

## RESERVOIR STORAGE

*May 2015*

At the end of the month, total storage in 114 of the state's major water supply reservoirs was at 26.2 million acre-feet\*, or 83% of their total conservation storage capacity. This is 2.96 million acre-feet more than a month ago and 5.2 million acre-feet more than the storage at this time last year.

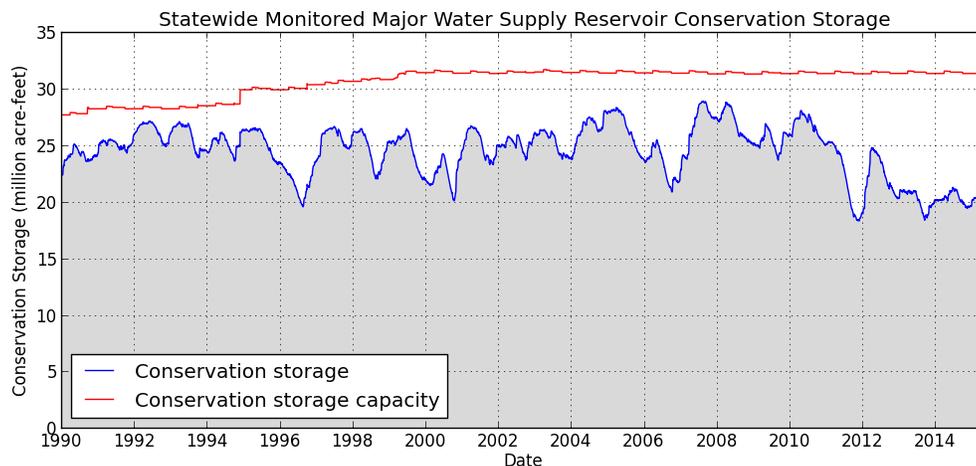
Seventy-three (73) reservoirs held 100% of conservation storage capacity. Of them, 2 in the Upper Coast region, 45 of 52 in the North Central region, and 21 of 23 in the East region. Seven (7) reservoirs remain below 10% full: Electra (0%), Abilene (3%), Palo Duro (3%), E.V. Spence (5%), Twin Buttes (6%), Meredith (6%), and Champion Creek (6%).

Total combined storage was greater than 70% in the Upper Coast (100%), East (100%), North Central (97%), South Central (79%), and Trans-Pecos (78%) regions. The regions with the lowest percentage storage were the High Plains (11%), Edwards Plateau (43%), and Southern (48%). Storage declined in 1 region and increased in 7 regions over the past month.

Elephant Butte reservoir held 399,965 acre-feet, or 20% of storage capacity. This is 7,107 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 May		Change since end of Apr 2015		Change since end of May 2014		
		2015 (acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)	(%)	
<b>HIGH PLAINS</b>								
Palo Duro Reservoir	61,066	1,528	3	764	1	-263	-0	
Meredith, Lake (Texas)	500,000	50,153	10	22,145	4	50,153	10	
Meredith, Lake (Texas & Oklahoma)	779,556	50,153	6	22,145	3	50,153	6	
MacKenzie Reservoir	46,450	6,108	13	2,752	6	3,871	8	
White River Lake	29,880	10,479	35	9,429	32	10,311	35	
<b>TOTAL</b>	<b>637,396</b>	<b>68,268</b>	<b>11</b>	<b>35,090</b>	<b>6</b>	<b>64,072</b>	<b>10</b>	
<b>LOW ROLLING PLAINS</b>								
Greenbelt Lake	59,968	13,344	22	5,694	9	5,388	9	
*Electra, Lake	5,626	no data						
N. Fork Buffalo Crk Reservoir	15,400	14,415	94	13,797	90	14,415	94	
Kemp, Lake	268,811	158,870	59	87,127	32	96,032	36	
Millers Creek Reservoir	26,768	26,768	100	24,635	92	23,673	88	
Alan Henry Reservoir	94,808	94,808	100	24,820	26	37,903	40	
Stamford, Lake	51,570	34,757	67	26,230	51	28,957	56	
J B Thomas, Lake	199,931	151,849	76	63,688	32	149,700	75	
Fort Phantom Hill, Lake	70,030	28,978	41	4,459	6	1,234	2	
Sweetwater, Lake	12,267	1,692	14	100	1	-513	-4	
Colorado City, Lake	30,758	7,600	25	625	2	52	0	
Champion Creek Reservoir	41,580	2,512	6	169	0	-467	-1	
Abilene, Lake	7,900	267	3	1	0	1	0	
Coleman, Lake	38,075	22,574	59	9,469	25	8,634	23	
Hords Creek Lake	8,443	3,627	43	178	2	927	11	
<b>TOTAL</b>	<b>926,309</b>	<b>562,061</b>	<b>61</b>	<b>260,992</b>	<b>28</b>	<b>365,936</b>	<b>40</b>	
<b>NORTH CENTRAL</b>								
Nocona, Lake (Farmers Crk)	21,444	21,444	100	12,685	59	13,303	62	
Hubert H Moss Lake	24,058	24,058	100	0	0	3,687	15	
Texoma, Lake (Texas)	1,258,113	1,258,113	100	0	0	270,530	22	
Texoma, Lake (Texas & Oklahoma)	2,525,281	1,258,113	50	0	0	270,530	11	
*Pat Mayse Lake	113,683	113,683	100	0	0	18,110	16	
Kickapoo, Lake	86,345	86,345	100	62,146	72	62,042	72	
Arrowhead, Lake	230,359	230,359	100	183,437	80	178,453	77	
Bonham, Lake	11,027	11,027	100	0	0	2,459	22	
Crook, Lake	9,195	9,195	100	0	0	136	1	
Amon G Carter, Lake	19,266	19,266	100	7,758	40	11,009	57	
Ray Roberts, Lake	788,167	788,167	100	13,539	2	220,009	28	
Jim Chapman Lake (Cooper)	260,332	260,332	100	0	0	113,963	44	
Graham, Lake	45,288	45,288	100	27,953	62	24,626	54	
*Lost Creek Reservoir	11,950	11,950	100	4,193	35	3,889	33	
Bridgeport, Lake	366,236	366,236	100	223,976	61	214,301	59	
Lewisville Lake	563,228	563,228	100	0	0	188,930	34	
Lavon Lake	406,388	406,388	100	0	0	197,203	49	
Hubbard Creek Reservoir	318,067	94,382	30	56,283	18	31,366	10	
Possum Kingdom Lake	540,340	516,223	96	161,006	30	188,395	35	
*Mineral Wells, Lake	6,760	6,760	100	0	0	2,975	44	
Weatherford, Lake	17,812	17,812	100	5,091	29	6,813	38	
Eagle Mountain Lake	179,880	179,880	100	45,472	25	60,984	34	
Worth, Lake	33,495	33,495	100	8,066	24	10,918	33	
Grapevine Lake	164,703	164,703	100	11,866	7	61,770	38	
Ray Hubbard, Lake	452,040	452,040	100	62,428	14	137,848	30	
New Terrell City Lake	8,583	8,583	100	0	0	814	9	

**CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS**

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of May 2015 (acre-feet)	(%)	Change since end of Apr 2015 (acre-feet)	(%)	Change since end of May 2014 (acre-feet)	(%)
<b>(North Central Continue)</b>							
Palo Pinto, Lake	26,827	26,827	100	18,911	70	20,611	77
Benbrook Lake	85,648	85,648	100	13,217	15	15,915	19
Arlington, Lake	40,188	40,188	100	365	1	671	2
Joe Pool Lake	175,358	175,358	100	0	0	2,731	2
*Cisco, Lake	25,895	16,688	64	5,013	19	3,047	12
Leon, Lake	26,476	26,476	100	10,035	38	6,584	25
Granbury, Lake	128,046	121,314	95	3,184	2	55,924	44
Pat Cleburne, Lake	26,008	26,008	100	0	0	9,964	38
Waxahachie, Lake	10,780	10,780	100	0	0	357	3
Bardwell Lake	46,122	46,122	100	0	0	2,727	6
Proctor Lake	55,457	55,457	100	37,592	68	32,097	58
Whitney, Lake	553,344	553,344	100	125,576	23	214,142	39
Aquilla Lake	44,460	44,460	100	0	0	6,684	15
Navarro Mills Lake	49,827	49,827	100	0	0	0	0
*Halbert, Lake	6,033	5,668	94	17	0	834	14
Richland-Chambers Reservoir	1,087,839	1,087,839	100	162,516	15	286,813	26
*Brownwood, Lake	128,839	121,845	95	56,062	44	51,082	40
Waco, Lake	189,567	189,567	100	0	0	12,403	7
Limestone, Lake	208,014	208,014	100	0	0	0	0
Belton Lake	435,225	435,225	100	121,348	28	102,425	24
Stillhouse Hollow Lake	227,771	227,771	100	73,311	32	53,314	23
Georgetown, Lake	36,823	36,823	100	13,376	36	16,197	44
Granger Lake	50,779	50,779	100	0	0	0	0
Tawakoni, Lake	871,685	871,685	100	134,036	15	272,800	31
Mountain Creek, Lake	22,850	22,850	100	0	0	0	0
Squaw Creek, Lake	151,250	151,250	100	0	0	158	0
<b>TOTAL</b>	<b>10,647,870</b>	<b>10,376,770</b>	<b>97</b>	<b>1,660,458</b>	<b>16</b>	<b>3,192,013</b>	<b>30</b>
<b>EAST</b>							
Wright Patman Lake	310,382	310,382	100	0	0	0	0
*Sulphur Springs, Lake	17,747	17,747	100	0	0	0	0
Cypress Springs, Lake	66,756	66,756	100	0	0	0	0
Bob Sandlin, Lake	190,822	190,822	100	0	0	6,509	3
Caddo, Lake	29,898	29,898	100	0	0	0	0
Martin, Lake	75,116	75,116	100	284	0	0	0
Monticello, Lake	34,740	34,740	100	102	0	0	0
Fork Reservoir, Lake	605,061	605,061	100	5,021	1	77,485	13
O the Pines, Lake	268,566	268,566	100	27,203	10	0	0
Cedar Creek Reservoir in Trinity	644,686	644,686	100	0	0	99,219	15
Athens, Lake	29,435	29,435	100	0	0	0	0
Palestine, Lake	373,199	373,199	100	0	0	0	0
Tyler, Lake	73,161	73,161	100	0	0	0	0
Murvaul, Lake	38,285	38,285	100	0	0	0	0
Jacksonville, Lake	25,670	25,670	100	0	0	0	0
Nacogdoches, Lake	39,522	39,522	100	0	0	0	0
Houston County Lake	17,113	17,113	100	0	0	0	0
Sam Rayburn Reservoir	2,857,077	2,857,077	100	0	0	59,460	2
Toledo Bend Reservoir (Texas)	2,245,752	2,245,752	100	0	0	75,408	3
Toledo Bend Reservoir (TX & LA)	4,472,900	2,245,752	50	0	0	75,408	2
*Livingston, Lake	1,785,348	1,785,348	100	0	0	0	0
B A Steinhagen Lake	66,961	65,909	98	8,216	12	4,129	6
Conroe, Lake	416,177	416,177	100	0	0	0	0
<b>TOTAL</b>	<b>10,211,474</b>	<b>10,210,422</b>	<b>100</b>	<b>40,826</b>	<b>0</b>	<b>322,210</b>	<b>3</b>

**CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS**

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of May 2015 (acre-feet)	(%)	Change since end of Apr 2015 (acre-feet)	(%)	Change since end of May 2014 (acre-feet)	(%)
<b>TRANS-PECOS</b>							
**Red Bluff Reservoir	151,110	118,327	78	-3,247	-2	36,927	24
<b>TOTAL</b>	151,110	118,327	78	-3,247	-2	36,927	24
<b>EDWARDS PLATEAU</b>							
Oak Creek Reservoir	39,210	8,083	21	2,235	6	58	0
E V Spence Reservoir	517,272	25,122	5	9,955	2	13,910	3
O C Fisher Lake	115,742	15,368	13	14,704	13	12,817	11
*O H Ivie Reservoir	554,340	82,126	15	9,856	2	-31,962	-6
Twin Buttes Reservoir	182,454	10,933	6	4,951	3	-1,664	-1
Brady Creek Reservoir	28,808	8,566	30	1,164	4	-853	-3
Buchanan, Lake	816,904	400,246	49	83,366	10	63,884	8
Inks, Lake	13,962	12,892	92	-174	-1	-15	-0
Lyndon B Johnson, Lake	115,056	110,269	96	-488	-0	-366	-0
*Amistad Reservoir (Texas)	1,840,849	1,163,446	63	9,981	1	256,200	14
*Amistad Reservoir (TX & Mexico)	3,275,532	1,163,446	36	9,981	0	256,200	8
<b>TOTAL</b>	4,224,597	1,837,051	43	135,550	3	312,009	7
<b>SOUTH CENTRAL</b>							
Travis, Lake	1,113,348	846,116	76	432,589	39	435,867	39
*Austin, Lake	23,972	23,143	97	417	2	31	0
Somerville Lake	147,104	147,104	100	0	0	0	0
Canyon Lake	378,781	378,781	100	76,230	20	62,868	17
Medina Lake	254,823	122,891	48	112,218	44	111,020	44
*Coleto Creek Reservoir	31,040	31,040	100	0	0	1,337	4
<b>TOTAL</b>	1,949,068	1,549,075	79	621,454	32	611,123	31
<b>UPPER COAST</b>							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	159,106	100	0	0	-460	-0
<b>TOTAL</b>	280,252	279,792	100	0	0	-460	-0
<b>SOUTHERN</b>							
Choke Canyon Reservoir	695,262	243,402	35	61,437	9	25,252	4
Corpus Christi, Lake	256,961	247,700	96	55,687	22	38,135	15
*Falcon Reservoir (Texas)	1,551,007	707,100	46	88,317	6	235,742	15
*Falcon Reservoir (TX & Mexico)	2,646,817	707,100	27	88,317	3	235,742	9
<b>TOTAL</b>	2,503,230	1,198,202	48	205,441	8	299,129	12
<b>STATE TOTAL</b>	31,531,306	26,199,968	83	2,956,564	9	5,202,959	17
* 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	399,965	20	7,107	0	34,963	2

**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.

# MAY RESERVOIR CONDITIONS

As of: 5/31/2015

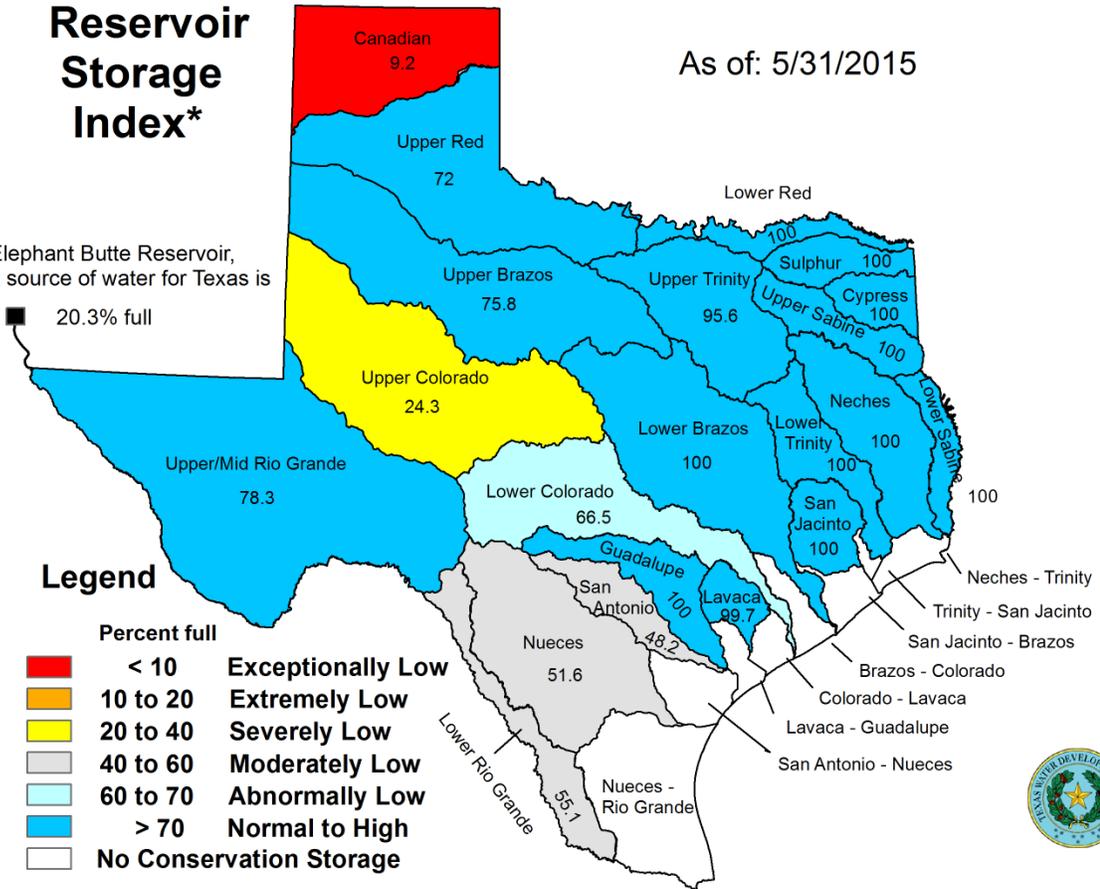
## Reservoir Storage Index\*

Elephant Butte Reservoir, a source of water for Texas is

20.3% 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	



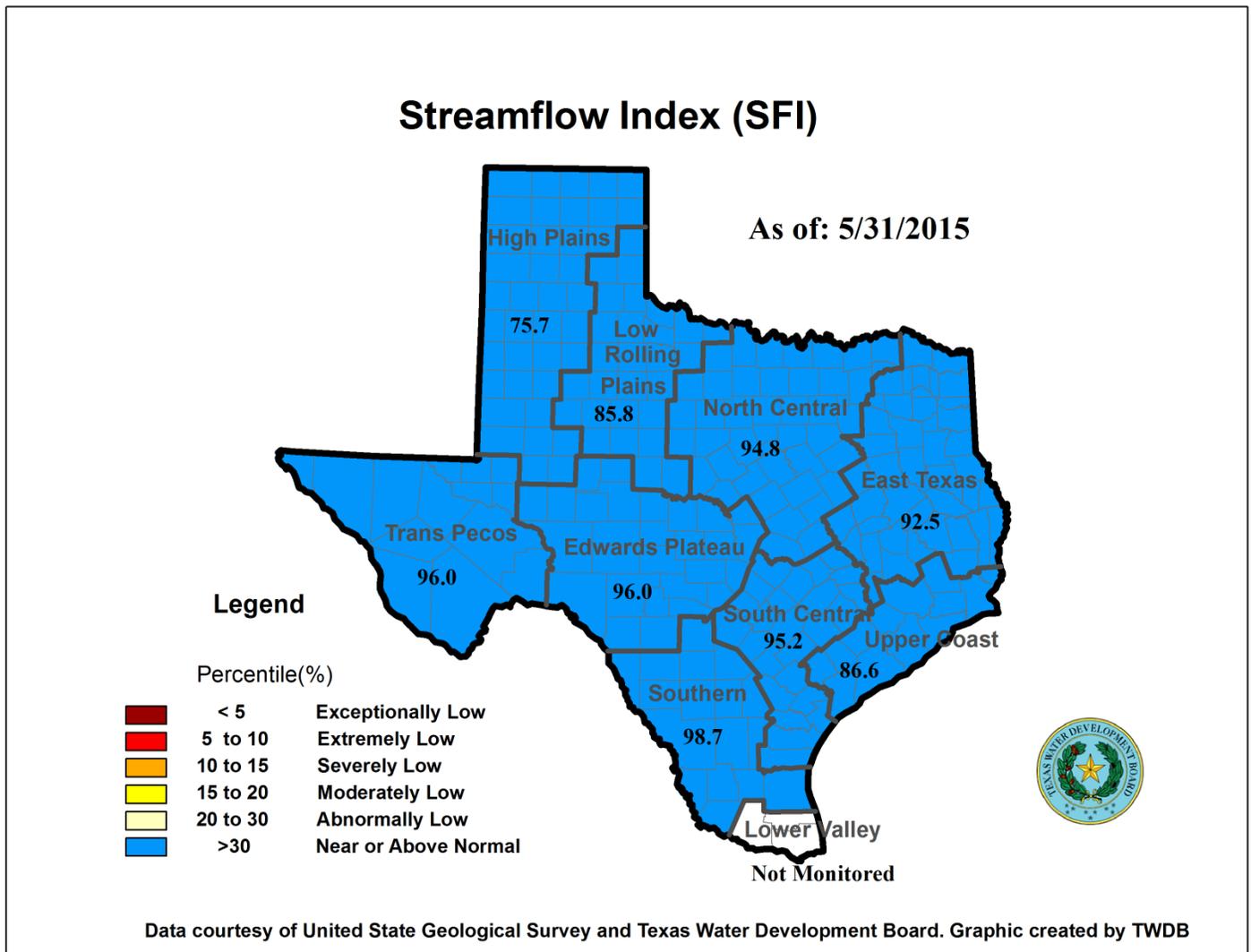
\*Percent of combined conservation storage capacity of 114 major water supply reservoirs by sub-basin (dead pools are excluded)

## *MAY STREAMFLOW CONDITIONS*

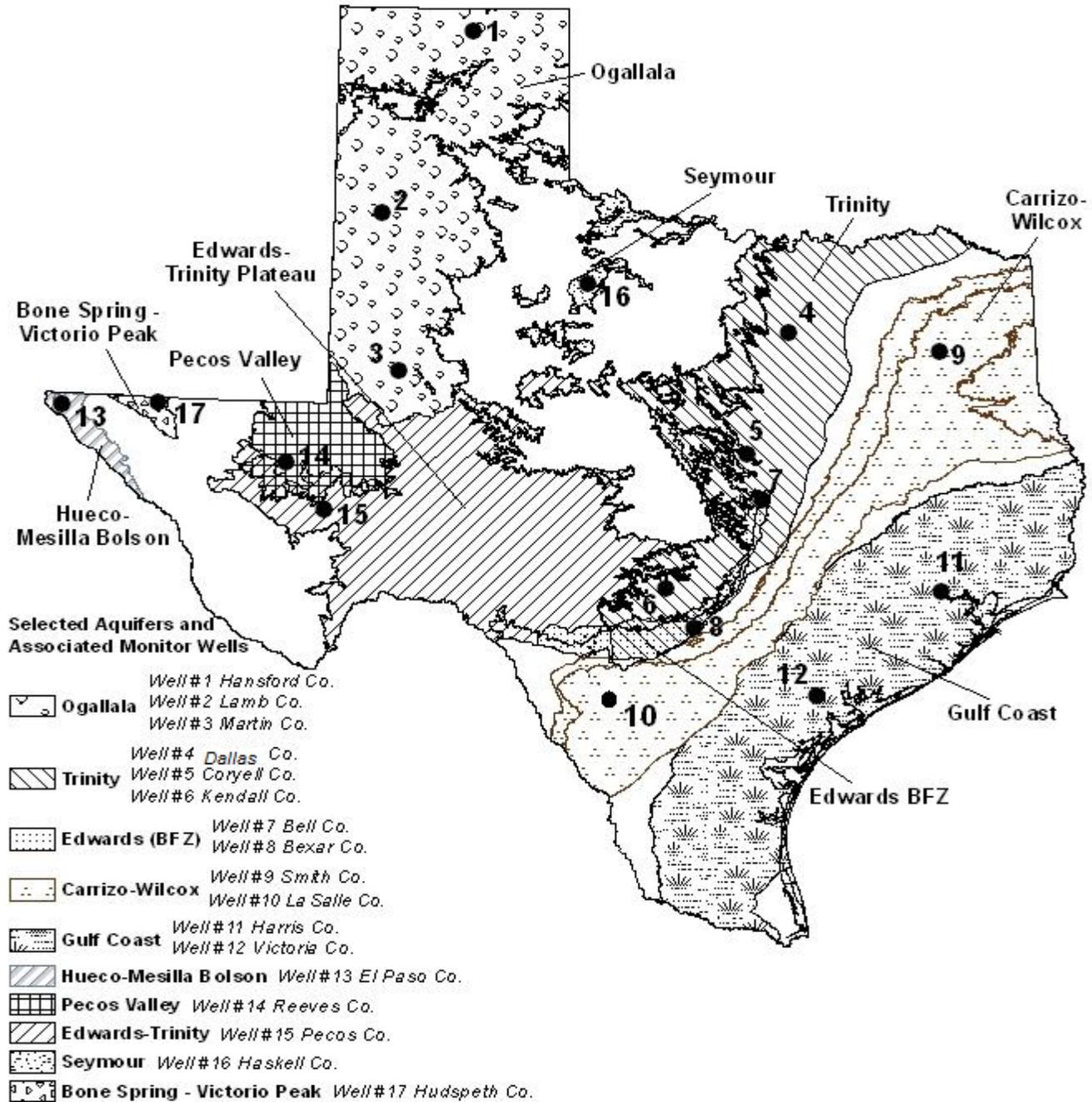
Of 29 reporting index stations monitored this month, computed 30-day mean flows status are presented below:

Flow Status	Number of Stations
Normal to High (>30%)	29
Abnormally Low (20-30%)	0
Moderately Low (15-20%)	0
Severely Low (10-15%)	0
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.



# MAY 2015 GROUNDWATER LEVELS IN OBSERVATION WELLS



May, 2015

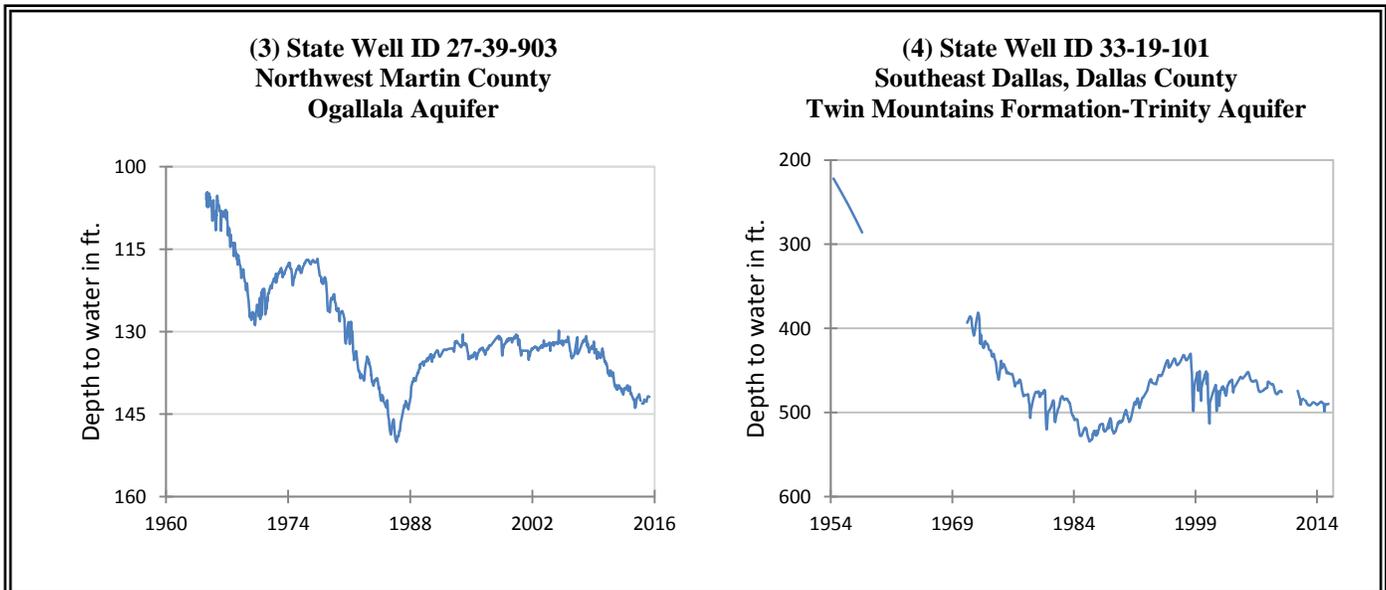
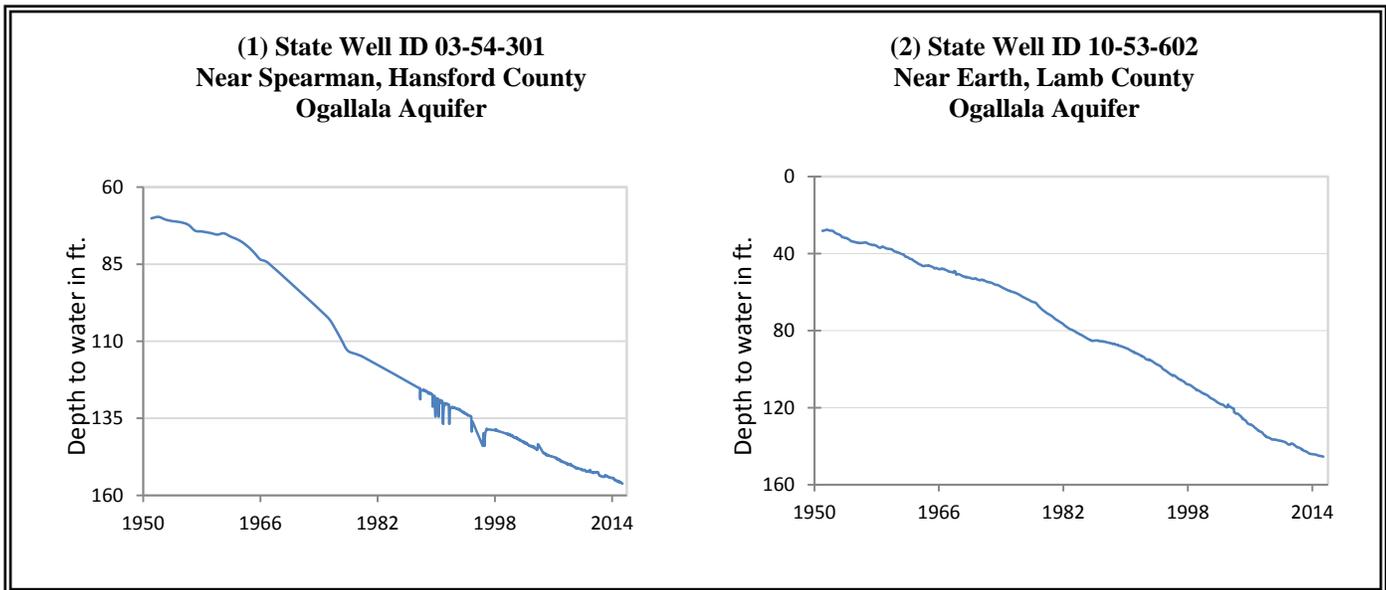
Water level measurements were available for all of the seventeen key monitoring wells in the state. Water levels rose in ten of the monitoring wells since the beginning of May, ranging from 0.3 feet in the Smith County Carrizo-Wilcox Aquifer well to 13.56 feet in the Kendall County Trinity Aquifer well. Water levels declined in seven monitoring wells, ranging from 0.02 feet in the Haskell County Seymour Aquifer well to 14.69 feet in the Pecos County Edwards-Trinity (Plateau) Aquifer well. The J-17 well in San Antonio recorded a water level of 68.21 feet below land surface or 662.79 feet above mean sea level. This water level is 22.79 feet above the Stage III critical management level in that segment of the Edwards Aquifer. Stage III restrictions are declared by the EAA when the ten-day average falls below the 640-foot elevation, or 91 feet below land surface.

\*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.

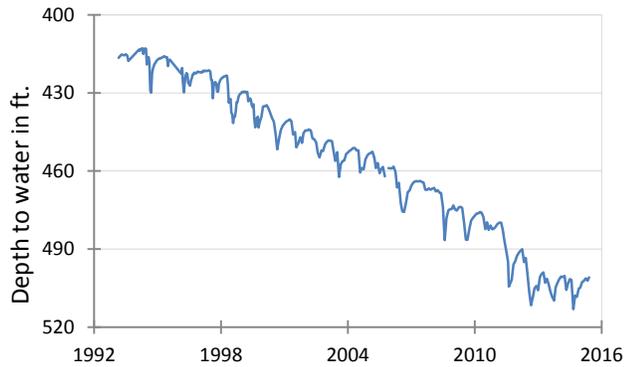
Monitoring Well	May	April	month change	year change	historical change	first measured
(1) Hansford 0354301	156.17	156.09	-0.08	-1.24	-86.05	1951
(2) Lamb 1053602	145.41	145.32	-0.07	-1.07	-117.26	1951
(3) Martin 2739903	141.89	141.8	-0.09	0.68	-37	1964
(4) Dallas 3319101	489.7	490.2	0.5	-2.04	-267.7	1954
(5) Coryell 4035404	500.87	502.17	1.3	2.44	-208.87	1955
(6) Kendall 6802609	108.06	121.62	13.56	27.64	-48.06	1975
(7) Bell 5804816	121.3	123.57	2.27	4.4	1.83	2008
(8) Bexar 6837203	68.21	79.1	10.89	19.8	-21.57	1932
(9) Smith 3430907	432.62	432.92	0.3	5.31	-66.62	1987
(10) La Salle 7738103	497.54	503.58	6.04	-6.08	-244.47	2003
(11) Harris 6514409	186.93	186.93	0.79	4.75	-50.64*	1956
(12) Victoria 8017502	35.22	36.28	1.06	-0.65	-1.22	1958
(13) El Paso 4913301	297.12	295.96	-1.16	-0.8	-65.22	1967
(14) Reeves 4644501	156.72	159.85	3.13	3.46	-64.63	1952
(15) Pecos 5216802	211.42	196.73	-14.69	15.13	35.46	1976
(16) Haskell 2135748	48.6	48.58	-0.02	0.13	-7.27	2002
(17) Hudspeth 4807516	145.48	142.29	-3.19	1.61	-41.56	1964

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

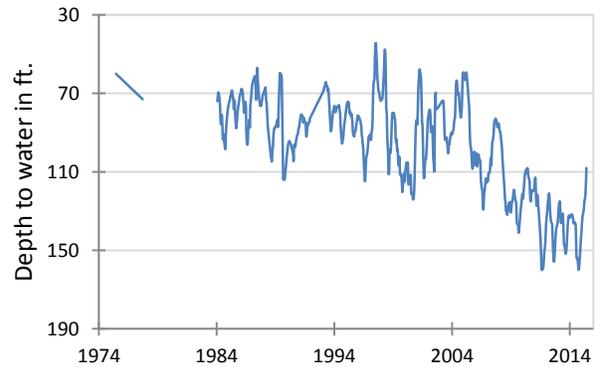
## MAY GROUNDWATER LEVELS IN OBSERVATION WELLS



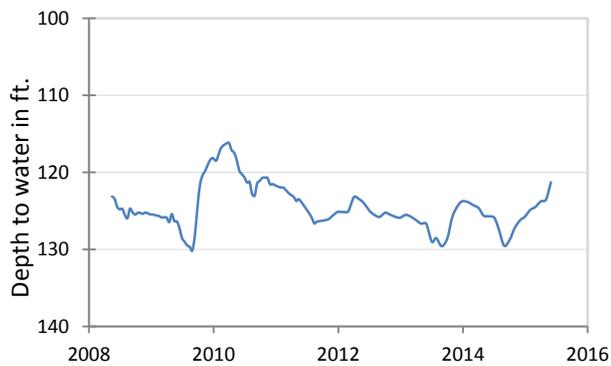
**(5) State Well ID 40-35-404  
Gatesville, Coryell County  
Hosston Formation-Trinity Aquifer**



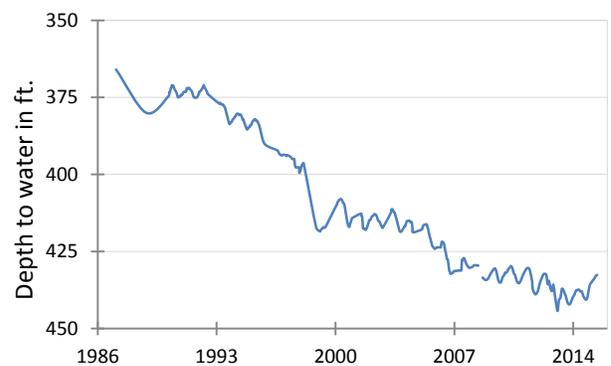
**(6) State Well ID 68-02-609  
Waring, Kendall County  
Cow Creek Formation-Trinity Aquifer**



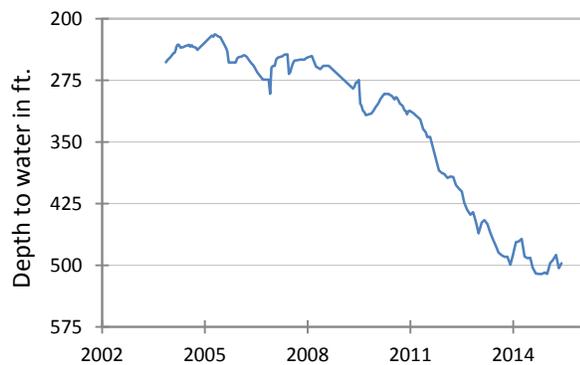
**(7) State Well ID 58-04-816  
Near Salado, Bell County  
Edwards (BFZ) Aquifer**



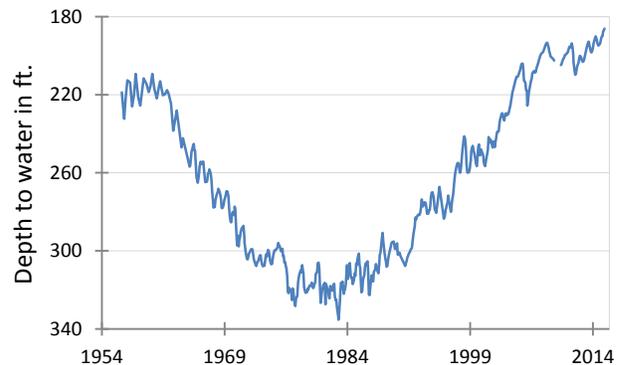
**(9) State Well ID 34-30-907  
Red Springs, Smith County  
Carrizo-Wilcox Aquifer**



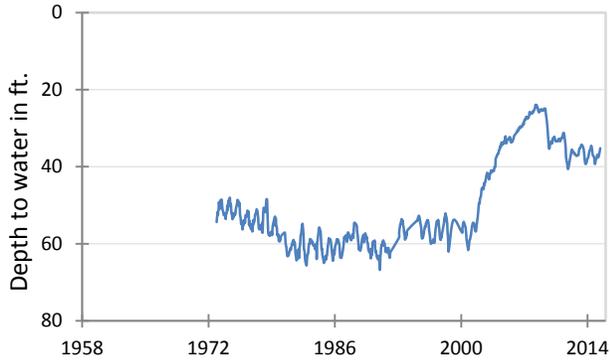
**(10) State Well ID 77-38-103  
Near Cotulla, La Salle County  
Carrizo-Wilcox Aquifer**



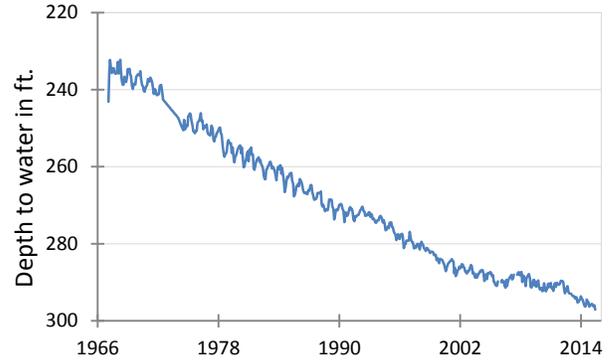
**(11) State Well ID 65-14-409  
Alief, Harris County  
Evangeline Formation-Gulf Coast Aquifer**



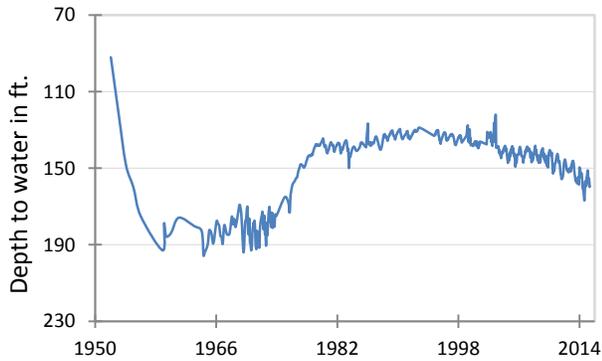
**(12) State Well ID 80-17-502**  
**Near Bloomington, Victoria County**  
**Lissie Formation-Gulf Coast Aquifer**



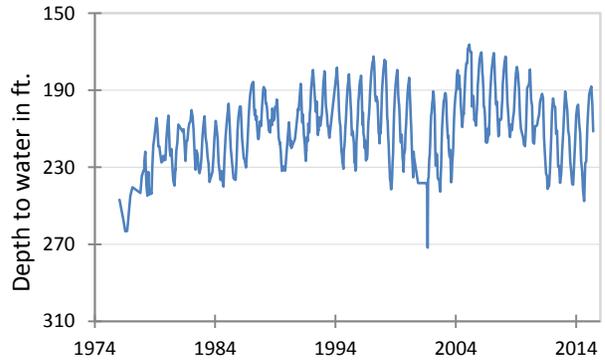
**(13) State Well ID 49-13-301**  
**El Paso, El Paso County**  
**Hueco-Mesilla Bolson Aquifer**



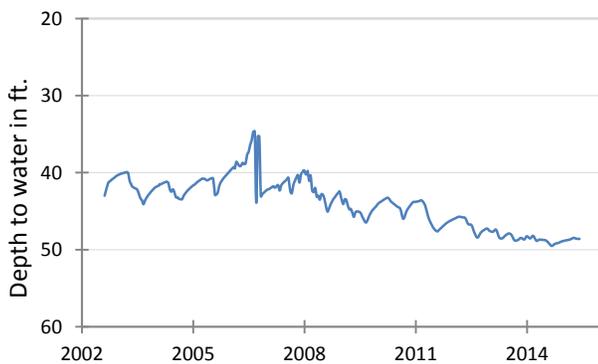
**(14) State Well ID 46-44-501**  
**Near Pecos, Reeves County**  
**Pecos Valley Aquifer**



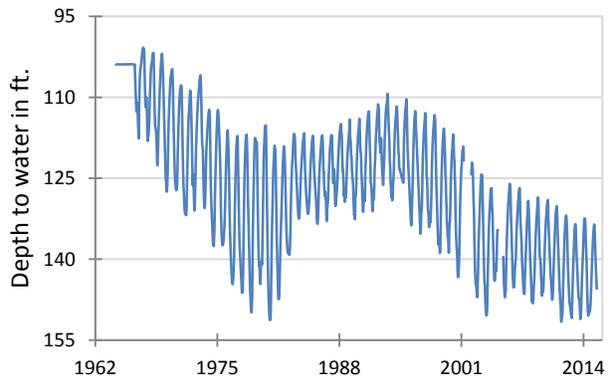
**(15) State Well ID 52-16-802**  
**Fort Stockton, Pecos County**  
**Edwards-Trinity (Plateau) Aquifer**



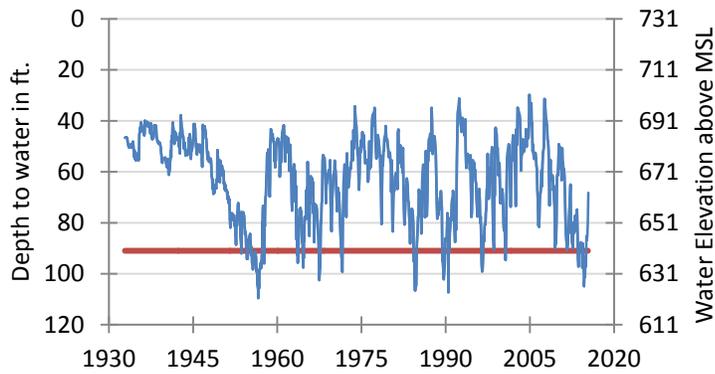
**(16) State Well ID 21-35-748**  
**Near O'Brien, Haskell County**  
**Seymour Aquifer**



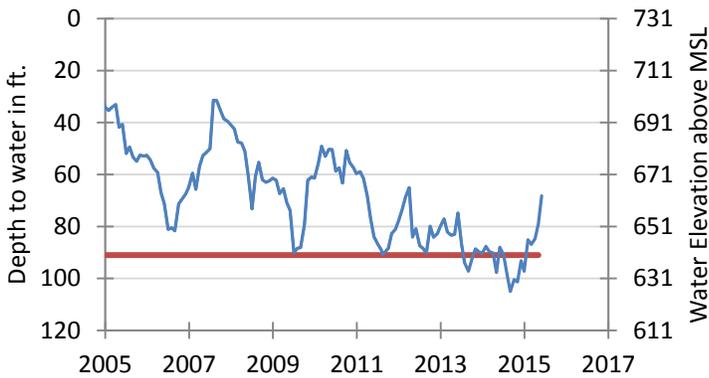
**(17) State Well ID 48-07-516**  
**Dell City, Hudspeth County**  
**Bone Spring - Victorio Peak Aquifer**



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

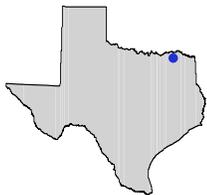


The late May water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above mean sea level, was 68.21 feet below land surface, or 662.79 feet above mean sea level. This was 10.89 feet above last month's measurement, 19.8 feet above last year's measurement, and 21.57 feet below the initial measurement recorded in 1932.



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

***HYDROGRAPH OF THE MONTH***

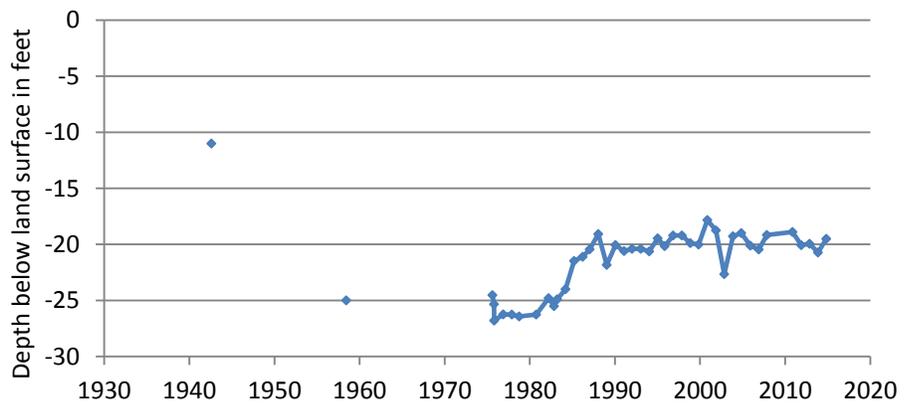


Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.

**Blossom Aquifer**

The Blossom Aquifer is a minor aquifer located in the northeast corner of Texas in Bowie, Red River, and Lamar counties. The aquifer consists of the Blossom Sand Formation, composed of alternating sequences of sand and clay. In places the aquifer is as much as 400 feet thick, although no more than about one-third of this thickness consists of sand, and freshwater saturated thickness averages 25 feet. Groundwater in the Blossom Aquifer is generally soft, slightly alkaline, and, in some areas, high in sodium, bicarbonate, iron, and fluoride. Although water quality is not acceptable for irrigation, it is generally acceptable for non-industrial uses. Municipal pumping accounts for a large percentage of total pumpage in the aquifer.

**Well # 1721710, 168 feet deep  
unused, central Lamar County**



Depth-to-water in this well was first measured by the driller in 1942 and consistently measured every year by TWDB since 1975. The water level declined after the first measurement, but has gradually increased since TWDB began measuring the well, with the highest measurement of 17.83 feet below land surface in 2000. The increase in the water level is possibly due to more surface water use in the area.

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