

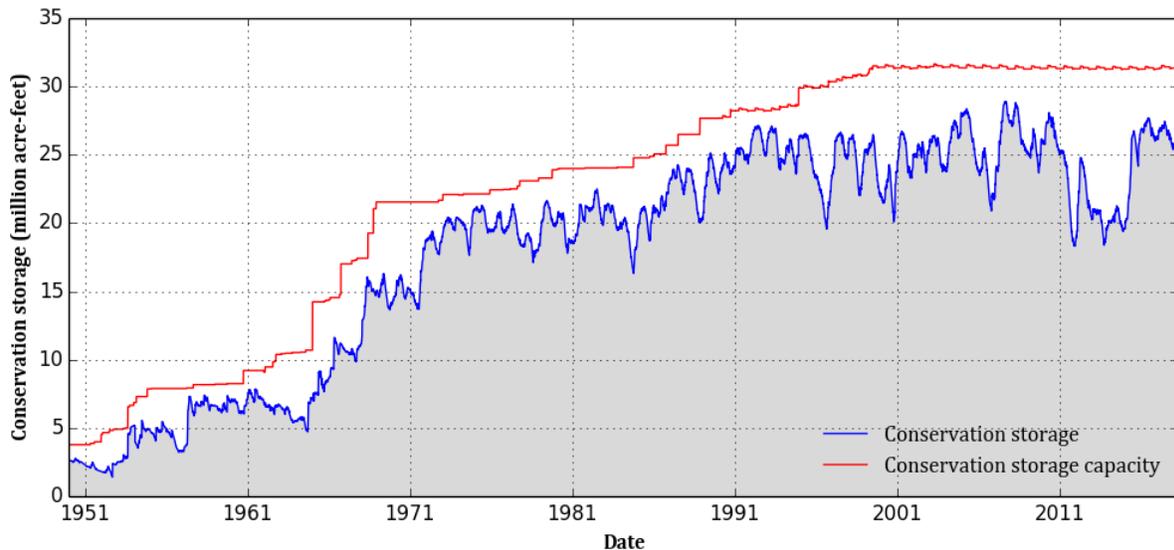
April 2018 RESERVOIR STORAGE*

At the end of April 2018, total conservation storage* in 118 of the state’s major water supply reservoirs was 26.68 million acre-feet or 82 percent of total conservation storage capacity. This is approximately 0.3 million acre-feet less than a month ago and 0.6 million acre-feet less than storage at this time last year.

Thirty-five (35) reservoirs held 100 percent of conservation storage capacity, primarily in the North Central (17 reservoirs) and East (16 reservoirs) regions. Three reservoirs, Palo Duro (1 percent), Twin Buttes (6 percent), and O. C. Fisher (9 percent) remained below 10 percent full.

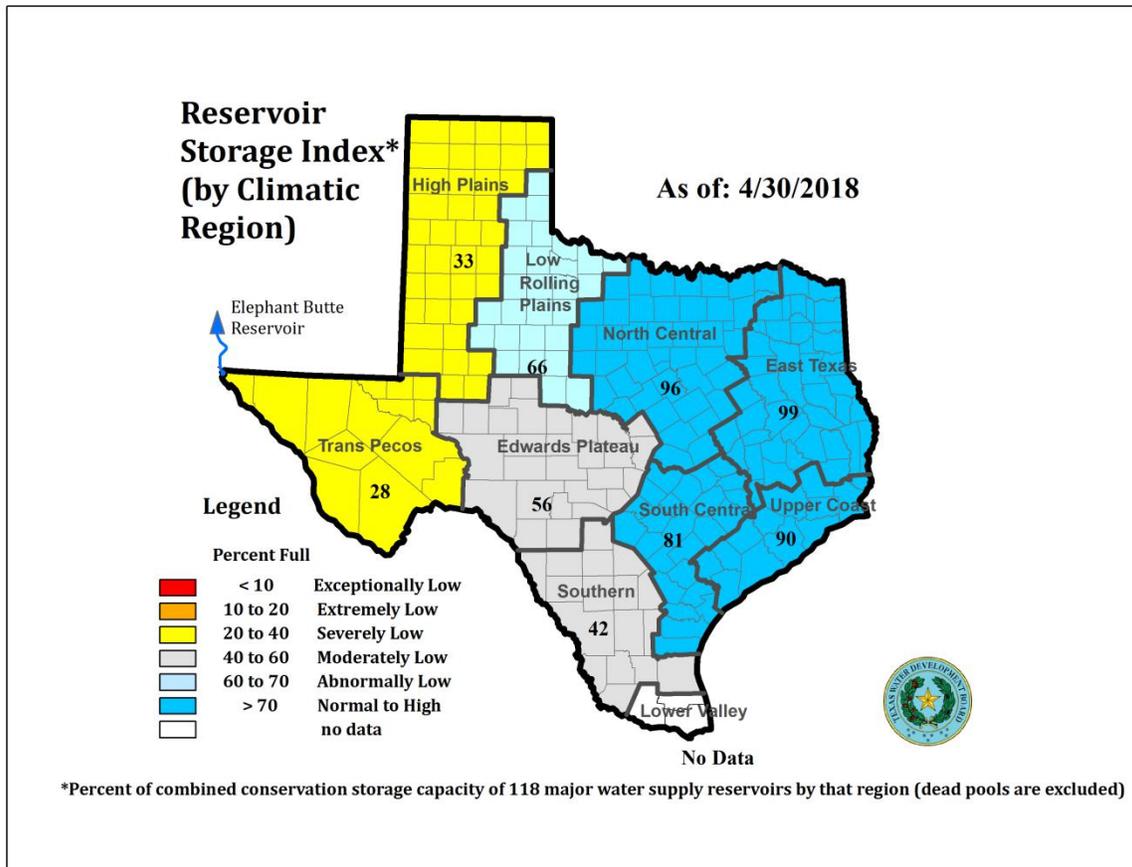
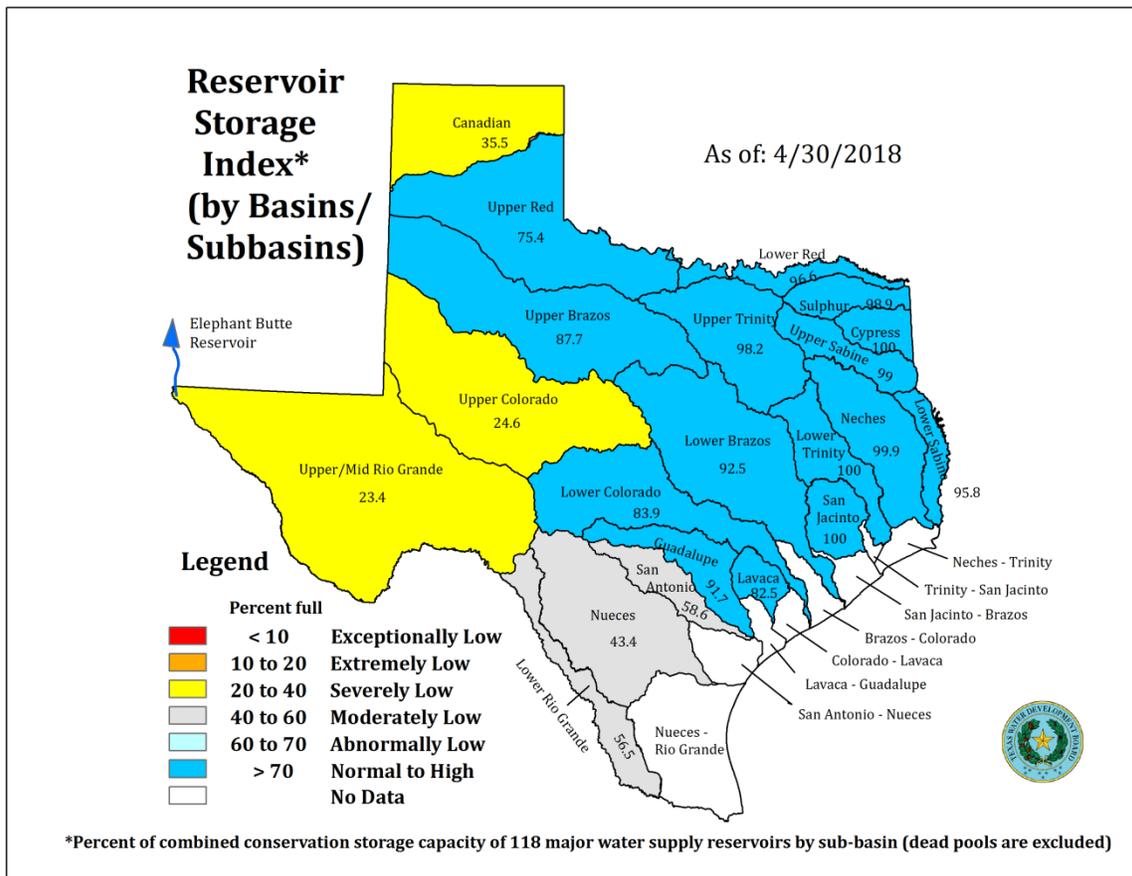
Total combined storage was at or above normal (storage \geq 70 percent) in the East (99 percent), North Central (96 percent), Upper Coast (90 percent), and South Central (81 percent) regions. The High Plains (33 percent) and Trans-Pecos (28 percent) regions had the lowest percentage of storage. Overall, storage increased in one but decreased in eight regions over the past month.

Statewide monitored major water supply reservoir conservation storage



*Storage is based on end of the month data in 118 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.

APRIL 2018 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 April 2018		Change since end of March 2018		Change since end of April 2017	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)
HIGH PLAINS							
MacKenzie Reservoir	46,450	6,507	14	-122	-0	-611	-1
Meredith, Lake	500,000	198,602	40	-2,252	-0	75,620	15
Palo Duro Reservoir	61,066	410	1	-42	-0	-437	-1
White River Lake	29,880	4,867	16	-419	-1	-2,286	-8
TOTAL	637,396	210,386	33	-2,835	-0	72,286	11
LOW ROLLING PLAINS							
Abilene, Lake	7,900	3,944	50	-202	-3	-3,523	-45
Alan Henry Reservoir	94,808	76,310	80	-1,762	-2	-12,617	-13
Champion Creek Reservoir	41,580	18,570	45	-359	-1	2,817	7
Coleman, Lake	38,075	32,922	86	-828	-2	-4,450	-12
Colorado City, Lake	30,758	11,411	37	-432	-1	-2,719	-9
Fort Phantom Hill, Lake	70,030	59,585	85	-2,159	-3	-9,313	-13
Greenbelt Lake	59,968	14,616	24	-304	-1	-2,051	-3
Hords Creek Lake	8,443	5,116	61	-166	-2	-2,024	-24
J. B. Thomas, Lake	199,931	85,751	43	-4,067	-2	-35,778	-18
Kemp, Lake	245,307	204,992	84	-4,933	-2	-40,315	-16
Millers Creek Reservoir	26,768	22,862	85	-1,069	-4	-3,293	-12
North Fork Buffalo Creek Reservoir	15,400	10,488	68	-610	-4	-1,005	-7
Stamford, Lake	51,570	43,975	85	-2,384	-5	-2,527	-5
Sweetwater, Lake	12,267	2,235	18	-71	-1	-683	-6
TOTAL	902,805	592,777	66	-19,346	-2	-117,481	-13
NORTH CENTRAL							
Amon G Carter, Lake	19,266	19,266	100	0	0	0	0
Aquilla Lake	43,243	43,089	100	-154	-0	-154	-0
Arlington, Lake	40,188	38,563	96	-1,625	-4	455	1
Arrowhead, Lake	230,359	207,673	90	-4,126	-2	-11,953	-5
Bardwell Lake	46,122	46,122	100	0	0	0	0
Belton Lake	435,225	408,153	94	-1,054	-0	-27,072	-6
Benbrook Lake	85,648	85,648	100	0	0	19,201	22
Bonham, Lake	11,027	10,775	98	-252	-2	2,301	21
Bridgeport, Lake	366,236	353,275	96	-4,840	-1	-12,961	-4
*Brownwood, Lake	128,839	101,714	79	-3,642	-3	-26,482	-21
*Cisco, Lake	29,003	23,411	81	-473	-2	-2,168	-7
Crook, Lake	9,195	9,091	99	-104	-1	-104	-1
Eagle Mountain Lake	179,880	179,449	100	-431	-0	-431	-0
Georgetown, Lake	36,823	23,937	65	-676	-2	-12,604	-34
Graham, Lake	45,288	42,680	94	-1,209	-3	-1,575	-3
Granbury, Lake	132,949	129,549	97	-2,829	-2	-2,748	-2
Granger Lake	51,822	51,822	100	0	0	0	0
Grapevine Lake	164,703	164,703	100	0	0	0	0
*Halbert, Lake	6,033	5,384	89	-155	-3	94	2
Hubbard Creek Reservoir	318,067	264,374	83	-6,954	-2	-46,790	-15
Hubert H Moss Lake	24,058	23,713	99	-215	-1	-86	-0
Jim Chapman Lake (Cooper)	260,332	255,555	98	-4,777	-2	42,480	16
Joe Pool Lake	175,358	174,325	99	-1,033	-1	-1,033	-1
Kickapoo, Lake	86,345	71,236	83	-1,850	-2	-4,813	-6
Lavon Lake	406,388	406,388	100	0	0	14,725	4
Leon, Lake	27,762	22,803	82	-784	-3	-815	-3
Lewisville Lake	563,228	553,816	98	-9,412	-2	-9,412	-2
Limestone, Lake	203,780	191,908	94	1,206	1	-11,872	-6
*Lost Creek Reservoir	11,950	11,732	98	-163	-1	-150	-1
*Mineral Wells, Lake	5,273	5,111	97	-162	-3	-162	-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 April 2018		Change since end of March 2018		Change since end of April 2017	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)	
<i>(North Central continued)</i>								
Navarro Mills Lake	49,827	49,497	99	701	1	-330	-1	
New Terrell City Lake	8,583	8,583	100	0	0	0	0	
Nocona, Lake (Farmers Crk)	21,444	21,444	100	0	0	0	0	
Palo Pinto, Lake	26,766	23,486	88	-1,168	-4	-2,262	-8	
Pat Cleburne, Lake	26,008	25,993	100	-15	-0	-15	-0	
*Pat Mayse Lake	113,683	113,683	100	0	0	0	0	
Possum Kingdom Lake	538,139	515,932	96	-8,551	-2	-18,455	-3	
Proctor Lake	54,762	43,442	79	-2,282	-4	-10,814	-20	
Ray Hubbard, Lake	439,559	432,302	98	-6,004	-1	-6,213	-1	
Ray Roberts, Lake	788,167	788,167	100	0	0	0	0	
Richland-Chambers Reservoir	1,087,839	1,086,983	100	1,284	0	-856	-0	
Squaw Creek, Lake	151,250	151,250	100	1,168	1	0	0	
Stillhouse Hollow Lake	227,771	200,491	88	-3,699	-2	-27,280	-12	
Tawakoni, Lake	871,685	869,097	100	-2,588	-0	69,028	8	
Texoma, Lake (Texas)	1,258,113	1,210,098	96	-23,943	-2	62,779	5	
Texoma, Lake (Texas & Oklahoma)	2,525,281	2,420,202	96	-47,887	-2	125,558	5	
Waco, Lake	189,418	179,754	95	473	0	-9,664	-5	
Waxahachie, Lake	10,780	10,709	99	-71	-1	-71	-1	
Weatherford, Lake	17,812	17,379	98	-401	-2	-22	-0	
Whitney, Lake	553,344	509,077	92	3,181	1	4,449	1	
Worth, Lake	33,495	30,094	90	-3,401	-10	-2,820	-8	
TOTAL	10,635,685	10,235,576	96	-91,030	-1	-36,675	-0	
EAST								
Athens, Lake	29,503	29,503	100	0	0	0	0	
B A Steinhagen Lake	66,961	65,386	98	9,133	14	9,848	15	
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	639,463	99	-5,223	-1	-5,223	-1	
Cherokee, Lake	40,094	40,094	100	0	0	0	0	
Conroe, Lake	410,988	410,796	100	-192	-0	1,917	0	
Cypress Springs, Lake	66,756	66,659	100	-97	-0	-97	-0	
Fork Reservoir, Lake	605,061	592,460	98	-8,898	-1	-12,601	-2	
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	75,330	99	-149	-0	1,912	3	
Monticello, Lake	34,740	29,954	86	-976	-3	-4,786	-14	
Murvaul, Lake	38,285	38,285	100	0	0	445	1	
Nacogdoches, Lake	39,522	38,483	97	-1,039	-3	277	1	
O' the Pines, Lake	241,363	241,363	100	0	0	0	0	
Palestine, Lake	367,303	367,303	100	0	0	692	0	
Sam Rayburn Reservoir	2,857,077	2,857,077	100	0	0	184,499	6	
Striker, Lake	16,934	16,934	100	0	0	231	1	
*Sulphur Springs, Lake	17,747	16,106	91	-529	-3	-1,641	-9	
Toledo Bend Reservoir (Texas)	2,236,450	2,142,984	96	-93,466	-4	-879	-0	
Toledo Bend Reservoir (Texas & Louisiana)	4,472,900	4,290,069	96	-364,803	-8	-1,757	-0	
Tyler, Lake	72,073	72,073	100	0	0	0	0	
Wright Patman Lake	310,382	310,382	100	187,789	61	17,742	6	
TOTAL	10,220,502	10,099,486	99	86,353	1	192,336	2	

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of lake or reservoir	Conservation storage capacity (acre-feet)	Conservation storage end of April 2018		Change since end of March 2018		Change since end of April 2017	
		(acre-feet)	(%)	(acre-feet)**	(%)	(acre-feet)**	(%)
TRANS-PECOS							
Elephant Butte Reservoir (Texas)	852,491	170,987	20	-17,444	-2	1,064	0
Elephant Butte Reservoir (Texas & New Mexico)	1,973,358	395,803	20	-40,379	-2	2,462	0
Red Bluff Reservoir	151,110	108,751	72	-2,910	-2	-20,970	-14
TOTAL	1,003,601	279,738	28	-20,354	-2	-19,906	-2
EDWARDS PLATEAU							
*Amistad Reservoir (Texas)	1,840,849	1,276,028	69	-104,814	-6	-183,122	-10
*Amistad Reservoir (Texas & Mexico)	3,275,532	1,855,352	57	-155,575	-5	117,271	4
Brady Creek Reservoir	28,808	15,124	52	-769	-3	-3,650	-13
Buchanan, Lake	860,607	768,960	89	-5,748	-1	-46,860	-5
E. V. Spence Reservoir	517,272	59,941	12	-2,687	-1	-10,222	-2
Inks, Lake	13,962	12,892	92	-174	-1	-53	-0
Lyndon B Johnson, Lake	115,249	110,209	96	-244	-0	-855	-1
Marble Falls, Lake	6,901	6,782	98	-16	-0	-70	-1
Nasworthy	9,615	8,036	84	36	0	134	1
Oak Creek Reservoir	39,210	18,060	46	-565	-1	-5,212	-13
O. C. Fisher Lake	119,445	10,829	9	-712	-1	-5,919	-5
*O. H. Ivie Reservoir	554,340	97,540	18	-5,023	-1	-39,634	-7
Twin Buttes Reservoir	182,454	10,531	6	-1,790	-1	-14,027	-8
TOTAL	4,288,712	2,394,932	56	-122,506	-3	-309,490	-7
SOUTH CENTRAL							
*Austin, Lake	23,972	22,650	94	-431	-2	-230	-1
Canyon Lake	378,781	349,018	92	-2,739	-1	-29,763	-8
*Coletto Creek Reservoir	31,040	26,718	86	-634	-2	-2,821	-9
Medina Lake	254,823	149,240	59	-6,112	-2	-84,930	-33
Somerville Lake	147,104	147,104	100	0	0	0	0
Travis, Lake	1,113,348	876,369	79	-17,016	-2	-226,836	-20
TOTAL	1,949,068	1,571,099	81	-26,932	-1	-344,580	-18
UPPER COAST							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	131,583	82	-2,115	-1	-27,615	-17
TOTAL	280,252	252,269	90	-2,115	-1	-27,615	-10
SOUTHERN							
Choke Canyon Reservoir	662,820	184,614	28	-7,817	-1	-69,887	-11
Corpus Christi, Lake	256,062	214,602	84	-13,825	-5	-25,465	-10
*Falcon Reservoir (Texas)	1,551,007	640,191	41	-86,974	-6	67,481	4
*Falcon Reservoir (Texas & Mexico)	2,646,817	798,963	30	-395,016	-15	40,658	2
TOTAL	2,469,889	1,039,407	42	-108,616	-4	-27,871	-1
STATEWIDE TOTAL							
STATEWIDE TOTAL	32,387,910	26,675,670	82	-307,381	-1	-618,996	-2

* 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:

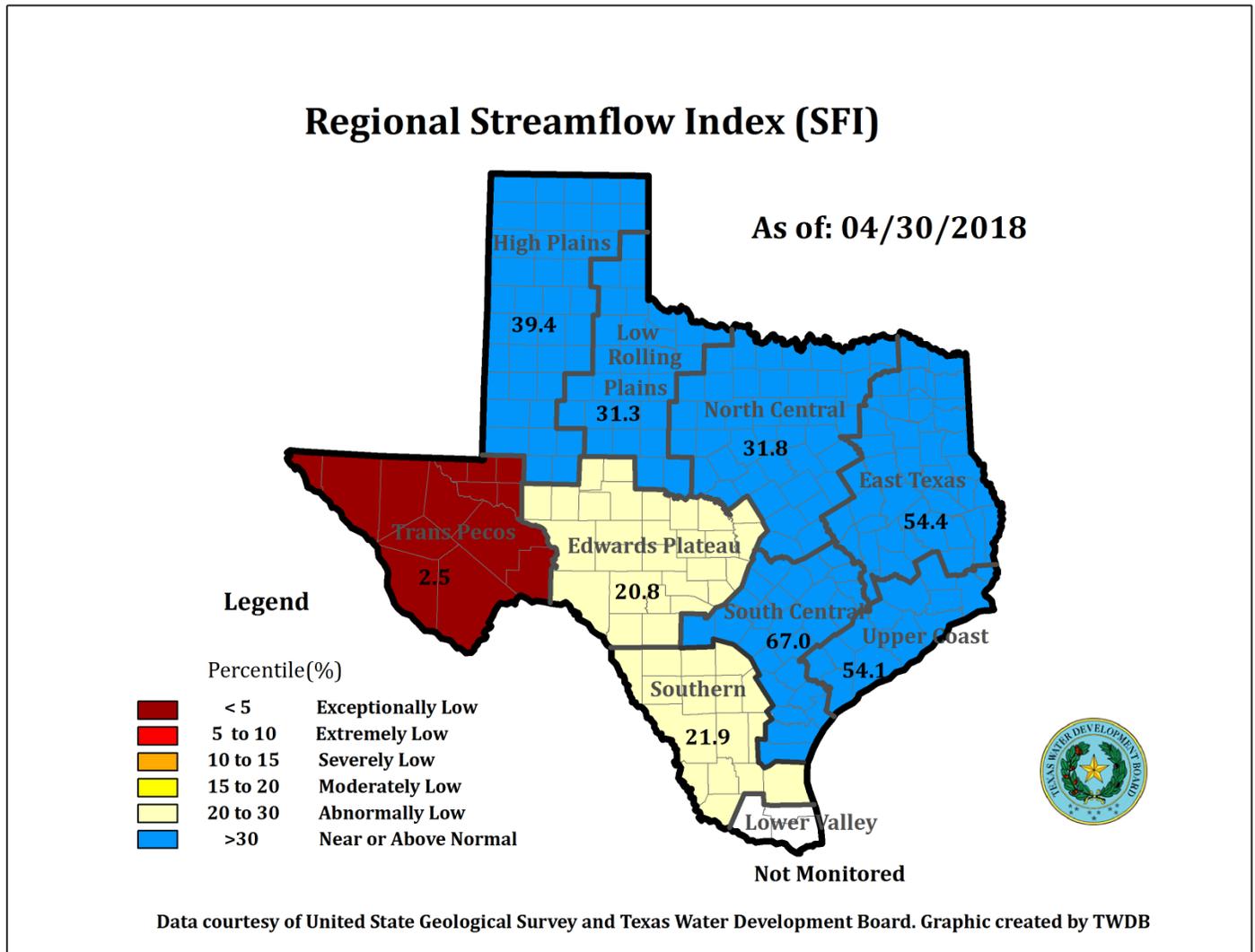
Conservation storage capacity is the space available to store water above the lowest outlet and below the top of conservation pool (some may have seasonal variations), or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not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

APRIL 2018 STREAMFLOW CONDITIONS

The computed 30-day mean flow status for 29 reporting index stations monitored this month is presented below. Mean flow increased at four index stations, decreased at 24 stations, and remained unchanged at one station.

Streamflow Status	Number of Stations
Near or Above Normal (>30%)	16
Abnormally Low (20-30%)	5
Moderately Low (15-20%)	3
Severely Low (10-15%)	3
Extremely Low (5-10%)	1
Exceptionally Low (<5%)	1

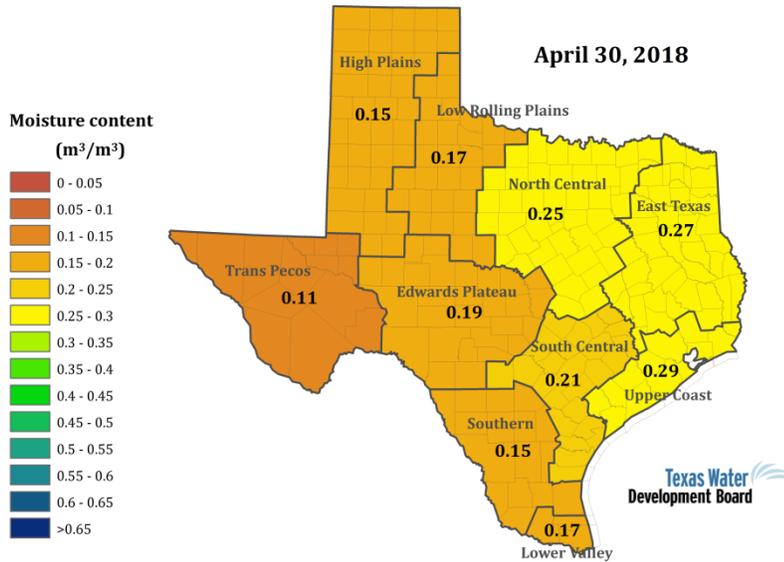
On a regional basis, as shown below, stream flows were exceptionally low in the Trans Pecos region, abnormally low in the Edwards Plateau and Southern regions, but near or above normal in all other regions. Streamflow in the Lower Valley region is not monitored.



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

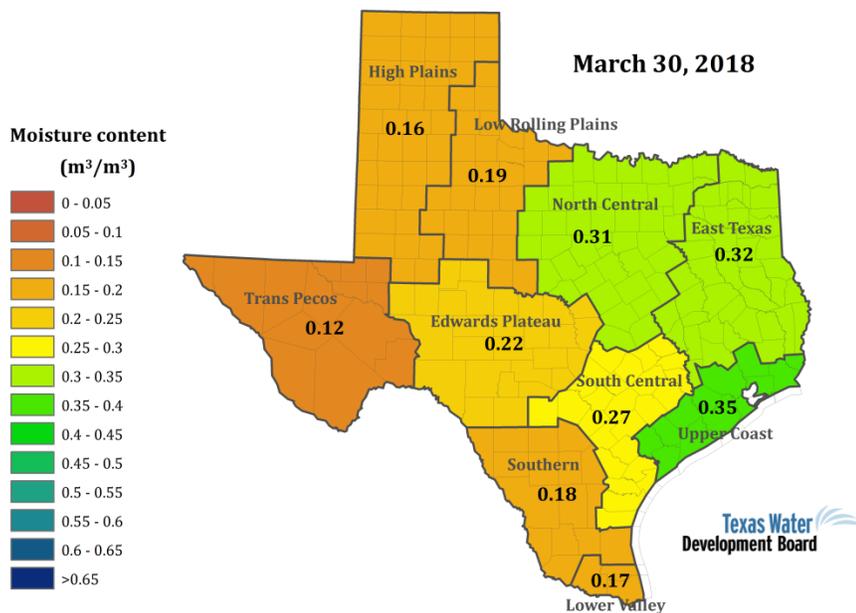
APRIL 2018 SOIL MOISTURE CONDITIONS

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.

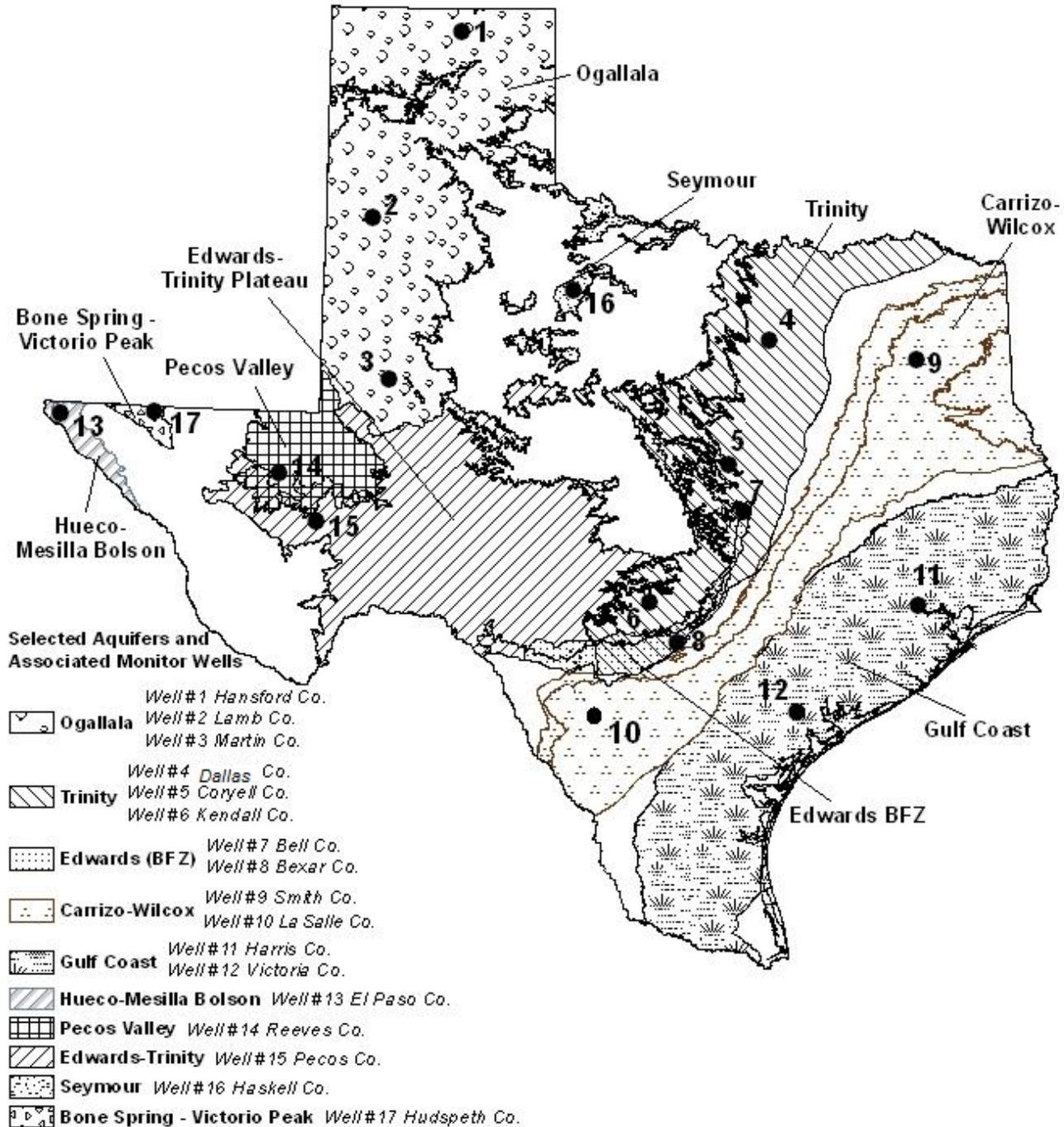
Soil Moisture Condition



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 at the end of April 2018 (*top image*), as compared to that at the end of March 2018 (*bottom image*), decreased in nine out of the ten regions, ranging from -6 to -22 percent, with double digit decreases in seven out of nine regions. Moisture condition remained unchanged in Lower Valley region.

April 2018 GROUNDWATER LEVELS IN OBSERVATION WELLS



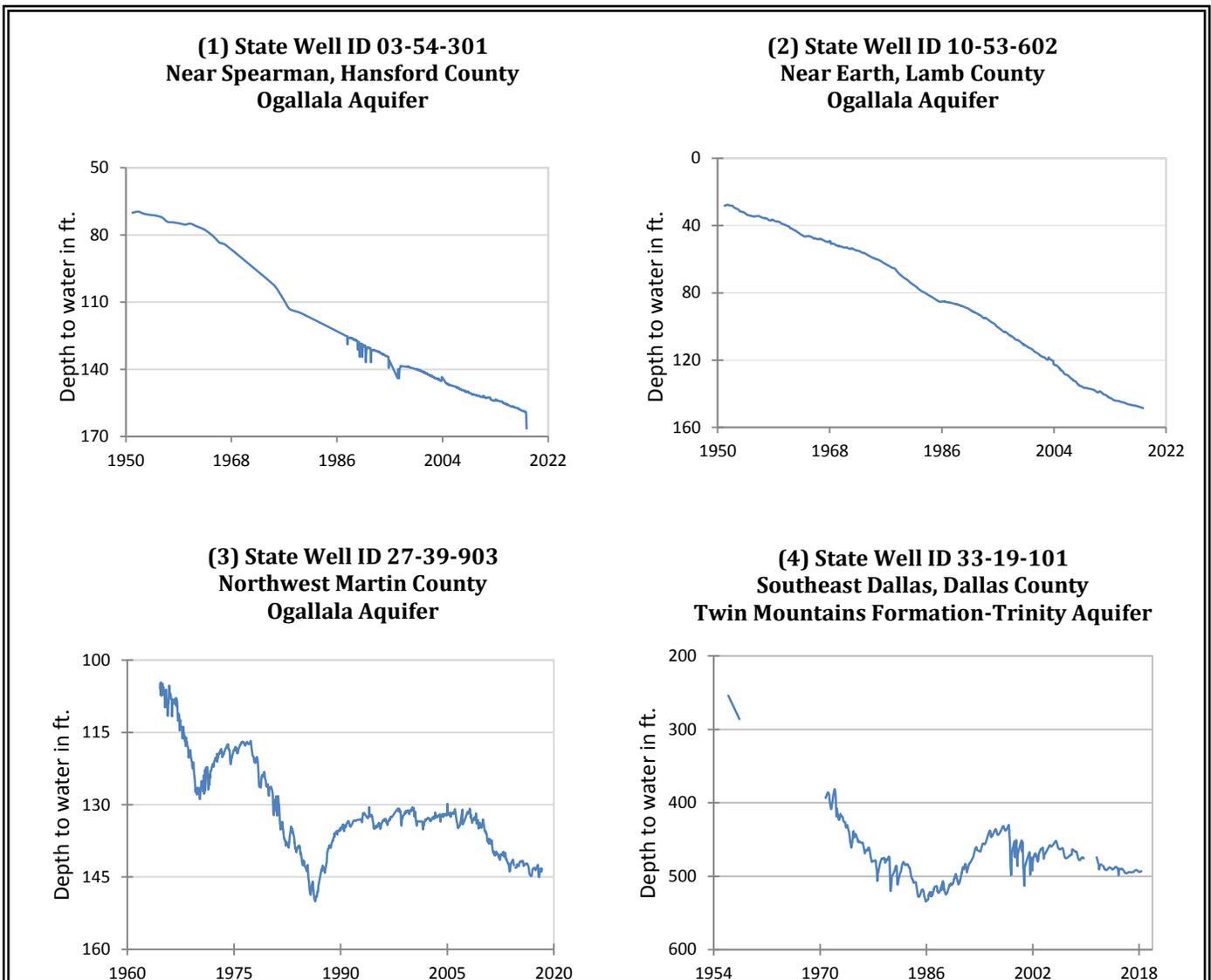
Water-level measurements were available for all 17 key monitoring wells in the state. Water levels rose in 7 monitoring wells since the beginning of April, ranging from an increase of 0.02 feet in the Haskell County Seymour Aquifer well (#16 on map) to 0.58 feet in the Martin County Ogallala Aquifer well (#3 on map). Water levels declined in 10 monitoring wells, ranging from a decline of 0.04 feet in the Lamb County Ogallala Aquifer well (#2 on map) to 21.06 feet in the LaSalle County Carrizo-Wilcox Aquifer well (#10 on map). The J-17 well (#8 on map) in San Antonio recorded a water level of 69.61 feet below land surface or 661.39 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 1.39 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.

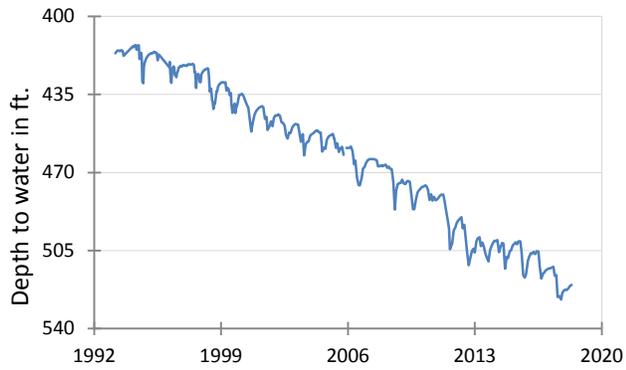
Monitoring Well	April	March	Month Change	Year Change	Historical Change	First Measured
(1) Hansford 0354301	166.43	159.34	-7.09	-8.23	-96.31	1951
(2) Lamb 1053602	148.56	148.52	-0.04	-1.13	-120.39	1951
(3) Martin 2739903	143.33	143.91	0.58	-0.09	-38.44	1964
(4) Dallas 3319101	493.10	493.67	0.57	-0.55	-271.10	1954
(5) Coryell 4035404	522.43	520.80	-1.63	-10.12	-230.43	1955
(6) Kendall 6802609	133.47	130.46	-3.01	-23.58	-73.47	1975
(7) Bell 5804816	125.44	124.46	-0.98	-4.56	-1.93	2008
(8) Bexar 6837203	69.61	63.51	-6.10	-16.40	-22.97	1932
(9) Smith 3430907	431.00	431.22	0.22	-0.34	-131.00	1977
(10) La Salle 7738103	520.00	498.94	-21.06	-51.27	-266.93	2003
(11) Harris 6514409	191.42	191.79	0.37	0.67	-55.92*	1947**
(12) Victoria 8017502	32.17	32.35	0.18	-0.64	1.83	1958
(13) El Paso 4913301	294.15	294.68	0.53	1.02	-62.25	1964
(14) Reeves 4644501	169.12	165.71	-3.41	-2.35	-77.03	1952
(15) Pecos 5216802	192.02	191.34	-0.68	6.01	54.86	1976
(16) Haskell 2135748	46.43	46.45	0.02	-0.36	-3.43	2002
(17) Hudspeth 4807516	148.49	144.83	-3.66	-0.16	-44.57	1966

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

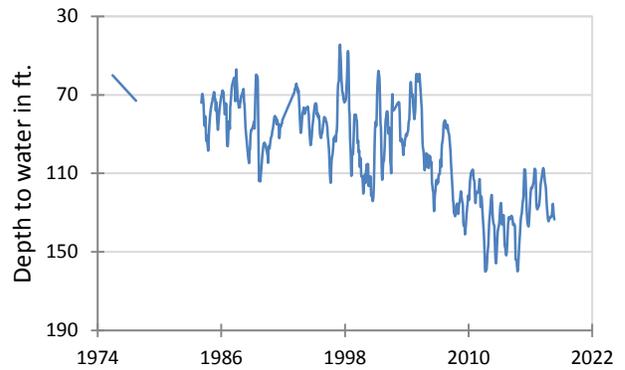
APRIL 2018 GROUNDWATER LEVELS IN OBSERVATION WELLS



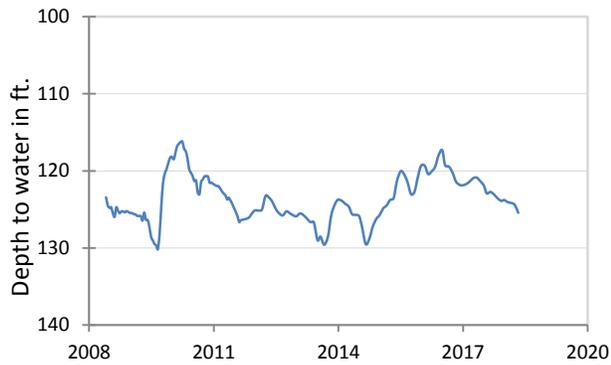
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



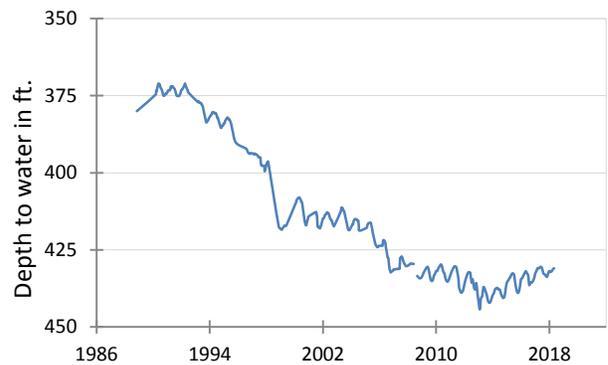
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



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



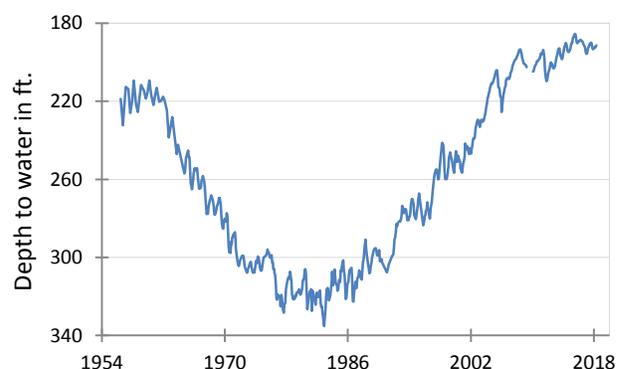
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



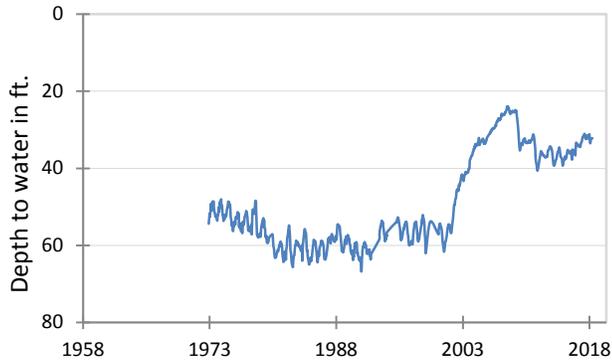
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



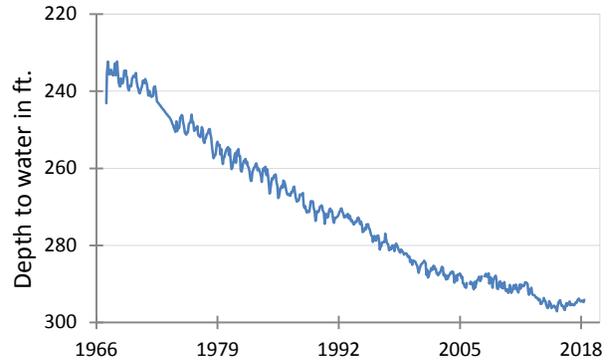
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



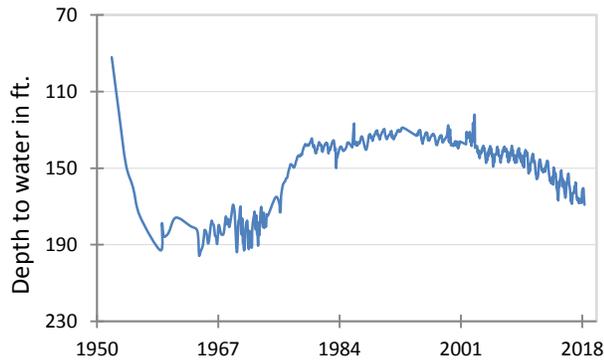
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



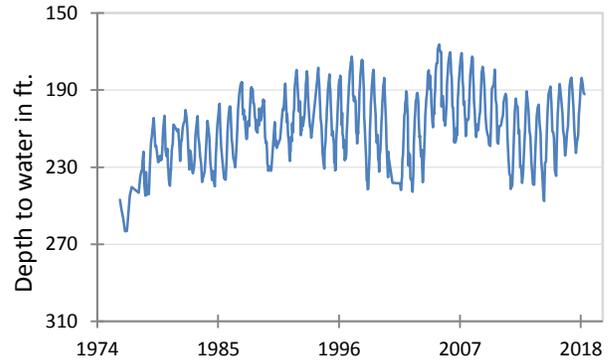
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



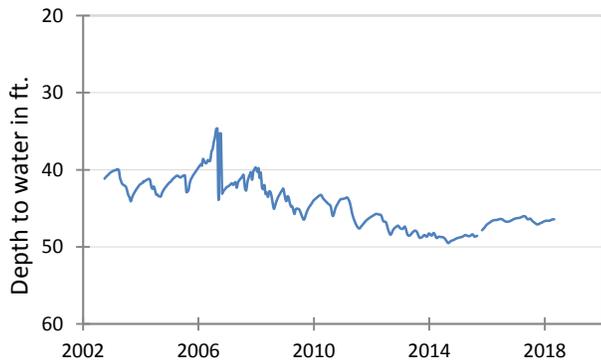
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



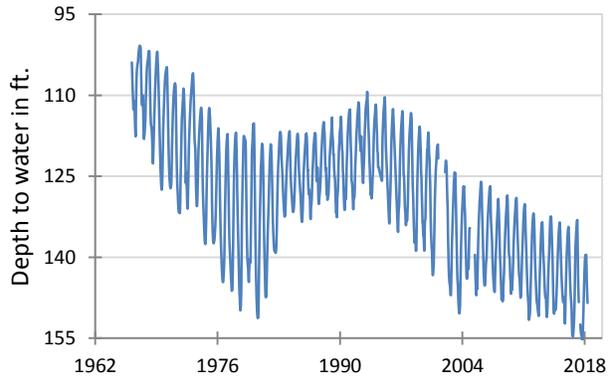
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



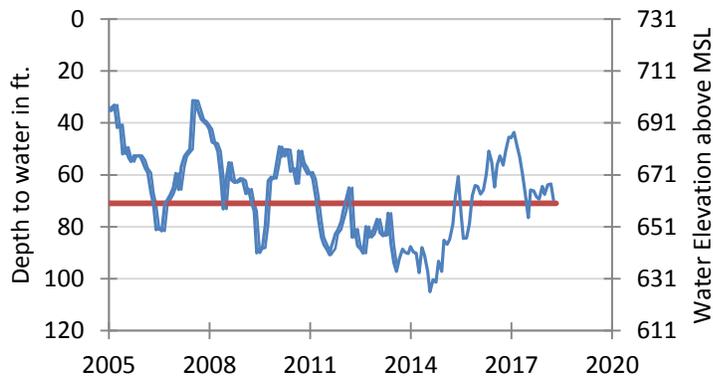
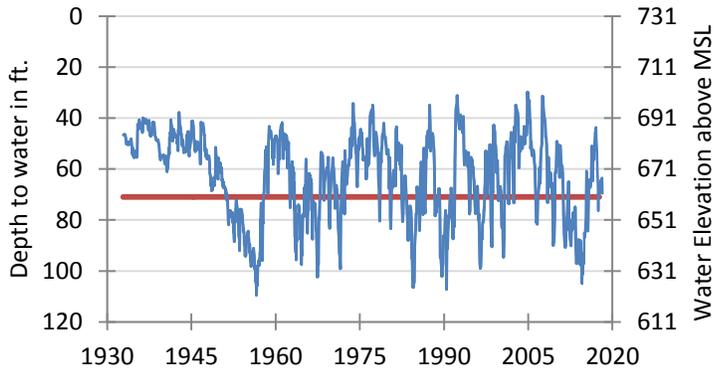
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



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

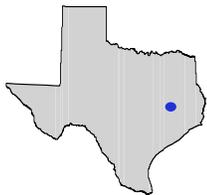


**(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (Balcones Fault Zone) Aquifer**



The late April water-level measurement in this Edwards (Balcones Fault Zone) Aquifer well, elevation 731 feet above mean sea level, was 69.61 feet below land surface, or 661.39 feet above mean sea level. This was 6.10 feet below last month's measurement, 16.40 feet below last year's measurement, and 22.97 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. *****



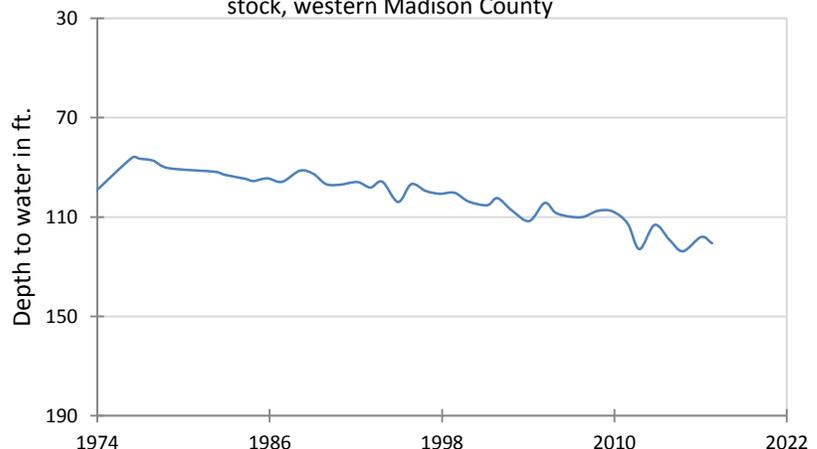
HYDROGRAPH OF THE MONTH

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

The Sparta Aquifer is a minor aquifer extending across East and South Texas, parallel to the Gulf of Mexico coastline and about 100 miles inland. Water is contained within a part of the Claiborne Group known as the Sparta Formation, a sand-rich unit interbedded with silt and clay layers. The thickness of the formation changes gradually from more than 700 feet at the Sabine River to about 200 feet in South Texas, with freshwater saturated thickness averaging about 120 feet. In outcrop areas and for a few miles in the subsurface, the water is usually fresh, with an average concentration of 300 milligrams per liter of total dissolved solids; however, water quality deteriorates with depth. Excess iron concentrations are common throughout the aquifer. Water from the aquifer is predominantly used for domestic and livestock purposes.

Sparta Aquifer

Well #5908701, 645 feet deep
stock, western Madison County



The initial measurement in this livestock well, with a total depth of 102 feet below land surface, was reported in 1973 by the well driller. TWDB has measured the water level annually since 1976. The period of record reveals a gradual decline with the lowest water level of 123.8 feet below land surface measured in October of 2014.