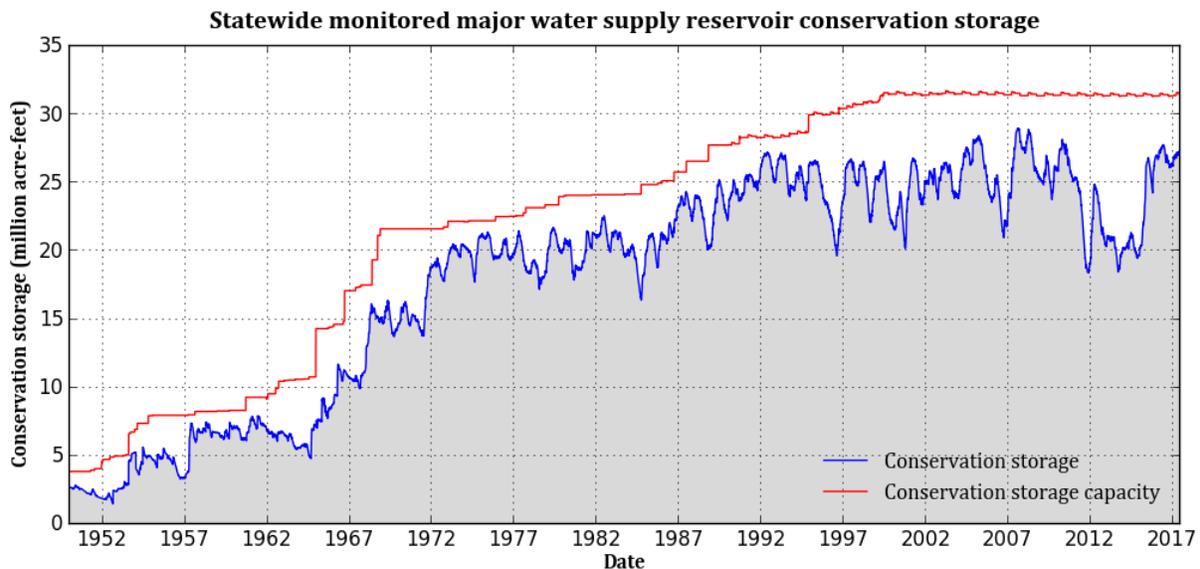


May 2017 RESERVOIR STORAGE*

At the end of May 2017, total conservation storage* in 118 of the state’s major water supply reservoirs was at 27.4 million acre-feet or 85 percent of total conservation storage capacity. This is approximately 0.16 million acre-feet more than a month ago but 0.40 million acre-feet less than storage at this time last year.

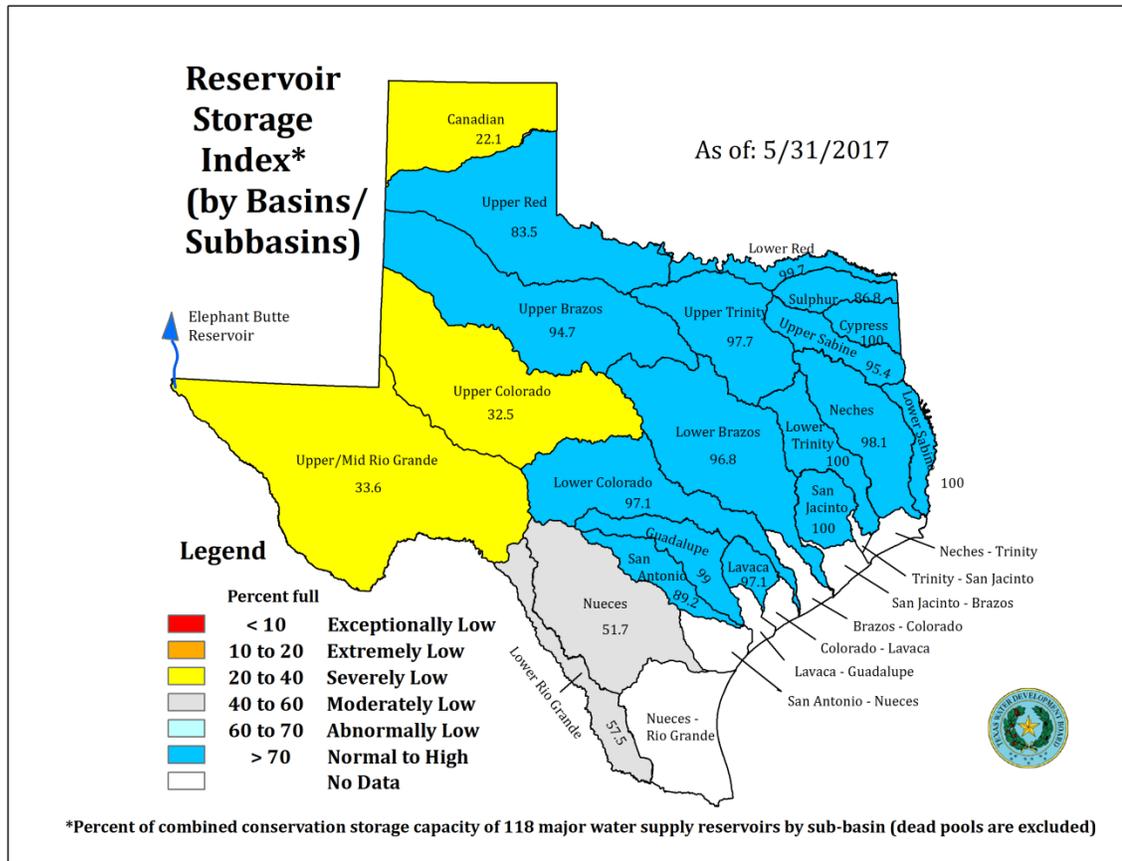
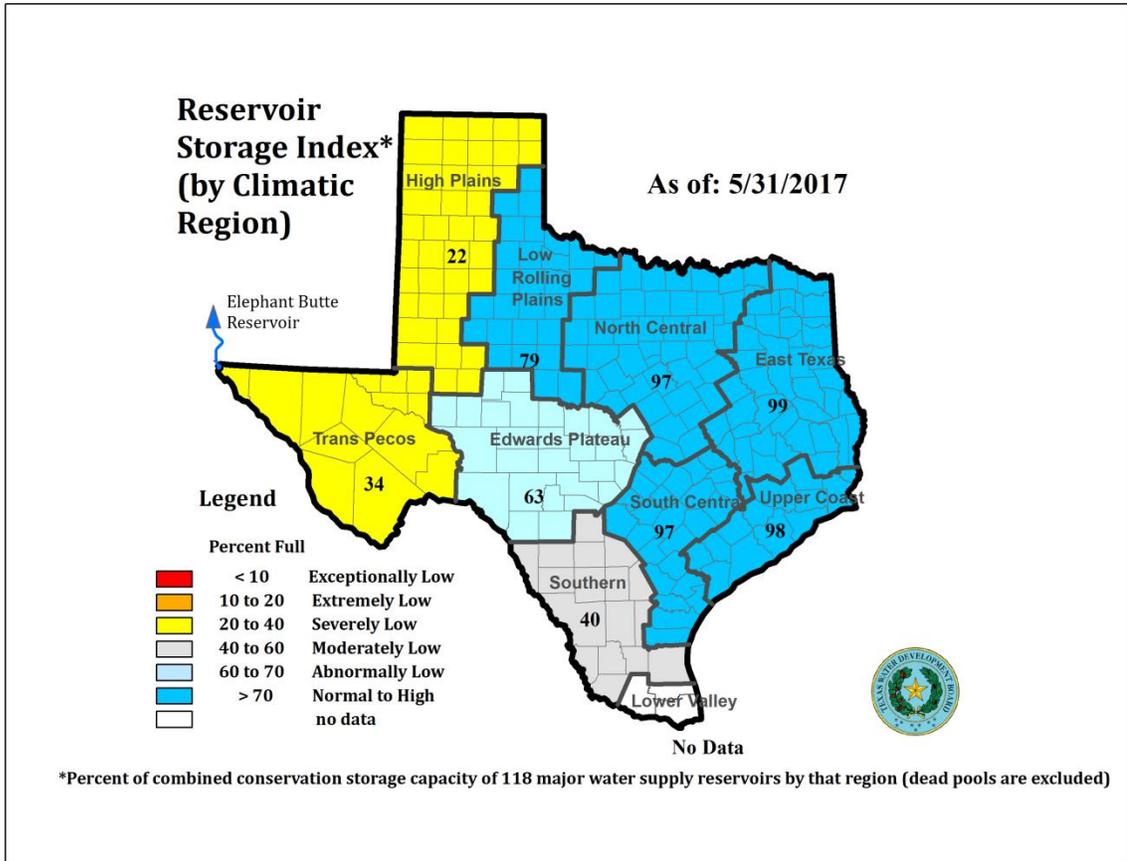
Forty-one (41) reservoirs held 100 percent of conservation storage capacity, primarily in the North Central (17 reservoirs) and East (18 reservoirs) regions. One reservoir, Palo Duro (1 percent), remained below 10 percent full.

Total combined storage was at or above normal (storage \geq 70 percent) in the East (99 percent), Upper Coast (98 percent), South Central (97 percent), North Central (97 percent), and Low Rolling Plains (79 percent) regions. The High Plains (22 percent) and Trans-Pecos (34 percent) regions had the lowest percentage of storage. Overall, storage increased in two regions but declined in seven regions over the past month.



*Storage is based on end of the month data in 117 major reservoirs that represent 96 percent of the total conservation storage capacity of 188 major water supply reservoirs in Texas plus Elephant Butte reservoir in New Mexico. Major reservoirs are defined as having a conservation storage capacity of 5,000 acre-feet or greater. Only the Texas share of storage in border reservoirs is counted.

MAY 2017 RESERVOIR CONDITIONS



*Reservoir Storage Index is defined as the percent full of conservation storage capacity.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of lake or reservoir	Conservation storage capacity	Conservation storage end of May 2017		Change since end of April 2017		Change since end of May 2016	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)
HIGH PLAINS							
MacKenzie Reservoir	46,450	6,970	15	-137	-0	-350	-1
Meredith, Lake	500,000	123,283	25	301	0	-9,837	-2
Palo Duro Reservoir	61,066	811	1	-31	-0	-1,217	-2
White River Lake	29,880	6,625	22	-536	-2	-3,087	-10
TOTAL	637,396	137,689	22	-403	-0	-14,491	-2
LOW ROLLING PLAINS							
Abilene, Lake	7,900	7,715	98	248	3	-185	-2
Alan Henry Reservoir	94,808	86,569	91	-2,358	-2	-3,293	-3
Champion Creek Reservoir	41,580	20,913	50	5,160	12	10,647	26
Coleman, Lake	38,075	37,895	100	523	1	-180	-0
Colorado City, Lake	30,758	14,544	47	522	2	6,372	21
Fort Phantom Hill, Lake	70,030	70,030	100	1,132	2	0	0
Greenbelt Lake	59,968	16,684	28	17	0	871	1
Hords Creek Lake	8,443	6,925	82	-215	-3	-378	-4
J. B. Thomas, Lake	199,931	116,679	58	-4,850	-2	-20,624	-10
Kemp, Lake	245,307	245,307	100	0	0	0	0
Millers Creek Reservoir	26,768	25,100	94	-989	-4	-1,668	-6
North Fork Buffalo Creek Reservoir	15,400	12,421	81	928	6	no data	
Stamford, Lake	51,570	45,603	88	-899	-2	-5,967	-12
Sweetwater, Lake	12,267	2,943	24	25	0	341	3
TOTAL	902,805	709,328	79	-756	-0	-14,064	-2
NORTH CENTRAL							
Amon G Carter, Lake	19,266	19,238	100	-28	-0	-28	-0
Aquila Lake	43,243	43,243	100	0	0	0	0
Arlington, Lake	40,188	35,643	89	-2,465	-6	-4,545	-11
Arrowhead, Lake	230,359	214,994	93	-4,632	-2	-15,365	-7
Bardwell Lake	46,122	46,122	100	0	0	0	0
Belton Lake	435,225	435,225	100	0	0	0	0
Benbrook Lake	85,648	66,977	78	593	1	-18,671	-22
Bonham, Lake	11,027	8,080	73	-394	-4	-2,947	-27
Bridgeport, Lake	366,236	362,283	99	-3,953	-1	-3,953	-1
*Brownwood, Lake	128,839	128,839	100	643	0	0	0
*Cisco, Lake	25,895	25,500	98	-49	-0	-395	-2
Crook, Lake	9,195	9,059	99	-136	-1	-136	-1
Eagle Mountain Lake	179,880	172,054	96	-7,826	-4	-7,826	-4
Georgetown, Lake	36,823	34,251	93	-2,290	-6	-2,572	-7
Graham, Lake	45,288	43,137	95	-1,118	-2	-2,151	-5
Granbury, Lake	132,949	129,549	97	-2,748	-2	3,729	3
Granger Lake	51,822	51,822	100	0	0	0	0
Grapevine Lake	164,703	163,534	99	-1,169	-1	-1,169	-1
*Halbert, Lake	6,033	5,095	84	-190	-3	-438	-7
Hubbard Creek Reservoir	318,067	304,337	96	-5,515	-2	-10,630	-3
Hubert H Moss Lake	24,058	23,595	98	-204	-1	-463	-2
Jim Chapman Lake (Cooper)	260,332	202,834	78	-10,402	-4	-57,498	-22
Joe Pool Lake	175,358	171,668	98	-3,690	-2	-3,690	-2
Kickapoo, Lake	86,345	74,371	86	-1,352	-2	-11,974	-14
Lavon Lake	406,388	384,965	95	-6,698	-2	-21,423	-5
Leon, Lake	27,762	23,215	84	-341	-1	-4,547	-16
Lewisville Lake	563,228	549,277	98	-13,951	-2	-13,951	-2
Limestone, Lake	203,780	203,780	100	0	0	0	0
*Lost Creek Reservoir	11,950	11,656	98	-226	-2	-294	-2
*Mineral Wells, Lake	5,273	5,097	97	-176	-3	-176	-3
Mountain Creek, Lake	22,850	22,850	100	0	0	0	0

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of lake or reservoir	Conservation storage capacity	Conservation storage end of May 2017		Change since end of April 2017		Change since end of May 2016	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)
<i>(North Central continued)</i>							
Navarro Mills Lake	49,827	49,685	100	-142	-0	-142	-0
New Terrell City Lake	8,583	8,583	100	0	0	0	0
Nocona, Lake (Farmers Crk)	21,444	21,284	99	-160	-1	-160	-1
Palo Pinto, Lake	26,766	24,633	92	-1,137	-4	-2,133	-8
Pat Cleburne, Lake	26,008	25,028	96	-980	-4	-980	-4
*Pat Mayse Lake	113,683	113,683	100	0	0	0	0
Possum Kingdom Lake	523,873	521,426	100	1,141	0	-2,121	-0
Proctor Lake	54,762	54,762	100	506	1	0	0
Ray Hubbard, Lake	439,559	427,186	97	-11,746	-3	-12,373	-3
Ray Roberts, Lake	788,167	780,814	99	-7,353	-1	-7,353	-1
Richland-Chambers Reservoir	1,087,839	1,076,305	99	-11,534	-1	-11,534	-1
Squaw Creek, Lake	151,250	151,250	100	0	0	0	0
Stillhouse Hollow Lake	227,771	227,771	100	0	0	0	0
Tawakoni, Lake	871,685	797,261	91	-5,269	-1	-74,424	-9
Texoma, Lake (Texas)	1,258,113	1,258,113	100	114,488	9	0	0
Texoma, Lake (Texas & Oklahoma)	2,525,281	2,722,463	100	435,207	17	-141,173	-6
Waco, Lake	189,418	189,418	100	0	0	0	0
Waxahachie, Lake	10,780	10,537	98	-243	-2	-243	-2
Weatherford, Lake	17,812	16,659	94	-731	-4	-1,153	-6
Whitney, Lake	553,344	497,927	90	-6,701	-1	-55,417	-10
Worth, Lake	33,495	30,127	90	-2,753	-8	-3,368	-10
TOTAL	10,618,311	10,254,742	97	-931	-0	-352,514	-3
EAST							
Athens, Lake	29,503	29,503	100	0	0	0	0
B A Steinhagen Lake	66,961	58,770	88	3,232	5	1,799	3
Bob Sandlin, Lake	190,822	190,822	100	0	0	0	0
Caddo, Lake	29,898	29,898	100	0	0	0	0
Cedar Creek Reservoir in Trinity	644,686	640,114	99	-4,572	-1	-4,572	-1
Cherokee, Lake	40,094	40,094	100	0	0	no data	
Conroe, Lake	410,988	410,988	100	2,109	1	0	0
Cypress Springs, Lake	66,756	66,756	100	0	0	0	0
Fork Reservoir, Lake	605,061	605,061	100	0	0	5,021	1
Houston County Lake	17,113	17,113	100	0	0	0	0
Jacksonville, Lake	25,670	25,670	100	0	0	0	0
*Livingston, Lake	1,785,348	1,785,348	100	0	0	0	0
Martin, Lake	75,726	75,578	100	2,160	3	-148	0
Monticello, Lake	34,740	33,990	98	-750	-2	-750	-2
Murvault, Lake	38,285	38,285	100	445	1	0	0
Nacogdoches, Lake	39,522	39,522	100	1,528	4	0	0
O' the Pines, Lake	268,566	268,566	100	27,203	10	0	0
Palestine, Lake	367,303	367,303	100	0	0	0	0
Sam Rayburn Reservoir	2,857,077	2,798,735	98	126,157	4	-58,342	-2
Striker, Lake	16,934	16,934	100	231	1	no data	
*Sulphur Springs, Lake	17,747	15,439	87	-2,308	-13	-395	-2
Toledo Bend Reservoir (Texas)	2,236,450	2,236,450	100	91,708	4	0	0
Toledo Bend Reservoir (Texas & Louisiana)	4,472,900	4,477,000	100	183,416	4	-103,434	-2
Tyler, Lake	72,073	72,073	100	0	0	0	0
Wright Patman Lake	310,382	292,311	94	-329	0	-18,071	-6
TOTAL	10,247,705	10,155,323	99	246,814	2.4	-75,458	-1

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of lake or reservoir	Conservation storage capacity (acre-feet)	Conservation storage end of May 2017		Change since end of April 2017		Change since end of May 2016	
		(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)
TRANS-PECOS							
Elephant Butte Reservoir (Texas)	852,491	216,336	25	46,412	5	83,091	10
Elephant Butte Reservoir (Texas & New Mexico)	1,973,358	500,777	25	107,436	5	192,340	10
Red Bluff Reservoir	151,110	120,470	80	-9,251	-6	-12,017	-8
TOTAL	1,003,601	336,806	34	37,161	4	71,074	7
EDWARDS PLATEAU							
*Amistad Reservoir (Texas)	1,840,849	1,457,165	79	-1,985	-0	91,852	5
*Amistad Reservoir (Texas & Mexico)	3,275,532	1,606,512	49	-131,569	-4	-339,302	-10
Brady Creek Reservoir	28,808	18,436	64	-325	-1	5,077	18
Buchanan, Lake	816,904	808,450	99	-7,370	-1	-3,034	-0
E. V. Spence Reservoir	517,272	75,320	15	5,361	1	23,143	4
Inks, Lake	13,962	12,795	92	-150	-1	-1,167	-8
Lyndon B Johnson, Lake	115,249	110,392	96	-672	-1	790	1
Marble Falls, Lake	6,901	6,825	99	-27	-0	-49	-1
Nasworthy	9,615	8,110	84	208	2	25	0
Oak Creek Reservoir	39,210	22,931	58	-341	-1	4,409	11
O. C. Fisher Lake	119,445	16,032	13	-725	-1	-3,893	-3
*O. H. Ivie Reservoir	554,340	135,957	25	-879	-0	49,649	9
Twin Buttes Reservoir	182,454	22,883	13	-1,675	-1	7,369	4
TOTAL	4,245,009	2,695,296	63	-8,580	-0	174,171	4
SOUTH CENTRAL							
*Austin, Lake	23,972	22,634	94	-246	-1	-648	-3
Canyon Lake	378,781	377,136	100	-1,645	-0	-1,645	-0
*Coletto Creek Reservoir	31,040	28,475	92	-1,064	-3	-2,565	-8
Medina Lake	254,823	227,162	89	-6,892	-3	-27,661	-11
Somerville Lake	147,104	147,104	100	0	0	0	0
Travis, Lake	1,113,348	1,078,783	97	-24,422	-2	-34,565	-3
TOTAL	1,949,068	1,881,294	97	-34,269	-2	-67,084	-3
UPPER COAST							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	155,002	97	-3,737	-2	-4,564	-3
TOTAL	280,252	275,688	98	-3,737	-1	-4,564	-2
SOUTHERN							
Choke Canyon Reservoir	662,820	247,855	37	-6,646	-1	33,617	5
Corpus Christi, Lake	256,961	226,647	88	-14,934	-6	37,654	15
*Falcon Reservoir (Texas)	1,551,007	517,515	33	-55,195	-4	-190,534	-12
*Falcon Reservoir (Texas & Mexico)	2,646,817	695,957	26	-62,348	-2	-242,478	-9
TOTAL	2,470,788	992,017	40	-76,775	-3	-119,263	-5
STATEWIDE TOTAL							
STATEWIDE TOTAL	32,354,935	27,438,183	85	158,524	0.5	-402,193	-1

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

**Monthly and yearly changes do not include reservoirs that did not have data in last month or last year, respectively.

Note:

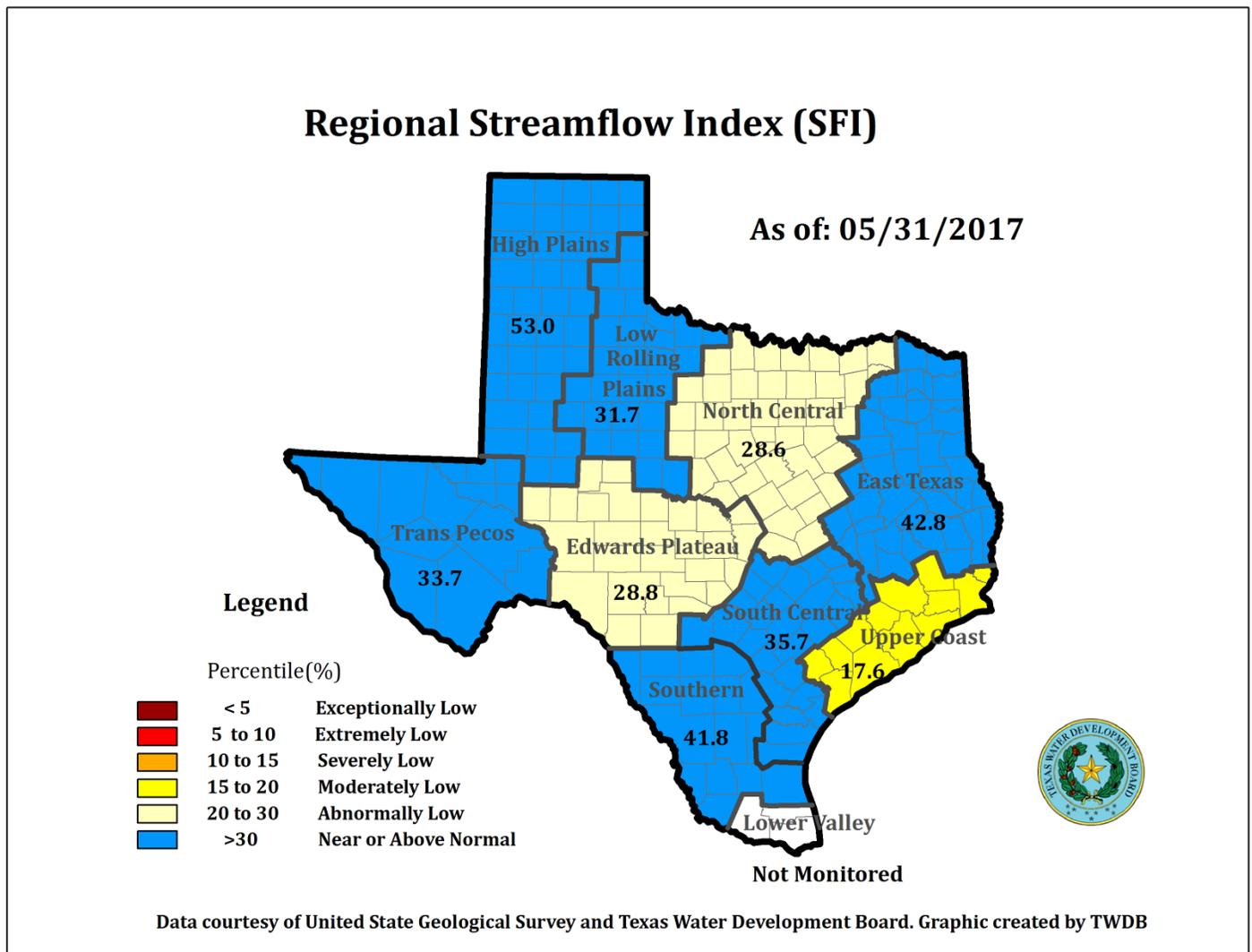
Conservation storage capacity is the space available to store water above the lowest outlet and below the top of conservation pool, or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level) or any water in the dead pool 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 $100 * (\text{current conservation storage} - \text{past conservation storage}) / \text{conservation storage capacity}$.

MAY 2017 STREAMFLOW CONDITIONS

The computed 30-day mean flow status for 29 reporting index stations monitored this month is presented below. Mean flow increased at two index stations and decreased at 27 stations.

Streamflow Status	Number of Stations
Near or Above Normal (>30%)	18
Abnormally Low (20-30%)	4
Moderately Low (15-20%)	2
Severely Low (10-15%)	0
Extremely Low (5-10%)	3
Exceptionally Low (<5%)	2

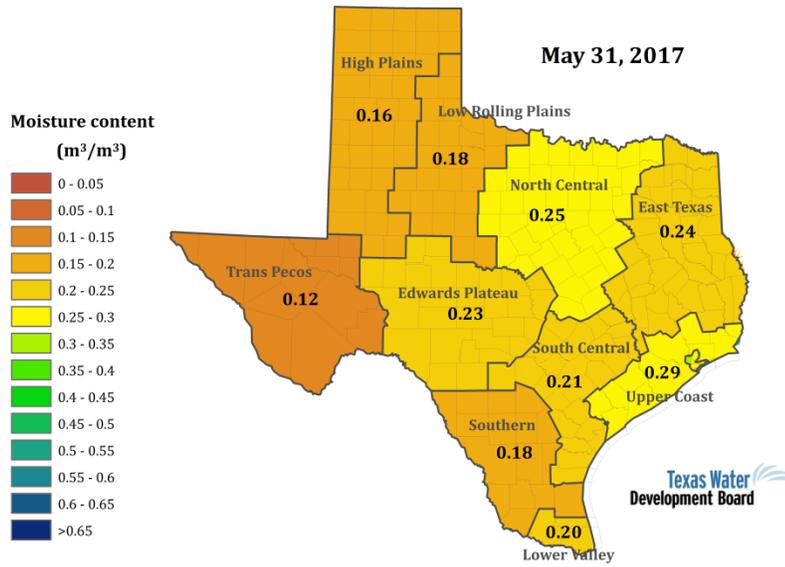
On a regional basis, as shown below, flows were near or above normal in all regions except in North Central and Edwards Plateau (abnormally low) and Upper Coast (moderately low). Streamflow in the Lower Valley region is not monitored.



*Streamflow Index is defined as the percentile flow that exceeds a given percent of observed flows.

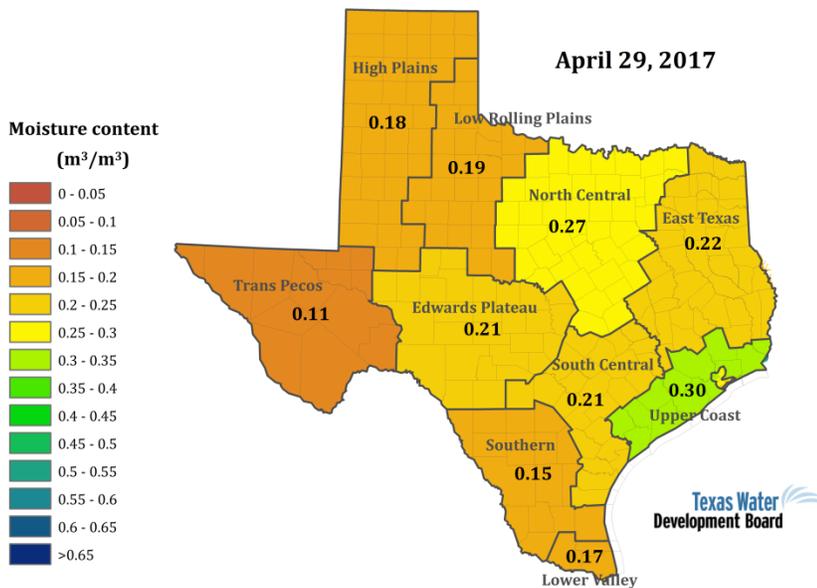
MAY 2017 SOIL MOISTURE CONDITIONS

Soil Moisture Condition



Data from NASA Soil Moisture Active Passive (SMAP) Level 4 - Model - Value Added Version 2
Soil moisture content is shown as volume of water per unit volume of bulk soil. Root zone: 0 to 1 meter depth.

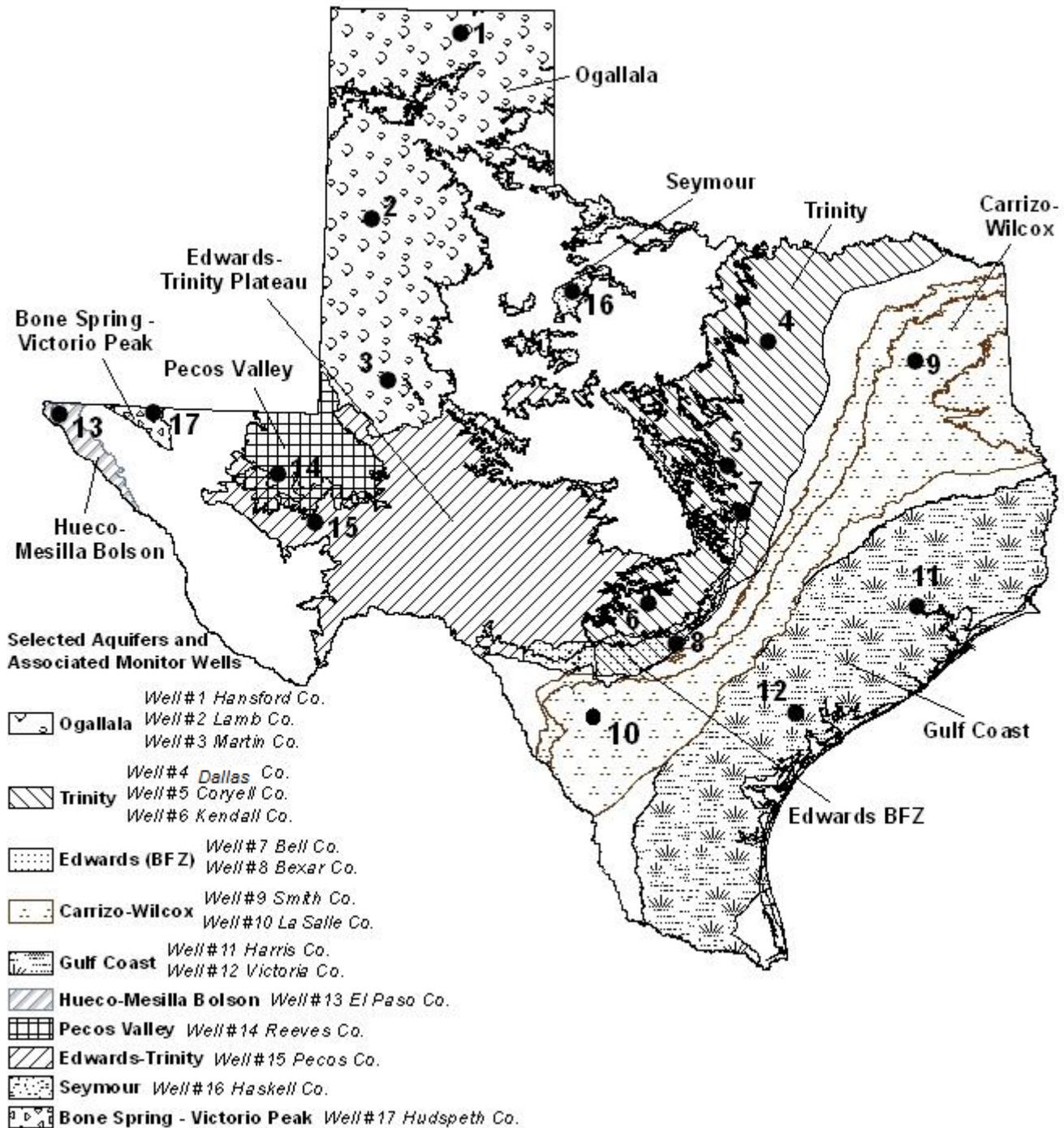
Soil Moisture Condition



Data from NASA Soil Moisture Active Passive (SMAP) Level 4 - Model - Value Added Version 2
Soil moisture content is shown as volume of water per unit volume of bulk soil. Root zone: 0 to 1 meter depth.

Soil moisture in the past 30 days (*top image*, May 31, 2017), as compared to soil moisture at the end of April 2017 (*bottom image*), declined in High Plains, Low Rolling Plains, North Central, and Upper Coast regions but increased in East Texas, Trans-Pecos, Edwards Plateau, Southern, and Lower Valley regions. Soil moisture in the South Central region remained the same.

May 2017 GROUNDWATER LEVELS IN OBSERVATION WELLS



Water-level measurements were available for 16 of the 17 key monitoring wells in the state. Water levels rose in seven monitoring wells since the beginning of May, ranging from an increase of 0.02 feet in the Lamb County Ogallala Aquifer well (#2 on map) to 1.26 feet in the Reeves County Pecos Valley Aquifer well (#14 on map). Water levels declined in nine monitoring wells, ranging from a decline of 0.07 feet in the Hansford County Ogallala Aquifer well (#1 on map) to 12.50 feet in the Pecos County Edwards-Trinity (Plateau) Aquifer well (#15 on map). The J-17 well (#8 on map) in San Antonio recorded a water level of 59.91 feet below land surface or 671.09 feet above mean sea level. There are no restrictions currently in place for the San Antonio portion of the Edwards (Balcones Fault Zone) Aquifer, with water levels at 10.3 feet above the Stage I critical management level.

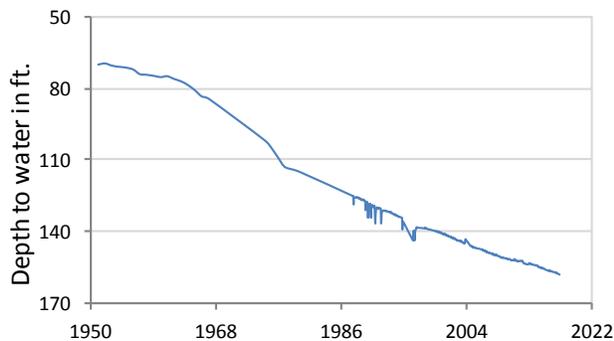
*IDs used in this publication on the aquifer map to indicate the monitoring well location (IDs 1 - 17) are different than the TWDB's six- or seven-digit state well identification number.

Monitoring Well	May	April	Month Change	Year Change	Historical Change	First Measured
(1) Hansford 0354301	158.27	158.20	-0.07	-1.25	-88.15	1951
(2) Lamb 1053602	147.41	147.43	0.02	-0.87	-119.24	1951
(3) Martin 2739903	143.58	143.24	-0.34	-0.87	-38.69	1964
(4) Dallas 3319101	492.17	492.55	0.38	2.33	-270.17	1954
(5) Coryell 4035404	516.34	512.31	-4.03	-10.90	-224.34	1955
(6) Kendall 6802609	114.46	109.89	-4.57	-6.36	-54.46	1975
(7) Bell 5804816	121.30	120.88	-0.42	-3.19	2.21	2008
(8) Bexar 6837203	59.91	53.21	-6.70	-8.50	-13.27	1932
(9) Smith 3430907	430.51	430.66	0.15	1.91	-130.51	1987
(10) La Salle 7738103	470.57	468.73	-1.84	-17.12	-217.50	2003
(11) Harris 6514409	190.97	192.09	1.12	-1.93	-55.47*	1947**
(12) Victoria 8017502	31.03	31.53	0.50	5.17	2.97	1958
(13) El Paso 4913301	294.77	295.17	0.40	0.22	-62.87	1964
(14) Reeves 4644501	165.51	166.77	1.26	1.68	-73.42	1952
(15) Pecos 5216802	210.53	198.03	-12.50	-0.59	36.35	1976
(16) Haskell 2135748	46.42	46.07	-0.35	0.00	-3.42	2002
(17) Hudspeth 4807516	NA	148.33	NA	NA	NA	1966

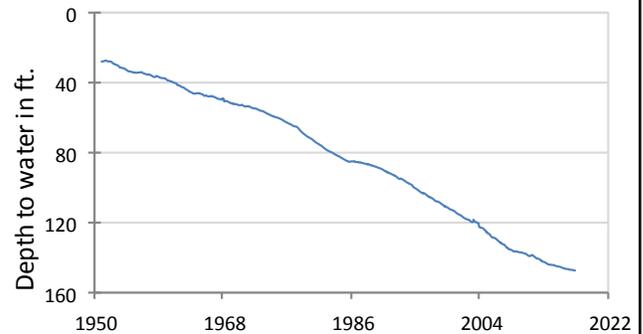
*Change since the original measurement of 135.5 feet below land surface in 1947 (**measurement not shown on the hydrograph)

May 2017 GROUNDWATER LEVELS IN OBSERVATION WELLS

(1) State Well ID 03-54-301
Near Spearman, Hansford County
Ogallala Aquifer



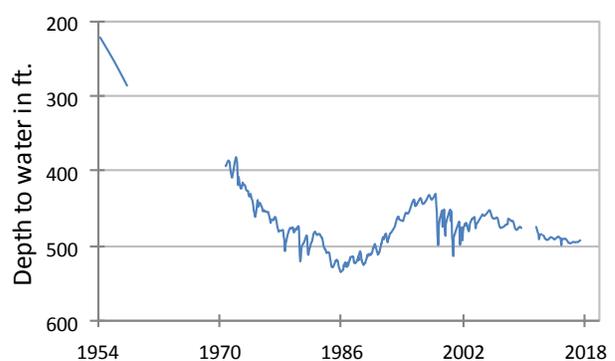
(2) State Well ID 10-53-602
Near Earth, Lamb County
Ogallala Aquifer



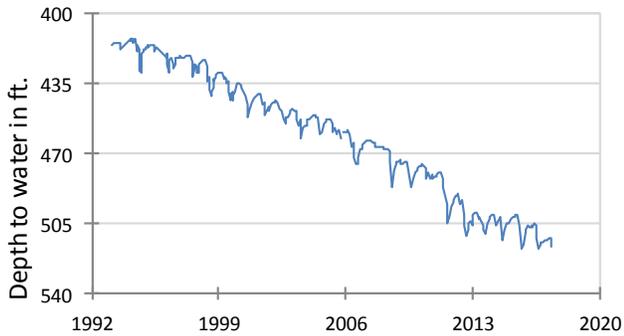
(3) State Well ID 27-39-903
Northwest Martin County
Ogallala Aquifer



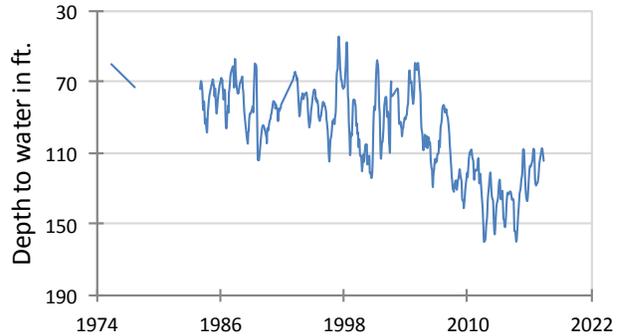
(4) State Well ID 33-19-101
Southeast Dallas, Dallas County
Twin Mountains Formation-Trinity Aquifer



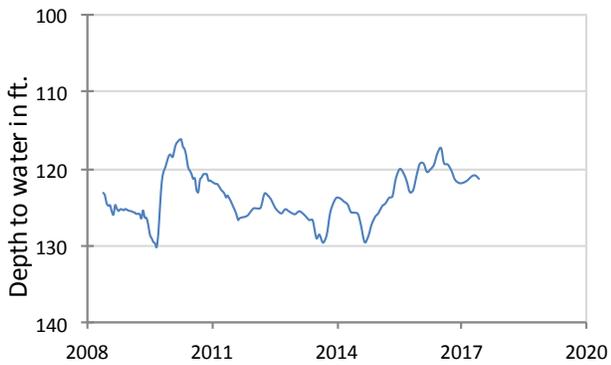
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



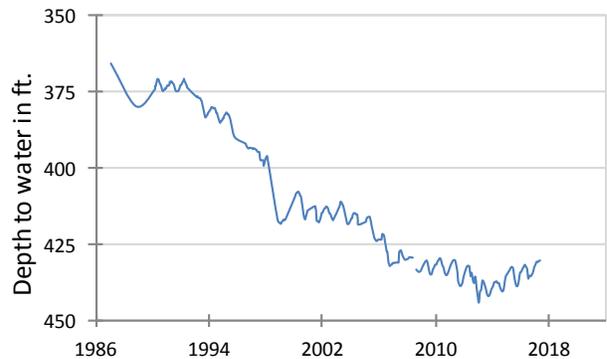
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



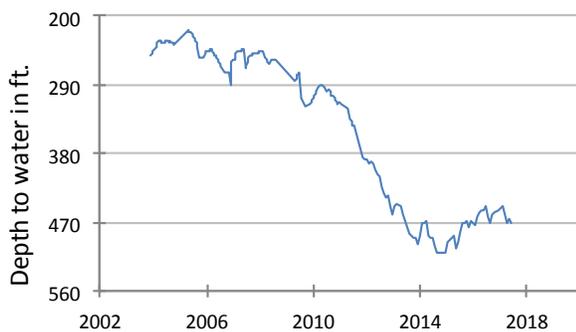
**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (Balcones Fault Zone) Aquifer**



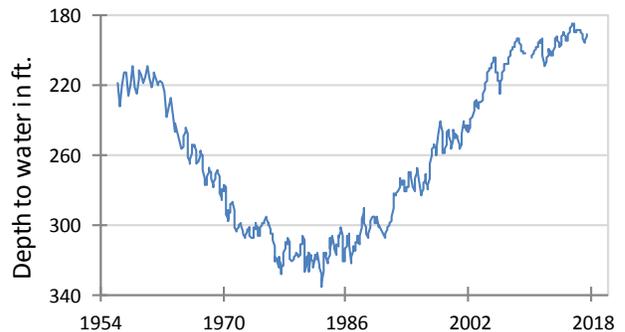
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



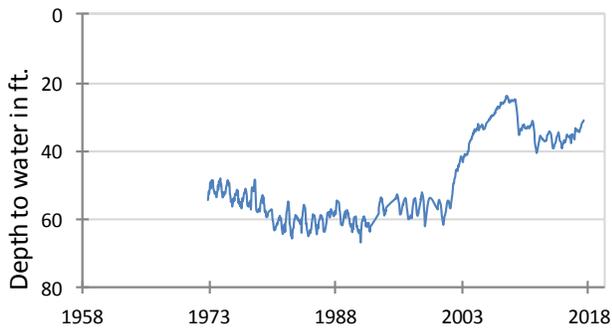
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



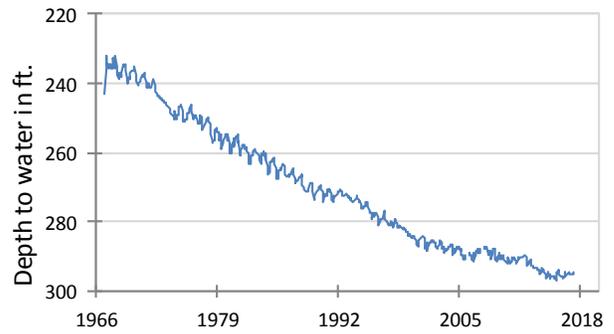
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



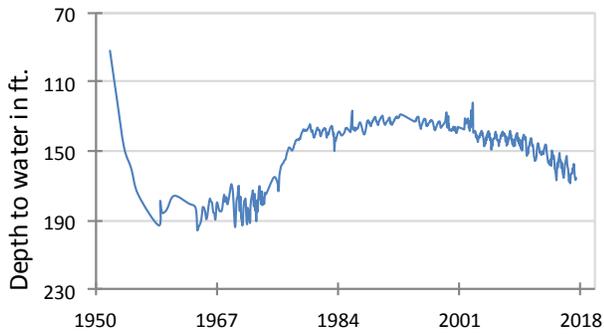
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



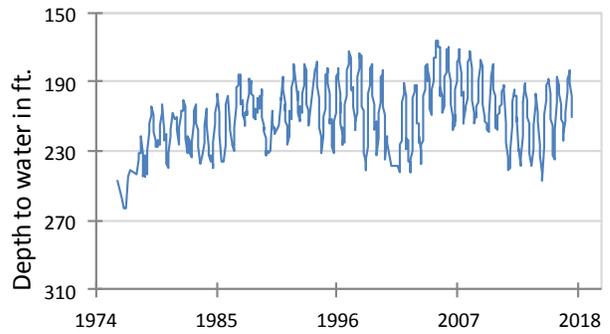
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



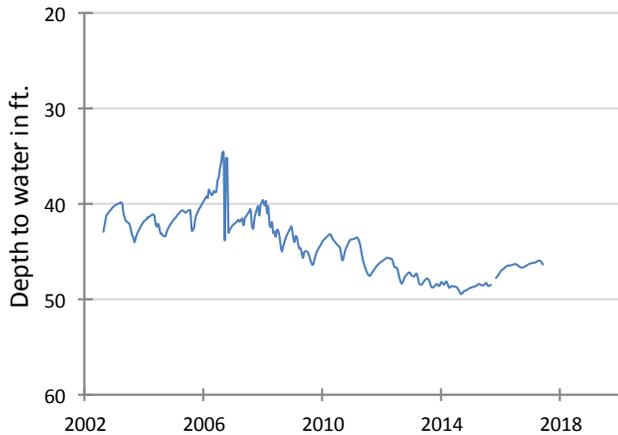
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



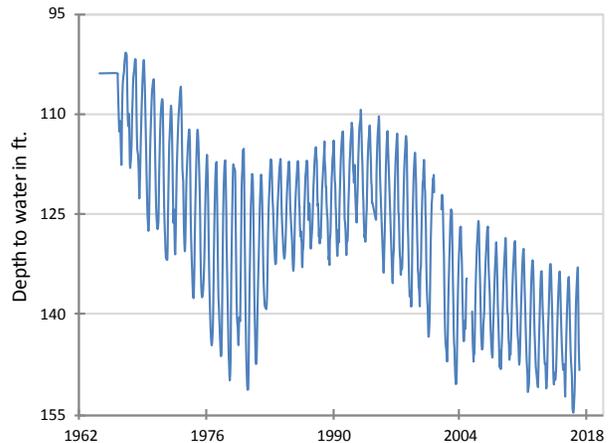
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



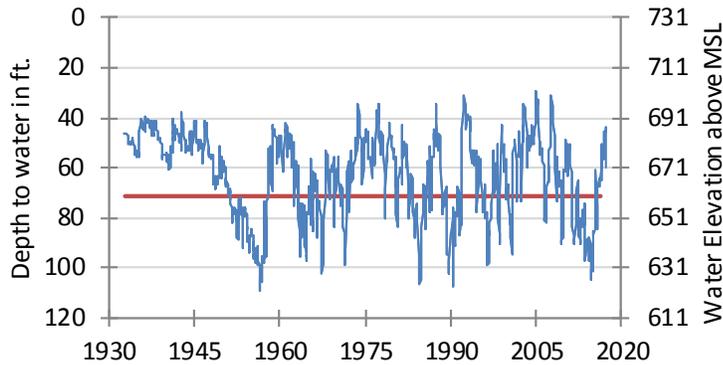
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



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



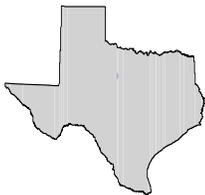
**(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (Balcones Fault Zone) Aquifer**



The late May water-level measurement in this Edwards (Balcones Fault Zone) Aquifer well, elevation 731 feet above mean sea level, was 59.91 feet below land surface, or 671.09 feet above mean sea level. This was 6.70 feet below last month's measurement, 8.50 feet below last year's measurement, and 13.27 feet below the initial measurement recorded in 1932.



***** Water levels below the red line indicate periods in which Edwards Aquifer Authority Stage I drought restrictions are in effect. *****



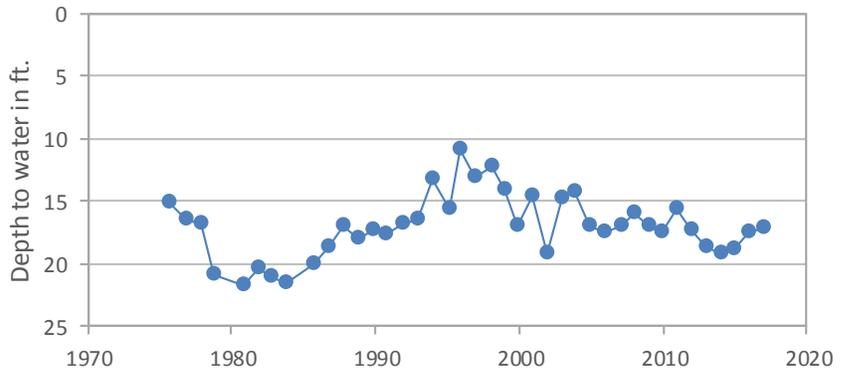
HYDROGRAPH OF THE MONTH

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

The Seymour Aquifer is a major aquifer that extends across north-central Texas. The aquifer consists of quaternary-age, alluvial sediments unconformably overlying Permian-age rocks. Water is contained in isolated patches of alluvium, as much as 360 feet thick, composed of discontinuous beds of poorly sorted gravel, conglomerate, sand, and silty clay. Water ranges from fresh to slightly saline, containing from approximately 100 to 3,000 milligrams per liter of total dissolved solids. Throughout its extent, the aquifer is affected by nitrate in excess of primary drinking water standards. Excess chloride also occurs throughout the aquifer. Irrigation accounts for 90% of the groundwater usage, with the remainder used primarily for municipal supply. Predictive groundwater availability modeling based on future estimates of pumping indicates that average water levels are not expected to change by more than several feet with or without a drought of record. However, water levels in localized areas are predicted to decline in the Seymour Aquifer by as much as 30 feet.

Seymour Aquifer

Well # 1360503, 32 feet deep
Unused Well, Foard County



The first recorded water-level measurement for this unused well was 15.14 feet below land surface in 1975, measured by the TWDB. The TWDB has consistently measured every year since with a measurement of 17.26 feet in 2016. The water-level has remained relatively unchanged but it has been impacted by nearby irrigation pumping of the aquifer. The highest recorded water level was 10.9 feet below land surface in 1995, and the lowest recorded water-level was 21.73 feet below land surface in 1980.