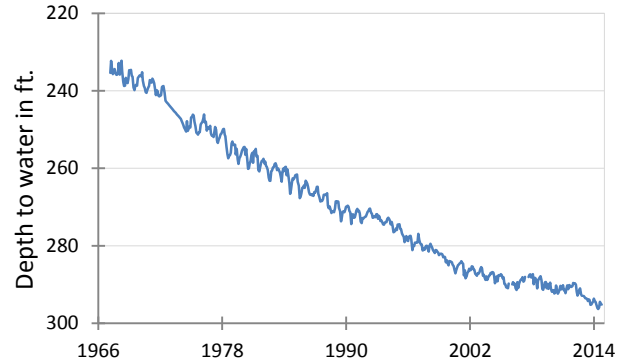
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



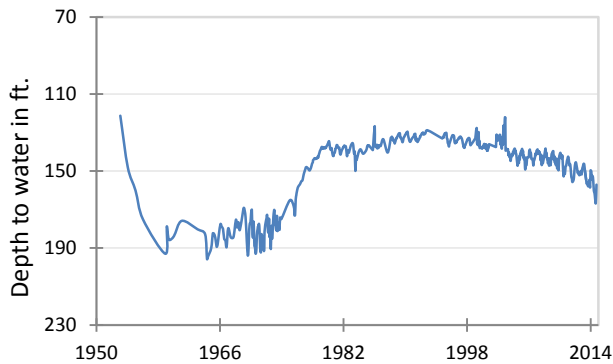
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



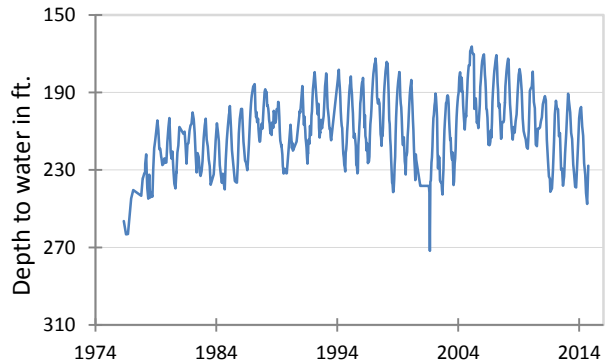
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



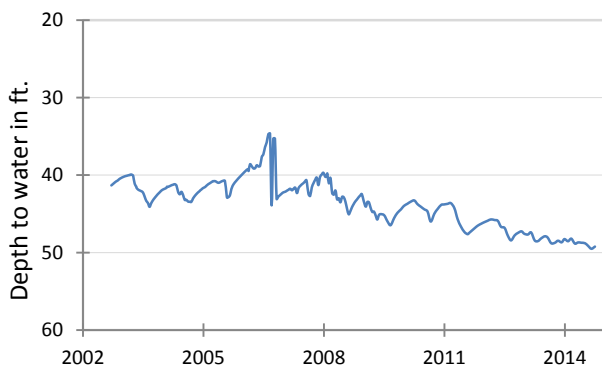
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



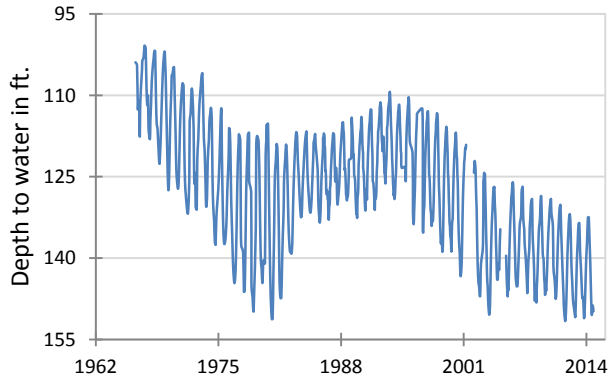
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



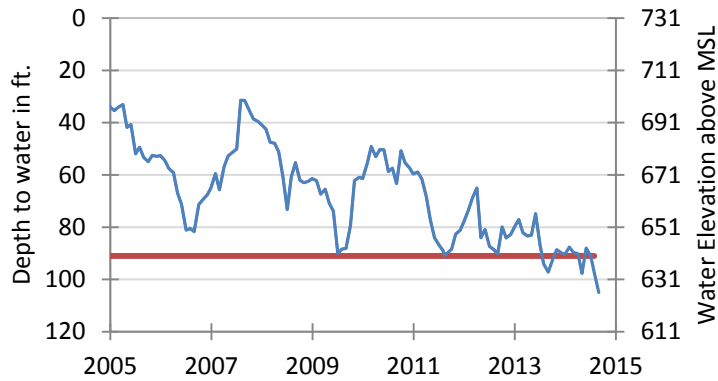
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



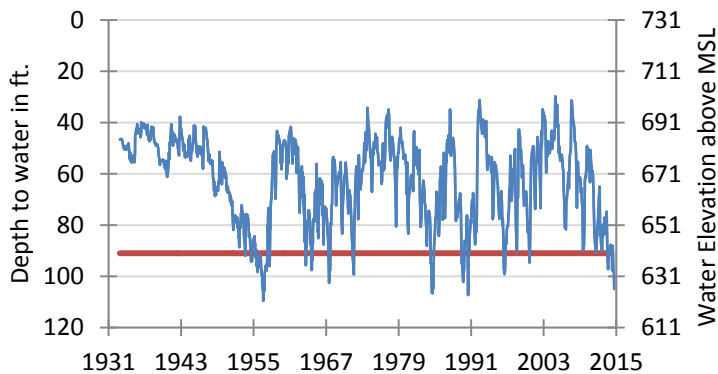
(17) State Well ID 48-07-516
Dell City, Hudspeth County
Bone Spring - Victorio Peak Aquifer



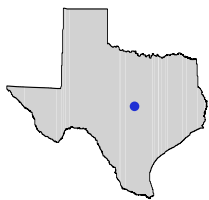
**(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (BFZ) Aquifer**



The late September water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above mean sea level, was 100.4 feet below land surface, or 630.6 feet above mean sea level. This was 4.6 feet above last month's measurement, 11.8 feet below last year's measurement, and 53.76 feet below the initial measurement recorded in 1932.



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



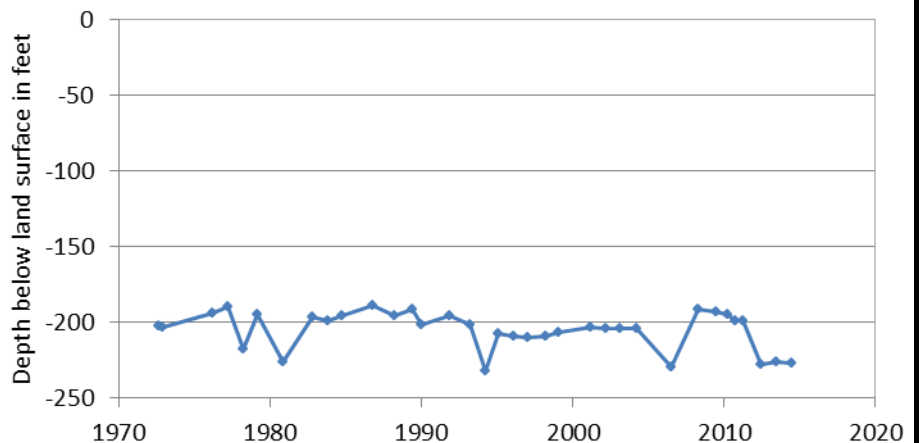
HYDROGRAPH OF THE MONTH

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

Ellenburger-San Saba Aquifer

The Ellenburger-San Saba Aquifer is a minor aquifer that underlies 4,000 square miles in parts of 15 counties in the Llano Uplift area of Central Texas. The aquifer consists of the Tanyard, Gorman, and Honeycut formations of the Ellenburger Group and the San Saba Limestone Member of the Wilberns Formation. The maximum thickness of the aquifer is approximately 2,700 feet. Water produced from the aquifer is hard, but usually has less than 1,000 milligrams per liter of total dissolved solids. Fresh to slightly saline water extends down dip to the depths of approximately 3,000 feet. The majority of the groundwater is used for municipal purposes, and the remainder for irrigation and livestock.

Well # 4149802, 1,010 feet deep
domestic, central San Saba County



This is a domestic well that is also used as a stock well. The TWDB has measured depth-to-water in it since 1972. Since the initial measurement, the water level has declined 24 feet, most recently as an apparent result of the drought.

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