

RESERVOIR STORAGE

December 2014

At the end of the month, total storage in 114 of the state's major water supply reservoirs was at 19.62 million acre-feet*, or 63% of their total conservation storage capacity. This is 117,125 acre-feet more than a month ago but 449,924 acre-feet less than the storage at this time last year.

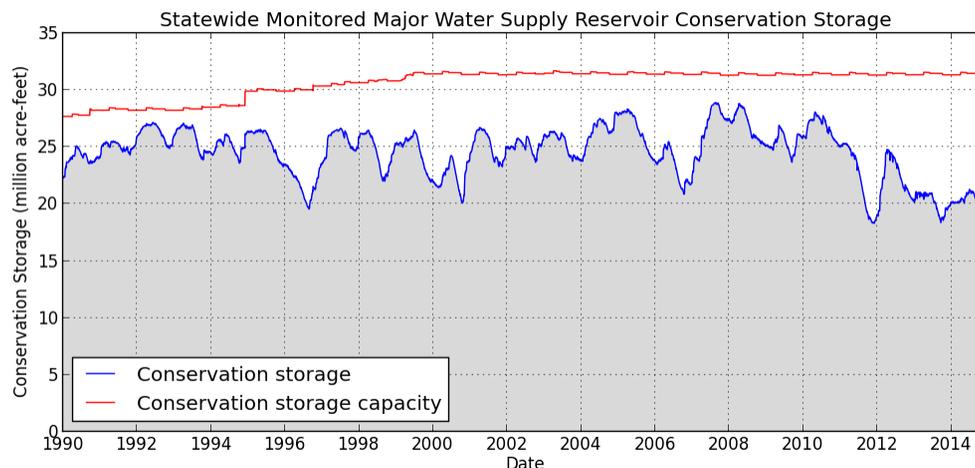
Eleven reservoirs held 100% of conservation storage capacity. Fourteen (14) reservoirs were below 10% full: Electra (0%), O. C. Fisher (1%), Palo Duro (2%), E.V. Spence (2%), Meredith (3%), Abilene (3%), Medina (3%), Twin Buttes (3%), North Fork Buffalo Creek (4%), White River (4%), Champion Creek (6%), Mackenzie (7%), Millers Creek (8%), and Palo Pinto (9%).

Total combined storage was greater than 70% in the Trans-Pecos (87%), Upper Coast (89%) and East (89%) regions. The regions with the lowest percentage storage were the High Plains (5%) and Southern regions (31%). Storage declined in 4 regions and increased in 5 regions over the past month.

Elephant Butte reservoir held 255,762 acre-feet, or 13% of storage capacity. This is 43,853 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 Dec		Change since end of Nov 2014		Change since end of Dec 2013	
		2014 (acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)	(%)
HIGH PLAINS							
Palo Duro Reservoir	61,066	1,004	2	-74	-0	-773	-1
Meredith, Lake (Texas)	500,000	25,114	5	-156	-0	25,114	5
Meredith, Lake (Texas & Oklahoma)	779,556	25,114	3	-156	-0	25,114	3
MacKenzie Reservoir	46,450	3,380	7	-39	-0	921	2
White River Lake	29,880	1,234	4	-180	-1	1,234	4
TOTAL	637,396	30,732	5	-449	-0	26,496	4
LOW ROLLING PLAINS							
Greenbelt Lake	59,968	7,166	12	-63	-0	-1,336	-2
*Electra, Lake	5,626	No Data					
N. Fork Buffalo Crk Reservoir	15,400	600	4	-114	-1	500	3
Kemp, Lake	245,307	66,241	27	-222	-0	6,203	3
Millers Creek Reservoir	26,768	2,129	8	-133	-0	-2,289	-9
Alan Henry Reservoir	94,808	70,141	74	-748	-1	7,828	8
Stamford, Lake	51,570	5,307	10	-171	0	-3,037	-6
J B Thomas, Lake	199,931	90,606	45	-1,072	-1	87,828	44
Fort Phantom Hill, Lake	70,030	20,941	30	-1,024	-1	-10,581	-15
Sweetwater, Lake	12,267	1,617	13	-38	0	-954	-8
Colorado City, Lake	30,758	6,589	21	-135	-0	-1,654	-5
Champion Creek Reservoir	41,580	2,347	6	-60	-0	-742	-2
Abilene, Lake	7,900	268	3	0	0	-207	-3
Coleman, Lake	38,075	12,080	32	-245	-1	-3,463	-9
Hords Creek Lake	8,443	3,453	41	-23	-0	792	9
TOTAL	908,431	289,485	32	-4,048	0	78,888	9
NORTH CENTRAL							
Nocona, Lake (Farmers Crk)	21,444	6,700	31	-197	-1	-2,524	-12
Hubert H Moss Lake	24,058	19,824	82	-78	-0	-1,094	-5
Texoma, Lake (Texas)	1,258,113	1,065,857	85	9,706	1	46,978	4
Texoma, Lake (Texas & Oklahoma)	2,525,281	1,065,857	42	9,706	0	46,978	2
*Pat Mayse Lake	113,683	103,511	91	1,122	1	12,938	11
Kickapoo, Lake	86,345	24,303	28	-444	-1	-3,989	-5
Arrowhead, Lake	230,359	44,587	19	-1,294	-1	-18,092	-8
Bonham, Lake	11,027	7,846	71	0	0	-1,517	-14
Crook, Lake	9,195	9,185	100	261	3	105	1
Amon G Carter, Lake	19,266	9,559	50	-157	-1	31	0
Ray Roberts, Lake	788,167	578,044	73	-5,341	-1	-20,404	-3
Jim Chapman Lake (Cooper)	260,332	83,768	32	297	0	-6,112	-2
Graham, Lake	45,288	17,320	38	-341	-1	-6,674	-15
*Lost Creek Reservoir	11,950	7,244	61	-58	-0	-1,418	-12
Bridgeport, Lake	366,236	138,382	38	-2,391	-1	-27,013	-7
Lewisville Lake	563,228	381,084	68	0	0	-6,229	-1
Lavon Lake	406,388	187,848	46	-952	-0	-8,784	-2
Hubbard Creek Reservoir	318,067	44,593	14	-1,539	-0	-33,920	-11
Possum Kingdom Lake	540,340	335,641	62	1,350	0	-19,576	-4
*Mineral Wells, Lake	6,760	3,342	49	-18	-0	-744	-11
Weatherford, Lake	17,812	10,557	59	753	4	314	2
Eagle Mountain Lake	179,880	100,795	56	0	0	-29,026	-16
Worth, Lake	33,495	21,895	65	-999	-3	-2,915	-9
Grapevine Lake	164,703	92,777	56	-1,013	-1	-18,469	-11
Ray Hubbard, Lake	452,040	261,806	58	938	0	-61,835	-14
New Terrell City Lake	8,583	6,667	78	92	1	84	1

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of Dec 2014 (acre-feet)	(%)	Change since end of Nov 2014 (acre-feet)	(%)	Change since end of Dec 2013 (acre-feet)	(%)
(North Central Continue)							
Palo Pinto, Lake	26,827	2,385	9	-352	-1	-6,500	-24
Benbrook Lake	85,648	58,995	69	-234	-0	-16,648	-19
Arlington, Lake	40,188	27,463	68	5,892	15	-2,061	-5
Joe Pool Lake	175,358	160,568	92	-282	-0	-7,558	-4
*Cisco, Lake	25,895	11,902	46	-144	-1	-2,880	-11
Leon, Lake	26,476	16,235	61	-228	-1	-6,003	-23
Granbury, Lake	128,046	66,798	52	-1,053	-1	-8,348	-7
Pat Cleburne, Lake	26,008	17,016	65	-181	-1	749	3
Waxahachie, Lake	10,780	8,382	78	614	6	-443	-4
Bardwell Lake	46,122	38,190	83	-910	-2	1,274	3
Proctor Lake	55,457	16,284	29	-388	-1	-10,862	-20
Whitney, Lake	553,344	353,791	64	-1,530	-0	4,710	1
Aquilla Lake	44,460	36,357	82	-896	-2	1,952	4
Navarro Mills Lake	49,827	40,266	81	-827	-2	-9,561	-19
*Halbert, Lake	6,033	4,373	72	181	3	-1,005	-17
Richland-Chambers Reservoir	1,087,839	675,299	62	-14,577	-1	-121,289	-11
*Brownwood, Lake	128,839	62,608	49	-965	-1	-11,673	-9
Waco, Lake	189,567	162,967	86	-1,359	-1	-6,687	-4
Limestone, Lake	208,014	180,437	87	-2,094	-1	-27,577	-13
Belton Lake	435,225	297,912	68	-4,779	-1	-33,338	-8
Stillhouse Hollow Lake	227,771	150,061	66	-3,493	-2	-20,696	-9
Georgetown, Lake	36,823	23,244	63	1,450	4	3,310	9
Granger Lake	50,779	50,779	100	0	0	0	0
Tawakoni, Lake	871,685	489,871	56	-2,068	-0	-93,383	-11
Mountain Creek, Lake	22,850	22,850	100	0	0	0	0
Squaw Creek, Lake	151,250	149,141	99	-376	-0	-2,109	-1
TOTAL	10,647,870	6,687,309	63	-28,902	-0	-586,511	-6
EAST							
Wright Patman Lake	122,593	122,593	100	0	0	0	0
*Sulphur Springs, Lake	17,747	15,785	89	165	1	-1,962	-11
Cypress Springs, Lake	66,756	65,629	98	1,055	2	-804	-1
Bob Sandlin, Lake	190,822	167,845	88	646	0	14,147	7
Caddo, Lake	29,898	29,898	100	0	0	0	0
Martin, Lake	75,116	67,437	90	889	1	-7,679	-10
Monticello, Lake	34,740	34,434	99	363	1	-306	-1
Fork Reservoir, Lake	605,061	424,255	70	-8,915	-1	-64,232	-11
O the Pines, Lake	241,363	230,733	96	-3,458	-1	-10,630	-4
Cedar Creek Reservoir in Trinity	644,686	458,447	71	-7,243	-1	-76,687	-12
Athens, Lake	29,435	26,764	91	184	1	-1,471	-5
Palestine, Lake	373,199	360,536	97	3,681	1	-12,663	-3
Tyler, Lake	73,161	71,141	97	1,023	1	4,316	6
Murvaul, Lake	38,285	38,285	100	0	0	0	0
Jacksonville, Lake	25,670	25,670	100	162	1	0	0
Nacogdoches, Lake	39,522	38,633	98	299	1	512	1
Houston County Lake	17,113	17,113	100	0	0	0	0
Sam Rayburn Reservoir	2,857,077	2,549,005	89	21,019	1	138,141	5
Toledo Bend Reservoir (Texas)	2,245,752	1,936,920	86	12,850	1	-19,939	-1
Toledo Bend Reservoir (TX & LA)	4,472,900	1,936,920	43	12,850	0	-19,939	-0
*Livingston, Lake	1,785,348	1,785,348	100	0	0	0	0
B A Steinhagen Lake	66,961	54,205	81	-8,595	-13	1,057	2
Conroe, Lake	416,177	415,184	100	7,295	2	27,489	7
TOTAL	9,996,482	8,935,860	89	21,420	0	-10,711	-0

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of Dec 2014 (acre-feet)	(%)	Change since end of Nov 2014 (acre-feet)	(%)	Change since end of Dec 2013 (acre-feet)	(%)
TRANS-PECOS							
**Red Bluff Reservoir	151,110	131,519	87	3,665	2	65,662	43
TOTAL	151,110	131,519	87	3,665	2	65,662	43
EDWARDS PLATEAU							
Oak Creek Reservoir	39,210	5,958	15	-134	-0	-2,334	-6
E V Spence Reservoir	517,272	11,101	2	-1,202	-0	-9,149	-2
O C Fisher Lake	119,445	1,376	1	-85	-0	-1,273	-1
*O H Ivie Reservoir	554,340	82,214	15	-2,897	-1	4,857	1
Twin Buttes Reservoir	182,454	5,403	3	-588	-0		
Brady Creek Reservoir	28,808	7,777	27	-170	-1	-1,661	-6
Buchanan, Lake	860,607	293,348	34	1,780	0	-29,002	-3
Inks, Lake	13,962	12,847	92	-333	-2	-287	-2
Lyndon B Johnson, Lake	115,056	110,757	96	-490	-0	-797	-1
*Amistad Reservoir (Texas)	1,840,849	1,160,991	63	11,511	1	257,325	14
*Amistad Reservoir (TX & Mexico)	3,275,532	1,160,991	35	11,511	0	257,325	8
TOTAL	4,272,003	1,691,772	40	7,392	0	217,679	5
SOUTH CENTRAL							
Travis, Lake	1,113,348	359,393	32	-2,853	-0	-45,969	-4
*Austin, Lake	23,972	22,711	95	-123	-1	-138	-1
Somerville Lake	147,104	145,697	99	5,566	4	28,027	19
Canyon Lake	378,781	286,002	76	-2,464	-1	-33,715	-9
Medina Lake	254,823	8,287	3	-432	-0	-1,126	-0
*Coletto Creek Reservoir	31,040	19,846	64	-584	-2	-725	-2
TOTAL	1,949,068	841,936	43	-890	-0	-53,646	-3
UPPER COAST							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	129,566	81	5,563	3	-5,749	-4
TOTAL	280,252	250,252	89	5,563	2	-5,749	-2
SOUTHERN							
Choke Canyon Reservoir	695,262	173,761	25	-3,503	-1	-65,899	-9
Corpus Christi, Lake	256,961	124,178	48	-2,538	-1	-112,217	-44
*Falcon Reservoir (Texas)	1,551,007	466,913	30	35,273	2	-88,079	-6
*Falcon Reservoir (TX & Mexico)	2,646,817	466,913	18	35,273	1	-88,079	-3
TOTAL	2,503,230	764,852	31	29,232	1	-266,195	-11
STATE TOTAL	31,345,842	19,623,717	63	117,125	0	-449,924	-1
* 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	255,762	13	43,853	2	-22,578	-1

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.

DECEMBER RESERVOIR CONDITIONS

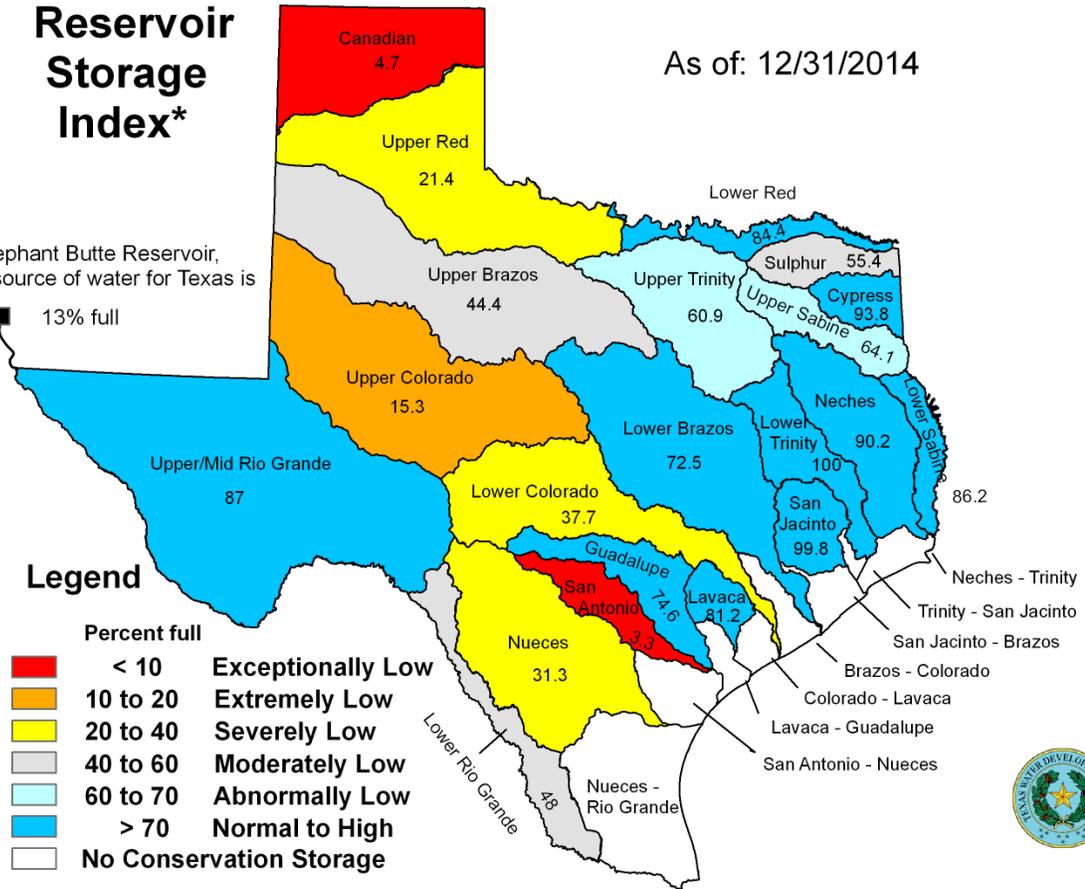
As of: 12/31/2014

Reservoir Storage Index*

Elephant Butte Reservoir, a source of water for Texas is 13% 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	

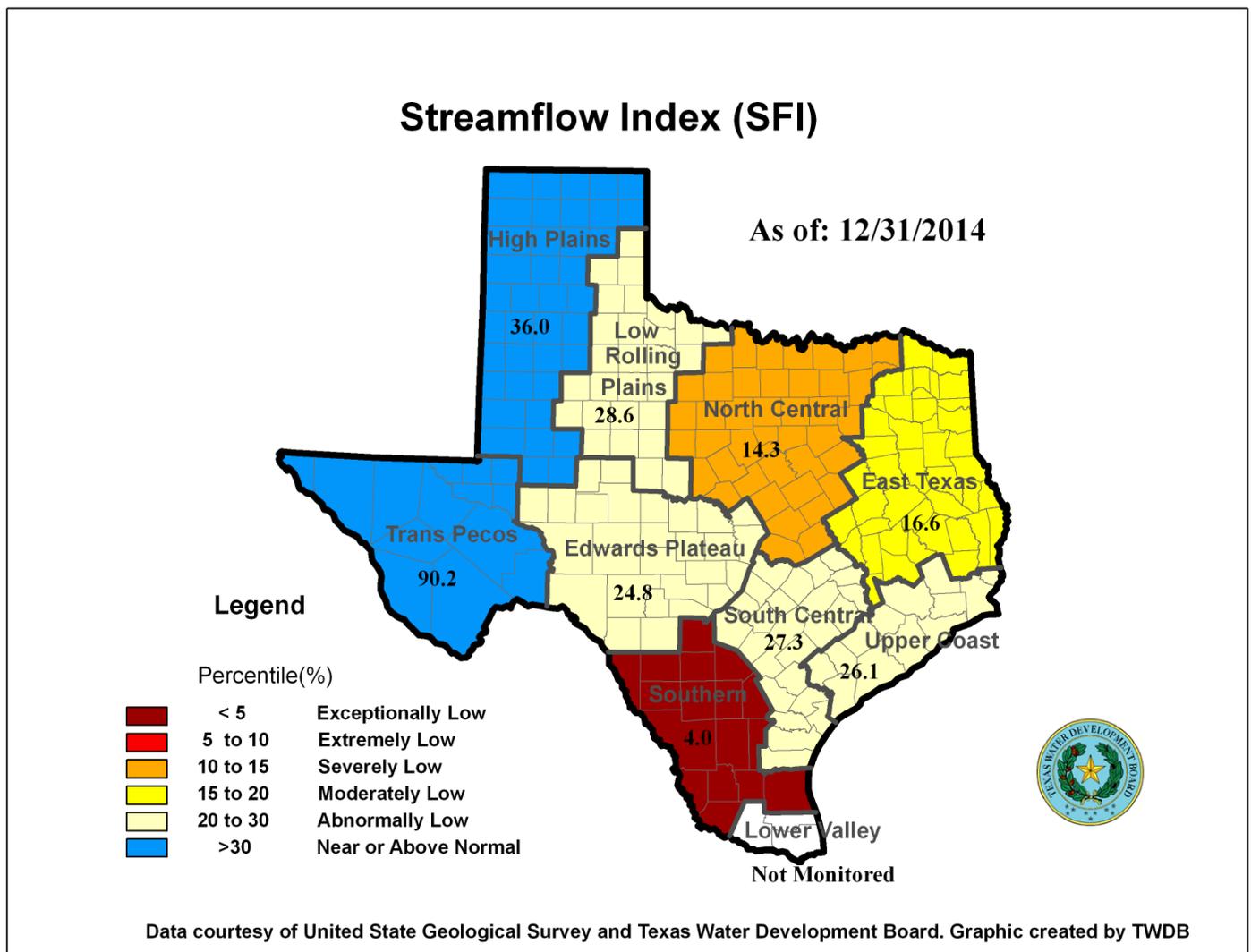


*Percent of combined conservation storage capacity of 114 major water supply reservoirs by sub-basin (dead pools are excluded)

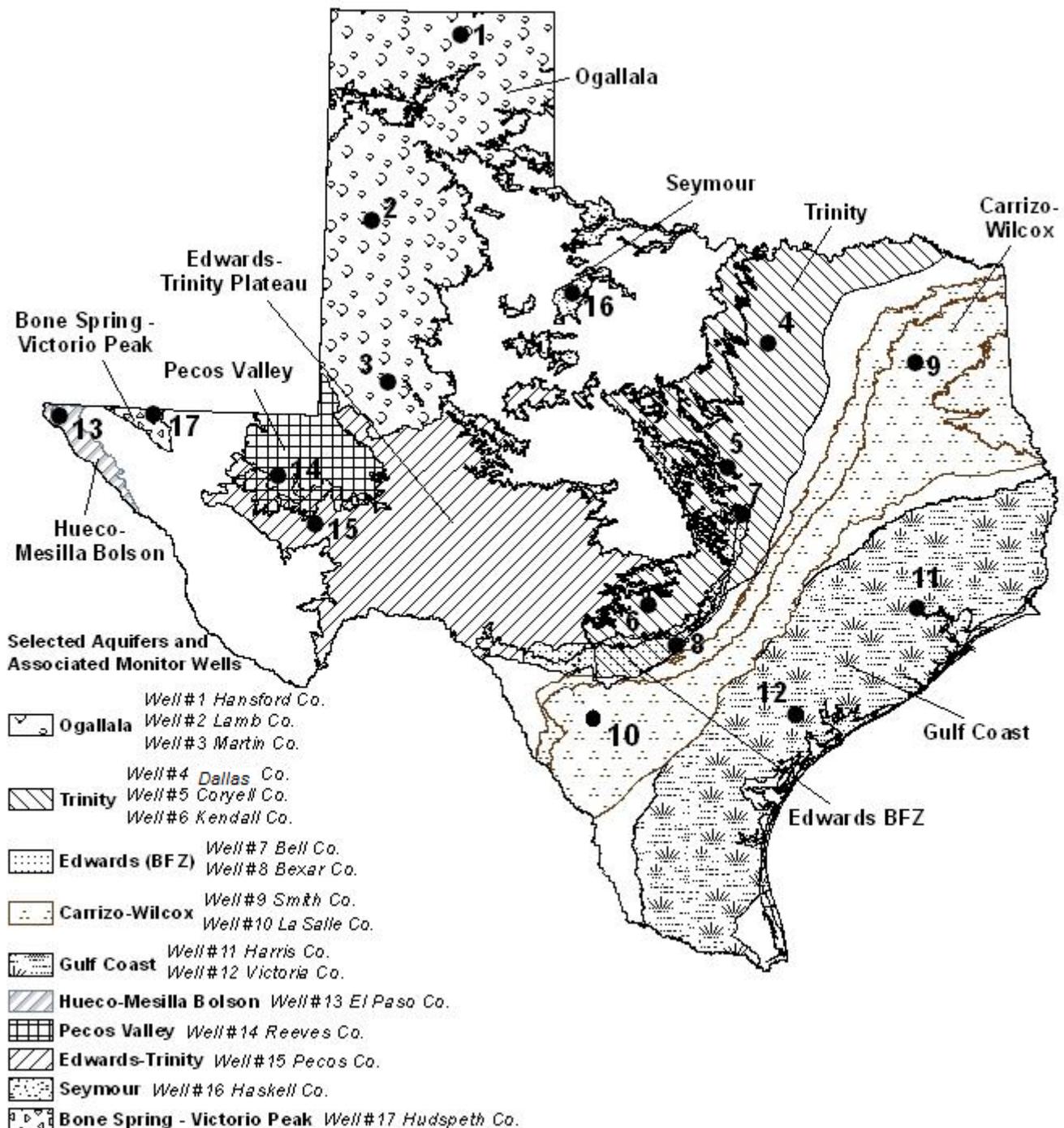
DECEMBER STREAMFLOW CONDITIONS

Of 29 reporting index stations monitored this month, computed 30-day mean flows were exceptionally low (<5%) at 7 stations, extremely low (5-10%) at 6 stations, severely low (10-15%) at 3 stations, moderately low (15-20%) at 0 station, abnormally low (20-30%) at 2 stations, and near normal (30% - 70%) at the remaining 11 stations. Compared to last month, flows have increased at 13 index stations and decreased at 11 stations.

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



DECEMBER 2014 GROUNDWATER LEVELS IN OBSERVATION WELLS



December, 2014

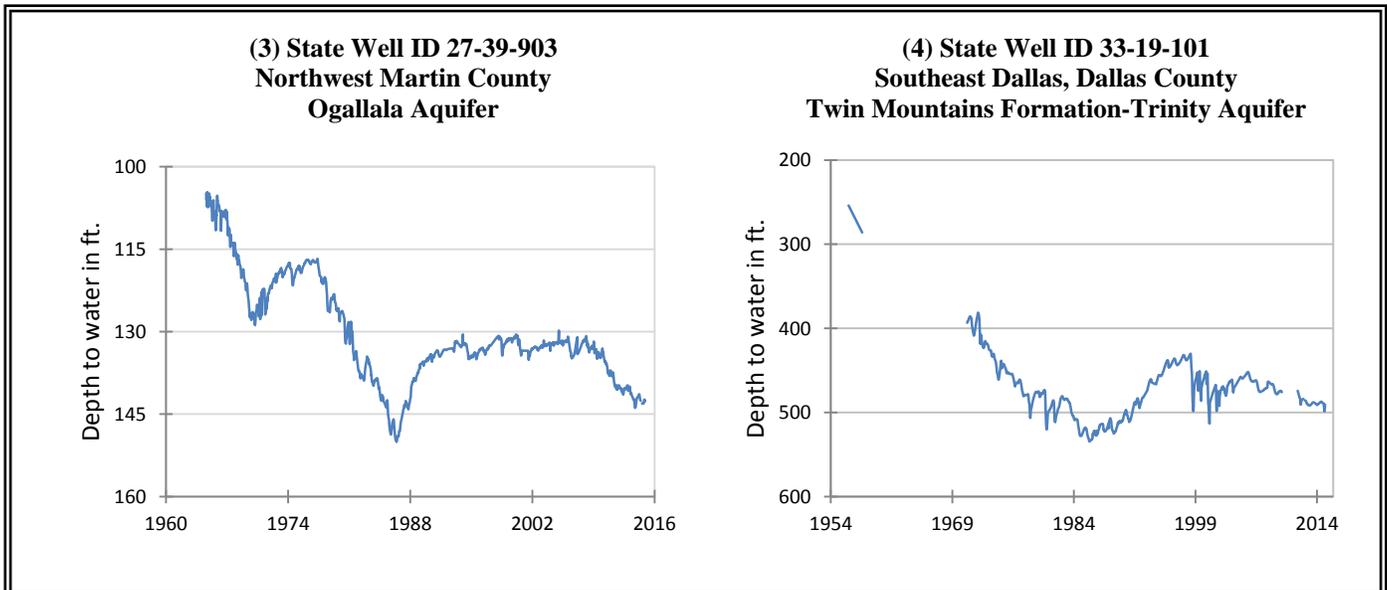
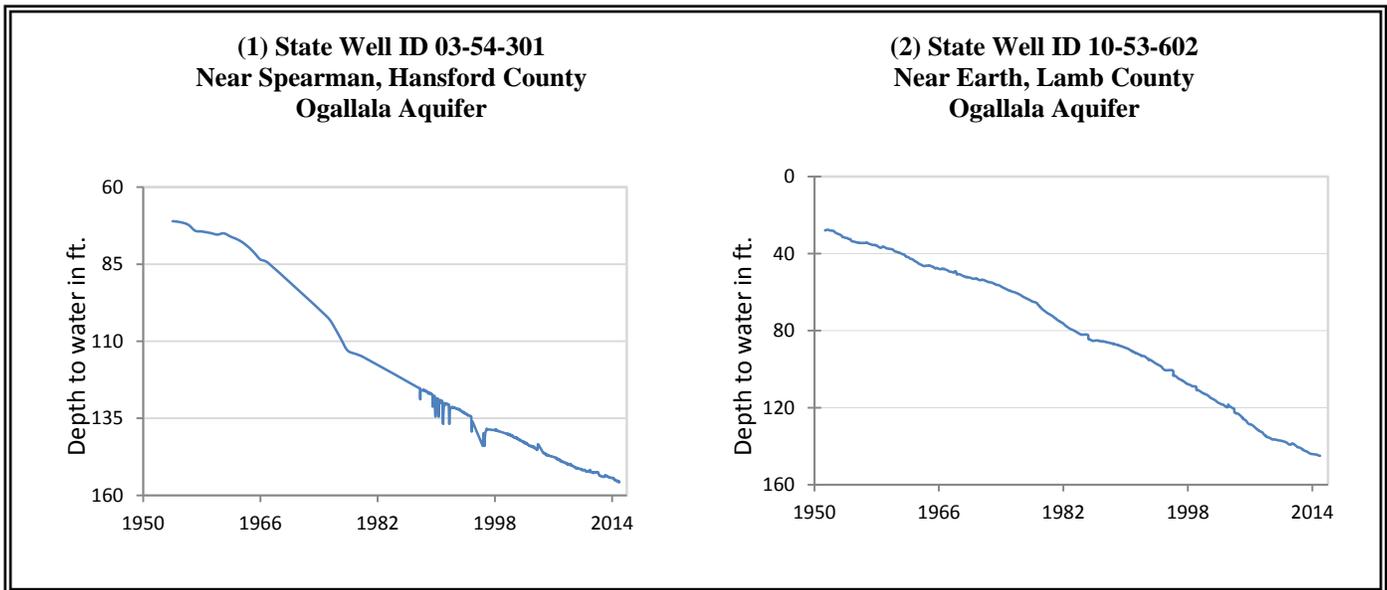
Water level measurements were available for sixteen of the seventeen key monitoring wells in the state. Water levels rose in eleven of the monitoring wells since the beginning of December, ranging from 0.1 feet in the Haskell County Seymour Aquifer well to 8.46 feet in the Pecos County Pecos Valley Aquifer well. Water levels declined in five monitoring wells, ranging from 0.04 feet in the Lamb County Ogallala Aquifer well to 3.99 feet in the Bexar County Edwards (BFZ) Aquifer well (J-17). The J-17 well in San Antonio recorded a water level of 97.2 feet below land surface or 633.8 feet above mean sea level. This water level is 6.2 feet below the Stage III critical management level in that segment of the Edwards Aquifer. Stage III restrictions were declared by the EAA when the ten-day average fell below the 640-foot elevation, or 91 feet below land surface.

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

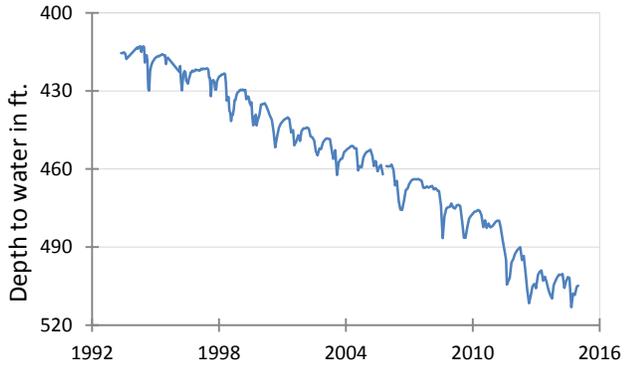
Monitoring Well	December	November	month change	year change	historical change	first measured
(1) Hansford 0354301	155.76	155.40	-0.36	-1.36	-85.64	1951
(2) Lamb 1053602	145.02	144.98	-0.04	-0.91	-116.87	1951
(3) Martin 2739903	NA	142.66	NA	NA	-37.77	1964
(4) Dallas 3319101	490.66	489.77	-0.89	0.47	-268.66	1954
(5) Coryell 4035404	504.88	505.26	0.38	-3.23	-212.88	1955
(6) Kendall 6802609	140.61	146.39	5.78	-7.22	-80.61	1975
(7) Bell 5804816	125.78	126.18	0.4	-2.03	-2.65	2008
(8) Bexar 6837203	97.2	93.21	-3.99	-6.86	-50.56	1932
(9) Smith 3430907	435.65	437.27	1.62	4.07	-69.65	1987
(10) La Salle 7738103	510.58	508.88	-1.7	-23.09	-257.51	2003
(11) Harris 6514409	191.24	193.17	1.93	4.76	-55.74*	1956
(12) Victoria 8017502	37.94	38.06	0.12	0	-3.94	1958
(13) El Paso 4913301	295.82	295.98	0.16	-2.19	-63.92	1967
(14) Reeves 4644501	153.99	155.5	1.51	-4.26	-61.9	1952
(15) Pecos 5216802	200.9	209.36	8.46	2.33	45.98	1976
(16) Haskell 2135748	48.85	48.95	0.1	-0.59	-7.52	2002
(17) Hudspeth 4807516	137.04	140.03	2.99	-0.54	-33.12	1964

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

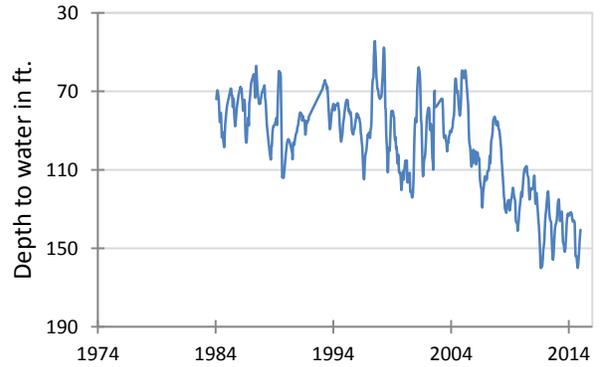
DECEMBER GROUNDWATER LEVELS IN OBSERVATION WELLS



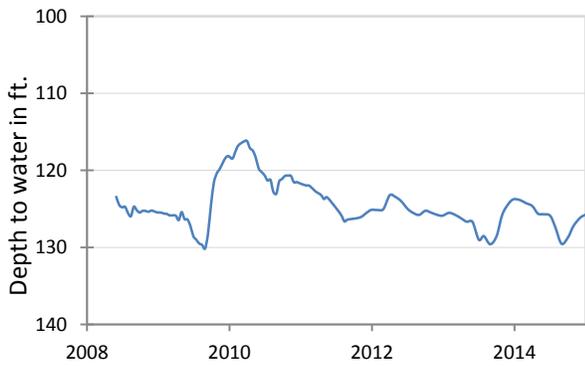
**(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer**



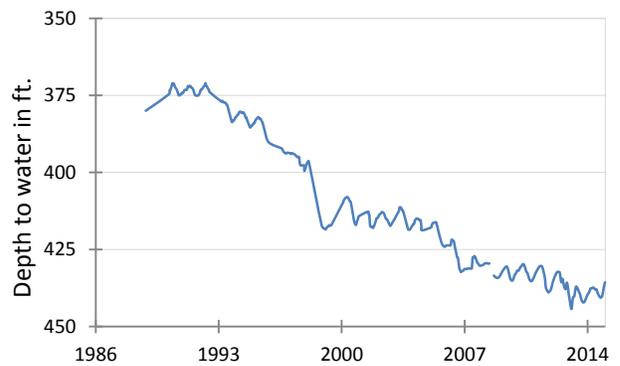
**(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer**



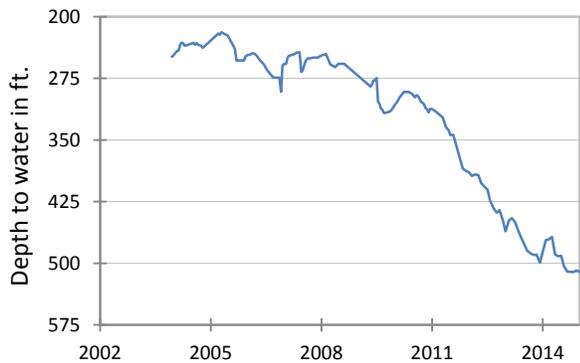
**(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer**



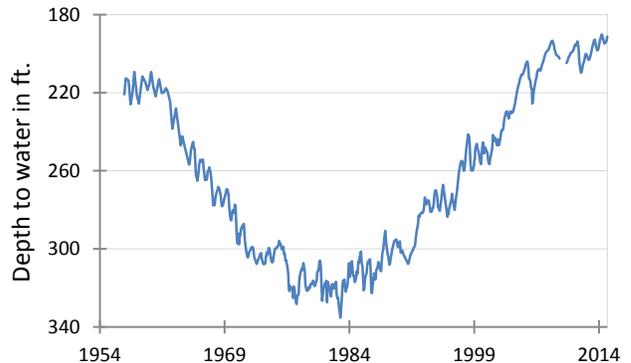
**(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer**



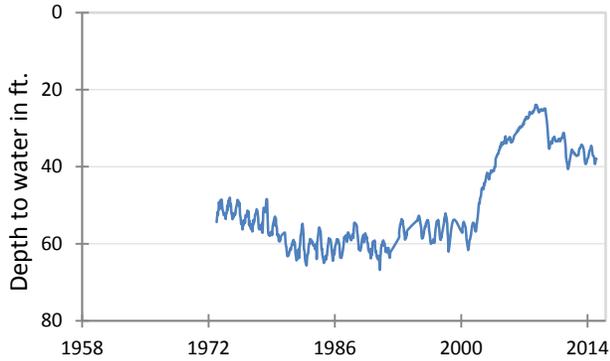
**(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer**



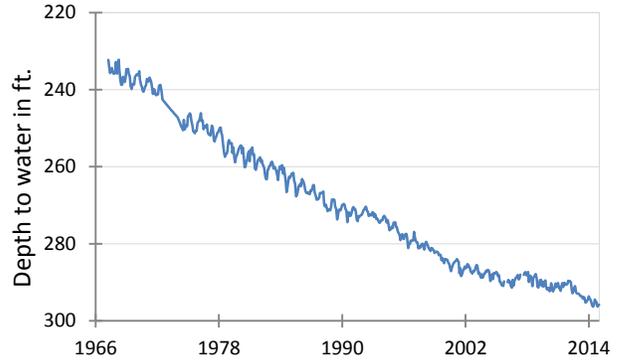
**(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer**



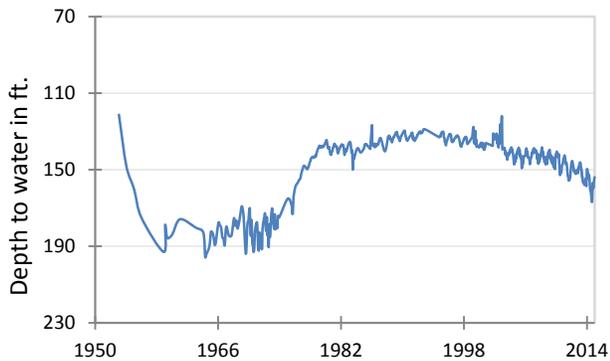
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



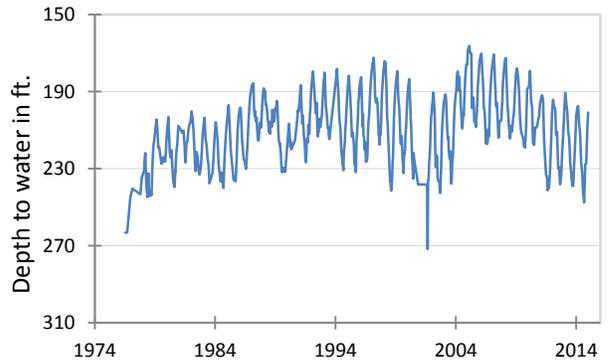
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



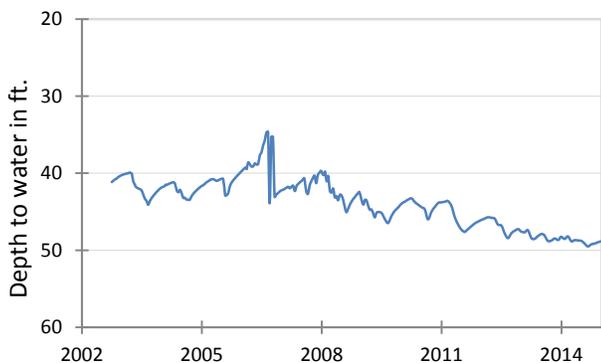
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



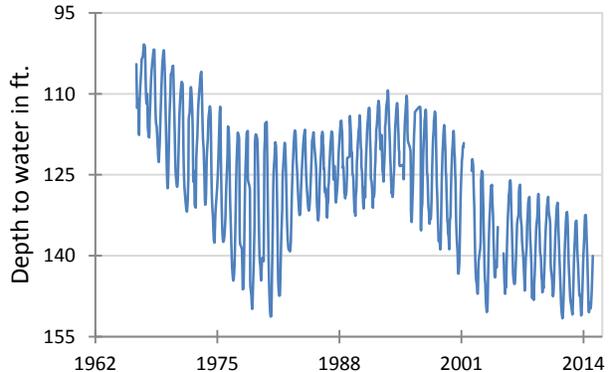
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



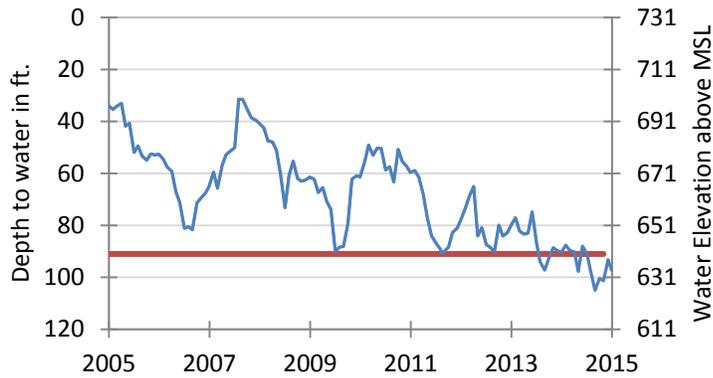
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



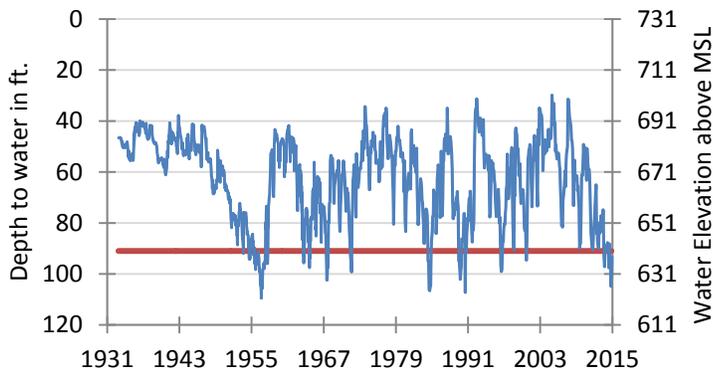
(17) State Well ID 48-07-516
Dell City, Hudspeth County
Bone Spring - Victorio Peak Aquifer



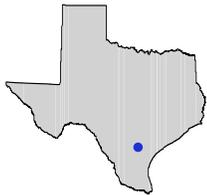
**(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (BFZ) Aquifer**



The late December water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above mean sea level, was 97.2 feet below land surface, or 633.8 feet above mean sea level. This was 3.99 feet below last month's measurement, 6.86 feet below last year's measurement, and 50.56 feet below the initial measurement recorded in 1932.



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



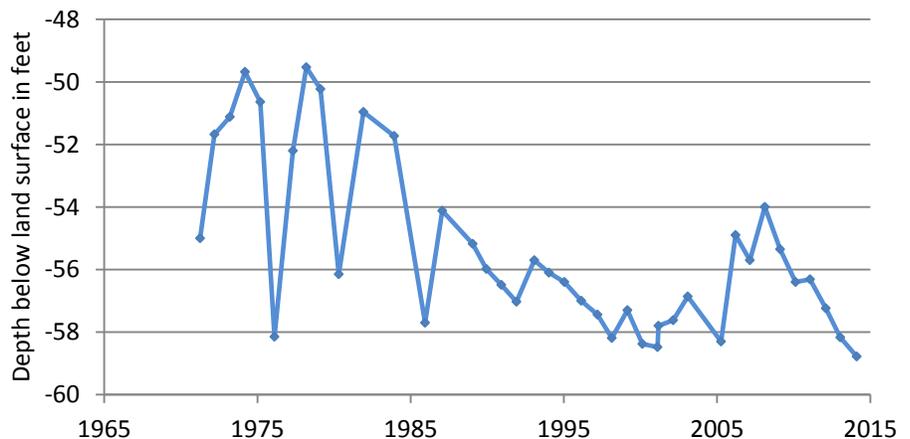
HYDROGRAPH OF THE MONTH

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

Gulf Coast Aquifer

The Gulf Coast Aquifer is a major aquifer paralleling the Gulf of Mexico coastline. It consists of several aquifers, including the Jasper, Evangeline, and Chicot aquifers, which are composed of discontinuous sand, silt, clay, and gravel beds. Water quality varies with depth and locality. It is generally good in the central and northeastern parts of the aquifer, where the water contains less than 500 milligrams per liter of total dissolved solids, but is poorer in the south, where it typically contains 1,000 to more than 10,000 milligrams per liter. The aquifer is used for municipal, industrial, and irrigation purposes. In Harris, Galveston, Fort Bend, Jasper, and Wharton counties, water levels have declined up to 350 feet, resulting in land subsidence. In other areas, water levels have not fluctuated as much.

Well # 7917801, 150 feet deep
Livestock, northern Bee County



Depth-to-water in this livestock well has been measured by the TWDB for more than 40 years. The water level has remained relatively unchanged throughout the period of record.

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