

# Texas Water Conditions Report

August 2024



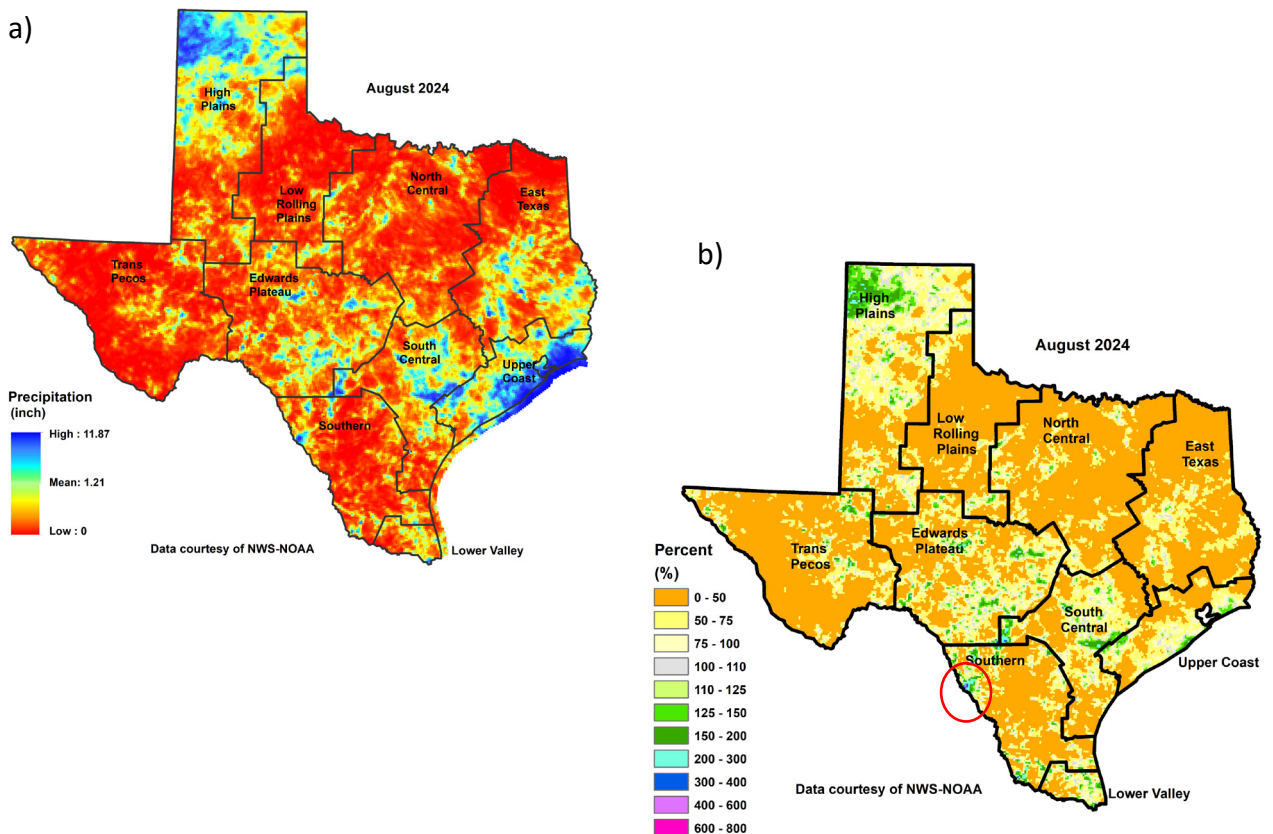
## Water News:

The Texas Water Development Board (TWDB) adopted the [2024 State Flood Plan](#) on August 15th, 2024. The plan is the first of its kind for the state and includes a comprehensive assessment of flood hazard risk across Texas, and strategies for flood mitigation and flood hazard reduction.

## RAINFALL

In August, little to no rain [yellow, orange, and red shading, Figure 1(a)] fell in the Trans Pecos, southern High Plains, Low Rolling Plains, much of the Edwards Plateau, North Central, much of East Texas, much of South Central, Lower Valley, Southern, and areas of the Upper Coast climate divisions. High amounts of rainfall [light and dark blue shading, Figure 1(a)] were seen in area of the northern High Plains, small areas of northern and southern Low Rolling Plains, scattered areas across the Edwards Plateau, areas of North Central, parts of central and southern East Texas, northern South Central, northern Southern, portions of eastern Lower Valley, and much of the southeastern 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 the northern High Plains, areas of northern and southern Low Rolling Plains, scattered areas across the Edwards Plateau, small areas of central North Central, northern South Central, northwestern and southwestern Southern, areas in southwestern East Texas, areas of the eastern Lower Valley climate divisions. 200–400 percent of normal rainfall [light to dark blue shading, Figure 1(b)] was received in portions of northwestern High Plains, northwestern South Central, and northwestern Southern climate divisions. 400–600 percent of normal rainfall [light purple shading, circled in red, Figure 1(b)] was received in the northwest Southern climate division.



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

# DROUGHT

At the end of August, 80.98% of the state was in the D0 (abnormally dry) through D4 (exceptional drought) categories (**Figure 2**). This is approximately 39.13% higher than the end of July.

## U.S. Drought Monitor Texas

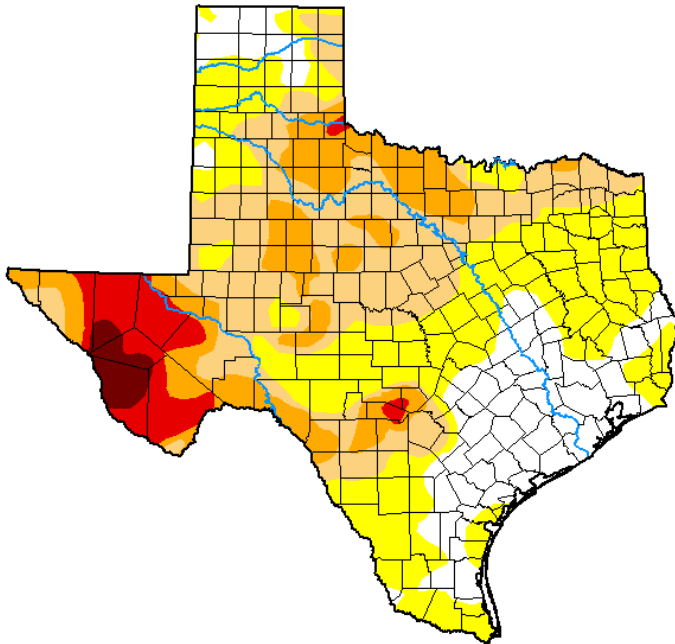
**August 27, 2024**

(Released Thursday, Aug. 29, 2024)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	19.02	80.98	48.13	22.25	7.60	1.82
<b>Last Week</b> 08-20-2024	37.79	62.21	40.01	14.17	6.18	1.82
<b>3 Months Ago</b> 05-28-2024	50.84	49.16	26.48	13.03	1.90	0.00
<b>Start of Calendar Year</b> 01-02-2024	39.60	60.40	39.47	17.78	5.68	0.68
<b>Start of Water Year</b> 09-26-2023	3.03	96.97	80.64	59.66	38.06	12.68
<b>One Year Ago</b> 08-29-2023	1.55	98.45	75.83	61.41	32.33	12.64



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

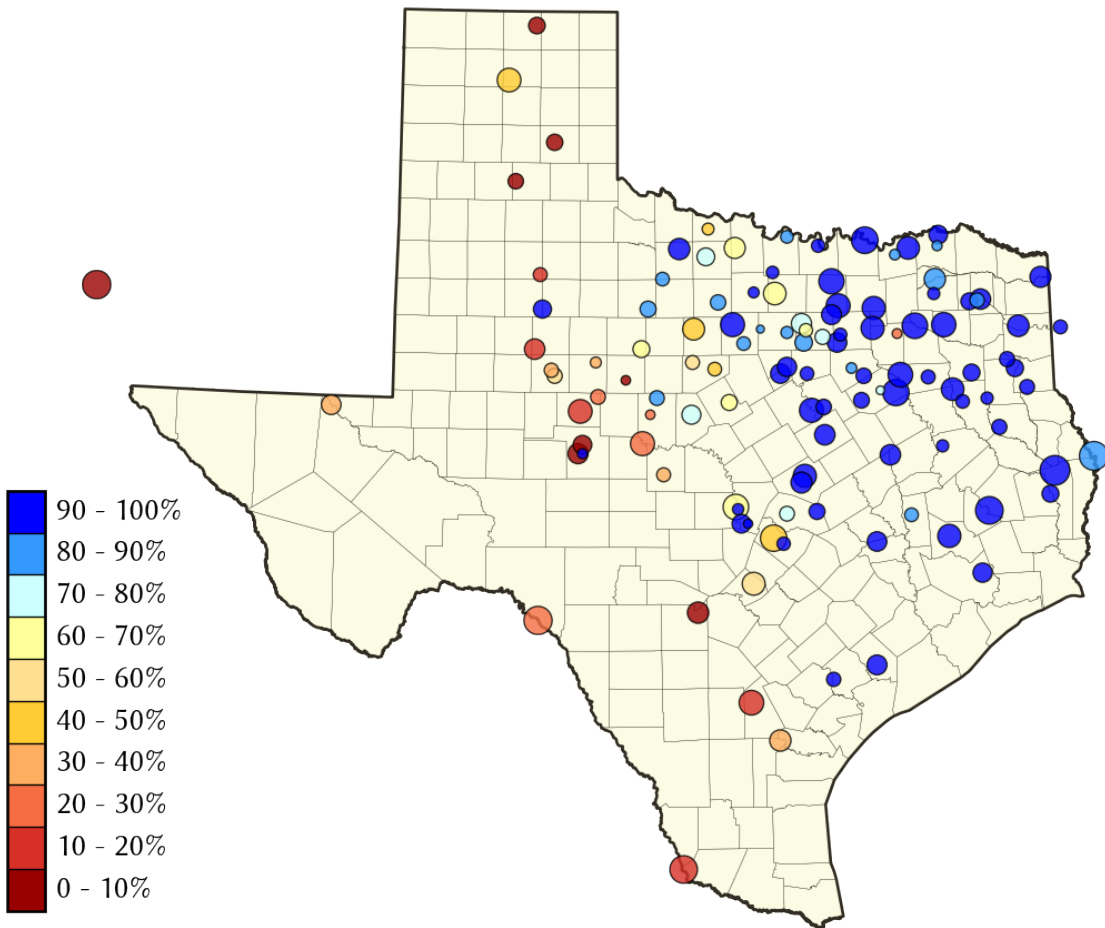
Richard Heim  
NCEI/NOAA



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

**Figure 2.** The percentage of drought in Texas according to the U.S. Drought Monitor map as of August 27, 2024.

## RESERVOIR STORAGE



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

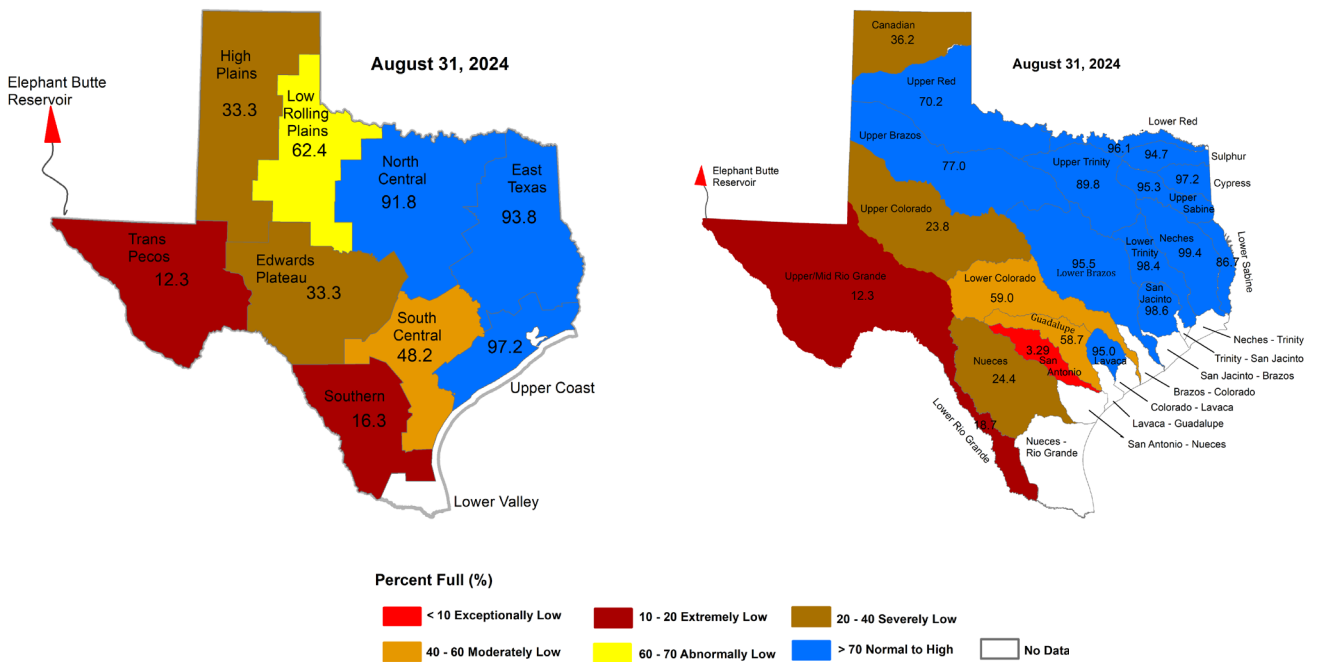
Out of 119 reservoirs in the state, 11 reservoirs held 100 percent conservation storage capacity, and 51 reservoirs were at or above 90 percent full this month. Seventeen reservoirs remained at or below 30 percent full: Abilene (6.6 percent full), Amistad (24.9 percent full), Choke Canyon (20.0 percent full), E.V. Spence (13.0 percent full), Falcon (11.5 percent full), Greenbelt (9.0 percent full), Hords Creek (27.2 percent full), J.B. Thomas (16.5 percent full), Mackenzie (8.6 percent full), Medina Lake (3.3 percent full), New Terrell City (25.0 percent full), O.C. Fisher (0.8 percent full), O.H. Ivie (25.3 percent full), Oak Creek (27.0 percent full), Palo Duro Reservoir (1.8 percent full), Twin Buttes (8.5 percent full), and the White River Lake (17.6 percent full). Elephant Butte Reservoir (New Mexico) was 8.0 percent full (Figure 3).

Reservoir conservation storage was at or above normal [Figure 4(a)] for East Texas (93.8 percent full), North Central (91.8 percent full), and the Upper Coast (97.2 percent full) climate divisions. The Low Rolling Plains (62.4 percent full) climate division had abnormally low conservation storage. Conservation storage was moderately low [Figure 4(a)] for the South Central (48.2 percent full) climate division. The High Plains (33.3 percent full) and Edwards Plateau (33.3 percent full) climate divisions had severely low conservation storage and the Trans Pecos (12.3 percent full) and the Southern (16.3 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, and extremely low [10–20 percent full, dark red shading] in the Upper/Mid and Lower Rio Grande river basins. Severely low conservation storage [20–40 percent full, brown shading, Figure 4(b)] was seen in the Canadian, Nueces, 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)]. Normal to high conservation storage [>70 percent full, blue shading, Figure 4(b)] was observed in the Upper and Lower Red, Sulphur, Cypress, Upper and Lower Sabine, Upper and Lower Brazos, Neches, Lavaca, and San Jacinto river basins.

a) Regional Reservoir Storage Index\*

b) Reservoir Storage Index\* (by Basins/Sub-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-August 2024		Storage change from end-Jul 2024		Storage change from end-Aug 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
Abilene, Lake	7,900	518	6.6	-139	-1.8	-1,117	-14.1
Alan Henry Reservoir	96,207	89,558	93.1	-3,366	-3.5	5,137	5.3
*Amistad Reservoir (Texas & Mexico)	3,275,532	624,460	19.1	-4,079	0.0	-434,954	-13.3
*Amistad Reservoir (Texas)	1,813,408	451,829	24.9	-705	0.0	-213,798	-11.8
Amon G Carter, Lake	19,266	17,917	93.0	-1,178	-6.1	1,184	6.1
Aquilla Lake	43,243	39,128	90.5	-3,378	-7.8	4,120	9.5
Arlington, Lake	40,157	28,699	71.5	-8,753	-21.8	734	1.8
Arrowhead, Lake	230,359	157,330	68.3	-10,187	-4.4	23,586	10.2
Athens, Lake	29,503	29,099	98.6	-404	-1.4	2,251	7.6
*Austin, Lake	23,972	23,158	96.6	124	0.5	139	0.6
B A Steinhagen Lake	69,186	67,259	97.2	-1,927	-2.8	-1,418	-2.0
Bardwell Lake	43,856	42,614	97.2	-1,242	-2.8	2,584	5.9
Belton Lake	432,631	423,372	97.9	-9,259	-2.1	171,157	39.6
Benbrook Lake	85,648	75,372	88.0	-4,407	-5.1	18,897	22.1
Bob Sandlin, Lake	192,417	189,671	98.6	-2,746	-1.4	6,479	3.4
Bois d'Arc Lake	367,609	339,484	92.3	-17,357	-4.7	59,102	16.1
Bonham, Lake	11,027	9,043	82.0	-854	-7.7	-625	-5.7
Brady Creek Reservoir	28,808	10,924	37.9	-764	-2.7	205	0.7
Bridgeport, Lake	372,183	249,318	67.0	-8,251	-2.2	15,210	4.1
*Brownwood, Lake	130,868	103,244	78.9	-6,552	-5.0	19,126	14.6
Buchanan, Lake	822,207	567,670	69.0	-32,109	-3.9	171,927	20.9
Caddo, Lake	29,898	29,358	98.2	-540	-1.8	-540	-1.8
Canyon Lake	378,781	212,243	56.0	-6,483	-1.7	-45,733	-12.1
Cedar Creek Reservoir in Trinity	644,686	599,346	93.0	-35,251	-5.5	48,820	7.6
Champion Creek Reservoir	41,580	21,501	51.7	-846	-2.0	-280	0.0
Cherokee, Lake	40,094	38,471	96.0	-1,623	-4.0	4,658	11.6
Choke Canyon Reservoir	662,820	132,382	20.0	-8,186	-1.2	-52,707	-8.0
*Cisco, Lake	29,003	15,851	54.7	-690	-2.4	-2,791	-9.6
Coleman, Lake	38,075	31,045	81.5	-924	-2.4	5,944	15.6
Colorado City, Lake	31,040	28,718	92.5	-1,689	-5.4	3,131	10.1
*Coletto Creek Reservoir	30,758	12,216	39.7	-779	-2.5	-3,185	-10.4
Conroe, Lake	417,577	410,057	98.2	-7,520	-1.8	27,413	6.6
Corpus Christi, Lake	256,062	92,545	36.1	-13,334	-5.2	-54,971	-21.5
Crook, Lake	9,195	7,929	86.2	-643	-7.0	-304	-3.3
Cypress Springs, Lake	66,756	65,276	97.8	-1,480	-2.2	1,495	2.2
E. V. Spence Reservoir	517,272	67,067	13.0	-4,085	0.0	-15,935	-3.1
Eagle Mountain Lake	185,087	145,364	78.5	-18,727	-10.1	21,440	11.6
Elephant Butte Reservoir (Texas)	852,491	67,795	8.0	-34,205	-4.0	-98,272	-11.5
Elephant Butte Reservoir (Total Storage)	1,960,900	156,934	8.0	-79,178	-4.0	-227,482	-11.6
*Falcon Reservoir (Texas & Mexico)	2,646,817	271,872	10.3	-49,669	-1.9	-133,074	-5.0
*Falcon Reservoir (Texas)	1,562,367	180,300	11.5	-30,610	-2.0	19,679	1.3
Fork Reservoir, Lake	605,061	571,463	94.4	-27,002	-4.5	12,784	2.1
Fort Phantom Hill, Lake	70,030	43,186	61.7	-2,199	-3.1	-6,615	-9.4
Georgetown, Lake	38,005	28,444	74.8	-2,558	-6.7	9,639	25.4
Gibbons Creek Reservoir	25,721	22,537	87.6	-3,006	-11.7	2,770	10.8
Graham, Lake	45,288	36,557	80.7	-2,277	-5.0	2,693	5.9
Granbury, Lake	132,949	124,336	93.5	-7,473	-5.6	78	0.1

## CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

Name of lake or reservoir	Storage capacity	Storage at end-August 2024		Storage change from end-Jul 2024		Storage change from end-Aug 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
<i>Continued</i>							
Granger Lake	51,822	51,822	100.0	0	0.0	9,710	18.7
Grapevine Lake	163,064	160,444	98.4	-2,620	-1.6	17,531	10.8
Greenbelt Lake	59,968	5,422	9.0	-415	0.0	-1,597	-2.7
*Halbert, Lake	6,033	4,818	79.9	-250	-4.1	271	4.5
Hords Creek Lake	8,109	2,206	27.2	-143	-1.8	195	2.4
Houston County Lake	17,113	17,113	100.0	0	0.0	2,376	13.9
Houston, Lake	132,318	132,318	100.0	0	0.0	5,441	4.1
Hubbard Creek Reservoir	313,298	139,353	44.5	-9,329	-3.0	-34,484	-11.0
Hubert H Moss Lake	24,058	22,050	91.7	-866	-3.6	124	0.5
Inks, Lake	13,729	13,187	96.1	158	1.2	48	0.3
J. B. Thomas, Lake	199,931	32,979	16.5	-3,016	-1.5	-5,144	-2.6
Jacksonville, Lake	25,670	25,450	99.1	-220	0.0	1,698	6.6
Jim Chapman Lake (Cooper)	258,723	232,716	89.9	-19,743	-7.6	-8,645	-3.3
Joe Pool Lake	149,629	149,362	99.8	-267	0.0	9,771	6.5
Kemp, Lake	245,307	245,307	100.0	0	0.0	82,752	33.7
Kickapoo, Lake	86,345	61,632	71.4	-4,322	-5.0	14,316	16.6
Lavon Lake	409,757	374,506	91.4	-35,251	-8.6	40,959	10.0
Leon, Lake	27,762	12,386	44.6	-1,097	-4.0	-2,333	-8.4
Lewisville Lake	563,228	547,680	97.2	-15,548	-2.8	76,797	13.6
Limestone, Lake	203,780	187,820	92.2	-9,922	-4.9	14,136	6.9
*Livingston, Lake	1,603,504	1,578,822	98.5	-24,682	-1.5	192,363	12.0
*Lost Creek Reservoir	11,950	11,063	92.6	-317	-2.7	157	1.3
Lyndon B Johnson, Lake	112,778	110,917	98.3	321	0.3	64	0.1
Mackenzie Reservoir	46,450	4,015	8.6	-156	0.0	-657	-1.4
Marble Falls, Lake	7,597	7,257	95.5	54	0.7	30	0.4
Martin, Lake	75,726	71,245	94.1	-3,740	-4.9	8,810	11.6
Medina Lake	254,823	8,394	3.3	-878	0.0	-2,758	-1.1
Meredith, Lake	500,000	202,169	40.4	-3,977	0.0	-31,236	-6.2
Millers Creek Reservoir	26,768	23,890	89.2	-1,874	-7.0	10,947	40.9
*Mineral Wells, Lake	5,273	4,642	88.0	-369	-7.0	1,109	21.0
Monticello, Lake	34,740	29,110	83.8	-1,045	-3.0	1,357	3.9
Mountain Creek, Lake	22,850	22,850	100.0	0	0.0	788	3.4
Murvaul, Lake	38,285	36,718	95.9	-1,567	-4.1	4,066	10.6
Nacogdoches, Lake	39,522	37,531	95.0	-1,947	-4.9	3,462	8.8
Nasworthy	9,615	8,820	91.7	-64	0.0	75	0.8
Navarro Mills Lake	49,827	49,827	100.0	0	0.0	7,153	14.4
New Terrell City Lake	8,583	2,144	25.0	-244	-2.8	507	5.9
Nocona, Lake (Farmers Crk)	21,444	18,168	84.7	-909	-4.2	2,427	11.3
North Fork Buffalo Creek Reservoir	15,400	6,542	42.5	-671	-4.4	1,553	10.1
O' the Pines, Lake	268,566	262,453	97.7	-6,113	-2.3	-6,113	-2.3
O. C. Fisher Lake	115,742	907	0.8	-251	0.0	-1,773	-1.5
*O. H. Ivie Reservoir	554,340	140,015	25.3	-9,862	-1.8	-34,438	-6.2
Oak Creek Reservoir	39,210	10,602	27.0	-836	-2.1	-3,958	-10.1

**CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS**

Name of lake or reservoir	Storage capacity	Storage at end-August 2024		Storage change from end-Jul 2024		Storage change from end-Aug 2023	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)
<i>Continued</i>							
Palestine, Lake	367,303	356,086	96.9	-11,217	-3.1	29,580	8.1
Palo Duro Reservoir	61,066	1,100	1.8	-233	0.0	-3,170	-5.2
Palo Pinto, Lake	26,766	22,497	84.1	-1,837	-6.9	13,120	49.0
Pat Cleburne, Lake	26,008	23,816	91.6	-1,383	-5.3	5,489	21.1
*Pat Mayse Lake	113,683	108,100	95.1	-5,583	-4.9	-2,834	-2.5
Possum Kingdom Lake	538,139	511,782	95.1	-19,406	-3.6	9,234	1.7
Proctor Lake	54,762	36,999	67.6	-4,930	-9.0	21,714	39.7
Ray Hubbard, Lake	439,559	412,231	93.8	-24,824	-5.6	36,579	8.3
Ray Roberts, Lake	788,167	779,405	98.9	-8,762	-1.1	33,339	4.2
Red Bluff Reservoir	151,110	56,635	37.5	-2,022	-1.3	-15,738	-10.4
Richland-Chambers Reservoir	1,099,417	1,080,190	98.3	-19,227	-1.7	70,725	6.4
Sam Rayburn Reservoir	2,857,077	2,857,077	100.0	0	0.0	458,482	16.0
Somerville Lake	150,293	150,293	100.0	0	0.0	40,253	26.8
Squaw Creek, Lake	151,250	151,250	100.0	0	0.0	1,293	0.9
Stamford, Lake	51,570	45,509	88.2	-3,954	-7.7	5,588	10.8
Stillhouse Hollow Lake	229,796	229,796	100.0	0	0.0	93,088	40.5
Striker, Lake	16,878	16,858	99.9	-20	0.0	3,169	18.8
Sweetwater, Lake	12,267	4,586	37.4	-299	-2.4	-1,563	-12.7
*Sulphur Springs, Lake	17,747	16,835	94.9	-912	-5.1	-91	0.0
Tawakoni, Lake	871,685	837,038	96.0	-25,800	-3.0	7,539	0.9
Texana, Lake	158,975	151,086	95.0	-7,272	-4.6	32,049	20.2
Texoma, Lake (Texas & Oklahoma)	2,487,601	2,433,981	97.8	-164,751	-6.6	48,810	2.0
Texoma, Lake (Texas)	1,243,801	1,216,990	97.8	-26,811	-2.2	24,405	2.0
Toledo Bend Reservoir (Texas & Louisiana)	4,472,900	3,883,583	86.8	-457,106	-10.2	-60,884	-1.4
Toledo Bend Reservoir (Texas)	2,236,450	1,939,742	86.7	-228,552	-10.2	-30,442	-1.4
Travis, Lake	1,098,044	511,381	46.6	-13,555	-1.2	87,241	7.9
Twin Buttes Reservoir	182,454	15,542	8.5	-2,855	-1.6	-18,101	-9.9
Tyler, Lake	72,073	69,744	96.8	-2,329	-3.2	6,290	8.7
Waco, Lake	189,418	187,157	98.8	-2,261	-1.2	72,582	38.3
Waxahachie, Lake	11,060	9,023	81.6	-933	-8.4	1,327	12.0
Weatherford, Lake	17,812	14,452	81.1	-1,206	-6.8	4,978	27.9
White River Lake	29,880	5,259	17.6	-675	-2.3	-505	-1.7
Whitney, Lake	564,808	551,723	97.7	-13,085	-2.3	136,714	24.2
Worth, Lake	24,419	15,826	64.8	-808	-3.3	1,213	5.0
Wright Patman Lake	231,496	231,496	100.0	0	0.0	0	0.0
<b>STATEWIDE TOTAL</b>							
<b>STATEWIDE TOTAL</b>	<b>32,478,921</b>	<b>23,583,370</b>	<b>72.6</b>	<b>-918,313</b>	<b>-2.8</b>	<b>1,666,035</b>	<b>5.1</b>

\*Total volume below elevation of conservation pool top is used as the conservation storage capacity, because the dead pool storage is unknown.

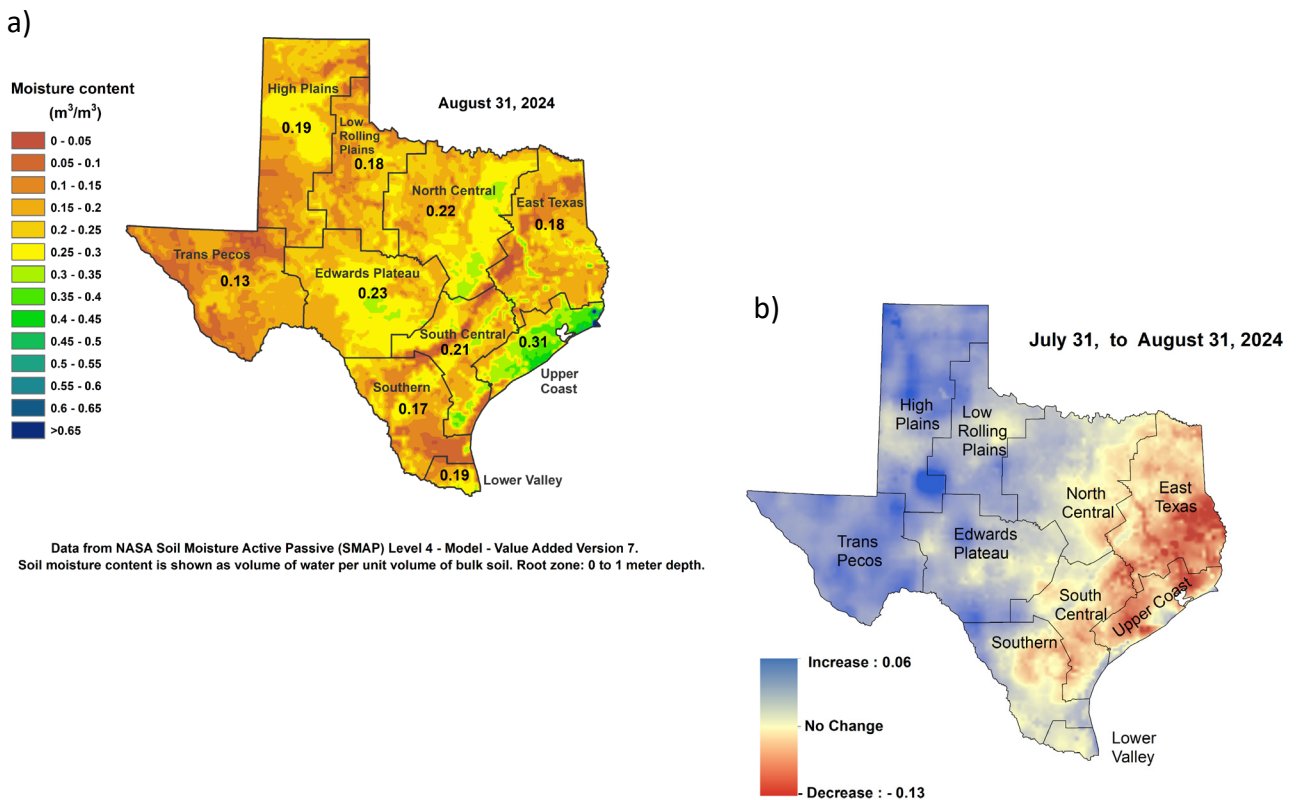
\*\*Monthly and yearly changes do not include reservoirs that did not have data in the last month or last year, respectively.



## SOIL MOISTURE

At the end of August 2024, root zone soil moisture was low [yellow, orange shading, Figure 5(a)] in the Panhandle, West, and portions of the 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 portions of northern and western East Texas climate divisions. Average soil moisture [green shading, Figure 5(a)] was seen in the central Edwards Plateau, northeastern and southern South Central, southern and northeastern North Central, portions of southern and central East Texas, southern Lower Valley, and much of the Upper Coast climate divisions.

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

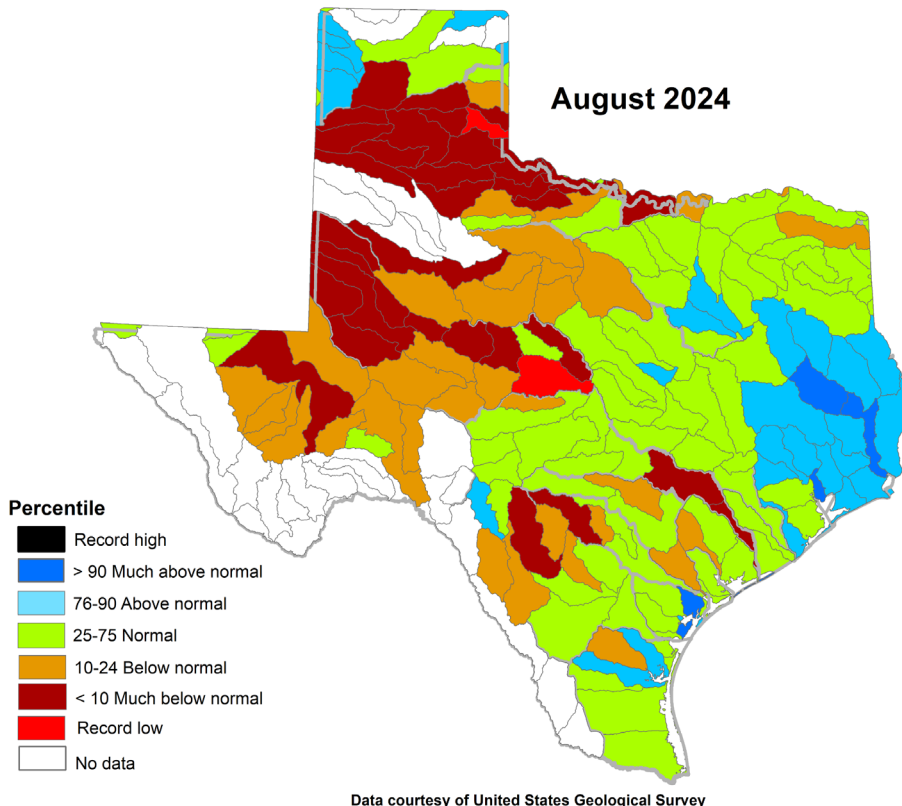


**Figure 5:** (a) Root zone soil moisture conditions in August 2024 and (b) the difference in root zone soil moisture between end-July 2024 and end-August 2024.

## STREAMFLOW CONDITIONS

Normal streamflow (25–75<sup>th</sup> percentile, green shading, Figure 6) was recorded in portions of the northern Panhandle, Northeastern, Central, and Southern regions of Texas this month. Above normal streamflow (76–90<sup>th</sup> percentile, light blue shading, Figure 6) was seen the Canadian, Sabine, Neches, Upper and Lower Trinity, Lower Brazos (Bosque watershed), San Jacinto-Brazos, San Jacinto, Nueces (West Nueces watershed), and Nueces-Rio Grande (Baffin Bay watershed) river basins. Much above normal streamflow (>90<sup>th</sup> percentile, dark blue shading, Figure 6) was seen in the Middle and Lower Neches, Trinity-San Jacinto, and the San Antonio-Nueces (Aransas watershed) river basins.

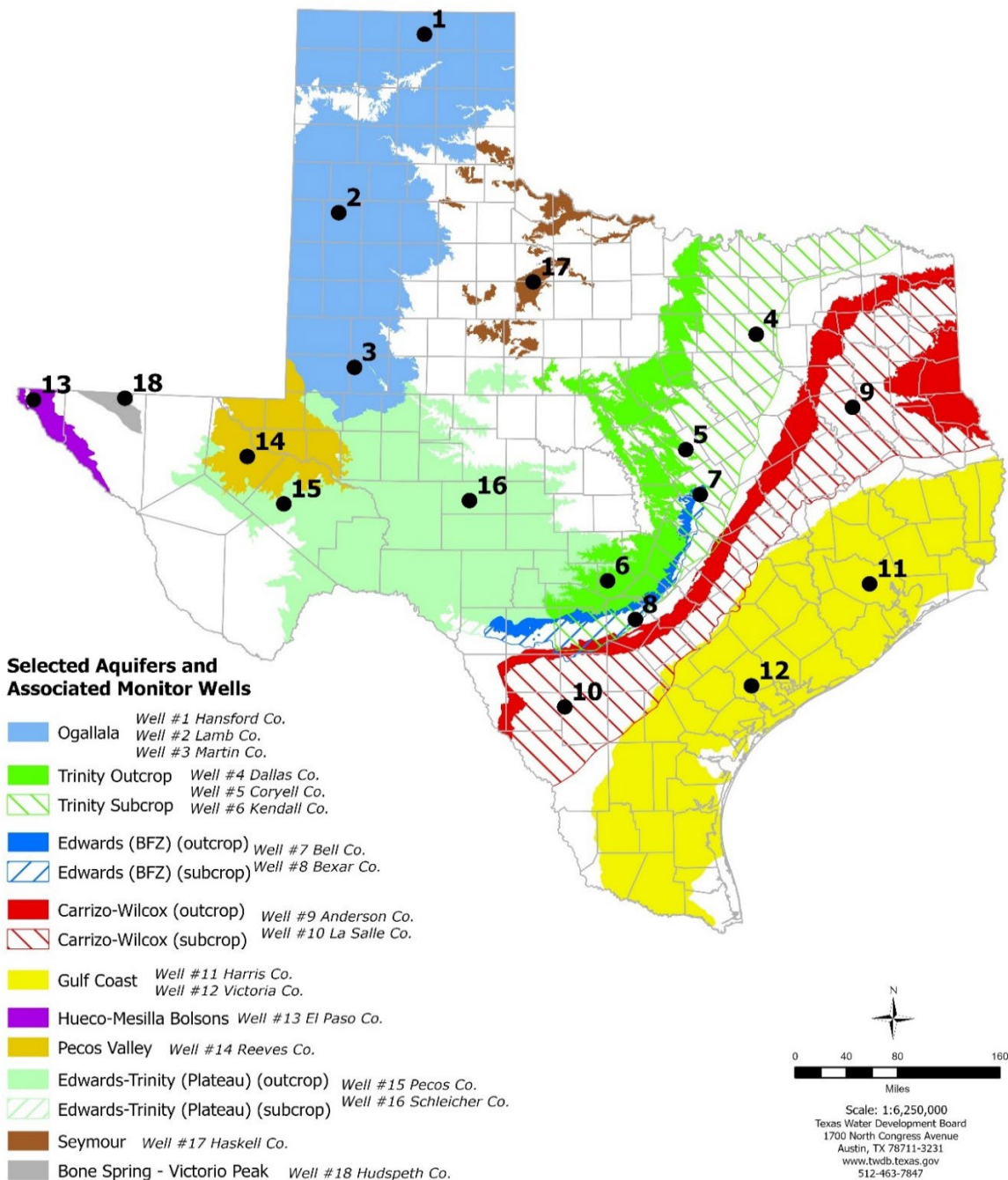
Below normal streamflow (10–24<sup>th</sup> percentile, orange shading, Figure 6) was seen in the Upper Red (Middle North Fork Red, North Witchita, and Witchita watersheds), Lower Red (Lake Texoma watershed), Upper Brazos, Upper Colorado, Pecos, Lower Sulphur, Lavaca, Guadalupe (Lower Guadalupe and San Marcos watersheds), Nueces-Rio Grande (San Fernando watershed) river basins. Much below normal streamflow (<10<sup>th</sup> percentile, dark red shading, Figure 6) was seen in the Canadian (Lake Meredith watershed), Upper Red, Lower Red (Farmers-Mud watershed), Upper Brazos (Double Mountain Fork Brazos watershed), Upper Colorado, Lower Colorado, San Antonio (Medina watershed), Nueces (Upper Frio watershed), and Pecos (Lower Pecos-Red Bluff Reservoir watershed) river basins. Record low streamflow (red shading, Figure 6) was seen in the Upper Red (Lower Salt Fork Red watershed), and the Middle Colorado 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](http://www.twdb.texas.gov/WaterDataforTexas).



\* 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.

## **AUGUST 2024 GROUNDWATER LEVELS IN MONITORING WELLS**

Water level measurements were available for 18 key monitoring wells in the state. Water levels rose in three monitoring wells since the beginning of August, with an increase of 0.06 feet in the Lamb County Ogallala Aquifer well (#2 on map) to 2.06 feet in the Dallas County Trinity Aquifer well (#4 on map). Water levels declined in fifteen monitoring wells, ranging from a decline of -0.06 feet in the El Paso County Hueco-Mesilla Bolsons Aquifer well (#13 on map) to -10.68 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 101.70 feet below land surface or 629.30 feet above mean sea level. Water levels are 0.70 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 a return to Stage 4 Critical Period Management permit reduction requirements, effective August 22, 2024, as a result of well J-17 water levels and area spring flow levels.

Monitoring Well	August (depth to water, feet)	July (depth to water, feet)	Month Change	Year Change	Historical Change*	First Measured (year)
(1) Hansford 0354301	165.67	165.56	-0.11	-1.11	-95.55	1951
(2) Lamb 1053602	155.01	155.07	0.06	-0.78	-126.84	1951
(3) Martin 2739903	145.23	145.40	0.17	0.61	-40.34	1964
(4) Dallas 3319101	492.21	494.27	2.06	9.16	-270.21	1954
(5) Coryell 4035404	546.71	545.55	-1.16	1.45	-254.71	1955
(6) Kendall 6802609	172.85	162.17	-10.68	0.09	-112.85	1975
(7) Bell 5804816	122.29	120.84	-1.45	6.44	1.22	2008
(8) Bexar 6837203	101.70	94.20	-7.50	0.50	-55.06	1932
(9) Anderson 3813106	239.49	238.95	-0.54	1.29	-94.49	1965
(10) La Salle 7738103	536.90	529.02**	-7.88	6.38	-283.83	2003
(11) Harris 6514409	196.56	195.33	-1.23	-3.68	-61.06	1947
(12) Victoria 8017502	33.35	33.08	-0.27	-0.50	0.65	1958
(13) El Paso 4913301	297.54	297.48	-0.06	1.69	-65.64	1964
(14) Reeves 4644501	159.37	157.08	-2.29	-2.84	-67.28	1952
(15) Pecos 5216802	228.69	225.64**	-3.05	-6.54	18.19	1976
(16) Schleicher 5512134	322.74	322.13	-0.61	-0.29	-20.84	2003
(17) Haskell 2135748	47.79	47.36	-0.43	0.01	-4.79	2002
(18) Hudspeth 4807516	158.10	157.18	-0.92	3.76	-54.18	1966

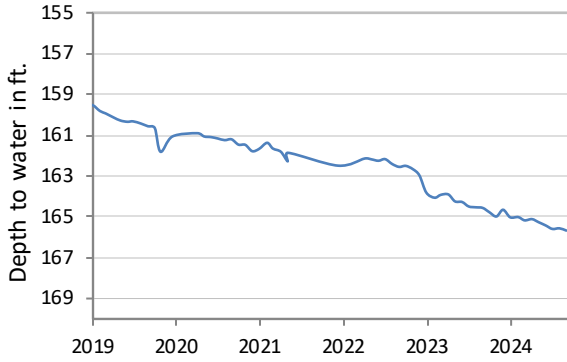
\* Change since the original measurement taken on the date indicated in the last column.

\*\*Measurement for #10 is representative of conditions in early July due to data collection issues later in the month. Measurement for #15 was updated since the previous report.

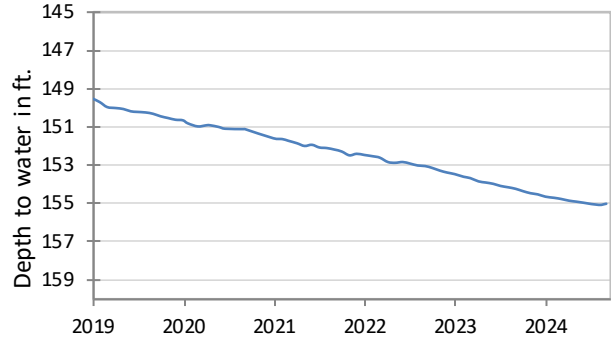
NA (not available). All data are provisional and subject to revision.

# AUGUST 2024 MONITORING WELL HYDROGRAPHS

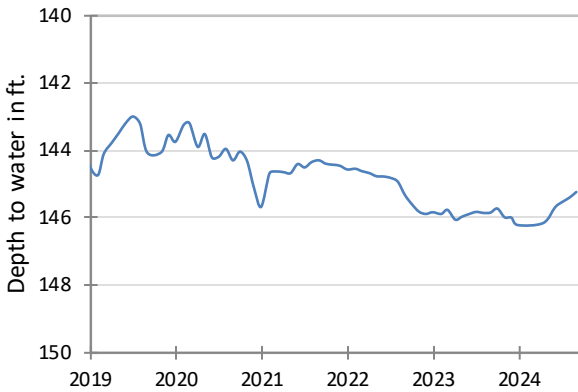
**(1) State Well #03-54-301**  
Near Spearman, Hansford County  
Ogallala Aquifer



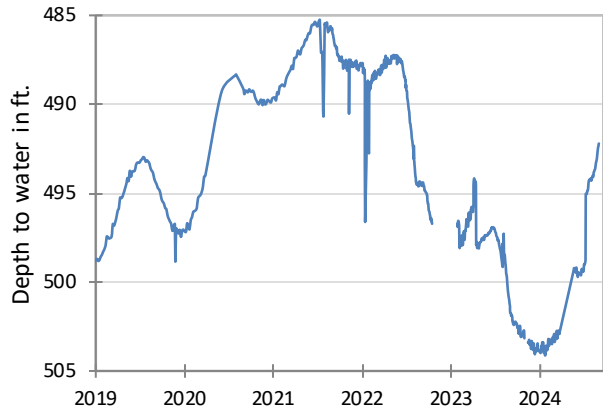
**(2) State Well #10-53-602**  
Near Earth, Lamb County  
Ogallala Aquifer



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



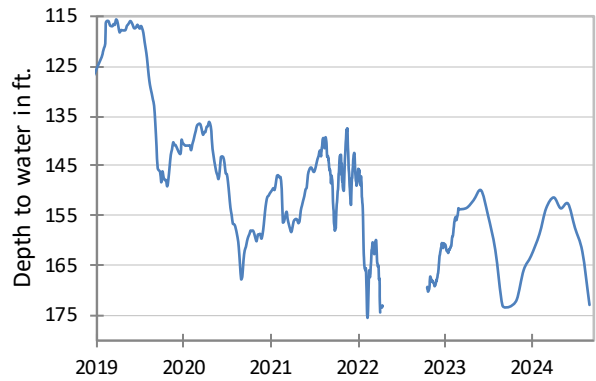
**(4) State Well #33-19-101**  
Southeast Dallas, Dallas County  
Twin Mountains Formation-Trinity Aquifer



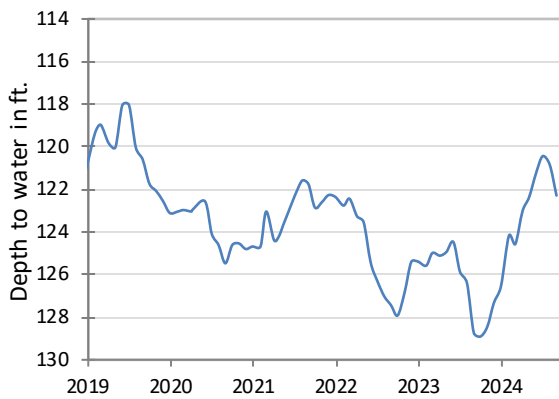
**(5) State Well #40-35-404**  
**Gatesville, Coryell County**  
**Hosston Formation-Trinity Aquifer**



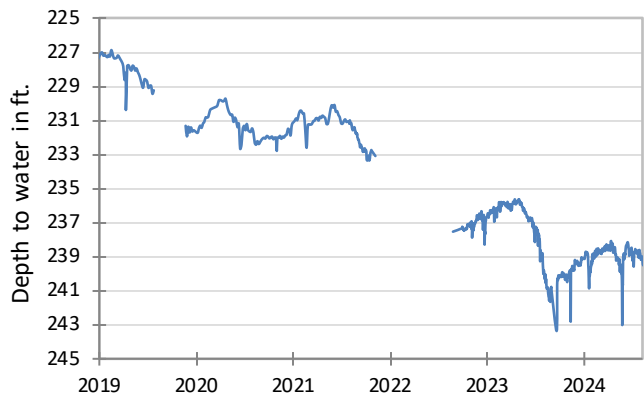
**(6) State Well #68-02-609**  
**Waring, Kendall County**  
**Travis Peak Formation-Trinity Aquifer**



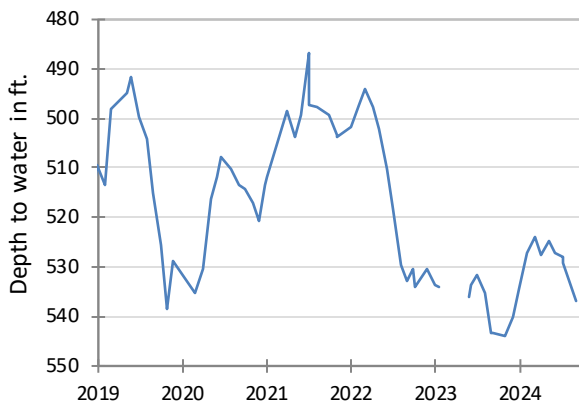
**(7) State Well #58-04-816**  
**Near Salado, Bell County**  
**Edwards (Balcones Fault Zone) Aquifer**



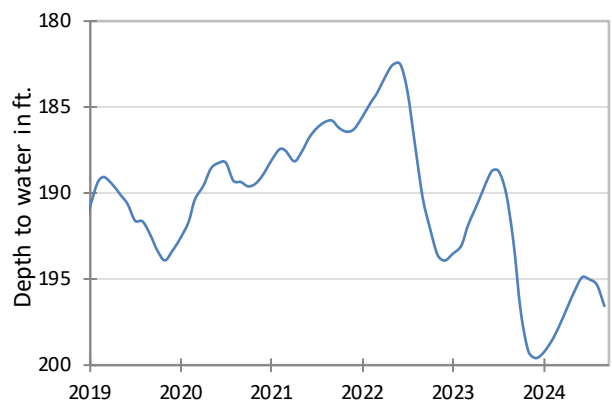
**(9) State Well #38-13-106**  
**Neches, Anderson County**  
**Carrizo-Wilcox Aquifer**



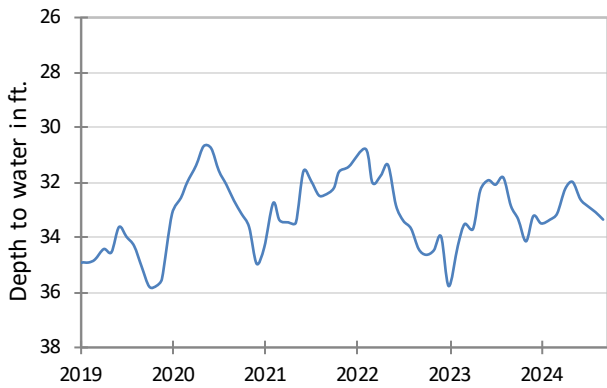
**(10) State Well #77-38-103**  
**Near Cotulla, La Salle County**  
**Carrizo-Wilcox Aquifer**



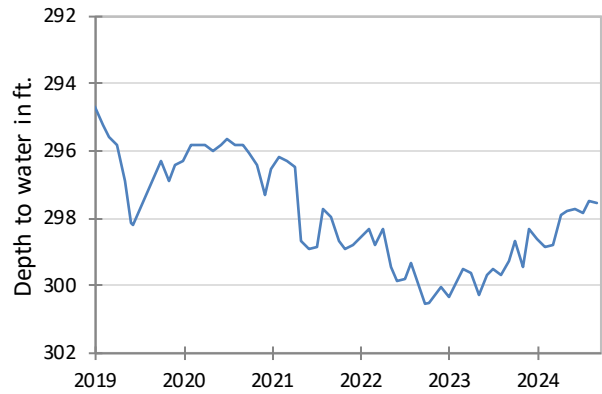
**(11) State Well #65-14-409**  
**North Houston, Harris County**  
**Evangeline Formation-Gulf Coast Aquifer**



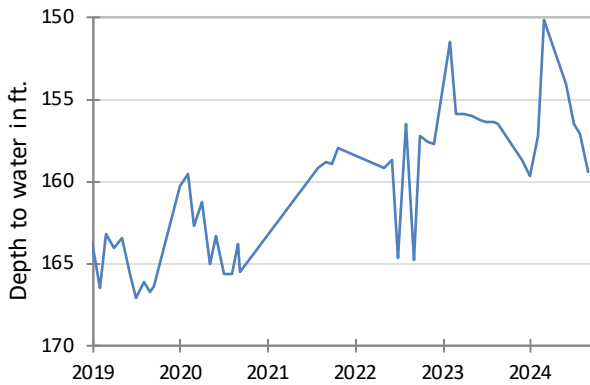
**(12) State Well #80-17-502**  
Near Bloomington, Victoria County  
Lissie Formation-Gulf Coast Aquifer



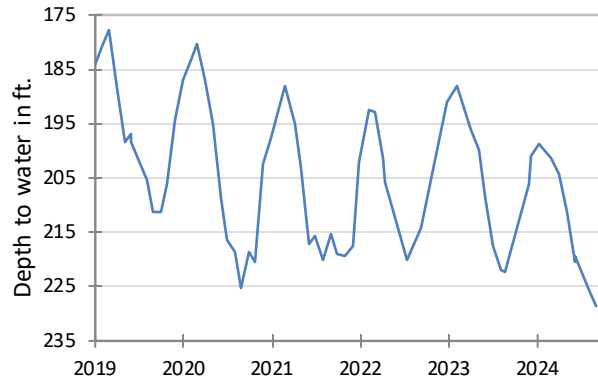
**(13) State Well #49-13-301**  
El Paso, El Paso County  
Hueco-Mesilla Bolsons Aquifer



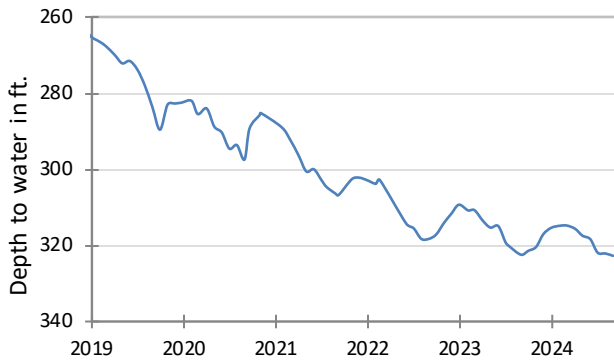
**(14) State Well #46-44-501**  
Near Pecos, Reeves County  
Pecos Valley Aquifer



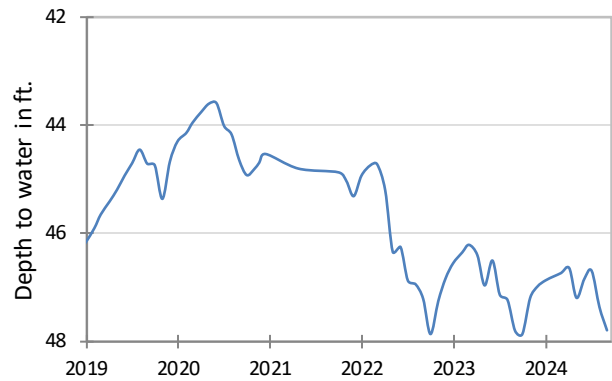
**(15) State Well #52-16-802**  
Fort Stockton, Pecos County  
Edwards-Trinity (Plateau) Aquifer



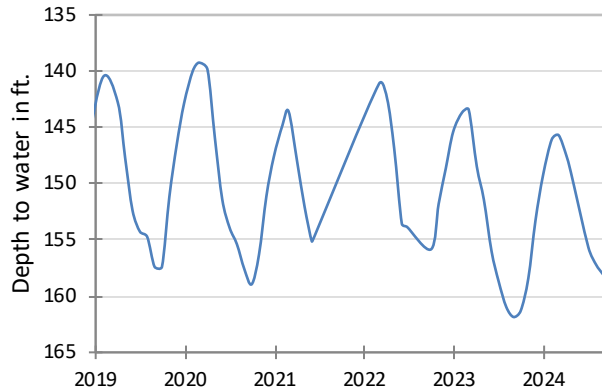
**(16) State Well #55-12-134**  
Eldorado, Schleicher County  
Edwards-Trinity (Plateau) Aquifer



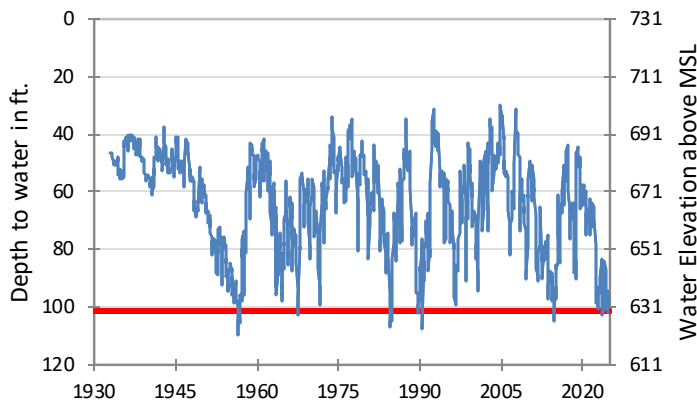
**(17) State Well #21-35-748**  
Near O'Brien, Haskell County  
Seymour Aquifer



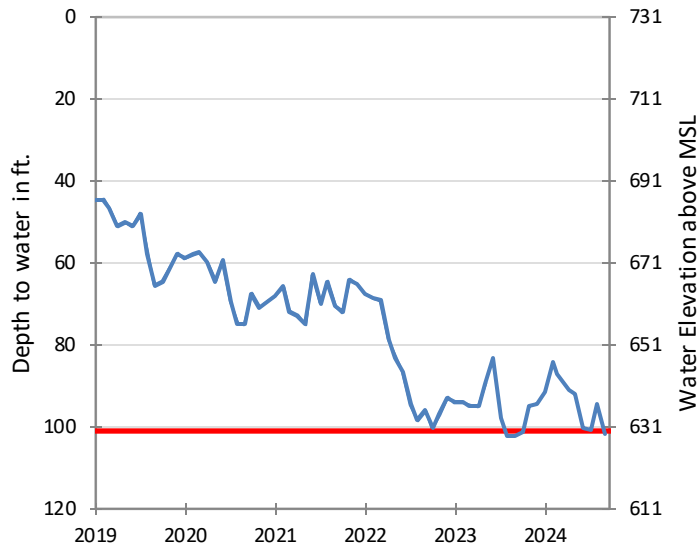
**(18) State Well #48-07-516  
Dell City, Hudspeth County  
Bone Spring-Victorio Peak Aquifer**



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



The late August water level measurement in this Edwards (Balcones Fault Zone) Aquifer well, located at an elevation of 731 feet above mean sea level, was 101.70 feet below land surface, or 629.30 feet above mean sea level. This was 7.50 feet below last month's measurement, 0.50 feet above last year's measurement, and 55.06 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 an increase from Stage 3 to Stage 4 Critical Period Management permit reductions as of August 22, 2024, as a result of well J-17 water levels and area spring flow levels.**