

RESERVOIR STORAGE

July 2015

At the end of the month, total storage in 114* of the state’s major water supply reservoirs was at 26.6 million acre-feet**, or 85% of their total conservation storage capacity. This is 74,587 acre-feet more than a month ago and 5.5 million acre-feet more than the storage at this time last year.

Thirty-seven (37) reservoirs held 100% of conservation storage capacity, primarily in the North Central (27) and East (5) regions. Four (4) reservoirs remain below 10% full: Palo Duro (2%), Abilene (3%), E.V. Spence (8%), Twin Buttes (8%).

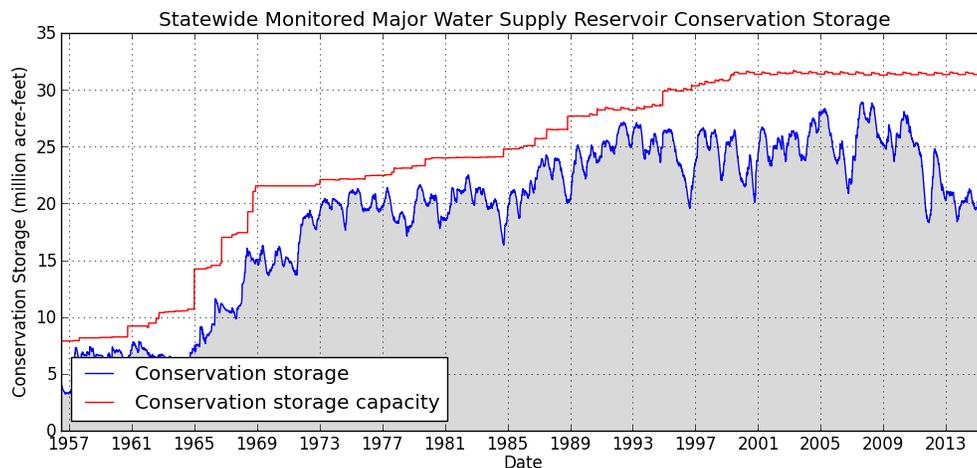
Total combined storage was greater than 70% in the East (99%), North Central (98%), Upper Coast (97%), South Central (87%) and Low Rolling (71%) regions. The regions with the lowest percentage storage were the High Plains (17%) and Edwards Plateau (49%). Storage declined in 6 regions and increased in 3 regions over the past month.

Elephant Butte reservoir held 283,474 acre-feet, or 14% of storage capacity. This is 60,597 acre-feet less than a month ago.

* Nasworthy Reservoir has been added to and Electra removed from our report beginning August 2015.

** 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 July		Change since end of June 2015		Change since end of July 2014		
		2015 (acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)	(%)	
HIGH PLAINS								
Palo Duro Reservoir	61,066	1,307	2	12	0	-419	-1	
Meredith, Lake (Texas)	500,000	84,643	17	20,161	4	64,080	13	
Meredith, Lake (Texas & Oklahoma)	779,556	84,643	11	20,161	3	64,080	8	
Mackenzie Reservoir	46,450	7,802	17	594	1	4,282	9	
White River Lake	29,880	11,460	38	918	3	10,245	34	
TOTAL	637,396	105,212	17	21,685	3	78,188	12	
LOW ROLLING PLAINS								
Greenbelt Lake	59,968	13,515	23	21	0	5,870	10	
N. Fork Buffalo Crk Reservoir	15,400	12,662	82	166	1	12,514	81	
Kemp, Lake	268,811	205,919	77	6,265	2	134,641	50	
Millers Creek Reservoir	26,768	26,768	100	0	0	24,200	90	
Alan Henry Reservoir	94,808	94,808	100	0	0	39,279	41	
Stamford, Lake	51,570	50,159	97	2,891	6	43,148	84	
J B Thomas, Lake	199,931	157,249	79	5,156	3	155,151	78	
Fort Phantom Hill, Lake	70,030	47,973	69	17,418	25	21,062	30	
Sweetwater, Lake	12,267	1,594	13	-89	-1	-409	-3	
Colorado City, Lake	30,758	9,963	32	2,338	8	2,904	9	
Champion Creek Reservoir	41,580	5,843	14	2,977	7	3,015	7	
Abilene, Lake	7,900	265	3	-1	-0	-1	-0	
Coleman, Lake	38,075	28,109	74	5,261	14	14,443	38	
Hords Creek Lake	8,443	3,501	41	-32	-0	535	6	
TOTAL	926,309	658,328	71	42,371	5	456,352	49	
NORTH CENTRAL								
Nocona, Lake (Farmers Crk)	21,444	21,444	100	0	0	13,626	64	
Hubert H Moss Lake	24,058	23,660	98	-365	-2	3,052	13	
Texoma, Lake (Texas)	1,258,113	1,258,113	100	0	0	178,996	14	
Texoma, Lake (Texas & Oklahoma)	2,525,281	1,258,113	50	0	0	178,996	7	
*Pat Mayse Lake	113,683	113,683	100	0	0	19,450	17	
Kickapoo, Lake	86,345	86,169	100	-176	-0	59,132	68	
Arrowhead, Lake	230,359	228,046	99	-2,313	-1	177,236	77	
Bonham, Lake	11,027	10,251	93	-765	-7	1,934	18	
Crook, Lake	9,195	8,510	93	-623	-7	-685	-7	
Amon G Carter, Lake	19,266	19,266	100	0	0	8,274	43	
Ray Roberts, Lake	788,167	788,167	100	0	0	170,045	22	
Jim Chapman Lake (Cooper)	260,332	256,962	99	-3,370	-1	126,068	48	
Graham, Lake	45,288	44,353	98	-935	-2	23,830	53	
*Lost Creek Reservoir	11,950	11,832	99	-113	-1	3,986	33	
Bridgeport, Lake	366,236	362,283	99	-3,953	-1	210,569	57	
Lewisville Lake	563,228	563,228	100	0	0	158,310	28	
Lavon Lake	406,388	406,388	100	0	0	202,188	50	
Hubbard Creek Reservoir	318,067	116,195	37	19,927	6	59,846	19	
Possum Kingdom Lake	523,873	523,873	100	0	0	193,272	37	
*Mineral Wells, Lake	6,760	6,760	100	0	0	3,091	46	
Weatherford, Lake	17,812	16,837	95	-975	-5	6,628	37	
Eagle Mountain Lake	179,880	179,018	100	-862	-0	54,487	30	
Worth, Lake	33,495	30,691	92	-2,804	-8	8,258	25	
Grapevine Lake	164,703	164,703	100	0	0	56,959	35	
Ray Hubbard, Lake	452,040	451,004	100	-1,036	-0	151,660	34	
New Terrell City Lake	8,583	8,583	100	0	0	1,101	13	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of July 2015 (acre-feet)	(%)	Change since end of June 2015 (acre-feet)	(%)	Change since end of July 2014 (acre-feet)	(%)
(North Central Continue)							
Palo Pinto, Lake	26,766	26,115	98	-280	-1	21,100	79
Benbrook Lake	85,648	85,648	100	0	0	16,363	19
Arlington, Lake	40,188	38,165	95	-1,486	-4	5,450	14
Joe Pool Lake	175,358	175,358	100	0	0	6,568	4
*Cisco, Lake	25,895	19,054	74	2,559	10	6,051	23
Leon, Lake	26,476	26,209	99	-233	-1	7,693	29
Granbury, Lake	125,756	125,756	100	76	0	33,873	27
Pat Cleburne, Lake	26,008	24,658	95	-1,350	-5	4,768	18
Waxahachie, Lake	10,780	10,091	94	-689	-6	698	6
Bardwell Lake	46,122	46,122	100	0	0	2,144	5
Proctor Lake	55,457	55,457	100	0	0	35,202	63
Whitney, Lake	553,344	553,344	100	0	0	151,221	27
Aquila Lake	44,460	43,697	98	-763	-2	-763	-2
Navarro Mills Lake	49,827	49,827	100	0	0	1,496	3
*Halbert, Lake	6,033	5,133	85	-267	-4	856	14
Richland-Chambers Reservoir	1,087,839	1,087,839	100	0	0	300,073	28
*Brownwood, Lake	128,839	127,362	99	1,152	1	62,221	48
Waco, Lake	189,418	187,479	99	-2,088	-1	1,767	1
Limestone, Lake	208,014	197,145	95	-10,869	-5	-7,056	-3
Belton Lake	435,225	435,225	100	0	0	98,479	23
Stillhouse Hollow Lake	227,771	227,771	100	0	0	55,872	25
Georgetown, Lake	36,823	35,930	98	-893	-2	15,259	41
Granger Lake	50,779	50,779	100	0	0	0	0
Tawakoni, Lake	871,685	867,251	99	-4,434	-1	310,649	36
Mountain Creek, Lake	22,850	22,850	100	0	0	0	0
Squaw Creek, Lake	151,250	151,250	100	0	0	1,733	1
TOTAL	10,628,903	10,375,534	98	-17,928	-0	3,023,030	28
EAST							
Wright Patman Lake	231,496	231,496	100	0	0	0	0
*Sulphur Springs, Lake	17,747	16,781	95	-966	-5	-528	-3
Cypress Springs, Lake	66,756	64,925	97	-1,831	-3	-1,831	-3
Bob Sandlin, Lake	190,822	187,550	98	-3,272	-2	6,022	3
Caddo, Lake	29,898	29,898	100	0	0	2,074	7
Martin, Lake	75,116	71,058	95	-4,058	-5	-2,879	-4
Monticello, Lake	34,740	34,353	99	-387	-1	1,746	5
Fork Reservoir, Lake	605,061	595,848	98	-9,213	-2	85,738	14
O the Pines, Lake	268,566	268,566	100	0	0	6,297	2
Cedar Creek Reservoir in Trinity	644,686	625,904	97	-18,782	-3	98,667	15
Athens, Lake	29,503	28,663	97	-772	-3	-200	-1
Palestine, Lake	373,199	362,708	97	-10,491	-3	-5,451	-1
Tyler, Lake	73,161	70,397	96	-2,764	-4	-1,351	-2
Murvault, Lake	38,285	36,381	95	-1,904	-5	-1,698	-4
Jacksonville, Lake	25,670	25,071	98	-599	-2	-552	-2
Nacogdoches, Lake	39,522	37,468	95	-1,857	-5	-1,015	-3
Houston County Lake	17,113	16,536	97	-577	-3	-538	-3
Sam Rayburn Reservoir	2,857,077	2,857,077	100	0	0	0	0
Toledo Bend Reservoir (Texas)	2,236,450	2,185,115	97	-57,289	-3	-11,277	-1
Toledo Bend Reservoir (TX & LA)	4,472,900	2,185,115	49	-57,289	-1	-11,277	-0
*Livingston, Lake	1,785,348	1,785,348	100	0	0	0	0
B A Steinhagen Lake	66,961	58,079	87	3,342	5	-2,488	-4
Conroe, Lake	416,177	404,966	97	-11,211	-3	-11,211	-3
TOTAL	10,123,356	9,994,188	99	-122,631	-1	159,525	2

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of July 2015 (acre-feet)	(%)	Change since end of June 2015 (acre-feet)	(%)	Change since end of July 2014 (acre-feet)	(%)
TRANS-PECOS							
**Red Bluff Reservoir	151,110	105,658	70	-7,410	-5	28,070	19
TOTAL	151,110	105,658	70	-7,410	-5	28,070	19
EDWARDS PLATEAU							
Oak Creek Reservoir	39,210	11,513	29	855	2	4,284	11
E V Spence Reservoir	517,272	41,574	8	11,207	2	32,082	6
O C Fisher Lake	115,742	14,279	12	-229	-0	12,457	11
*O H Ivie Reservoir	554,340	91,754	17	10,414	2	-10,389	-2
Twin Buttes Reservoir	182,454	15,140	8	2,405	1	3,020	2
Nasworthy	9,615	7,781	81	-725	-8	288	3
Brady Creek Reservoir	28,808	10,377	36	2,039	7	1,398	5
Buchanan, Lake	816,904	603,252	74	160,938	20	271,848	33
Inks, Lake	13,962	13,005	93	30	0	53	0
Lyndon B Johnson, Lake	115,249	110,697	96	-489	-0	184	0
*Amistad Reservoir (Texas)	1,840,849	1,176,435	64	-482	-0	187,646	10
*Amistad Reservoir (TX & Mexico)	3,275,532	1,176,435	36	-482	-0	187,646	6
TOTAL	4,234,405	2,095,807	49	185,963	4	502,871	12
SOUTH CENTRAL							
Travis, Lake	1,113,348	924,082	83	-14,070	-1	525,002	47
*Austin, Lake	23,972	22,834	95	-745	-3	92	0
Somerville Lake	147,104	147,104	100	0	0	217	0
Canyon Lake	378,781	378,781	100	0	0	71,318	19
Medina Lake	254,823	192,094	75	7,589	3	180,973	71
*Coletto Creek Reservoir	31,040	30,430	98	-610	-2	4,314	14
TOTAL	1,949,068	1,695,325	87	-7,836	-0	781,916	40
UPPER COAST							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	151,578	95	-7,528	-5	717	0
TOTAL	280,252	272,264	97	-7,528	-3	717	0
SOUTHERN							
Choke Canyon Reservoir	695,262	268,781	39	-13,473	-2	65,980	9
Corpus Christi, Lake	256,961	247,520	96	-9,441	-4	92,028	36
*Falcon Reservoir (Texas)	1,551,007	766,091	49	10,815	1	351,677	23
*Falcon Reservoir (TX & Mexico)	2,646,817	766,091	29	10,815	0	351,677	13
TOTAL	2,503,230	1,282,392	51	-12,099	-0	509,685	20
STATE TOTAL	31,434,029	26,584,708	85	74,587	0	5,540,354	18
* Conservation volume is used as conservation storage capacity because the dead storage is unknown.							
** Nov 11/27 2013 – 12/02 2014 data were not available. End of Nov 2013 storage was estimated.							
Elephant Butte Reservoir	1,973,358	283,474	14	-60,597	-3	148,807	8

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.

JULY RESERVOIR CONDITIONS

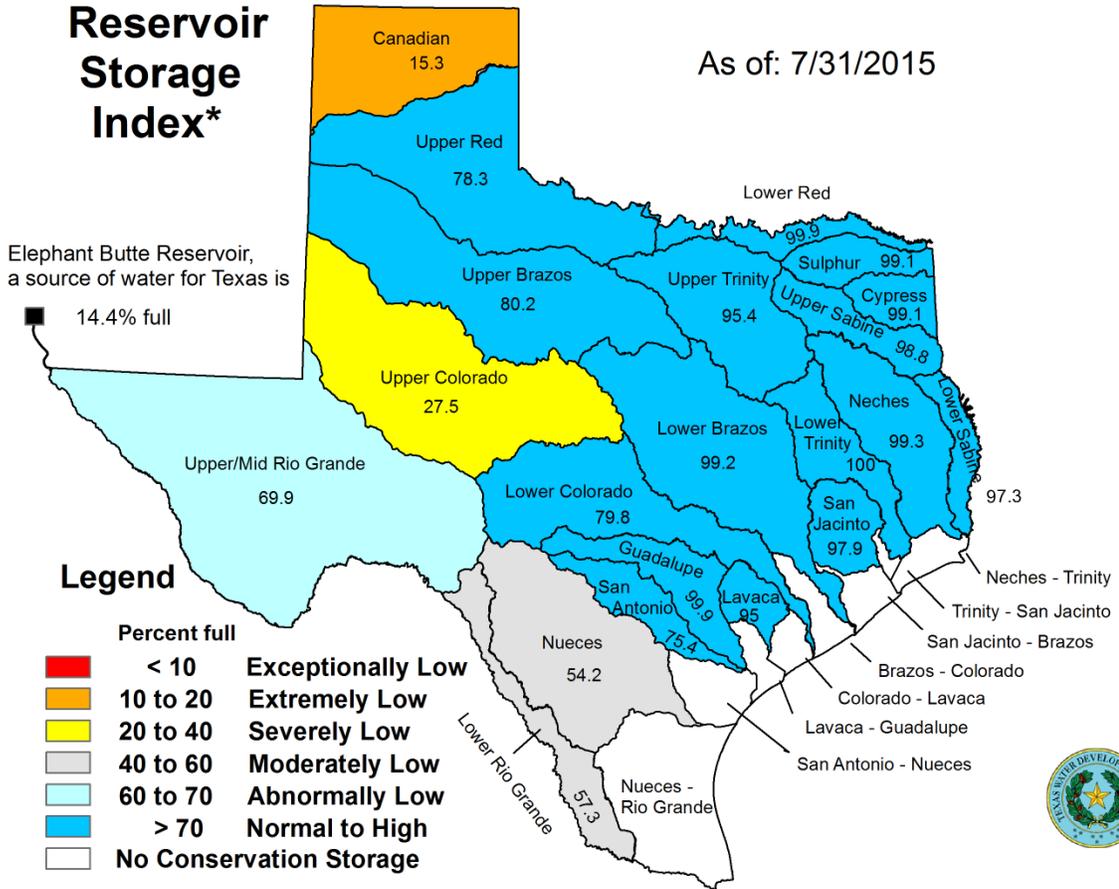
As of: 7/31/2015

Reservoir Storage Index*

Elephant Butte Reservoir, a source of water for Texas is 14.4% full

Legend

Percent full	Category
< 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	



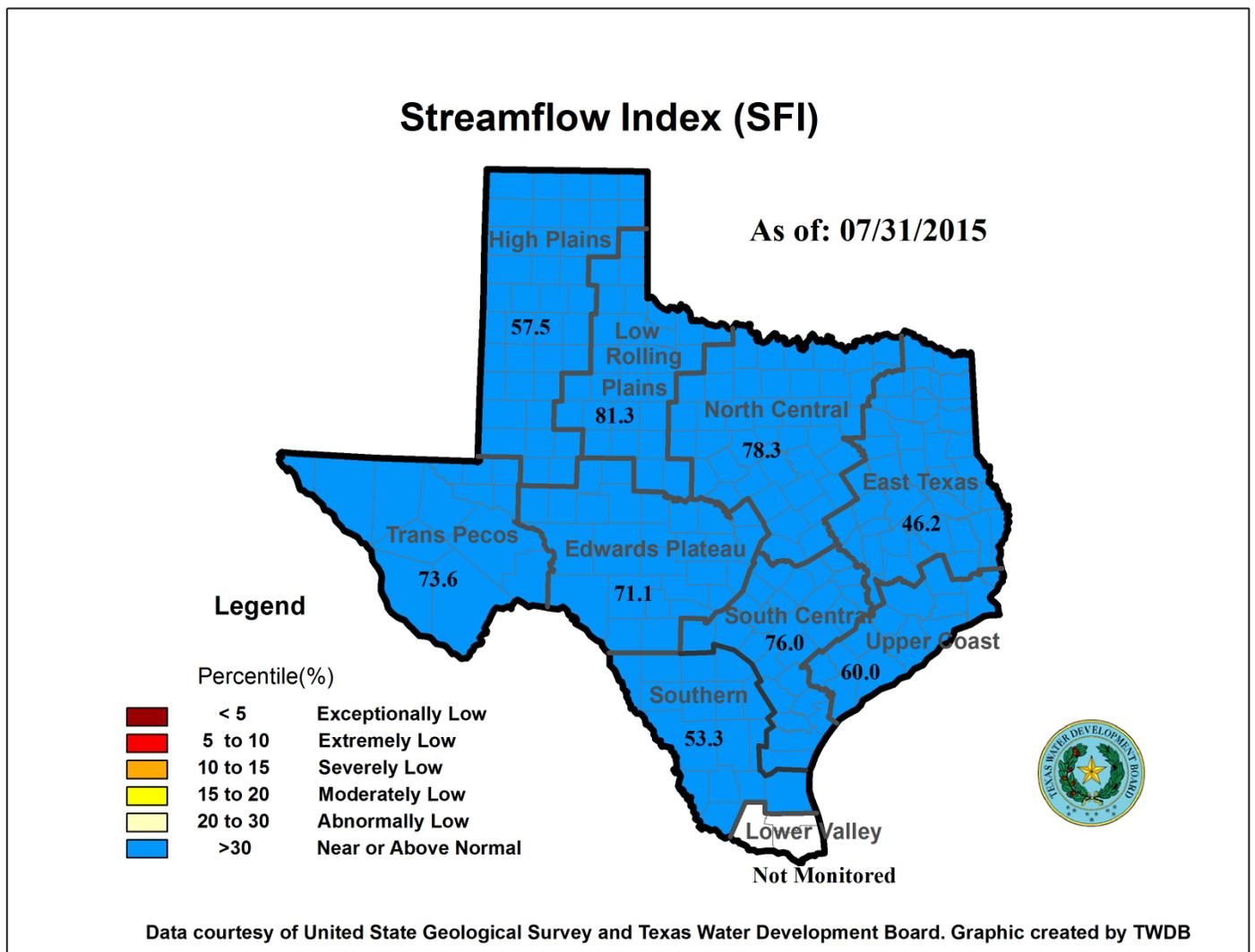
*Percent of combined conservation storage capacity of 114 major water supply reservoirs by sub-basin (dead pools are excluded)

JULY STREAMFLOW CONDITIONS

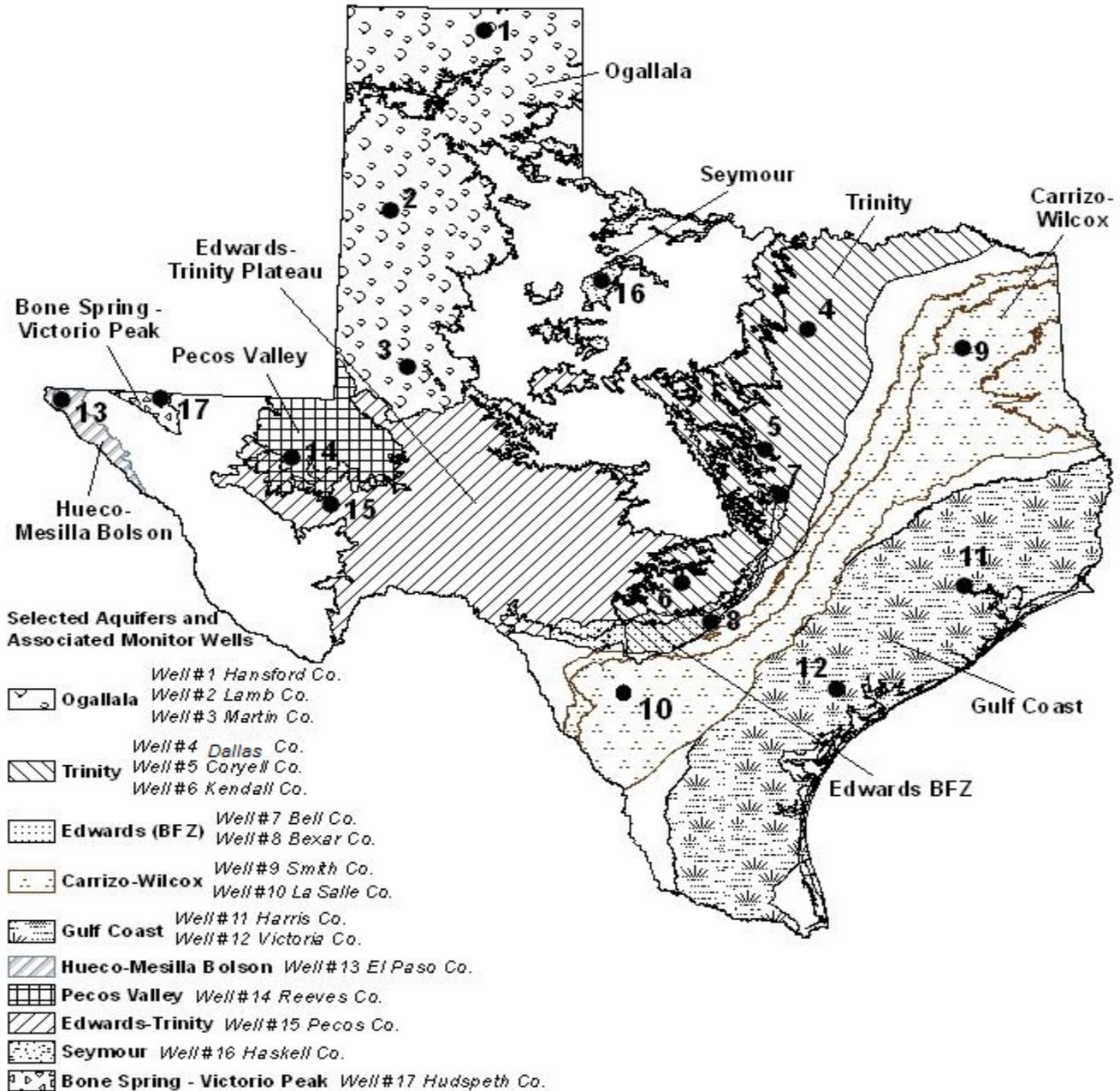
The computed 30-day mean flow status for 29 reporting index stations monitored this month is presented below:

Flow Status	Number of Stations
Normal to High (>30%)	27
Abnormally Low (20-30%)	0
Moderately Low (15-20%)	1
Severely Low (10-15%)	1
Extremely Low (5-10%)	0
Exceptionally Low (<5%)	0

On a regional basis, flows in this month at index stations were near or above normal in all regions. Streamflow in the Lower Valley region is not monitored.



JULY 2015 GROUNDWATER LEVELS IN OBSERVATION WELLS



July, 2015

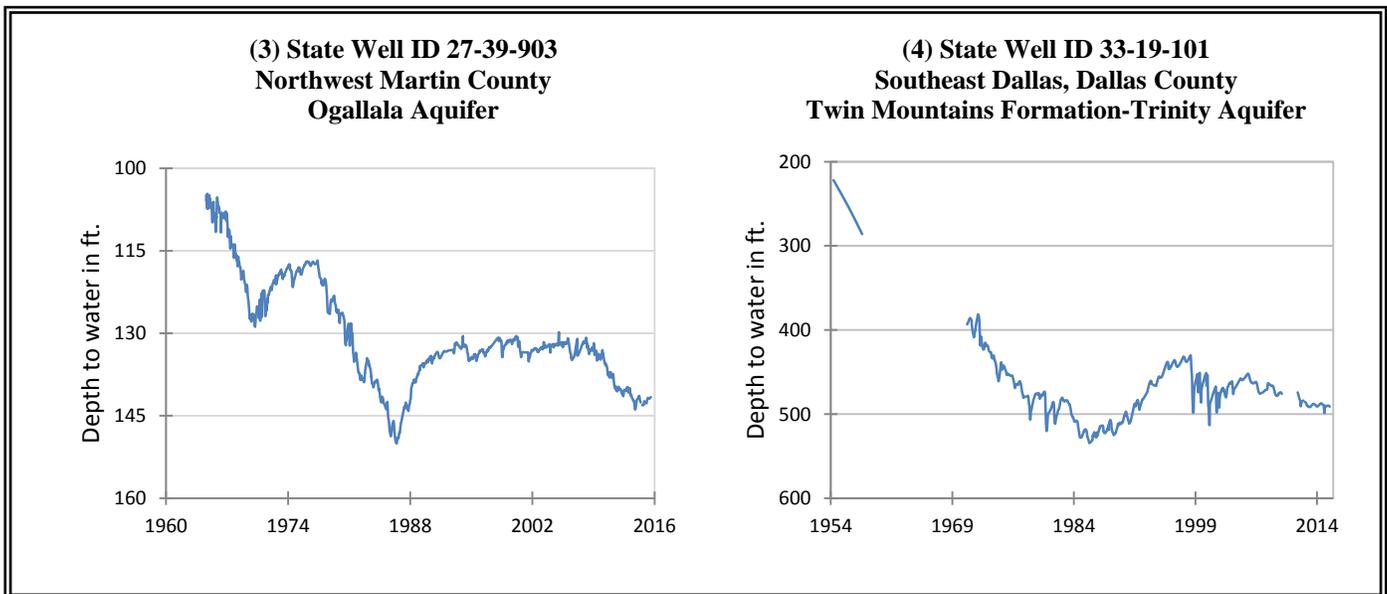
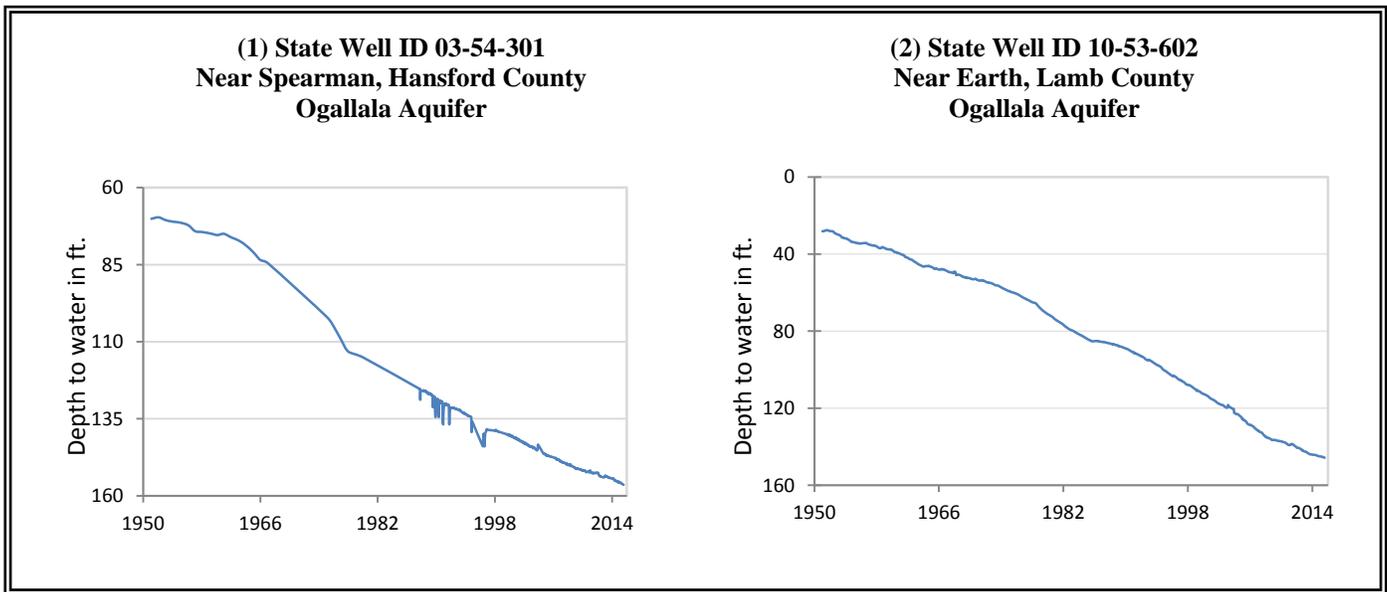
Water level measurements were available for all of the seventeen key monitoring wells in the state. Water levels rose in four of the monitoring wells since the beginning of July, ranging from 0.01 feet in the Harris County Gulf Coast Aquifer well to 11.41 feet in the LaSalle County Carrizo-Wilcox Aquifer well. Water levels declined in thirteen monitoring wells, ranging from 0.06 feet in the Lamb County Ogallala Aquifer well to 14.51 feet in the Bexar County Edwards Aquifer well. The J-17 well in San Antonio recorded a water level of 75.21 feet below land surface or 655.79 feet above mean sea level. Stage I restrictions are currently in place for the San Antonio portion of the Edwards BFZ, with water levels at 4.21 feet below Stage I critical management levels, in that segment of the Edwards Aquifer.

*IDs used in this publication on the aquifer map to indicate the monitoring well location (IDs 1 - 17) are different than the TWDB's six- or seven-digit state well "identification" number.

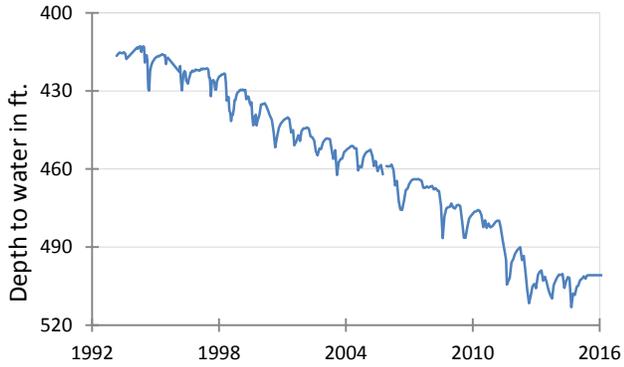
Monitoring Well	July	June	month change	year change	historical change	first measured
(1) Hansford 0354301	156.42	156.34	-0.08	-1.09	-86.3	1951
(2) Lamb 1053602	145.7	145.64	-0.06	-1.13	-117.55	1951
(3) Martin 2739903	141.61	141.73	0.12	1.65	-36.72	1964
(4) Dallas 3319101	491.10	490.43	-0.67	-3.81	-269.10	1954
(5) Coryell 4035404	505.79	500.85	-4.94	-4	-213.79	1955
(6) Kendall 6802609	118.21	108.3	-9.91	35.85	-58.21	1975
(7) Bell 5804816	120.32	120.05	-0.27	7.31	2.81	2008
(8) Bexar 6837203	75.21	60.7	-14.51	21.8	-32.58	1932
(9) Smith 3430907	435.34	433.06	-2.28	3.77	-69.34	1987
(10) La Salle 7738103	471.55	482.96	11.41	31.47	-218.48	2003
(11) Harris 6514409	185.50	185.51	0.01	8.47	-33.3*	1956
(12) Victoria 8017502	35.73	35.53	-0.2	1.22	-1.73	1958
(13) El Paso 4913301	294.81	295.58	0.77	-0.3	-62.91	1964
(14) Reeves 4644501	163.58	161.83	-1.75	0.83	-71.49	1952
(15) Pecos 5216802	214.93	212.1	-2.83	27.01	31.95	1976
(16) Haskell 2135748	48.68	48.37	-0.31	0.44	-5.68	2002
(17) Hudspeth 4807516	148.35	147.82	-0.53	0.35	-44.43	1966

*change since the original measurement of 135.5 feet below land surface in 1947 (measurement not shown on the hydrograph)

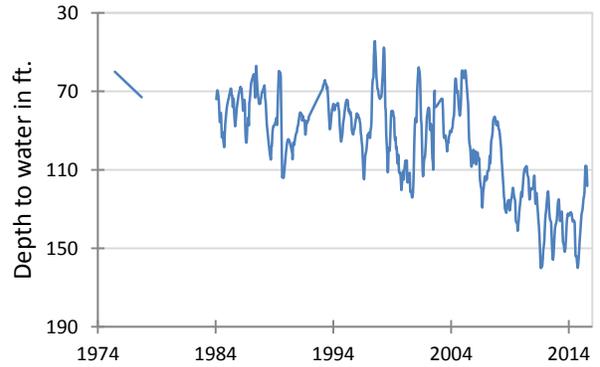
JULY GROUNDWATER LEVELS IN OBSERVATION WELLS



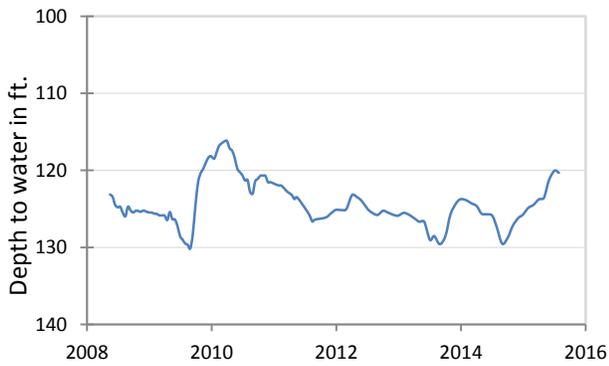
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



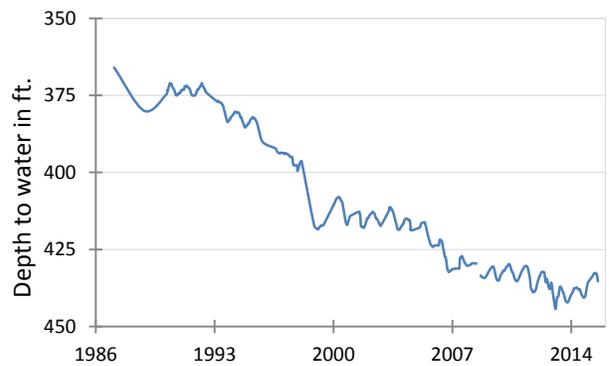
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



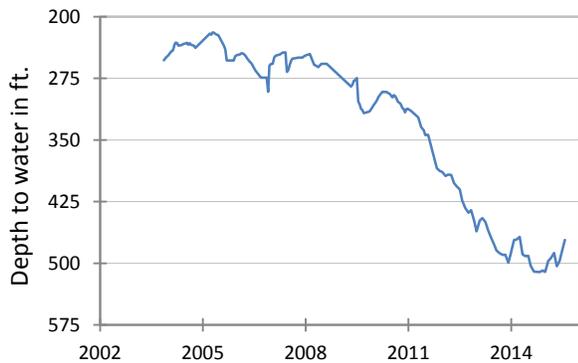
**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer**



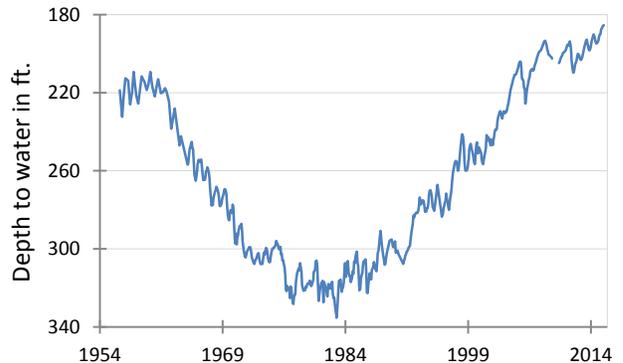
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



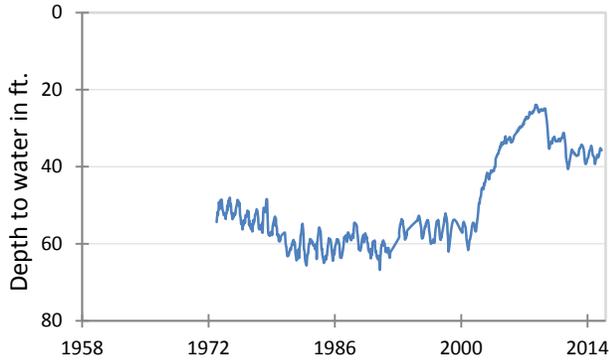
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



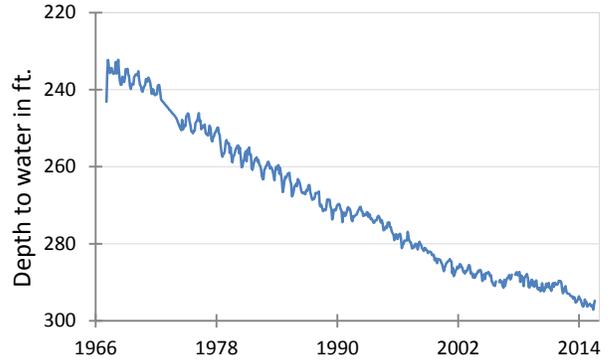
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



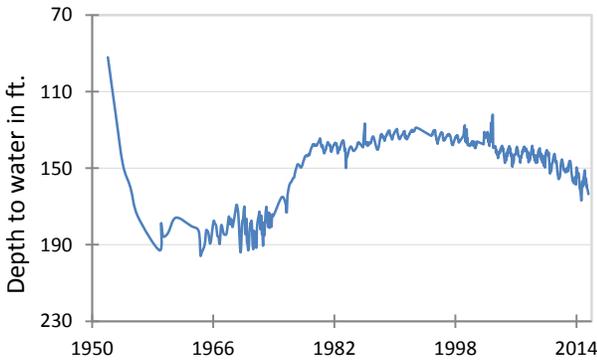
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



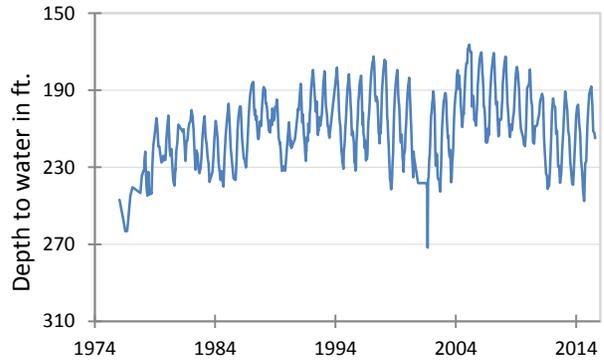
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



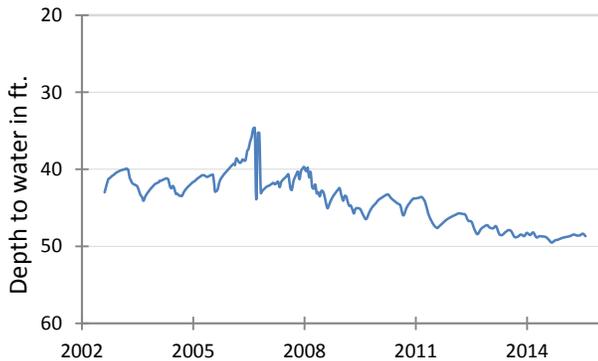
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



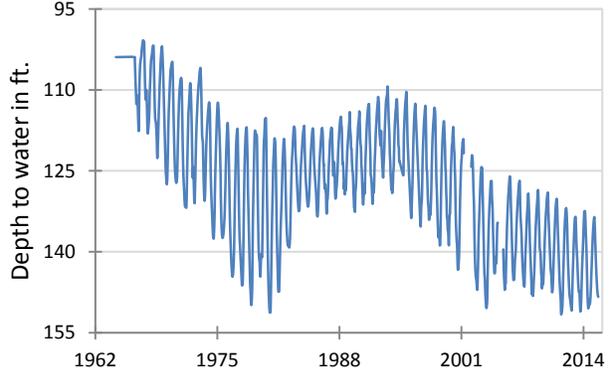
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



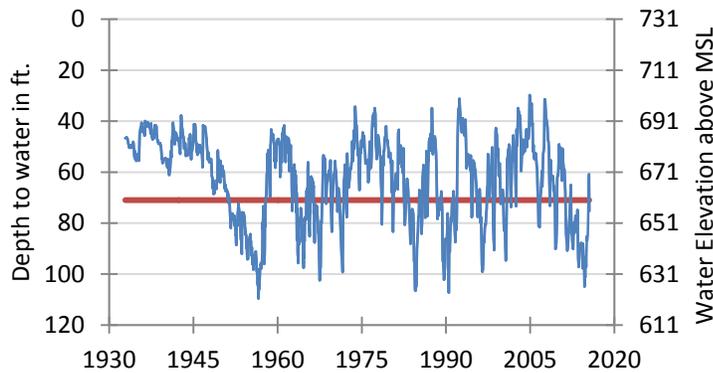
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



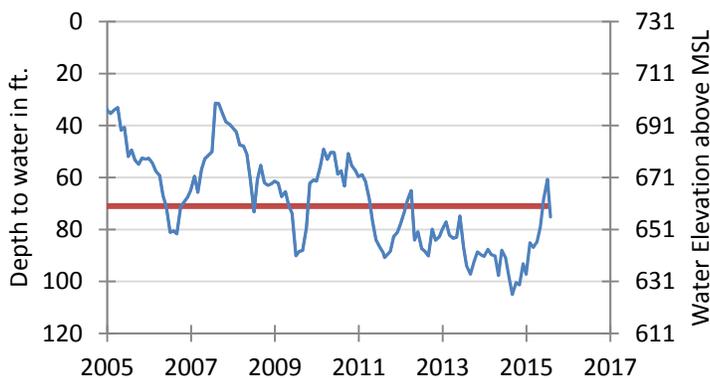
(17) State Well ID 48-07-516
Dell City, Hudspeth County
Bone Spring - Victorio Peak Aquifer



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



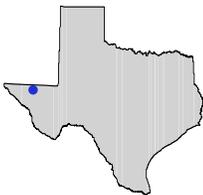
The late July water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above mean sea level, was 75.21 feet below land surface, or 655.79 feet above mean sea level. This was 14.51 feet below last month's measurement, 21.8 feet above last year's measurement, and 32.58 feet below the initial measurement recorded in 1932.



***** Water levels below the red line, at 660 feet above mean sea level, indicate Edwards Aquifer Authority Stage I drought restrictions. *****

HYDROGRAPH OF THE MONTH

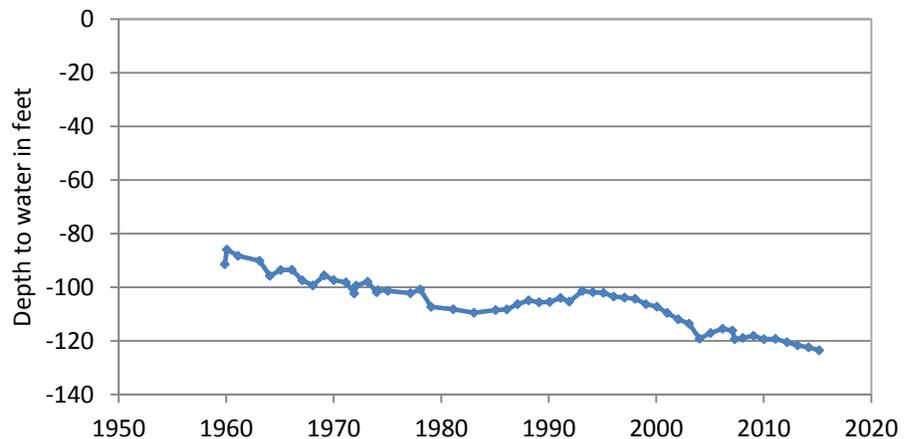
Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.



Capitan Reef Complex Aquifer

The Capitan Reef Complex Aquifer is a minor aquifer located in Culberson, Hudspeth, Jeff Davis, Brewster, Pecos, Reeves, Ward, and Winkler counties. The aquifer is exposed in mountain ranges of Far West Texas; elsewhere it occurs in the subsurface. It is composed of as much as 2,360 feet of cavernous dolomite and limestone. The aquifer contains water of marginal quality, yielding small to large quantities of slightly saline to saline groundwater containing 1,000 to greater than 5,000 milligrams per liter of total dissolved solids. Most of the groundwater pumped from the aquifer is used for oil reservoir flooding in Ward and Winkler counties, while a small amount is used to irrigate salt-tolerant crops in Pecos, Culberson, and Hudspeth counties. Over the past 70 years, water levels have declined as a result of localized production.

Well # 4717206, 750 feet deep
unused, northwest Hudspeth County



The initial measurement in this unused well of 91.42 feet below land surface was reported in 1959 by the USGS. TWDB has measured the water level yearly since 1975. The period of record reveals a gradual decline with the lowest water level of 123.5 feet below land surface measured most recently in February of 2015.

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