Texas Water Conditions Report

September 2024

Water News:

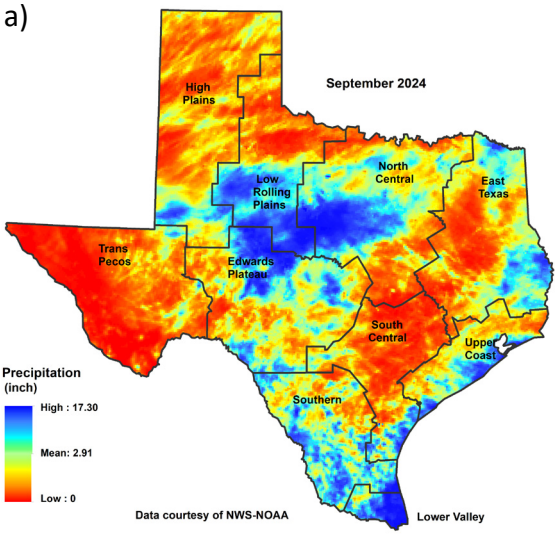
The Texas Water Development Board's Coastal Science staff participated in the 5th annual San Antonio Bay Partnership Shorelines Cleanup, removing plastic bottles, jugs, and old crab trap buoys from East Guadalupe Bay.

RAINFALL

In September, little to no rain [yellow, orange, and red shading, Figure 1(a)] fell in the Trans Pecos, High Plains, northern Low Rolling Plains, areas of the Edwards Plateau, portions of North Central, much of East Texas, much of South Central, northern Southern, and areas of the Upper Coast climate divisions. Rainfall of 10" or greater [light and dark blue shading, Figure 1(a)] was seen in areas of the southern High Plains, southern Low Rolling Plains, portions of eastern Trans Pecos, areas across the Edwards Plateau, western North Central, parts of northern and southeastern East Texas, southern South Central, much of the Southern, Lower Valley, and areas of central and western Upper Coast climate divisions.

Compared to historical data from 1991–2020, 0–75 percent of normal rainfall [yellow and orange shading, Figure 1(b)] was received across all climate divisions. 125–200 percent of normal rainfall [green shading, Figure 1(b)] was received in areas of the High Plains, southern Low Rolling Plains, eastern Trans Pecos, scattered areas across the Edwards Plateau, western and central North Central, southern South Central, areas of Southern, northern and southeastern East Texas, areas of the Lower Valley, and central and southwestern Upper Coast climate divisions. 200–400 percent of normal rainfall [light to dark blue shading, Figure 1(b)] was received the southern High Plains, southern Low Rolling Plains, western North Central, northern and eastern Edwards Plateau, western Southern, and Lower Valley climate divisions. 400–600 percent of normal rainfall [light purple shading, Figure 1(b)] was received in the southern High Plains, southern Low Rolling Plains, western North Central, and northern Edwards Plateaus climate division.

a)



b)

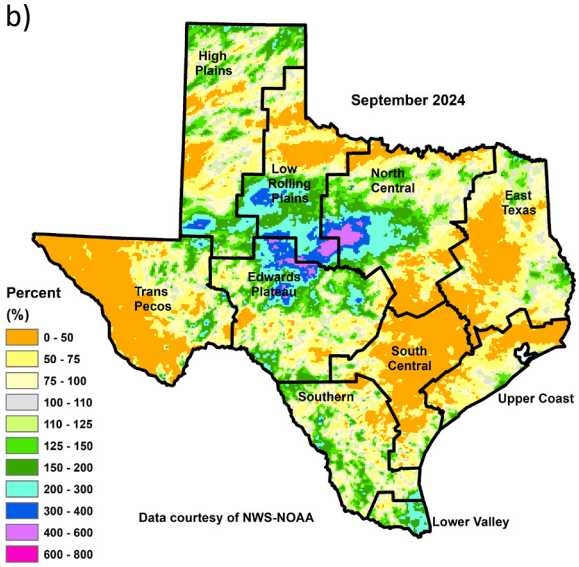


Figure 1: (a) Monthly accumulated rainfall, and (b) Percent of normal rainfall

DROUGHT

At the end of September, 62.69% of the state was in the D0 (abnormally dry) through D4 (exceptional drought) categories (**Figure 2**). This is approximately 18.29% lower than the end of August.

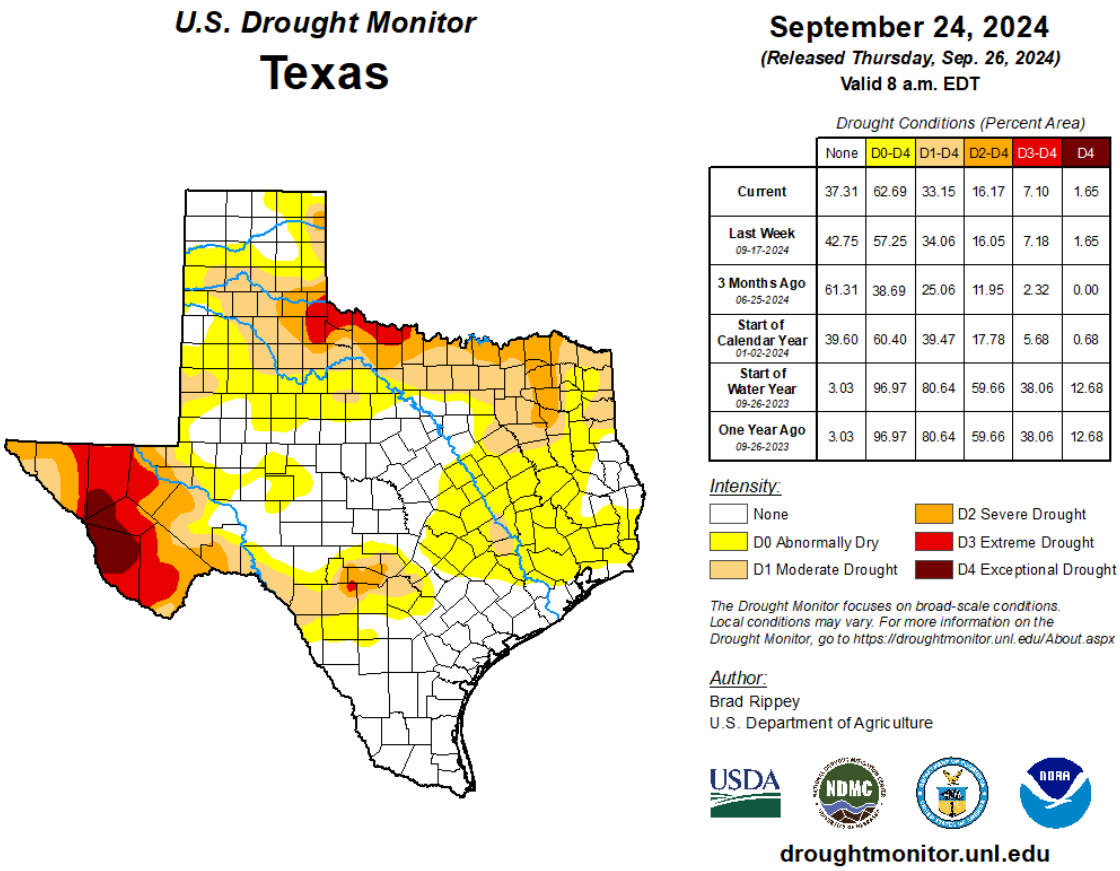


Figure 2. The percentage of drought in Texas according to the U.S. Drought Monitor map as of September 24, 2024.

RESERVOIR STORAGE

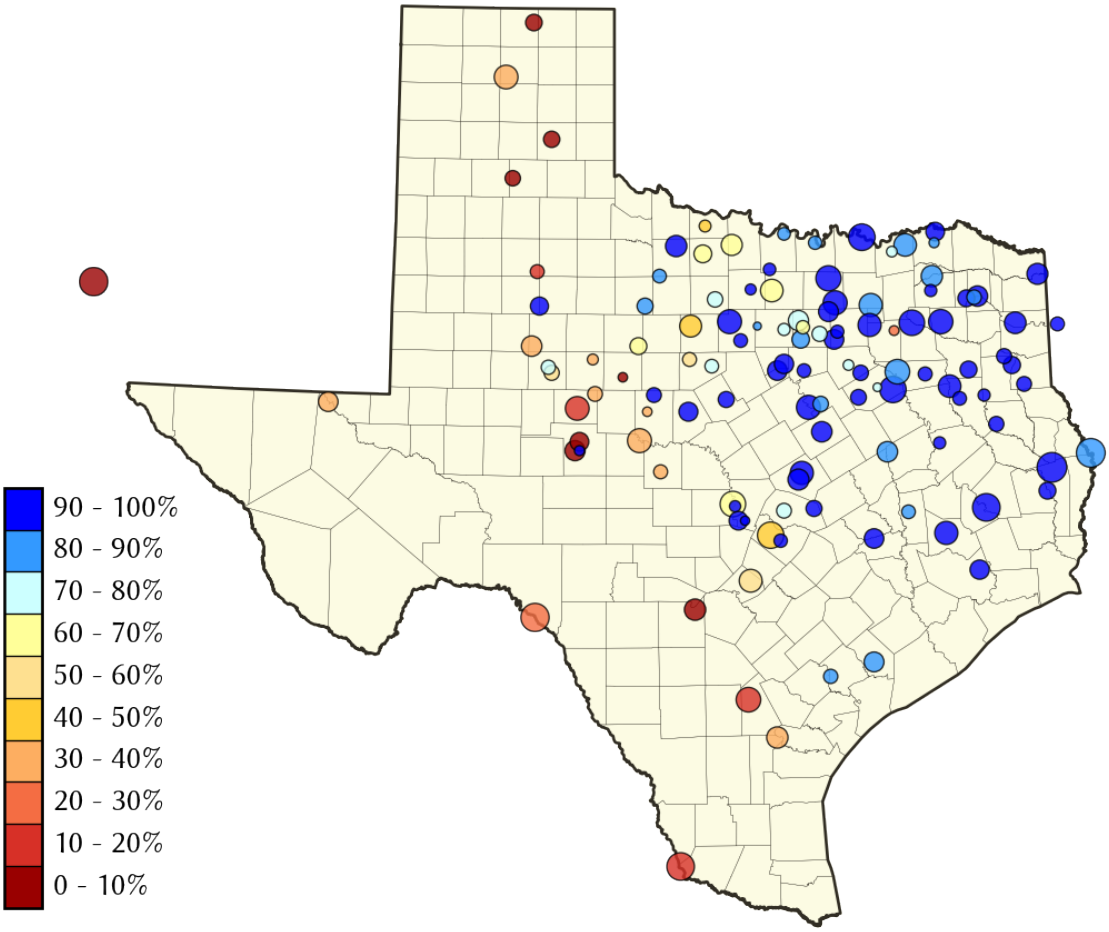


Figure 3. Reservoir conservation storage at end-August expressed as percent full (%)

Out of 119 monitored reservoirs in the state, eight reservoirs held 100 percent conservation storage capacity, and 50 reservoirs were at or above 90 percent full this month. Thirteen reservoirs remained at or below 30 percent full: Abilene (7.2 percent full), Amistad (27.0 percent full), Choke Canyon (19.0 percent full), E.V. Spence (17.7 percent full), Falcon (13.7 percent full), Greenbelt (8.7 percent full), Mackenzie (8.5 percent full), Medina Lake (3.1 percent full), New Terrell City (23.9 percent full), O.C. Fisher (7.2 percent full), Palo Duro Reservoir (1.6 percent full), Twin Buttes (9.7 percent full), and the White River Lake (16.6 percent full). Elephant Butte Reservoir (New Mexico) was 5.7 percent full (Figure 3).

Reservoir conservation storage was at or above normal [Figure 4(a)] for East Texas (91.4 percent full), North Central (90.3 percent full), and the Upper Coast (93.0 percent full) climate divisions. The Low Rolling Plains (69.7 percent full) climate division had abnormally low conservation storage. Conservation storage was moderately low [Figure 4(a)] for the South Central (47.3 percent full) climate division. The High Plains (32.7 percent full) and Edwards Plateau (36.2 percent full) climate divisions had severely low conservation storage and the Trans Pecos (10.6 percent full) and the Southern (17.3 percent full) climate divisions had extremely low conservation storage [Figure 4(a)].

Combined conservation storage by river basin or sub-basin was exceptionally low [<10 percent full, red shading, Figure 4(b)] in the San Antonio river basin. Severely low conservation storage [20–40 percent full, brown shading, Figure 4(b)] was seen in the Canadian, Nueces, Lower Rio Grande, and Upper Colorado river basins. The Lower Colorado and Guadalupe river basins had moderately low conservation storage [40–60 percent full, orange shading, Figure 4(b)]. Abnormally low conservation storage [60–70 percent full, yellow shading, Figure 4(b)] was seen in the Upper Red river basin. Normal to high conservation storage [>70 percent full, blue shading, Figure 4(b)] was observed in the Lower Red, Sulphur, Cypress, Upper and Lower Sabine, Upper and Lower Trinity, Upper and Lower Brazos, Neches, Lavaca, and San Jacinto river basins.

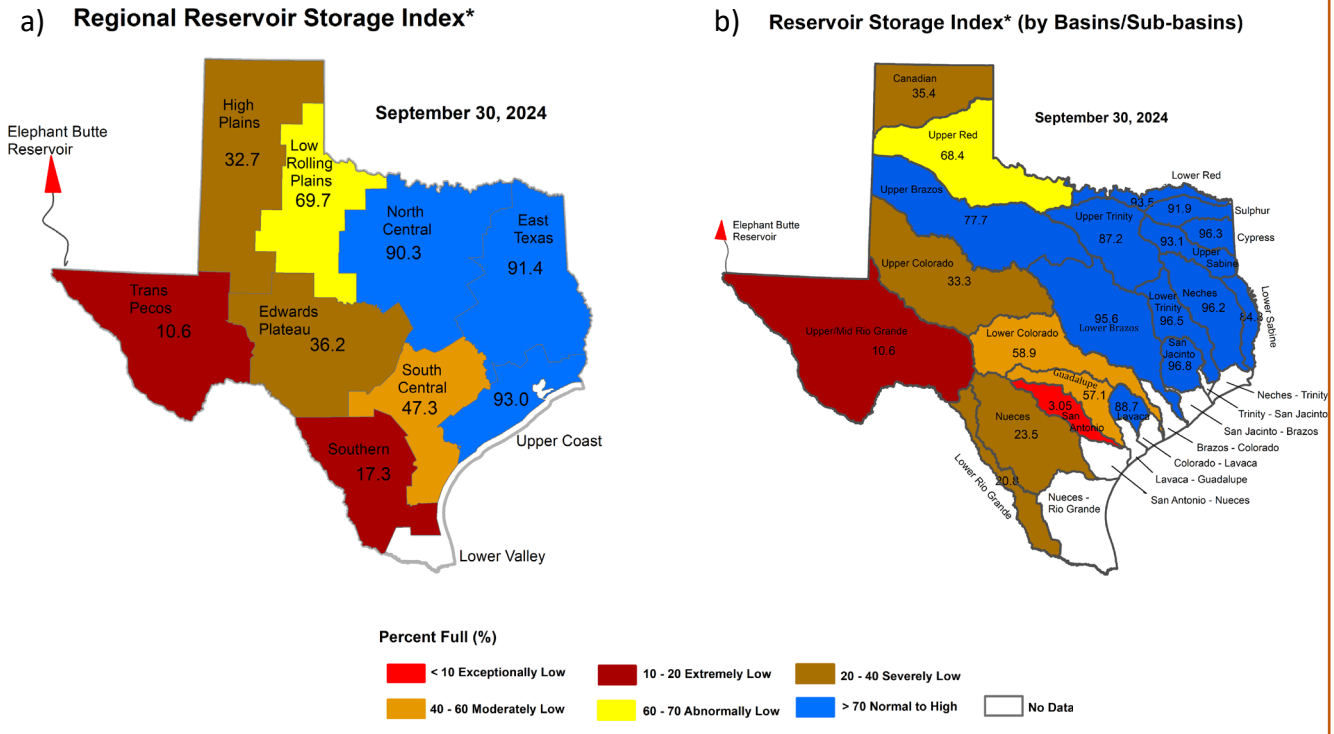


Figure 4: Reservoir Storage Index by a) climate division, and b) basin/sub-basin.

*Reservoir Storage Index is defined as the percent full of conservation storage capacity. Percent full is calculated as the combined conservation storage of all reservoirs in a climate region or a basin/subbasin, excluding dead pool storage.

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS							
Name of lake or reservoir	Storage capacity	Storage at end-September 2024		Storage change from end-Aug 2024		Storage change from end-Sep 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
Abilene, Lake	7,900	566	7.2	48	0.6	-1,027	-13.0
Alan Henry Reservoir	96,207	96,207	100.0	6,649	6.9	11,413	11.9
*Amistad Reservoir (Texas & Mexico)	3,275,532	675,661	20.6	51,201	1.6	-349,039	-10.7
*Amistad Reservoir (Texas)	1,813,408	489,366	27.0	37,537	2.1	-129,306	-7.1
Amon G Carter, Lake	19,266	17,945	93.1	28	0.1	2,097	10.9
Aquilla Lake	43,243	37,892	87.6	-1,236	-2.9	3,731	8.6
Arlington, Lake	40,157	29,691	73.9	992	2.5	-1,654	-4.1
Arrowhead, Lake	230,359	151,129	65.6	-6,201	-2.7	23,505	10.2
Athens, Lake	29,503	28,412	96.3	-687	-2.3	2,100	7.1
*Austin, Lake	23,972	23,267	97.1	109	0.5	264	1.1
B A Steinhagen Lake	69,186	64,675	93.5	-2,584	-3.7	-2,283	-3.3
Bardwell Lake	43,856	41,744	95.2	-870	-2.0	2,990	6.8
Belton Lake	432,631	415,345	96.0	-8,027	-1.9	174,193	40.3
Benbrook Lake	85,648	76,153	88.9	714	0.8	31,720	37.0
Bob Sandlin, Lake	192,417	186,418	96.9	-3,253	-1.7	7,114	3.7
Bois d'Arc Lake	367,609	327,571	89.1	-11,913	-3.2	58,922	16.0
Bonham, Lake	11,027	8,456	76.7	-587	-5.3	-548	-5.0
Brady Creek Reservoir	28,808	10,857	37.7	-67	0.0	155	0.5
Bridgeport, Lake	372,183	243,519	65.4	-5,799	-1.6	24,297	6.5
*Brownwood, Lake	130,868	130,868	100.0	27,624	21.1	49,064	37.5
Buchanan, Lake	822,207	565,879	68.8	-1,791	0.0	194,662	23.7
Caddo, Lake	29,898	29,178	97.6	-180	0.0	-180	0
Canyon Lake	378,781	207,103	54.7	-5,140	-1.4	-40,275	-10.6
Cedar Creek Reservoir in Trinity	644,686	574,054	89.0	-25,292	-3.9	42,438	6.6
Champion Creek Reservoir	41,580	21,339	51.3	-162	0.0	-2,052	-4.9
Cherokee, Lake	40,094	38,084	95.0	-387	0.0	6,487	16.2
Choke Canyon Reservoir	662,820	125,900	19.0	-6,482	0.0	-50,279	-7.6
*Cisco, Lake	29,003	16,181	55.8	330	1.1	-2,127	-7.3
Coleman, Lake	38,075	37,805	99.3	6,760	17.8	13,269	34.8
Colorado City, Lake	31,040	26,986	86.9	-1,779	-5.7	3,225	10.4
*Coleto Creek Reservoir	30,758	23,800	77.4	11,584	37.7	8,562	27.8
Conroe, Lake	417,577	401,835	96.2	-8,222	-2.0	25,594	6.1
Corpus Christi, Lake	256,062	90,687	35.4	-1,858	0.0	-47,316	-18.5
Crook, Lake	9,195	7,668	83.4	-261	-2.8	-332	-3.6
Cypress Springs, Lake	66,756	64,479	96.6	-797	-1.2	1,958	2.9
E. V. Spence Reservoir	517,272	91,395	17.7	24,328	4.7	6,651	1.3
Eagle Mountain Lake	185,087	140,171	75.7	-5,193	-2.8	23,899	12.9
Elephant Butte Reservoir (Texas)	852,491	48,797	5.7	-18,998	-2.2	-100,547	-11.8
Elephant Butte Reservoir (Total Storage)	1,960,900	112,957	5.8	-43,977	-2.2	-232,747	-11.9
*Falcon Reservoir (Texas & Mexico)	2,646,817	327,336	12.4	55,464	2.1	-41,105	-1.6
*Falcon Reservoir (Texas)	1,562,367	213,890	13.7	33,590	2.1	73,173	4.7
Fork Reservoir, Lake	605,061	559,924	92.5	-11,539	-1.9	17,530	2.9
Fort Phantom Hill, Lake	70,030	44,656	63.8	1,470	2.1	-4,135	-5.9
Georgetown, Lake	38,005	26,785	70.5	-1,659	-4.4	9,473	24.9
Gibbons Creek Reservoir	25,721	21,655	84.2	-882	-3.4	2,912	11.3
Graham, Lake	45,288	35,072	77.4	-1,485	-3.3	2,385	5.3
Granbury, Lake	132,949	128,749	96.8	4,413	3.3	8,560	6.4

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Name of lake or reservoir	Storage capacity	Storage at end-September 2024		Storage change from end-Aug 2024		Storage change from end-Sep 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
Continued							
Granger Lake	51,822	51,331	99.1	-491	0.0	12,033	23.2
Grapevine Lake	163,064	156,272	95.8	-3,654	-2.2	21,835	13.4
Greenbelt Lake	59,968	5,212	8.7	-210	0.0	-1,513	-2.5
*Halbert, Lake	6,033	4,734	78.5	-84	-1.4	325	5.4
Hords Creek Lake	8,109	3,038	37.5	832	10.3	1,107	13.7
Houston County Lake	17,113	17,023	99.5	-90	0.0	2,718	15.9
Houston, Lake	132,318	130,039	98.3	-2,279	-1.7	-909	0.0
Hubbard Creek Reservoir	313,298	138,434	44.2	-919	0.0	-30,123	-9.6
Hubert H Moss Lake	24,058	21,546	89.6	-535	-2.2	122	0.5
Inks, Lake	13,729	12,998	94.7	-189	-1.4	-70	0.0
J. B. Thomas, Lake	199,931	75,659	37.8	42,680	21.3	38,561	19.3
Jacksonville, Lake	25,670	25,519	99.4	69	0.3	2,121	8.3
Jim Chapman Lake (Cooper)	258,723	219,349	84.8	-13,367	-5.2	-3,687	-1.4
Joe Pool Lake	149,629	148,696	99.4	-666	0.0	12,643	8.4
Kemp, Lake	245,307	242,409	98.8	-2,898	-1.2	91,329	37.2
Kickapoo, Lake	86,345	59,207	68.6	-2,425	-2.8	13,783	16.0
Lavon Lake	409,757	352,206	86.0	-22,300	-5.4	44,657	10.9
Leon, Lake	27,762	21,752	78.4	9,366	33.7	7,547	27.2
Lewisville Lake	563,228	523,726	93.0	-24,486	-4.3	84,051	14.9
Limestone, Lake	203,780	180,586	88.6	-7,234	-3.5	20,824	10.2
*Livingston, Lake	1,603,504	1,547,681	96.5	-31,141	-1.9	234,230	14.6
*Lost Creek Reservoir	11,950	10,963	91.7	-100	0.0	261	2.2
Lyndon B Johnson, Lake	112,778	111,365	98.7	448	0.4	-257	0.0
Mackenzie Reservoir	46,450	3,946	8.5	-69	0.0	-606	-1.3
Marble Falls, Lake	7,597	7,233	95.2	-24	0.0	54	0.7
Martin, Lake	75,726	68,266	90.1	-2,979	-3.9	8,851	11.7
Medina Lake	254,823	7,794	3.1	-600	0.0	-2,455	0.0
Meredith, Lake	500,000	198,602	39.7	-3,567	0.0	-30,953	-6.2
Millers Creek Reservoir	26,768	23,220	86.7	-670	-2.5	10,877	40.6
*Mineral Wells, Lake	5,273	4,528	85.9	-114	-2.2	1,198	22.7
Monticello, Lake	34,740	28,425	81.8	-632	-1.8	1,429	4.1
Mountain Creek, Lake	22,850	22,850	100.0	0	0.0	0	0.0
Murvaul, Lake	38,285	35,777	93.4	-941	-2.5	3,060	8.0
Nacogdoches, Lake	39,522	36,617	92.6	-893	-2.3	3,478	8.8
Nasworthy	9,615	8,871	92.3	51	0.5	-64	0.0
Navarro Mills Lake	49,827	47,914	96.2	-1,913	-3.8	7,821	15.7
New Terrell City Lake	8,583	2,051	23.9	-93	-1.1	511	6.0
Nocona, Lake (Farmers Crk)	21,444	17,450	81.4	-718	-3.3	2,353	11.0
North Fork Buffalo Creek Reservoir	15,400	6,172	40.1	-370	-2.4	1,554	10.1
O' the Pines, Lake	268,566	262,085	97.6	-368	0.0	7,127	2.7
O. C. Fisher Lake	115,742	8,298	7.2	7,391	6.4	5,759	5.0
*O. H. Ivie Reservoir	554,340	192,653	34.8	52,638	9.5	23,535	4.2
Oak Creek Reservoir	39,210	11,913	30.4	1,311	3.3	-2,203	-5.6

CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS							
Name of lake or reservoir	Storage capacity	Storage at end-September 2024		Storage change from end-Aug 2024		Storage change from end-Sep 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
Continued							
Palestine, Lake	367,303	345,083	94.0	-11,230	-3.1	27,517	7.5
Palo Duro Reservoir	61,066	954	1.6	-137	0.0	-3,267	-5.3
Palo Pinto, Lake	26,766	25,986	97.1	3,489	13.0	17,920	67.0
Pat Cleburne, Lake	26,008	23,452	90.2	-364	-1.4	6,216	23.9
*Pat Mayse Lake	113,683	104,747	92.1	-3,353	-2.9	-2,635	-2.3
Possum Kingdom Lake	538,139	508,517	94.5	-3,265	0.0	26,482	4.9
Proctor Lake	54,762	54,762	100.0	17,763	32.4	40,766	74.4
Ray Hubbard, Lake	439,559	398,268	90.6	-13,963	-3.2	45,005	10.2
Ray Roberts, Lake	788,167	769,590	97.6	-9,815	-1.2	40,146	5.1
Red Bluff Reservoir	151,110	58,293	38.6	1,618	1.1	-10,990	-7.3
Richland-Chambers Reservoir	1,099,417	1,050,349	95.5	-29,841	-2.7	62,304	5.7
Sam Rayburn Reservoir	2,857,077	2,761,944	96.7	-95,133	-3.3	452,158	15.8
Somerville Lake	150,293	140,682	93.6	-9,611	-6.4	43,290	28.8
Squaw Creek, Lake	151,250	151,250	100.0	0	0.0	758	0.5
Stamford, Lake	51,570	45,886	89.0	377	0.7	7,669	14.9
Stillhouse Hollow Lake	229,796	229,796	100.0	0	0.0	97,194	42.3
Striker, Lake	16,878	16,878	100.0	20	0.1	3,760	22.3
Sweetwater, Lake	12,267	4,647	37.9	61	0.5	-1,337	-10.9
*Sulphur Springs, Lake	17,747	16,252	91.6	-583	-3.3	-36	0.0
Tawakoni, Lake	871,685	817,730	93.8	-19,308	-2.2	4,965	0.6
Texana, Lake	158,975	141,138	88.8	-9,948	-6.3	30,809	21.8
Texoma, Lake (Texas & Oklahoma)	2,487,601	2,377,286	95.6	-56,695	-2.3	131,165	5.3
Texoma, Lake (Texas)	1,243,801	1,188,642	95.6	-28,348	-2.3	65,582	5.3
Toledo Bend Reservoir (Texas & Louisiana)	4,472,900	3,798,568	84.9	-85,015	-1.9	-23,978	0
Toledo Bend Reservoir (Texas)	2,236,450	1,897,234	84.8	-42,508	-1.9	-11,989	0.0
Travis, Lake	1,098,044	510,414	46.5	-967	0.0	117,133	10.7
Twin Buttes Reservoir	182,454	17,713	9.7	2,171	1.2	-13,799	-7.6
Tyler, Lake	72,073	68,147	94.6	-1,597	-2.2	7,217	10.0
Waco, Lake	189,418	182,680	96.4	-4,477	-2.4	73,581	38.8
Waxahachie, Lake	11,060	8,670	78.4	-248	-2.2	1,737	15.7
Weatherford, Lake	17,812	14,004	78.6	-448	-2.5	4,564	25.6
White River Lake	29,880	4,954	16.6	-305	-1.0	-1,501	-5.0
Whitney, Lake	564,808	560,182	99.2	8,459	1.5	157,387	27.9
Worth, Lake	24,419	15,275	62.6	-551	-2.3	1,018	4.2
Wright Patman Lake	231,496	231,496	100.0	0	0.0	4,919	2.1
STATEWIDE TOTAL							
STATEWIDE TOTAL	**32,478,921**	**23,342,178**	**71.9**	**-241,430**	**0**	**2,307,110**	**7.1**

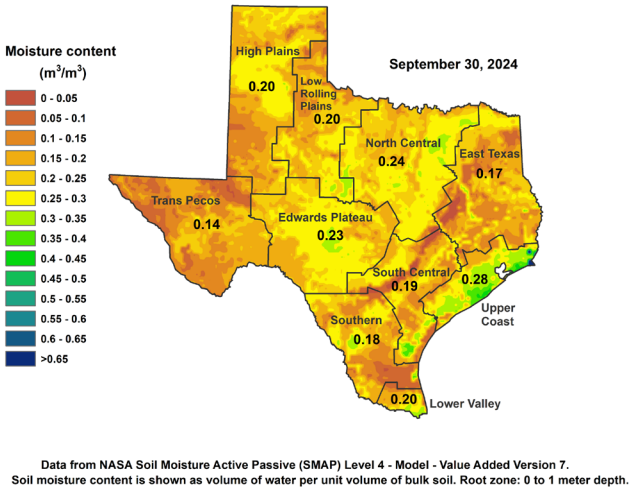
*Total volume below elevation of conservation pool top is used as the conservation storage capacity, because the dead pool storage is unknown.
**Monthly and yearly changes do not include reservoirs that did not have data in the last month or last year, respectively.

SOIL MOISTURE

At the end of September 2024, root zone soil moisture was low [yellow, orange shading, Figure 5(a)] in the Panhandle, West, Central, East, and South Texas. Areas of more severe dryness [brown shading, Figure 5(a)] were seen in the Trans Pecos, northern and southern High Plains, areas of the Low Rolling Plains, western North Central, areas of northern and southern South Central, Southern, northern Lower Valley, and East Texas climate divisions. Average soil moisture [green shading, Figure 5(a)] was seen in the central Edwards Plateau, southern South Central, central Southern, areas of central and northeastern North Central, southern Lower Valley, and much of the Upper Coast climate divisions.

Compared to conditions at the end of August 2024, soil moisture increased [blue shading in Figure 5(b)] in the High Plains, southern Low Rolling Plains, northeastern Trans Pecos, northern and western Edwards Plateau, northern and western North Central, northern Southern, southern South Central, and portions of the Lower Valley climate divisions. Soil moisture decreased [red shading in Figure 5(b)] in the eastern and southern North Central, northeastern and northwestern Southern, much of South Central, Upper Coast, and much of East Texas climate divisions.

a)



Data from NASA Soil Moisture Active Passive (SMAP) Level 4 - Model - Value Added Version 7.
Soil moisture content is shown as volume of water per unit volume of bulk soil. Root zone: 0 to 1 meter depth.

b)

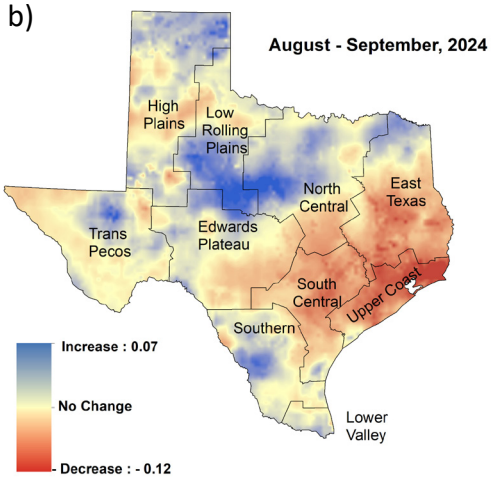


Figure 5: (a) Root zone soil moisture conditions in September 2024 and (b) the difference in root zone soil moisture between end-August 2024 and end-September 2024.

STREAMFLOW CONDITIONS

Normal streamflow (25–75th percentile, green shading, Figure 6) was recorded in portions of the northern Panhandle, Eastern, Central, and Southern regions of Texas this month. Above normal streamflow (76–90th percentile, light blue shading, Figure 6) was seen the Canadian (Lower Beaver watershed), Cypress (Lake O' the Pines), Lower Trinity, Upper Brazos (Running Water Draw, Double Mountain Fork Brazos, and Hubbard watersheds), Middle Colorado, and Nueces (West Nueces watershed) river basins. Much above normal streamflow (>90th percentile, dark blue shading, Figure 6) was seen in the Upper Colorado and Middle Colorado (Pecan Bayou watershed) river basin. Record high streamflow (black shading, Figure 6) was seen in the Middle Colorado (Jim Ned watershed) river basin.

Below normal streamflow (10–24th percentile, orange shading, Figure 6) was seen in the Upper Red (Upper North Fork Red, Upper Salt Fork Red, North Witchita, South Witchita, Witchita, and Little Witchita watersheds), Lower Red (Lake Texoma and Pecan-Waterhole watersheds), Middle and Lower Brazos, Lower Colorado (Lower Colorado-Cummins watershed), Pecos, Guadalupe (San Marcos, and Middle and Lower Guadalupe watersheds), Trinity-San Jacinto, Colorado-Lavaca, San Antonio-Nueces (Mission watershed), Nueces (Turkey, Hondo, San Miguel, Lower Frio, Lower Nueces watersheds) river basins. Much below normal streamflow (<10th percentile, dark red shading, Figure 6) was seen in the Upper Red, Lower Red (Farmers Mud and Bois d'Arc-Island watersheds), Lower Colorado, Brazos-Colorado (San Bernard watershed), Nueces (Upper Frio watershed), Lavaca (Navidad watershed), and Pecos (Lower Pecos-Red Bluff Reservoir watershed) river basins.

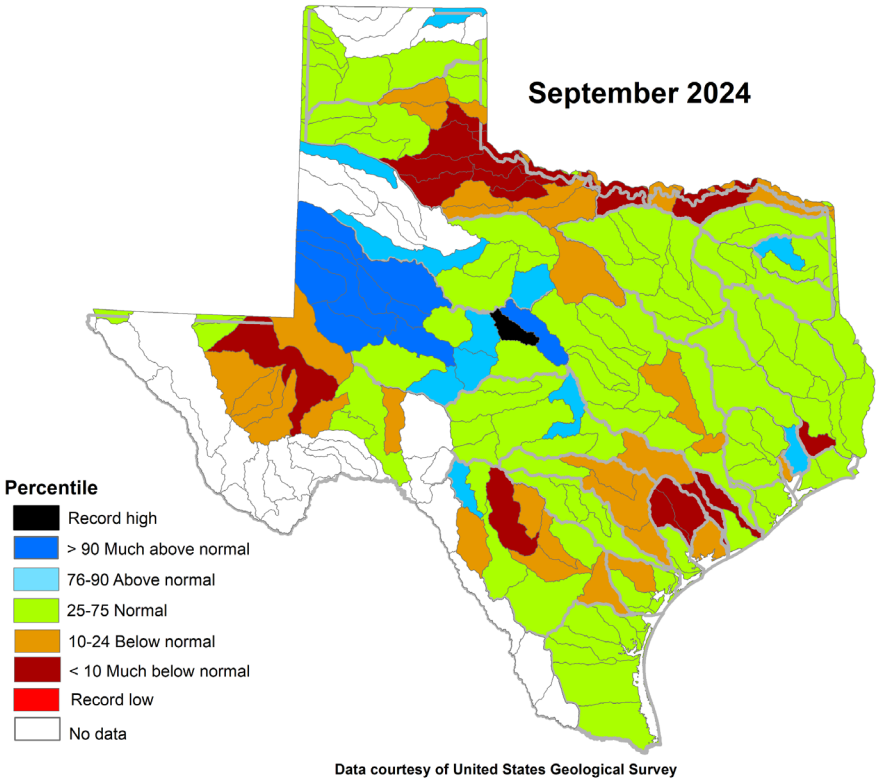
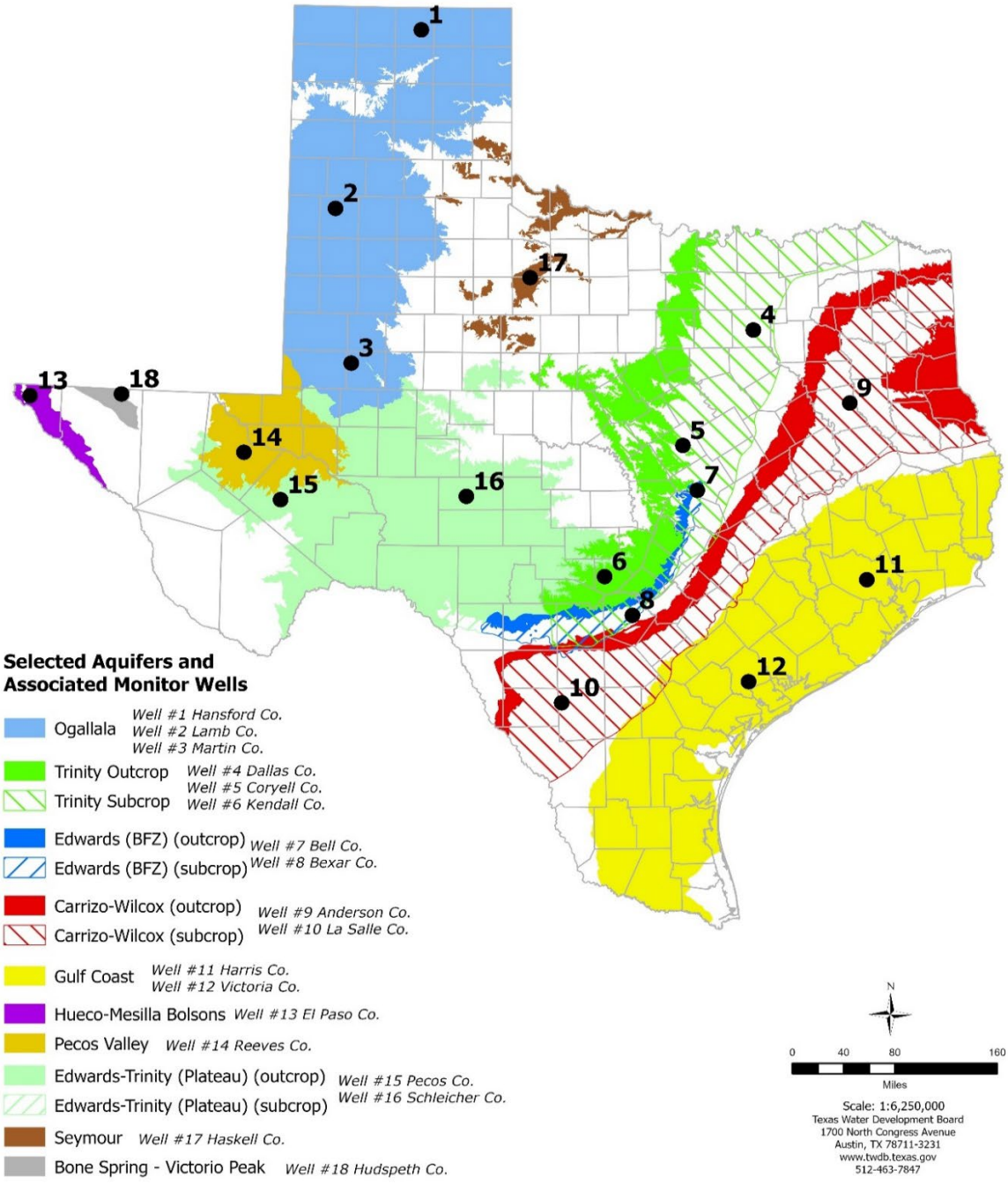


Figure 6: Runoff percentiles by the U.S. Geological Survey's Hydrologic Unit Code

RECORDER WELL NETWORK AND WATER DATA FOR TEXAS

The TWDB, in partnership with its cooperators, continues to install and monitor automatic water level recorders in monitoring wells throughout the state. An automatic groundwater level recorder well, or recorder well, refers to a water well installed with water level recording equipment, a datalogger, and satellite or cellular transmitter. The selection and distribution of the 18 wells shown in this report are based on several considerations: key areas of drawdown and recovery, areas where local conditions are affected by recurring pumping cycles or seasonal activities, wells with a means of triggering drought conditions, and site availability. The spatial distribution of recorder wells attempts to capture broader conditions and trends representative of each aquifer while also highlighting areas of particular interest. The hydrographs provided in this report show a five-year history. For more information and to view full periods of record for available hydrographs, please visit Water Data for Texas.



*** Well numbers used in this publication on the aquifer map to indicate the monitoring well locations (numbers 1 to 18) are different than the TWDB's seven-digit state well number.**

SEPTEMBER 2024 GROUNDWATER LEVELS IN MONITORING WELLS

Water level measurements were available for 18 key monitoring wells in the state. Water levels rose in ten monitoring wells since the beginning of September, with an increase of 0.08 feet in the Martin County Ogallala Aquifer well (#3 on map) to 4.95 feet in the Dallas County Trinity Aquifer well (#4 on map). Water levels declined in eight monitoring wells, ranging from a decline of -0.04 feet in the Hansford County Ogallala Aquifer well (#1 on map) to -1.90 feet in the Kendall County Trinity Aquifer well (#6 on map). The J-17 well (#8 on map) in San Antonio recorded a water level of 101.40 feet below land surface or 629.60 feet above mean sea level. Water levels are 0.40 feet below the Stage 4 critical management levels for the San Antonio portion of the Edwards (Balcones Fault Zone) Aquifer. The Edwards Aquifer Authority declared Stage 3 Critical Period Management permit reduction requirements, effective September 16, 2024, and shortly thereafter, declared a return to Stage 4 permit reductions effective September 18, 2024, as a result of well J-17 water levels and area spring flow levels.

Monitoring Well	September (depth to water, feet)	August (depth to water, feet)	Month Change	Year Change	Historical Change*	First Measured (year)
(1) Hansford 0354301	165.71	165.67	-0.04	-0.94	-95.59	1951
(2) Lamb 1053602	154.91	155.01	0.10	-0.56	-126.74	1951
(3) Martin 2739903	145.15	145.23	0.08	0.57	-40.26	1964
(4) Dallas 3319101	487.26	492.21	4.95	15.17	-265.26	1954
(5) Coryell 4035404	546.95	546.71	-0.24	0.12	-254.95	1955
(6) Kendall 6802609	174.75	172.85	-1.90	-1.52	-114.75	1975
(7) Bell 5804816	123.07	122.29	-0.78	5.84	0.44	2008
(8) Bexar 6837203	101.40	101.70	0.30	0.00	-54.76	1932
(9) Anderson 3813106	240.21	239.49	-0.72	0.02	-95.21	1965
(10) La Salle 7738103	536.04	536.90	0.86	7.30	-282.97	2003
(11) Harris 6514409	197.76	196.56	-1.20	-0.88	-62.26	1947
(12) Victoria 8017502	34.36	33.35	-1.01	-1.02	-0.36	1958
(13) El Paso 4913301	296.95	297.54	0.59	1.70	-65.05	1964
(14) Reeves 4644501	155.62	159.37	3.75	NA**	-63.53	1952
(15) Pecos 5216802	224.43	228.69	4.26	-3.63	22.45	1976
(16) Schleicher 5512134	321.25	322.74	1.49	0.19	-19.35	2003
(17) Haskell 2135748	47.07	47.79	0.72	0.79	-4.07	2002
(18) Hudspeth 4807516	158.62	158.10	-0.52	2.68	-54.7	1966

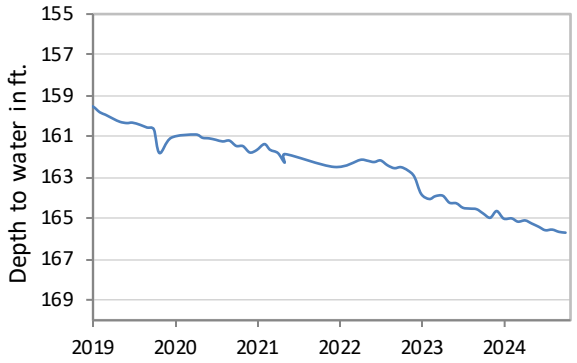
*** Change since the original measurement taken on the date indicated in the last column.**

****Year Change not available due to data collection issues in September 2023.**

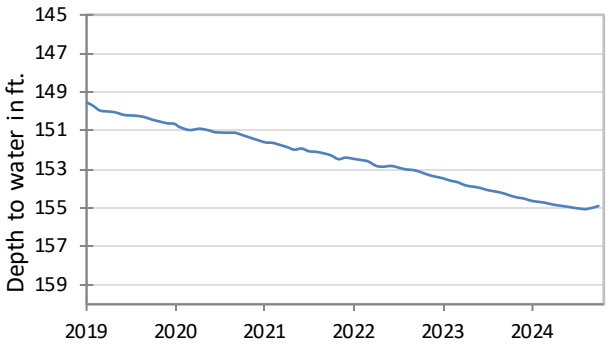
NA (not available). All data are provisional and subject to revision.

SEPTEMBER 2024 MONITORING WELL HYDROGRAPHS

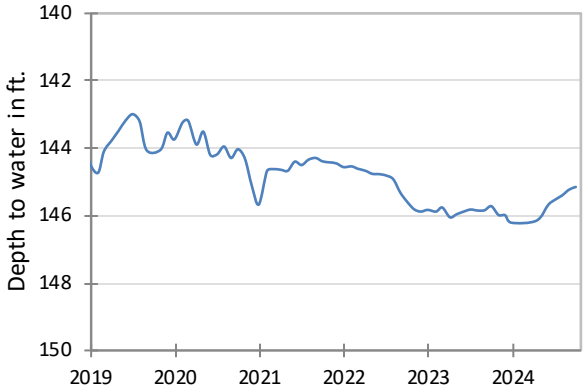
(1) State Well #03-54-301
Near Spearman, Hansford County
Ogallala Aquifer



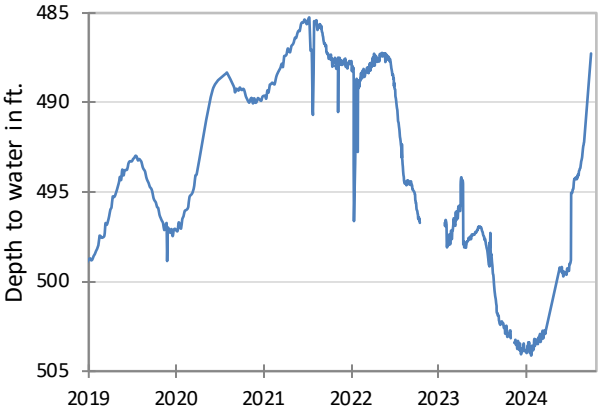
(2) State Well #10-53-602
Near Earth, Lamb County
Ogallala Aquifer



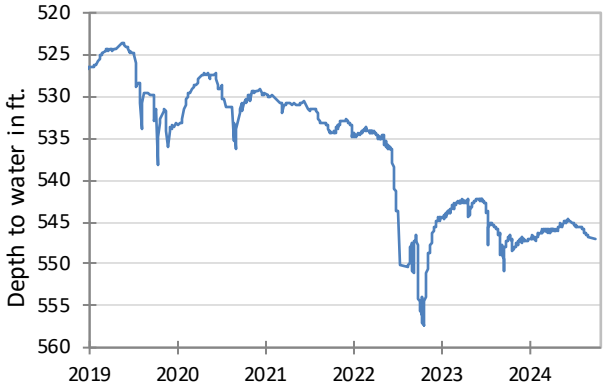
(3) State Well #27-39-903
Northwest Martin County
Ogallala Aquifer



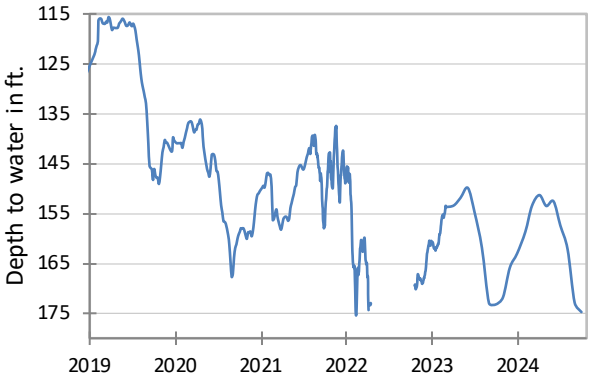
(4) State Well #33-19-101
Southeast Dallas, Dallas County
Twin Mountains Formation-Trinity Aquifer



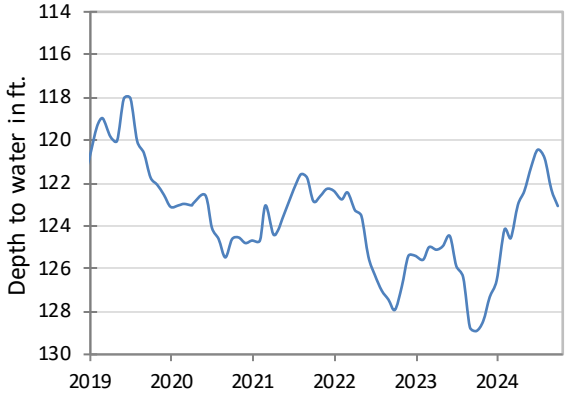
(5) State Well #40-35-404
Gatesville, Coryell County
Hosston Formation-Trinity Aquifer



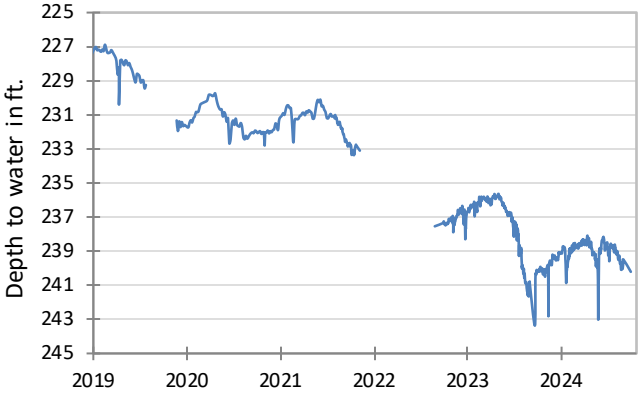
(6) State Well #68-02-609
Waring, Kendall County
Travis Peak Formation-Trinity Aquifer



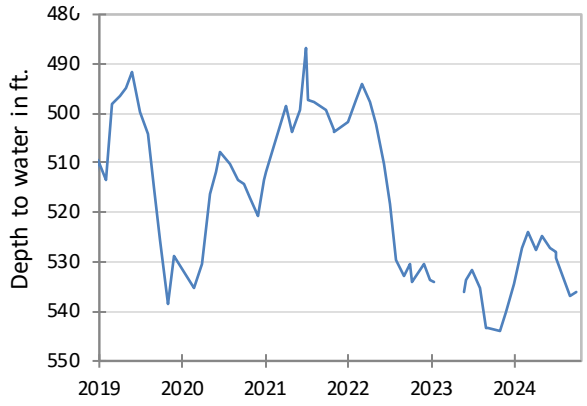
(7) State Well #58-04-816
Near Salado, Bell County
Edwards (Balcones Fault Zone) Aquifer



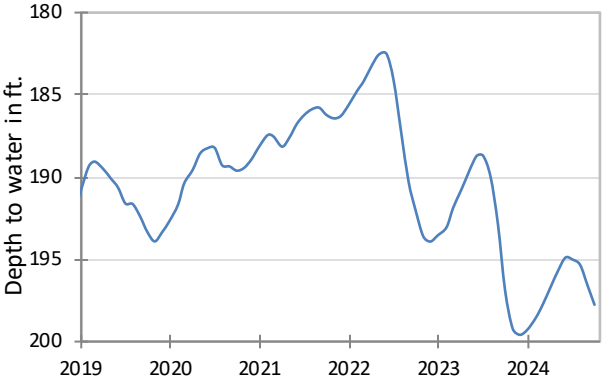
(9) State Well #38-13-106
Neches, Anderson County
Carrizo-Wilcox Aquifer



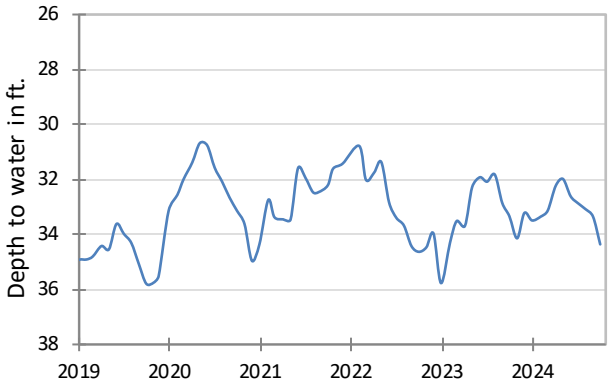
(10) State Well #77-38-103
Near Cotulla, La Salle County
Carrizo-Wilcox Aquifer



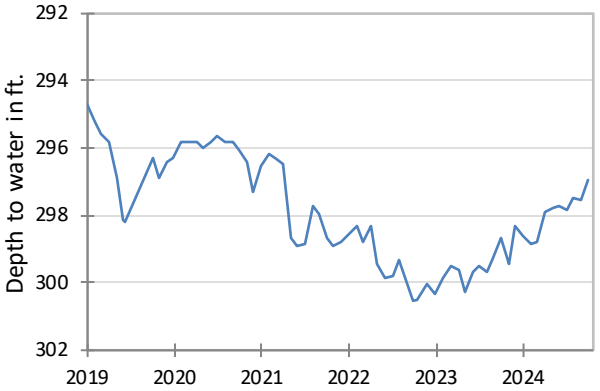
(11) State Well #65-14-409
North Houston, Harris County
Evangeline Formation-Gulf Coast Aquifer



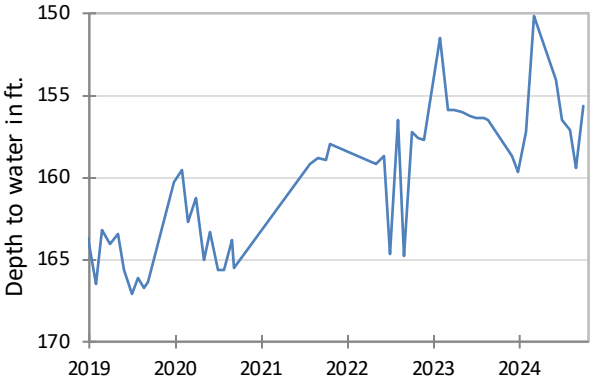
(12) State Well #80-17-502
Near Bloomington, Victoria County
Lissie Formation-Gulf Coast Aquifer



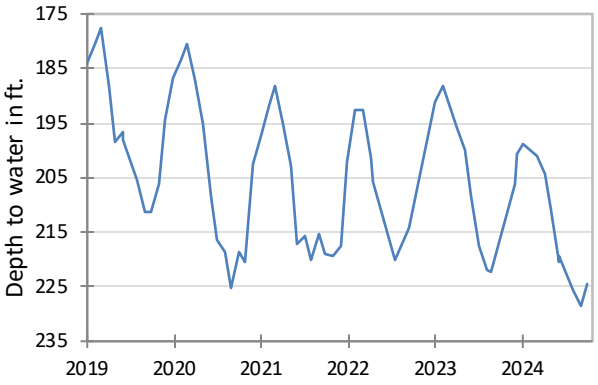
(13) State Well #49-13-301
El Paso, El Paso County
Hueco-Mesilla Bolsons Aquifer



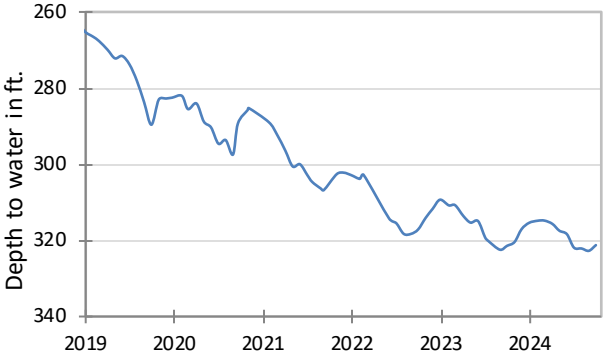
(14) State Well #46-44-501
Near Pecos, Reeves County
Pecos Valley Aquifer



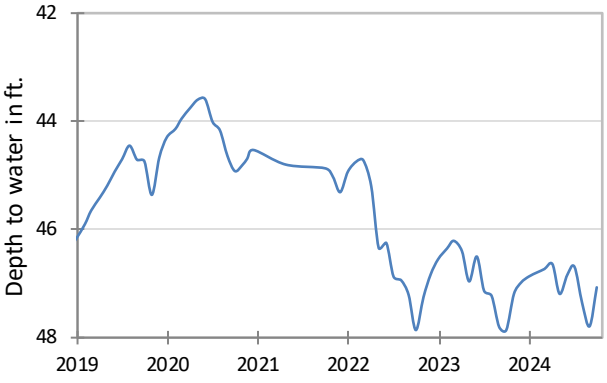
(15) State Well #52-16-802
Fort Stockton, Pecos County
Edwards-Trinity (Plateau) Aquifer



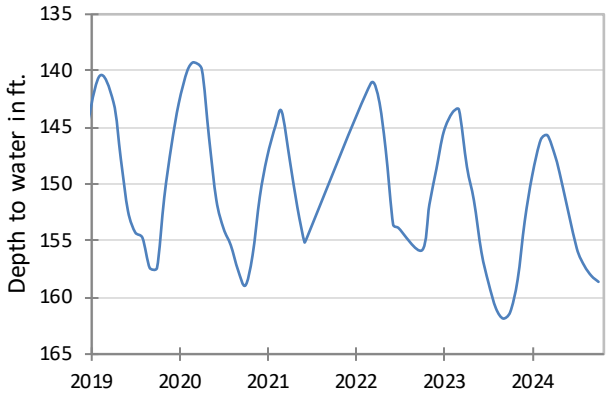
(16) State Well #55-12-134
Eldorado, Schleicher County
Edwards-Trinity (Plateau) Aquifer



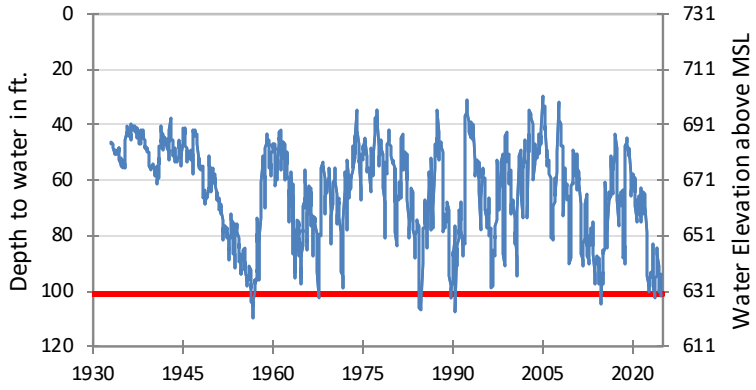
(17) State Well #21-35-748
Near O'Brien, Haskell County
Seymour Aquifer

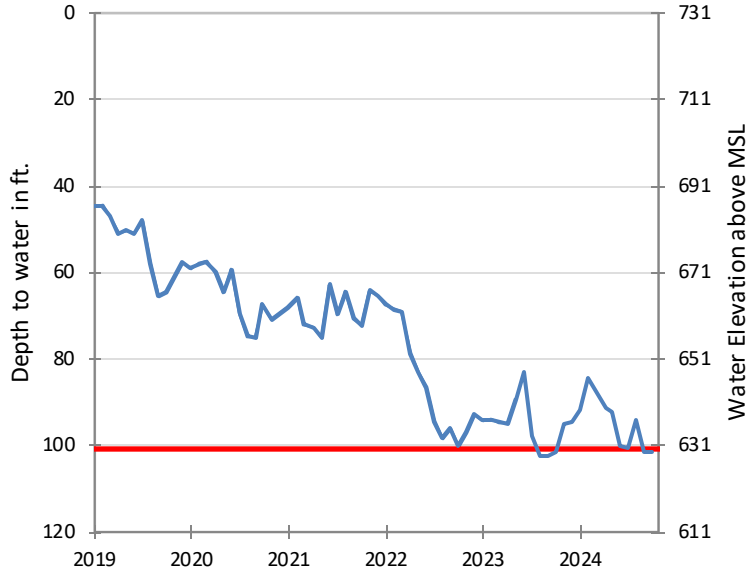


(18) State Well #48-07-516
Dell City, Hudspeth County
Bone Spring-Victorio Peak Aquifer



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





The late September water level measurement in this Edwards (Balcones Fault Zone) Aquifer well, located at an elevation of 731 feet above mean sea level, was 101.40 feet below land surface, or 629.60 feet above mean sea level. This was 0.30 feet above last month's measurement, equal to last year's measurement, and 54.76 feet below the initial measurement recorded in 1932.

Water levels below the red line indicate periods in which Edwards Aquifer Authority Stage 4 drought restrictions are in effect. The Edwards Aquifer Authority declared Stage 3 Critical Period Management permit reduction requirements, effective September 16, 2024, and shortly thereafter, declared a return to Stage 4 permit reductions effective September 18, 2024, as a result of well J-17 water levels and area spring flow levels.