RESERVOIR STORAGE

July 2014

At the end of the month, total storage in 114 of the state's major water supply reservoirs was at 21.04 million acre-feet*, or 67% of their total conservation storage capacity. This is 213,800 acre-feet less than a month ago but 1.08 million acre-feet more than the storage at this time last year. No data was reported for Electra and B.A. Steinhagen. Electra has been empty since the end of October, 2012

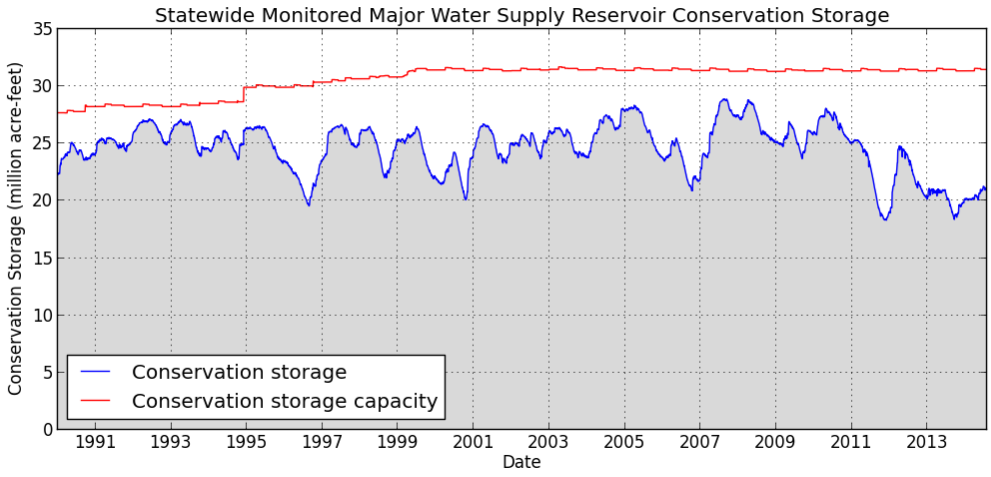
Thirteen reservoirs, most in the North Central and East regions, held 100% of conservation storage capacity. Thirteen (13) reservoirs were below 10% full: Electra (0%), North Fork Buffalo Creek (1%), J. B. Thomas (1%), O. C. Fisher (2%), E.V. Spence (2%), Meredith (3%), Palo Duro (3%), Abilene (3%), White River (4%), Medina (4%), Champion Creek (7%), Twin Buttes (7%), and Mackenzie (8%).

Total combined storage was greater than 70% in the Upper Coast (97%) and East (97%) regions. The regions with the lowest percentage storage were the High Plains (4%) and Low Rolling Plains regions (22%). Storage declined in 6 regions and increased in 3 regions over the past month.

Elephant Butte reservoir held 134,667 acre-feet, or 7% of storage capacity. This is 94,100 acre-feet less 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 July 2014 (acre-feet)	(%)	Change since end of June 2014 (acre-feet)	(%)	Change since end of July 2013 (acre-feet)	(%)
HIGH PLAINS							
Palo Duro Reservoir	61,066	1,724	3	-193	-0	-442	-1
Meredith, Lake (Texas)	500,000	20,563	4	12,238	2	20,563	4
Meredith, Lake (Texas & Oklahoma)	779,556	20,563	3	12,238	2	20,563	3
MacKenzie Reservoir	46,450	3,520	8	-77	-0	976	2
White River Lake	29,880	1,215	4	1,040	3	872	3
TOTAL	637,396	27,022	4	13,008	2	21,969	3
LOW ROLLING PLAINS							
Greenbelt Lake	59,968	7,645	13	-175	-0	-873	-1
*Electra, Lake	5,626	No Data					
N. Fork Buffalo Crk Reservoir	15,400	151	1			-227	-1
Kemp, Lake	268,811	71,278	27	8,826	3	-1,966	-1
Millers Creek Reservoir	26,768	2,568	10	-229	-1	-3,337	-12
Alan Henry Reservoir	94,808	55,529	59	-2,036	-2	-9,486	-10
Stamford, Lake	51,570	7,011	14	827	2	-3,492	-7
J B Thomas, Lake	199,931	2,196	1	-555	-0	-1,099	-1
Fort Phantom Hill, Lake	70,030	26,911	38	-582	-1	-9,793	-14
Sweetwater, Lake	12,267	2,003	16	-122	-1	-956	-8
Colorado City, Lake	30,758	7,561	25	-380	-1	-1,753	-6
Champion Creek Reservoir	41,580	2,836	7	-221	-1	-674	-2
Abilene, Lake	7,900	266	3	0	0	-426	-5
Coleman, Lake	38,075	13,713	36	168	0	-3,700	-10
Hords Creek Lake	8,443	2,966	35	340	4	-2	-0
TOTAL	926,309	202,634	22	5,861	1	-30,139	-3
NORTH CENTRAL							
Nocona, Lake (Farmers Crk)	21,444	7,756	36	-266	-1	-2,616	-12
Hubert H Moss Lake	24,058	20,588	86	463	2	-816	-3
Texoma, Lake (Texas)	1,258,113	1,079,117	86	32,915	3	-178,996	-14
Texoma, Lake (Texas & Oklahoma)	2,525,281	1,079,117	43	32,915	1	-178,996	-7
*Pat Mayse Lake	113,683	94,233	83	-1,391	-1	-772	-1
Kickapoo, Lake	86,345	27,037	31	4,136	5	-5,349	-6
Arrowhead, Lake	230,359	50,810	22	1,823	1	-26,861	-12
Bonham, Lake	11,027	8,317	75	-288	-3	-2,025	-18
Crook, Lake	9,195	9,195	100	188	2	623	7
Amon G Carter, Lake	19,266	10,992	57	2,687	14	252	1
Ray Roberts, Lake	788,167	618,364	78	59,959	8	-34,094	-4
Jim Chapman Lake (Cooper)	260,332	130,894	50	-8,086	-3	17,723	7
Graham, Lake	45,288	20,523	45	687	2	-8,169	-18
*Lost Creek Reservoir	11,950	7,846	66	-132	-1	-1,565	-13
Bridgeport, Lake	366,236	151,714	41	-147	-0	-25,994	-7
Lewisville Lake	563,228	404,918	72	34,399	6	-7,198	-1
Lavon Lake	406,388	204,200	50	-708	-0	-42,279	-10
Hubbard Creek Reservoir	318,067	56,349	18	-2,370	-1	-40,908	-13
Possum Kingdom Lake	540,340	330,601	61	223	0	-54,679	-10
*Mineral Wells, Lake	6,760	3,669	54	-116	-2	-801	-12
Weatherford, Lake	17,812	10,209	57	-551	-3	-1,509	-8
Eagle Mountain Lake	179,880	124,531	69	724	0	-21,422	-12
Worth, Lake	33,495	22,433	67	-1,197	-4	-753	-2
Grapevine Lake	164,703	107,744	65	3,440	2	-12,225	-7
Ray Hubbard, Lake	452,040	299,344	66	-2,363	-1	-68,012	-15
New Terrell City Lake	8,583	7,482	87	-115	-1	1,217	14

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of July 2014 (acre-feet)	(%)	Change since end of June 2014 (acre-feet)	(%)	Change since end of July 2013 (acre-feet)	(%)
(North Central Continue)							
Palo Pinto, Lake	26,827	5,015	19	-713	-3	-8,038	-30
Benbrook Lake	85,648	69,285	81	-5,748	-7	542	1
Arlington, Lake	40,188	32,715	81	-5,260	-13	533	1
Joe Pool Lake	175,358	168,790	96	-4,428	-3	3,260	2
*Cisco, Lake	25,895	13,003	50	-426	-2	-3,321	-13
Leon, Lake	26,476	18,516	70	-898	-3	-6,229	-24
Granbury, Lake	128,046	91,883	72	-6,143	-5	9,572	7
Pat Cleburne, Lake	26,008	19,890	76	-880	-3	1,994	8
Waxahachie, Lake	10,780	9,393	87	-841	-8	632	6
Bardwell Lake	46,122	43,978	95	-1,894	-4	8,947	19
Proctor Lake	55,457	20,255	37	-1,538	-3	-13,233	-24
Whitney, Lake	553,344	402,123	73	-13,181	-2	47,873	9
Aquilla Lake	44,460	44,460	100	0	0	14,937	34
Navarro Mills Lake	49,827	48,331	97	-1,496	-3	7,544	15
*Halbert, Lake	6,033	4,277	71	-436	-7	341	6
Richland-Chambers Reservoir	1,087,839	787,766	72	-31,930	-3	16,661	2
*Brownwood, Lake	128,839	65,056	50	-3,325	-3	-17,870	-14
Waco, Lake	189,567	185,712	98	-3,855	-2	41,426	22
Limestone, Lake	208,014	204,201	98	-3,813	-2	60,922	29
Belton Lake	435,225	336,746	77	-5,653	-1	-1,356	-0
Stillhouse Hollow Lake	227,771	171,899	75	-4,793	-2	-9,034	-4
Georgetown, Lake	36,823	20,671	56	366	1	702	2
Granger Lake	50,779	50,779	100	0	0	3,124	6
Tawakoni, Lake	871,685	556,602	64	-18,530	-2	-82,181	-9
Mountain Creek, Lake	22,850	22,850	100	0	0	0	0
Squaw Creek, Lake	151,250	149,517	99	-1,733	-1	-1,733	-1
TOTAL	10,647,870	7,352,579	69	6,766	0	-441,213	-4
EAST							
Wright Patman Lake	231,496	231,496	100	0	0	0	0
*Sulphur Springs, Lake	17,747	17,309	98	-328	-2	2,182	12
Cypress Springs, Lake	66,756	66,756	100	33	0	7,309	11
Bob Sandlin, Lake	190,822	181,528	95	-1,348	-1	40,148	21
Caddo, Lake	29,898	27,824	93	-1,174	-4	7,402	25
Martin, Lake	75,116	73,937	98	-942	-1	13,572	18
Monticello, Lake	34,740	32,607	94	-1,625	-5	-2,133	-6
Fork Reservoir, Lake	605,061	510,110	84	-9,775	-2	30,655	5
O the Pines, Lake	268,566	262,269	98	-6,297	-2	73,072	27
Cedar Creek Reservoir in Trinity	644,686	527,237	82	-22,394	-3	36,265	6
Athens, Lake	29,435	28,863	98	-572	-2	4,866	17
Palestine, Lake	373,199	368,159	99	-5,040	-1	13,032	3
Tyler, Lake	73,161	71,748	98	-1,413	-2	17,014	23
Murvaul, Lake	38,285	38,079	99	-206	-1	2,469	6
Jacksonville, Lake	25,670	25,623	100	-47	-0	495	2
Nacogdoches, Lake	39,522	38,483	97	-22	-0	2,946	7
Houston County Lake	17,113	17,074	100	-39	-0	1,468	9
Sam Rayburn Reservoir	2,857,077	2,857,077	100	0	0	453,375	16
Toledo Bend Reservoir (Texas)	2,245,752	2,196,392	98	10,409	0	231,857	10
Toledo Bend Reservoir (TX & LA)	4,472,900	2,196,392	49	10,409	0	231,857	5
*Livingston, Lake	1,785,348	1,785,348	100	0	0	54,814	3
B A Steinhagen Lake	66,961	No Data					
Conroe, Lake	416,177	416,177	100	0	0	56,051	13
TOTAL	10,065,627	9,774,096	97	-40,780	-0	2,770,427	28

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

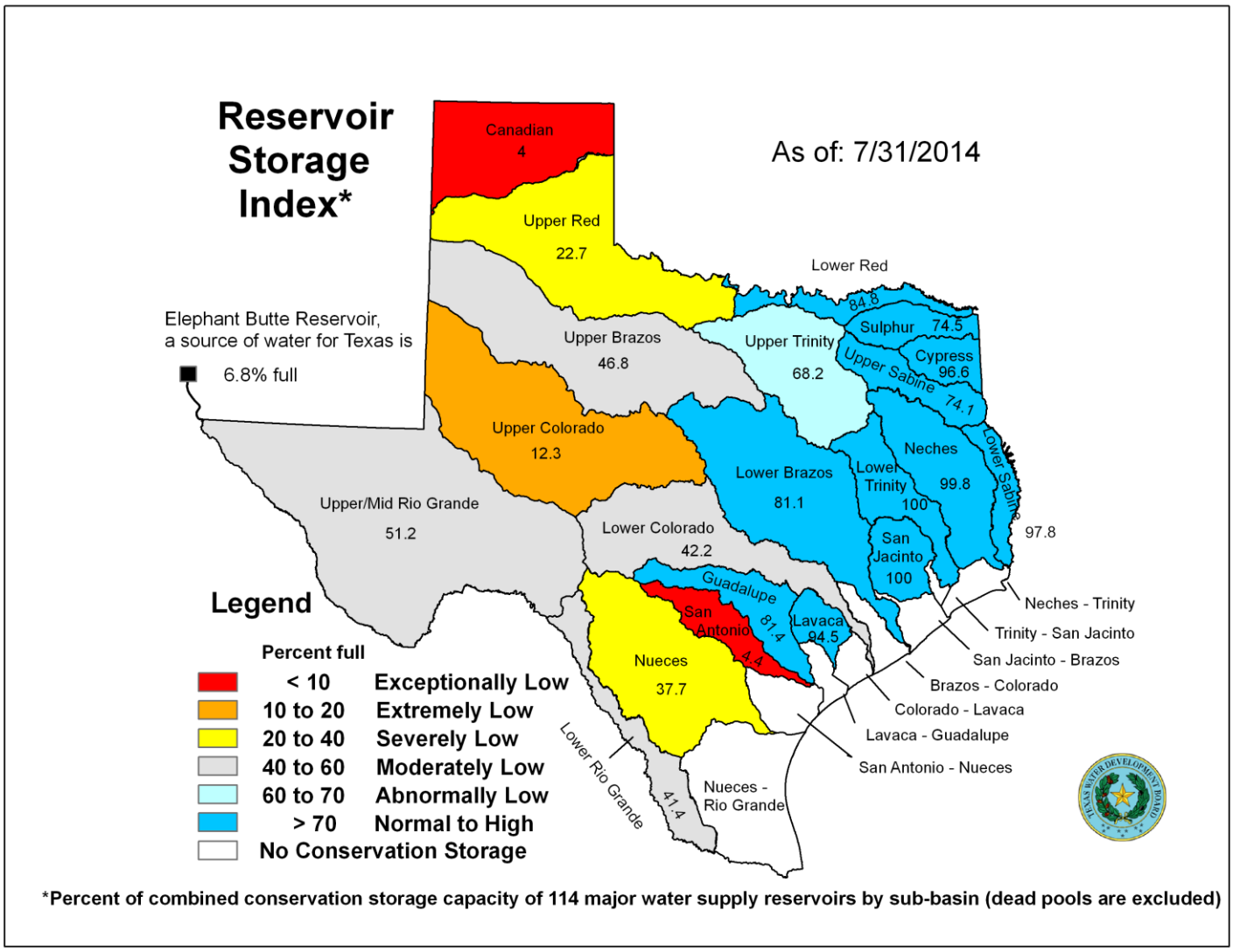
Name of Lake or Reservoir	Conservation Storage Capacity (acre-feet)	Conservation Storage end of July 2014 (acre-feet)	(%)	Change since end of June 2014 (acre-feet)	(%)	Change since end of July 2013 (acre-feet)	(%)
TRANS-PECOS							
Red Bluff Reservoir	151,110	77,394	51	-1,712	-1	50,056	33
TOTAL	151,110	77,394	51	-1,712	-1	50,056	33
EDWARDS PLATEAU							
Oak Creek Reservoir	39,210	7,209	18	-493	-1	-2,482	-6
E V Spence Reservoir	517,272	9,492	2	-2,043	-0	-20,686	-4
O C Fisher Lake	119,445	2,912	2	-374	-0	2,000	2
*O H Ivie Reservoir	554,340	102,196	18	-5,022	-1	946	0
Twin Buttes Reservoir	182,454	11,876	7	-2,048	-1	10,102	6
Brady Creek Reservoir	28,808	8,979	31	-34	-0	-411	-1
Buchanan, Lake	816,904	331,404	41	-10,596	-1	13,410	2
Inks, Lake	13,962	12,952	93	60	0	-15	-0
Lyndon B Johnson, Lake	115,056	110,513	96	-183	-0	122	0
*Amistad Reservoir (Texas)	1,840,849	988,789	54	-22,678	-1	278,941	15
*Amistad Reservoir (TX & Mexico)	3,275,532	988,789	30	-22,678	-1	278,941	9
TOTAL	4,228,300	1,586,322	38	-43,411	-1	281,927	7
SOUTH CENTRAL							
Travis, Lake	1,113,348	399,080	36	-18,110	-2	29,044	3
*Austin, Lake	23,972	22,742	95	-169	-1	-215	-1
Somerville Lake	147,104	146,887	100	-217	-0	52,892	36
Canyon Lake	378,781	307,463	81	-6,704	-2	5,407	1
Medina Lake	254,823	11,121	4	-869	-0	-1,318	-1
*Coleto Creek Reservoir	31,040	26,116	84	-2,481	-8	575	2
TOTAL	1,949,068	913,409	47	-28,550	-1	86,385	4
UPPER COAST							
Houston, Lake	120,686	120,686	100	0	0	0	0
Texana, Lake	159,566	150,861	95	-8,705	-5	15,802	10
TOTAL	280,252	271,547	97	-8,705	-3	15,802	6
SOUTHERN							
Choke Canyon Reservoir	695,262	203,174	29	-9,826	-1	-62,600	-9
Corpus Christi, Lake	256,961	155,492	61	-25,357	-10	83,087	32
*Falcon Reservoir (Texas)	1,551,007	414,414	27	-81,221	-5	34,154	2
*Falcon Reservoir (TX & Mexico)	2,646,817	414,414	16	-81,221	-3	34,154	1
TOTAL	2,503,230	773,080	31	-116,404	-5	54,641	2
STATE TOTAL	31,471,264	21,042,656	67	-213,813	-1	1,078,424	3

* Conservation volume is used as conservation storage capacity because the dead storage is unknown.
** No reading available. Last valid reading was near empty. Percentage estimated assuming current storage is zero.

Elephant Butte Reservoir	1,973,358	134,667	7	-94,126	-5	61,265	3

Note:
Conservation storage capacity is the space available to store water above the lowest outlet and below the top of conservation pool, or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level), or any water in the dead storage. Conservation storage percentage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir on date shown. Percent change is given by 100*(current conservation storage - past conservation storage)/conservation storage capacity. Figures shown are for the Texas share of conservation storage in all reservoirs.

JULY RESERVOIR CONDITIONS

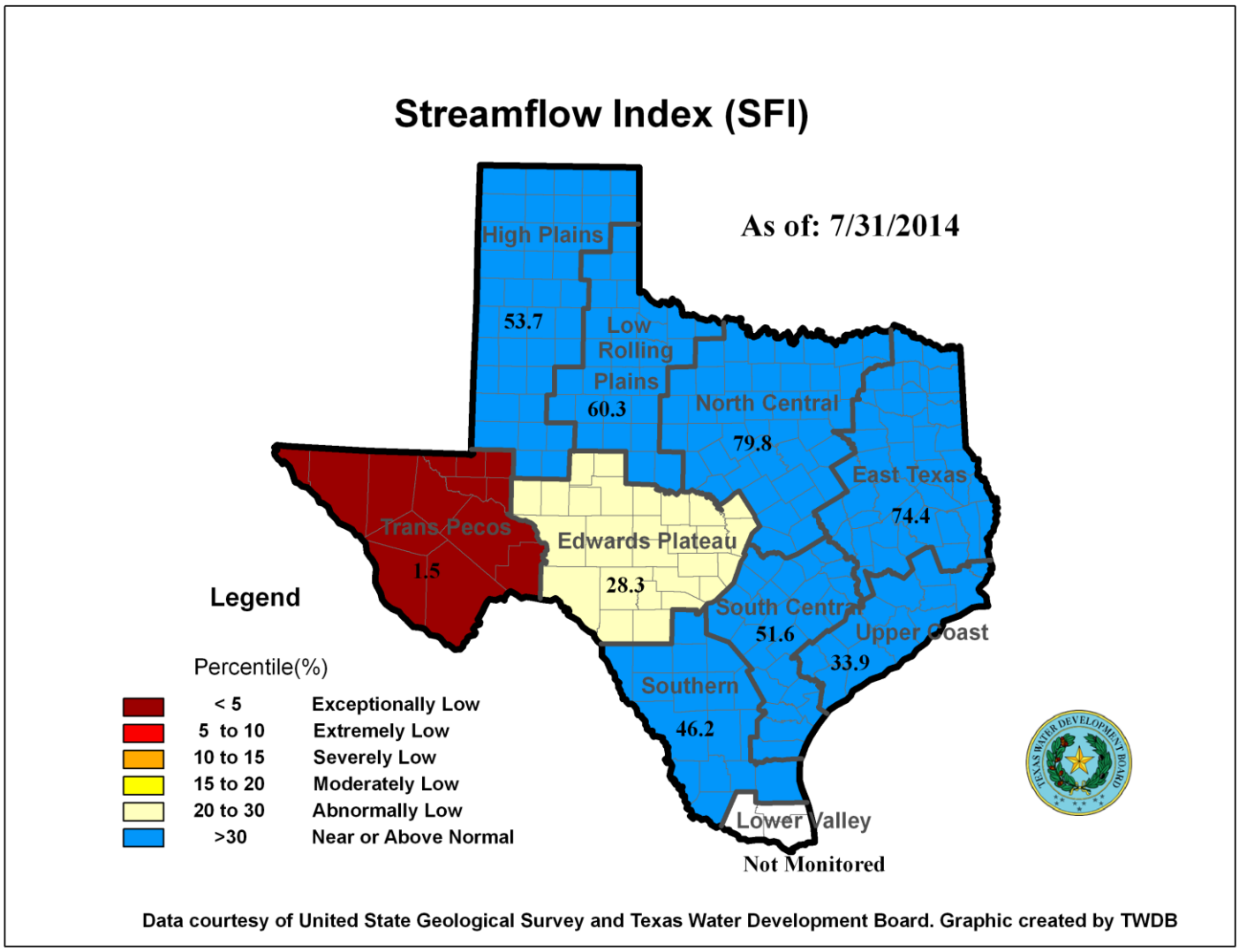


*Percent of combined conservation storage capacity of 114 major water supply reservoirs by sub-basin (dead pools are excluded)

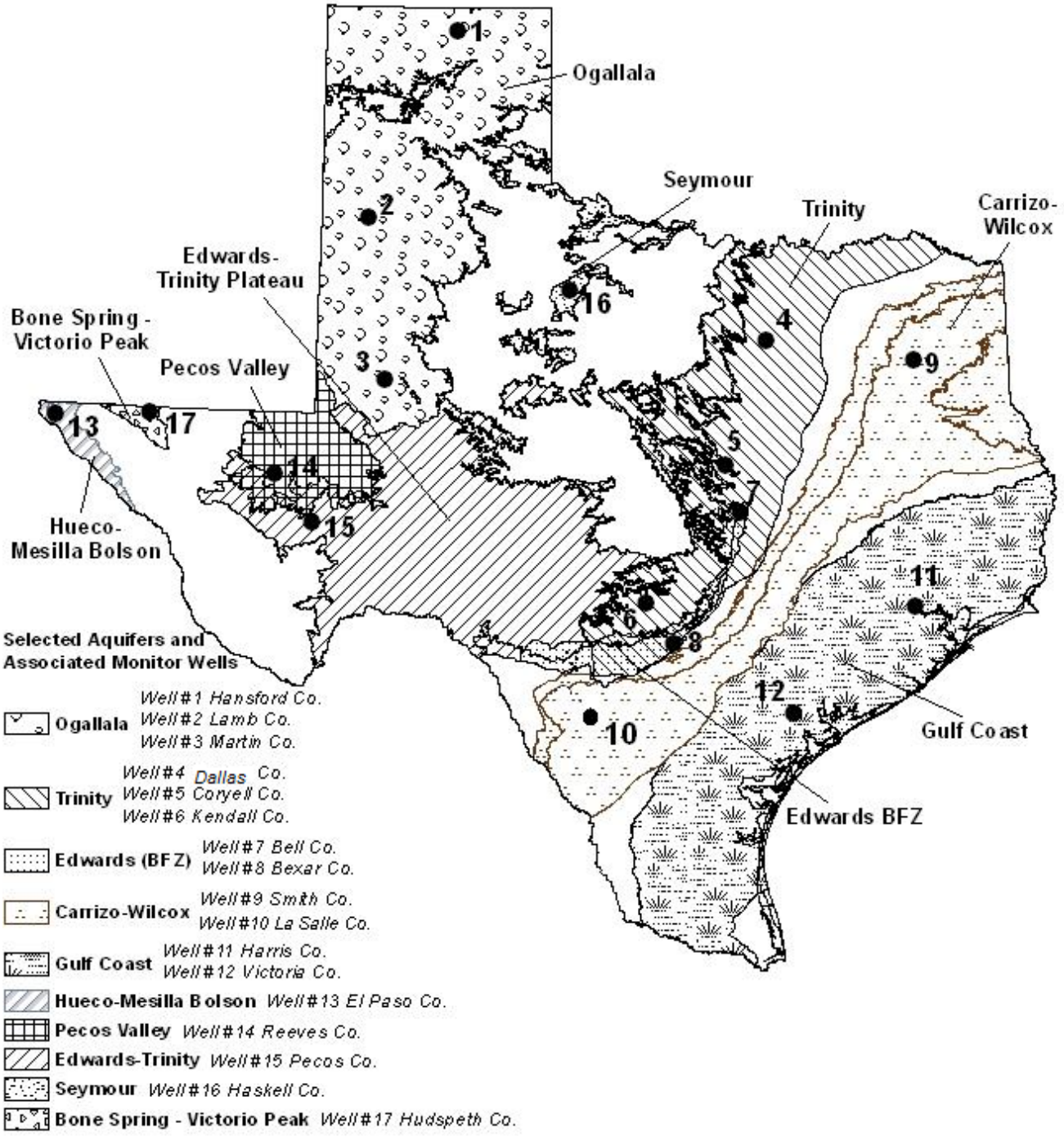
JULY STREAMFLOW CONDITIONS

Of 29 reporting index stations monitored this month, computed 30-day mean flows were exceptionally low (<5%) at 2 stations, extremely low (5-10%) at 2 stations, severely low (10-15%) at 1 station, moderately low (15-20%) at 1 station, abnormally low (20-30%) at 2 stations, and near normal (30% - 70%) at the remaining 21 stations. Compared to last month, flows have increased at 13 index stations and decreased at 15 stations.

On a regional basis, flows in this month at index stations were exceptionally low in the Trans-Pecos region and abnormally low in Edwards Plateau region but near or above normal in all other regions. Streamflow in the Lower Valley region is not monitored.



JULY 2014 GROUNDWATER LEVELS IN OBSERVATION WELLS



July, 2014

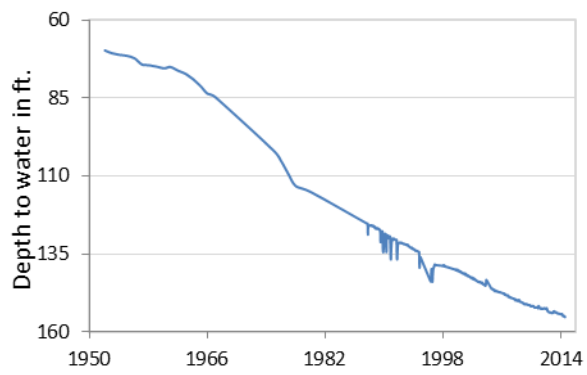
Water level measurements were available for all of the seventeen key monitoring wells in the state. Water levels rose in two of the monitoring wells since the beginning of July, ranging from 1.42 feet in the El Paso County Hueco-Mesilla Bolson Aquifer well to 1.76 feet in the Hudspeth County Bone Spring-Victorio Creek Aquifer well. Water levels declined in fifteen monitoring wells, ranging from 0.08 feet in the Dallas County Trinity Aquifer well to 16.77 feet in the Kendall County Trinity Aquifer well. 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.**

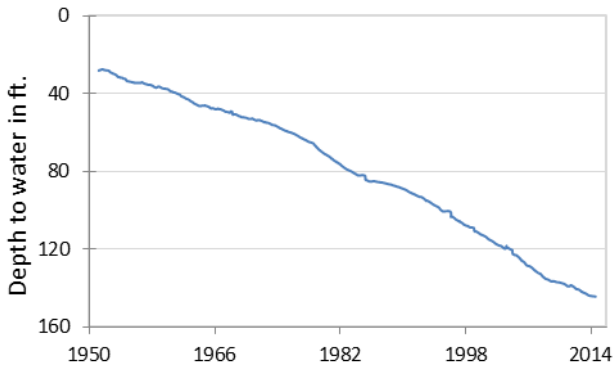
Monitoring Well	July	June	month change	year change	historical change	first measured
(1) Hansford 0354301	155.32	155.05	-0.27	-1.12	-85.2	1951
(2) Lamb 1053602	144.55	144.38	-0.17	-0.83	-116.4	1951
(3) Martin 2739903	143.07	NA	NA	-0.75	-38.18	1964
(4) Dallas 3319101	487.31	487.23	-0.08	0.71	-265.31	1954
(5) Coryell 4035404	501.88	501.57	-0.31	4.3	-209.88	1955
(6) Kendall 6802609	153.85	137.08	-16.77	-5.88	-93.85	1975
(7) Bell 5804816	127.28	125.88	-1.4	1.25	-4.15	2008
(8) Bexar 6837203	97.2	90.91	-6.29	-3.2	-50.56	1932
(9) Smith 3430907	439.11	437.93	-1.18	0.51	-73.11	1987
(10) La Salle 7738103	503.02	491.02	-12.0	-18.55	-249.95	2003
(11) Harris 6514409	193.95	192.6	-1.35	0.68	-58.45	1956
(12) Victoria 8017502	36.95	35.55	-1.4	-1.47	-2.95	1958
(13) El Paso 4913301	294.48	295.9	1.42	-0.51	-62.58	1967
(14) Reeves 4644501	164.04	161.52	-2.52	-7.94	-71.95	1952
(15) Pecos 5216802	241.94	232.5	-9.44	-10.36	4.94	1976
(16) Haskell 2135748	49.09	48.79	-0.3	-1.04	-7.76	2002
(17) Hudspeth 4807516	148.73	150.49	1.76	-1.41	-44.81	1964

JULY GROUNDWATER LEVELS IN OBSERVATION WELLS

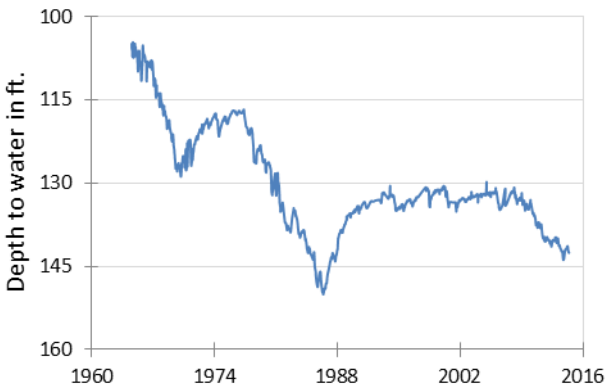
(1) State Well ID 03-54-301
Near Spearman, Hansford County
Ogallala Aquifer



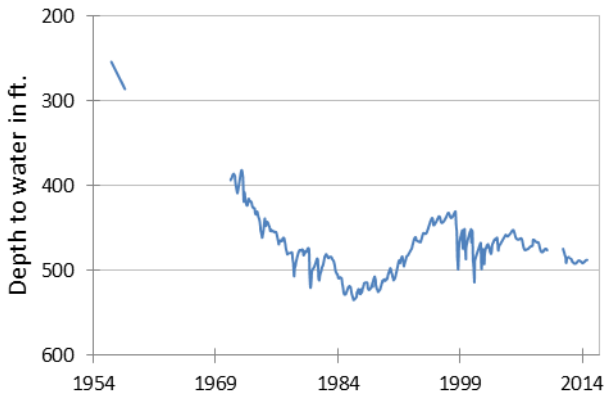
(2) State Well ID 10-53-602
Near Earth, Lamb County
Ogallala Aquifer



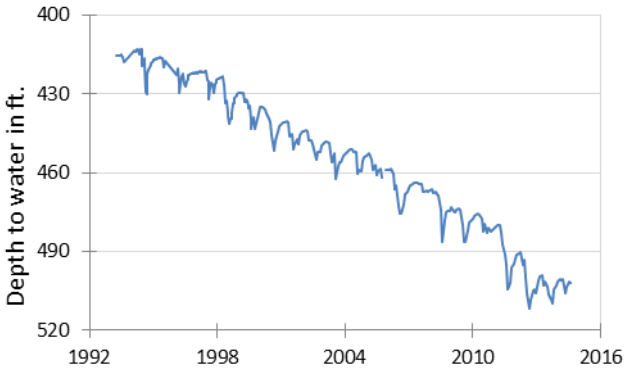
(3) State Well ID 27-39-903
Northwest Martin County
Ogallala Aquifer



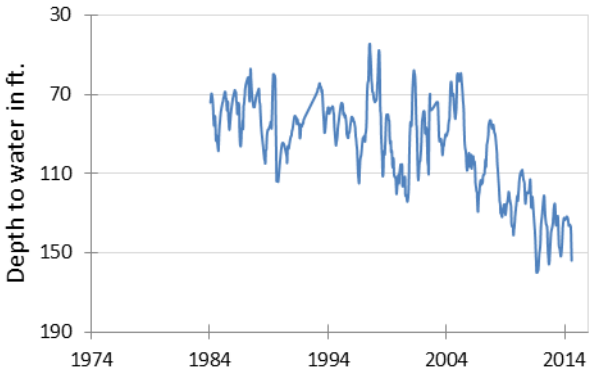
(4) State Well ID 33-19-101
Southeast Dallas, Dallas County
Twin Mountains Formation-Trinity Aquifer



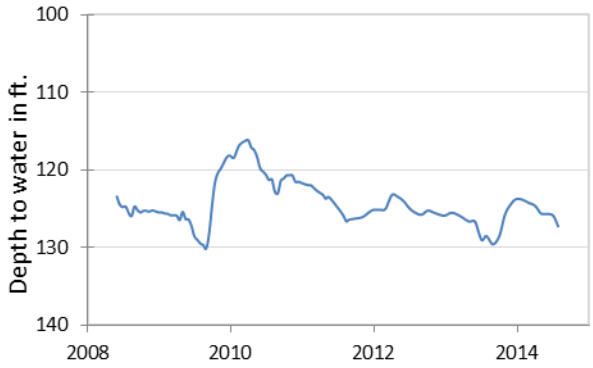
(5) State Well ID 40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer



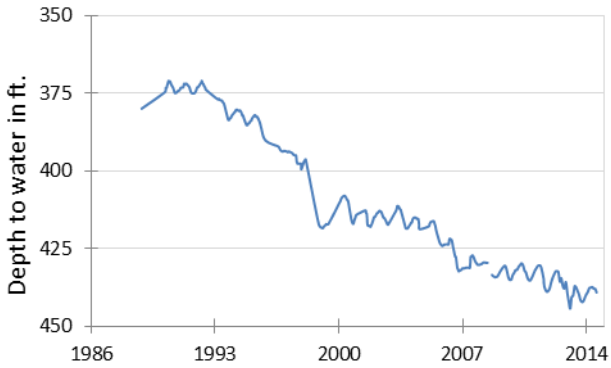
(6) State Well ID 68-02-609
Waring, Kendall County
Cow Creek Formation-Trinity Aquifer



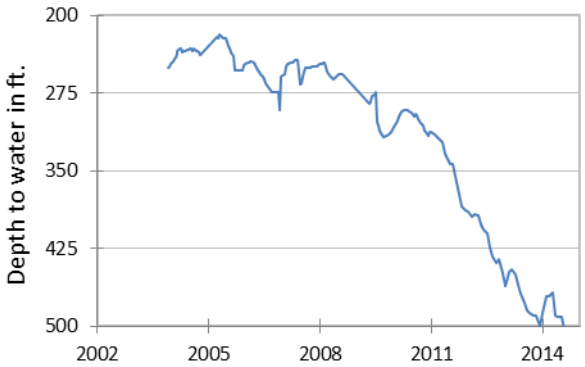
(7) State Well ID 58-04-816
Near Salado, Bell County
Edwards (BFZ) Aquifer



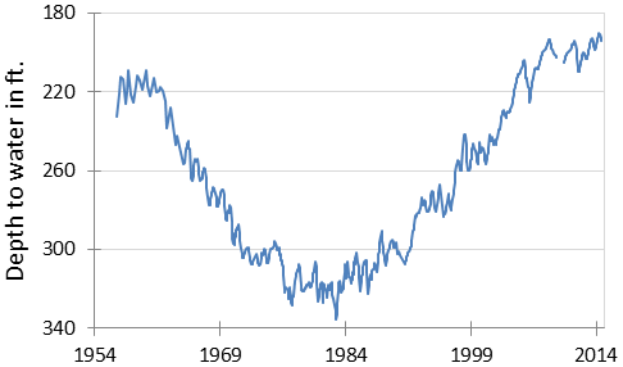
(9) State Well ID 34-30-907
Red Springs, Smith County
Carrizo-Wilcox Aquifer



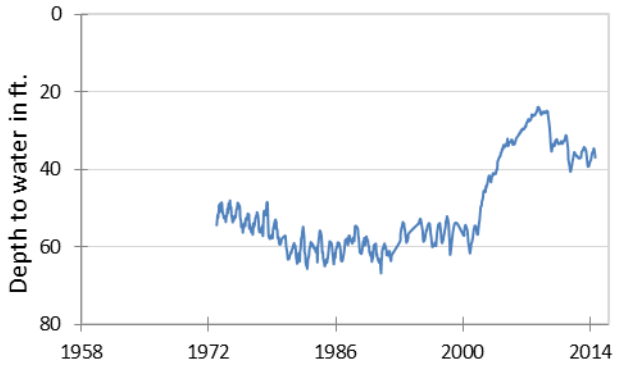
(10) State Well ID 77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer



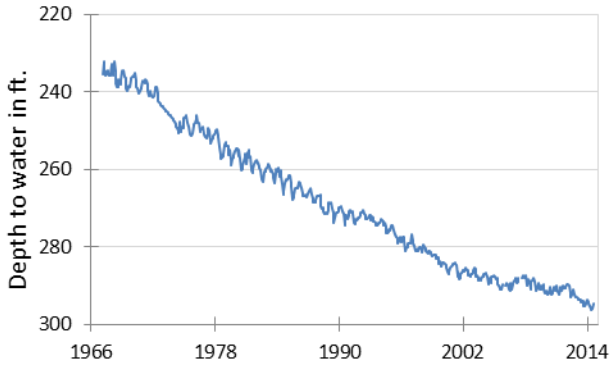
(11) State Well ID 65-14-409
Alief, Harris County
Evangeline Formation-Gulf Coast Aquifer



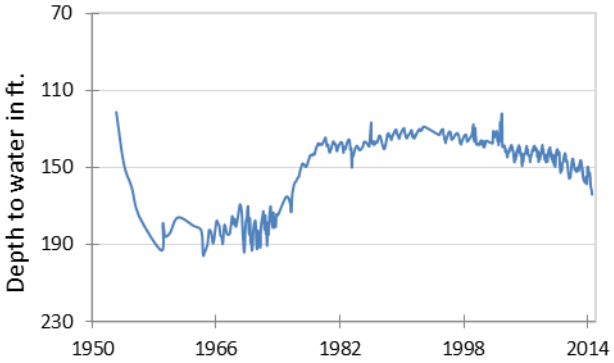
(12) State Well ID 80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



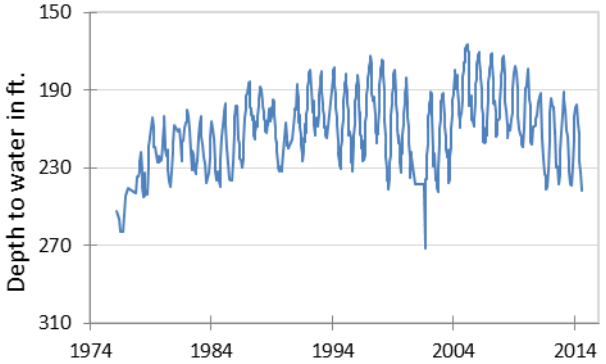
(13) State Well ID 49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolson Aquifer



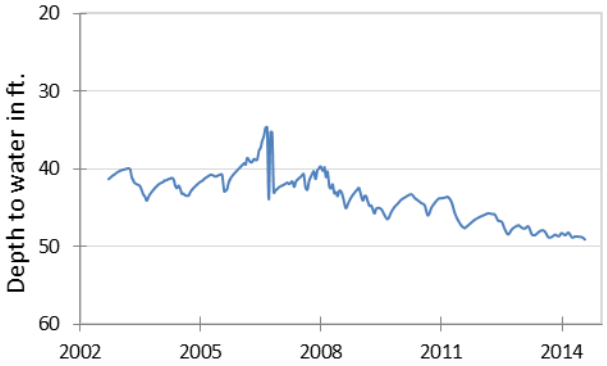
(14) State Well ID 46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



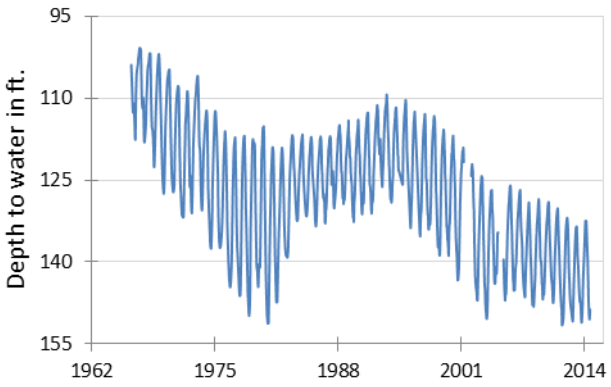
(15) State Well ID 52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



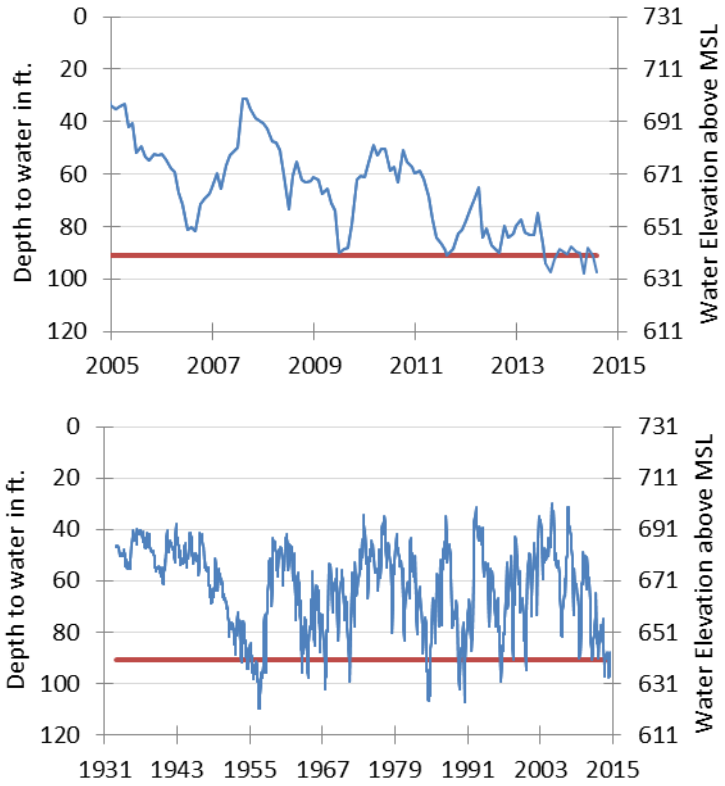
(16) State Well ID 21-35-748
Near O'Brien, Haskell County
Seymour Aquifer



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



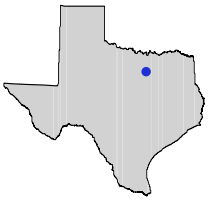
(8) State Well ID 68-37-203 (J-17)
In San Antonio, Bexar County
Edwards (BFZ) Aquifer



The late July water level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above mean sea level, was 97.2 feet below land surface, or 633.8 feet above mean sea level. This was 6.29 feet below last month's measurement, 3.2 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

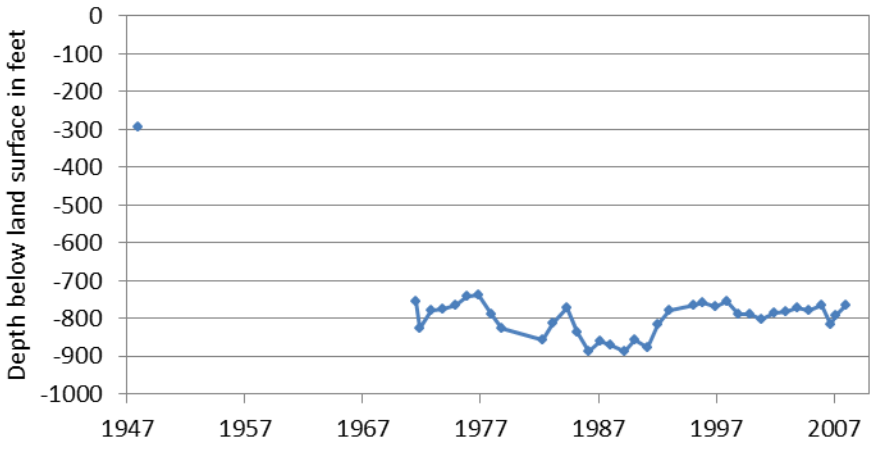


Each month this space features a new hydrograph (marked with the • symbol on the map) depicting different aquifers and different conditions in Texas.

Trinity Aquifer

The Trinity Aquifer is a major aquifer extending across much of the central and northeastern part of the state. The aquifer's total area is 31,960 square miles. It is composed of several smaller aquifers contained within the Trinity Group. Their combined saturated thickness averages about 600 feet in North Texas and about 1,900 feet in Central Texas. In general, groundwater is very fresh but very hard in the outcrop of the aquifer. Total dissolved solids increase from less than 1,000 milligrams per liter in the east and southeast to between 1,000 and 5,000 milligrams per liter as the depth of the aquifer increases. Sulfate and chloride concentrations also tend to increase with depth. The aquifer is one of the most extensive and highly used groundwater resources in Texas. Although its primary use is for municipalities, it is also used for irrigation, livestock, and other domestic purposes.

Well #3223101, 1,363 feet deep
unused, central Tarrant County



This well was formerly used as a source of public-water supply for the City of Arlington from 1966 – 1969. Now an observation well, the water level has remained relatively unchanged since the early nineties at approximately 500 feet below the initial measurement of 293 feet in 1947.

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