Texas Water Conditions Report

January 2025



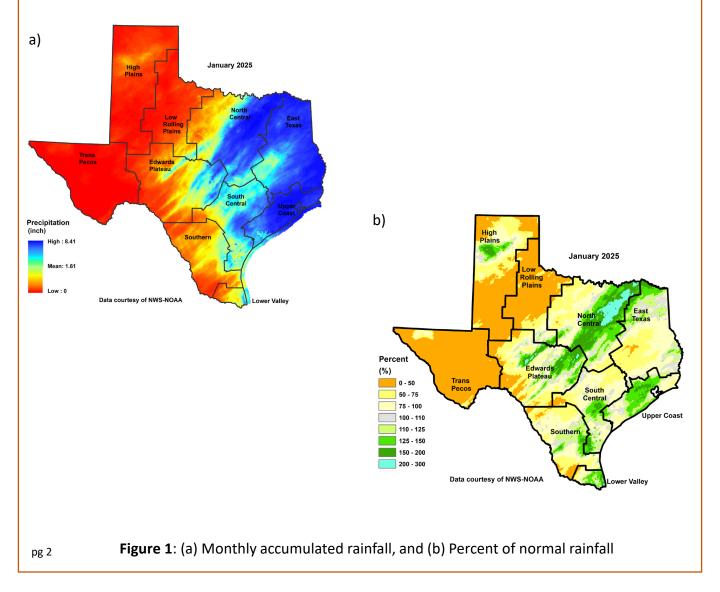
Water News:

The Texas Water Development Board's TexMesonet program staff built 12 new stations during 2024 in as many counties. The TexMesonet started in May 2016 and has an expanding network of 112 stations. All TWDB stations measure rainfall, temperature, soil moisture, and soil temperature. Some stations also monitor atmospheric pressure, wind speed and directions, gusts, relative humidity, and solar radiation. These stations and others can be viewed here https://texmesonet.org/ with data being updated every 5 minutes.

RAINFALL

In January, little to no rain [yellow, orange, and red shading, Figure 1(a)] fell in the Panhandle, western, and southern areas of the state. The eastern North Central, South Central, Upper Coast, eastern Lower Valley, eastern Edwards Plateau, southern Low Rolling Plains, and East Texas climate divisions received up to 8.41 inches of rainfall this month [light and dark blue shading, Figure 1(a)].

Compared to historical data from 1991–2020, 0–75 percent of normal rainfall [yellow and orange shading, Figure 1(b)] was received in High Plains, Trans Pecos, Low Rolling Plains, Edwards Plateau, Southern, western Lower Valley, southern and northern South Central, and western and southern North Central, portions of western and easter Upper Coast, and much of the East Texas climate divisions. 125–200 percent of normal rainfall [green shading, Figure 1(b)] was received in northern High Plains, southern Low Rolling Plains, central and northeastern North Central, central and eastern Edwards Plateau, central Southern, central and southwestern South Central, central Upper Coast, eastern Lower Valley, northern East Texas climate divisions. 200–300 percent of normal rainfall [light blue shading, Figure 1(b)] was received in northeastern North Central climate division.



DROUGHT

At the end of January 53.05% of the state was in the D0 (abnormally dry) through D4 (exceptional drought) categories (**Figure 2**). This is approximately 10.37% lower than the end of December.

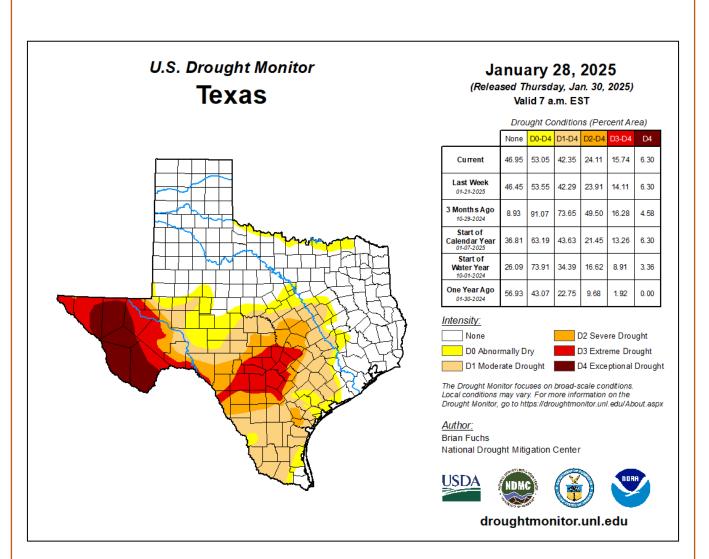


Figure 2. The percentage of drought in Texas according to the U.S. Drought Monitor map as of January 28, 2025.

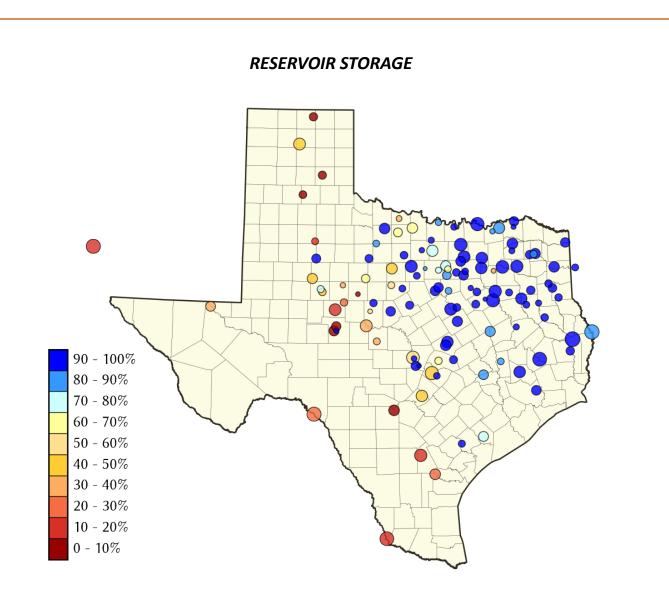


Figure 3. Reservoir conservation storage at end-January expressed as percent full (%)

Out of 119 monitored reservoirs in the state, 33 reservoirs held 100 percent conservation storage capacity, and 35 reservoirs were at or above 90 percent full this month. Fourteen reservoirs remained at or below 30 percent full: Abilene (5.5 percent full), Amistad (26.3 percent full), Choke Canyon (16.3 percent full), Corpus Christi (25.0 percent full), E.V. Spence (16.7 percent full), Falcon (15.3 percent full), Greenbelt (9.1 percent full), Mackenzie (9.2 percent full), Medina Lake (2.5 percent full), O.C. Fisher (8.1 percent full), Oak Creek (27.9 percent full), Palo Duro Reservoir (1.1 percent full), Twin Buttes (8.9 percent full), and the White River Lake (16.8 percent full). Elephant Butte Reservoir (New Mexico) was 11.7 percent full (Figure 3).

Reservoir conservation storage was at or above normal [Figure 4(a)] for East Texas (94.9 percent full), North Central (93.0 percent full), Low Rolling Plains (70.5 percent full), and the Upper Coast (84.2 percent full) climate divisions. Conservation storage was moderately low [Figure 4(a)] for the South Central (43.7 percent full) climate division. The High Plains (33.5 percent full) and Edwards Plateau (34.9 percent full) climate divisions had severely low conservation storage and the Trans Pecos (15.6 percent full) and the Southern (16.5 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. The Upper-Mid Rio Grande, and Nueces river basins had extremely low conservation storage [10–20 percent full, dark red shading, Figure 4 (b)]. Severely low conservation storage [20–40 percent full, brown shading, Figure 4(b)] was seen in the Canadian, 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 climate division. 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.

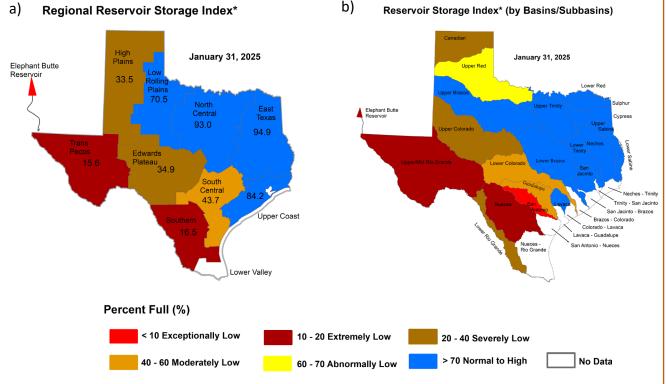


Figure 4: Reservoir Storage Index by a) climate division, and b) basin/sub-basin.

*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 STOR								
	Storage				-	Storage change		
Name of lake or reservoir	capacity	2025		from end-Dec	2024	from end-Jan 2	2024	
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%)	
Abilene, Lake	7,900	436	5.5	-40	0.0	-743	-9.4	
Alan Henry Reservoir	96,207	94,291	98.0	-1,385	-1.4	8,190	8.5	
*Amistad Reservoir (Texas & Mexico)	3,275,532	671,453	20.5	-181	0.0	-159,904	-4.9	
*Amistad Reservoir (Texas)	1,813,408	477,693	26.3	-2,984	0.0	30,858	1.7	
Amon G Carter, Lake	19,266	19,266	100.0	0	0.0	3,211	16.7	
Aquilla Lake	43,243	43,243	100.0	4,579	10.6	0	0.0	
Arlington, Lake	40,157	40,157	100.0	3,553	8.8	0	0.0	
Arrowhead, Lake	230,359	156,982	68.1	-2,215	0.0	28,128	12.2	
Athens, Lake	29,503	29,503	100.0	0	0.0	386	1.3	
*Austin, Lake	23,972	23,205	96.8	31	0.1	31	0.1	
B A Steinhagen Lake	69,186	61,388	88.7	-4,175	-6.0	-7,798	-11.3	
Bardwell Lake	43,856	43,856	100.0	0	0.0	0	0.0	
Belton Lake	432,631	403,166	93.2	-2,603	0.0	124,268		
Benbrook Lake	85,648	75,473	88.1	8,464	9.9	-3,679		
Bob Sandlin, Lake	192,417	192,417	100.0	3,892	2.0	0		
Bois d'Arc Lake	367,609	319,018	86.8	11,185	3.0	56,782		
Bonham, Lake	11,027	9,540	86.5	1,406		-1,487		
Brady Creek Reservoir	28,808	9,874	34.3	-144	0.0		-2.0	
Bridgeport, Lake	372,183	272,399	73.2	-4,649		63,757		
*Brownwood, Lake	130,868	129,495	99.0	-879	0.0	51,505	-	
Buchanan, Lake	866,694	517,916	59.8	-14,632		124,287		
Caddo, Lake	29,898	29,898	100.0	0		0		
Canyon Lake	378,781	185,880	49.1	-4,328		-42,929		
Cedar Creek Reservoir in Trinity	644,686	581,702	90.2	22,486	3.5	-62,984		
Champion Creek Reservoir	41,580	20,035	48.2	-242	0.0	-4,096		
Cherokee, Lake	40,094	40,094	100.0	0	0.0	0		
•	662,820	108,342			0.0	-52,557		
Choke Canyon Reservoir *Cisco, Lake	29,003		16.3 58.3	-2,557 -182	0.0	-52,557		
-	38,075	16,906 37,390	98.2	-182	0.0	14,114		
Coleman, Lake								
Colorado City, Lake	31,040	28,085	90.5	49	0.2	-2,955		
*Coleto Creek Reservoir	30,758	22,365	72.7	-352		7,708		
Conroe, Lake	417,577	414,600	99.3	9,253		-2,977		
Corpus Christi, Lake	256,062	63,976	25.0	-2,876		-57,759		
Crook, Lake	9,195	9,195	100.0	209	2.3	52		
Cypress Springs, Lake	66,756	66,756	100.0	0	0.0	0		
E. V. Spence Reservoir	517,272	86,594	16.7	-2,009	0.0	3,090		
Eagle Mountain Lake	185,087	146,397	79.1	-1,758		12,703		
Elephant Butte Reservoir (Texas)	852,491	99,522	11.7	19,279		-114,717		
Elephant Butte Reservoir (Total Storage)	1,985,900	230,376	11.6	44,627		-265,548		
*Falcon Reservoir (Texas & Mexico)	2,646,817	355,595	13.4	11,283		-134,026		
*Falcon Reservoir (Texas)	1,562,367	239,161	15.3	23,727		-39,105		
Fork Reservoir, Lake	605,061	586,252	96.9	27,076		-13,788		
Fort Phantom Hill, Lake	70,030	46,033	65.7	-741	-1.1	-2,030	-2.9	
Georgetown, Lake	38,005	25,128	66.1	625	1.6	1,410	3.7	
Gibbons Creek Reservoir	25,721	22,332	86.8	1,189	4.6	-1,579	-6.1	
Graham, Lake	45,288	43,186	95.4	-849	-1.9	10,926	24.1	
Granbury, Lake	132,949	131,809	99.1	-243	0.0	891	0.7	

CONSERVATION ST	ORAGE DATA FO	OR SELECTED N	AJOR	TEXAS RESE	RVO	IRS		
	Storage	Storage at end-Ja	anuary	Storage chan	ge	Storage chang		
Name of lake or reservoir	capacity	2025		from end-Dec 2024		from end-Jan 2024		
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%	
	С	ontinued						
Granger Lake	51,822	49,240	95.0	1,141	2.2	-2,582	-5.	
Grapevine Lake	163,064	163,064	100.0	2,814	1.7	0	0.	
Greenbelt Lake	59,968	5,445	9.1	23	0.0	-1,242	-2.	
*Halbert, Lake	6,033	5,855	97.0	776	12.9	995	16.	
Hords Creek Lake	8,109	4,851	59.8	-55	0.0	3,043	37.	
Houston County Lake	17,113	17,113	100.0	0	0.0	0	0.	
Houston, Lake	132,318	132,318	100.0	0	0.0	0	0.	
Hubbard Creek Reservoir	313,298	146,573	46.8	-2,398	0.0	-14,367	-4.	
Hubert H Moss Lake	24,058	23,885	99.3	-108	0.0	386	1.	
Inks, Lake	13,729		95.1	-56	0.0	101		
J. B. Thomas, Lake	199,931	82,447	41.2	-2,180	-1.1	39,049		
Jacksonville, Lake	25,670		100.0	0	0.0	0		
Jim Chapman Lake (Cooper)	258,723		96.8	52,669		-8,396	-	
Joe Pool Lake	149,629		100.0	997	0.7	0		
Kemp, Lake	245,307		100.0	0	0.0	80,165	-	
Kickapoo, Lake	86,345	58,505	67.8	-984		11,433		
Lavon Lake	409,757		100.0	45,412		10,865		
Leon, Lake	27,762	27,083	97.6	-243	0.0	13,644		
Lewisville Lake	563,228		92.5	18,565	3.3	-18,074		
Limestone, Lake	203,780		87.5	4,126	2.0	-19,967		
*Livingston, Lake	1,603,504		100.0	4,120	0.0	0		
			99.3		0.0	1,393		
*Lost Creek Reservoir	11,950		99.5	-42 -192	0.0	1,393		
Lyndon B Johnson, Lake	112,778							
Mackenzie Reservoir	46,450		9.2	-41	0.0	-106		
Marble Falls, Lake	7,597	7,263	95.6	18	0.2	0		
Martin, Lake	75,726	75,677	99.9	-49	0.0	2,064		
Medina Lake	254,823	6,398	2.5	-397	0.0	-1,956		
Meredith, Lake	500,000		40.8	-148	0.0	-17,674		
Millers Creek Reservoir	26,768		80.4	-496	-1.9	9,511		
*Mineral Wells, Lake	5,273	4,463	84.6	-43	0.0	-48		
Monticello, Lake	34,740	30,559	88.0	1,784	5.1	37	_	
Mountain Creek, Lake	22,850		100.0	0		0		
Murvaul, Lake	38,285		100.0	0	0.0	0		
Nacogdoches, Lake	39,522		100.0	0	0.0	0		
Nasworthy	9,615	8,935	92.9	25	0.3	-77	0.	
Navarro Mills Lake	49,827	49,827	100.0	4,155	8.3	0	0.	
New Terrell City Lake	8,583	3,376	39.3	1,311	15.3	184		
Nocona, Lake (Farmers Crk)	21,444	18,772	87.5	-216	-1.0	4,325		
North Fork Buffalo Creek Reservoir	15,400	5,986	38.9	-168	-1.1	1,604	10	
O' the Pines, Lake	241,363	241,363	100.0	0	0.0	0	0.	
D. C. Fisher Lake	115,742	9,348	8.1	-319	0.0	7,018	6.	
*O. H. Ivie Reservoir	554,340	220,767	39.8	-1,424	0.0	67,148	12.	
Dak Creek Reservoir	39,210	10,920	27.9	-244	0.0	-2,227	-5.	

CONSERVATION STORA	GE DATA FO	OR SELECTED N	AJOR	TEXAS RESE	RVO	IRS	
	Storage	Storage at end-January 2025		Storage change from end-Dec 2024		Storage change from end-Jan 2024	
Name of lake or reservoir	capacity						
	(acre-feet)	(acre-feet)	(%)	(acre-feet)	(%)	(acre-feet)**	(%
	C	ontinued					
Palestine, Lake	367,303	367,303	100.0	0	0.0	8,033	2.
Palo Duro Reservoir	61,066	678	1.1	-72	0.0	-2,041	-3.
Palo Pinto, Lake	26,766	26,440	98.8	-304	-1.1	16,788	62.
Pat Cleburne, Lake	26,008	23,330	89.7	1,246	4.8	-2,678	-10.
*Pat Mayse Lake	113,683	113,683	100.0	11,666	10.3	6,467	5.
Possum Kingdom Lake	538,139	535,636	99.5	-2,503	0.0	12,381	2.3
Proctor Lake	54,762	54,762	100.0	0	0.0	39,591	72.3
Ray Hubbard, Lake	439,559	439,559	100.0	32,933	7.5	1,044	0.2
Ray Roberts, Lake	788,167	767,636	97.4	4,455	0.6	2,508	0.3
Red Bluff Reservoir	151,110	57,322	37.9	1,617	1.1	849	0.6
Richland-Chambers Reservoir	1,099,417	1,060,685	96.5	34,700	3.2	-38,732	-3.5
Sam Rayburn Reservoir	2,857,077	2,857,077	100.0	120,629	4.2	407,140	14.3
Somerville Lake	150,293	127,421	84.8	104	0.1	-15,001	-10.0
Squaw Creek, Lake	151,250	151,250	100.0	0	0.0	0	0.0
Stamford, Lake	51,570	47,268	91.7	-1,066	-2.1	11,930	23.1
Stillhouse Hollow Lake	229,796	212,819	92.6	-2,741	-1.2	74,336	32.3
Striker, Lake	16,878	16,644	98.6	-175	-1.0	-233	-1.4
Sweetwater, Lake	12,267	4,389	35.8	-56	0.0	-1,382	-11.3
*Sulphur Springs, Lake	17,747	17,747	100.0	0	0.0	1,765	9.9
Tawakoni, Lake	871,685	870,945	99.9	75,437	8.7	-740	0.0
Texana, Lake	158,975	113,010	71.1	-578	0.0	-45,450	-28.6
Texoma, Lake (Texas & Oklahoma)	2,487,601	2,355,781	94.7	-204,849	-8.2	-98,308	-4.0
Texoma, Lake (Texas)	1,243,801	1,177,890	94.7	-65,911	-5.3	-49,154	-4.0
Toledo Bend Reservoir (Texas & Louisiana)	4,472,900	3,990,017	89.2	-99,143	-2.2	-324,581	-7.3
Toledo Bend Reservoir (Texas)	2,236,450	1,992,958	89.1	-49,572	-2.2	-162,291	-7.3
Travis, Lake	1,098,044	476,557	43.4	-5,757	0.0	58,637	-
Twin Buttes Reservoir	182,454	16,161	8.9	-493	0.0	-11,729	-6.4
Tyler, Lake	72,073	72,073	100.0	0	0.0	1,358	
Waco, Lake	189,418	174,049	91.9	1,934	1.0	-15,369	-8.
Waxahachie, Lake	11,060	9,956	90.0	2,064	18.7	19	-
Weatherford, Lake	17,812	12,918	72.5	-47	0.0	2,290	_
White River Lake	29,880	5,028	16.8	-238	0.0	-2,784	_
Whitney, Lake	564,808	564,808	100.0	0	0.0	0	_
Worth, Lake	24,419	16,853	69.0	125	0.5	2,507	-
Wright Patman Lake	122,593	122,593	100.0	0	0.0	0	_
	•						
STATEWIDE TOTAL	32,387,302	23,738,645	73.3	367,303	1.1	596,270	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 January 2025, root zone soil moisture was low [yellow, orange shading, Figure 5(a)] in the Panhandle, North Central, West, Central, and South Texas. Areas of more severe dryness [brown shading, Figure 5(a)] were seen in the Trans Pecos, northern and southern High Plains, Low Rolling Plains, western Edwards Plateau, western North Central, western East Texas, areas of South Central, Southern, Lower Valley, and parts of the western Upper Coast climate divisions. Average soil moisture [green shading, Figure 5(a)] was seen in the northern High Plains, eastern North Central, areas of East Texas, northern South Central, and the Upper Coast climate divisions.

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

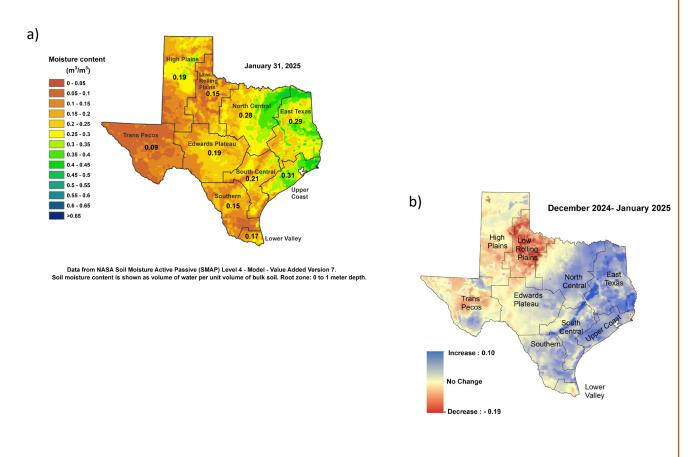


Figure 5: (a) Root zone soil moisture conditions in January 2025 and (b) the difference in root zone soil moisture between end-December 2024 and end-January 2025.

STREAMFLOW CONDITIONS

Normal streamflow (25–75th percentile, green shading, Figure 6) was recorded in portions of the Panhandle, Eastern, and Central regions of Texas this month. Above normal streamflow (76–90th percentile, light blue shading, Figure 6) was seen the Canadian (Lower Beaver watershed), Upper Red, Middle Colorado (Jim Ned watershed), Upper Trinity, Neches (Lower Angelina, Upper Neches, Middle Neches, and Lower Neches watersheds) river basins. Much above normal streamflow (>90th percentile, dark blue shading, Figure 6) was seen in the Upper Red (North Witchita watershed), Sulphur (Sulphur Headwater water shed) river basins.

Below normal streamflow (10–24th percentile, orange shading, Figure 6) was seen in Pecos (Independence watershed), Upper Red (Lower Salt Fork Red and Blue China watersheds), Lower Red (Farmers Mud and Lake Texoma watersheds), Lower Brazos, Brazos-Colorado (East Matagorda Bay watershed), Lavaca, Lower Guadalupe, Upper San Antonio, Lower Colorado, Upper San Antonio, San Antonio-Nueces (Aransas and Aransas Bay watersheds), Nueces, Nueces-Rio Grande San Fernando watershed) river basins. Much below normal streamflow (<10th percentile, dark red shading, Figure 6) was seen in the Upper Red (Lower Prairie Dog Town Fork and Witchita watersheds), Lower Colorado(###), Middle Colorado (### watershed), Upper Brazos (Double Mountain Fork Brazos watershed), Lower Brazos (Yegua watershed), Pecos, Nueces-Rio Grande, Nueces, San Antonio-Nueces (Mission watershed) river basins.

A record low (bright red shading, Figure 6) was seen in the Nueces (Atascosa watershed), Pecos (Toya watershed) river basin.

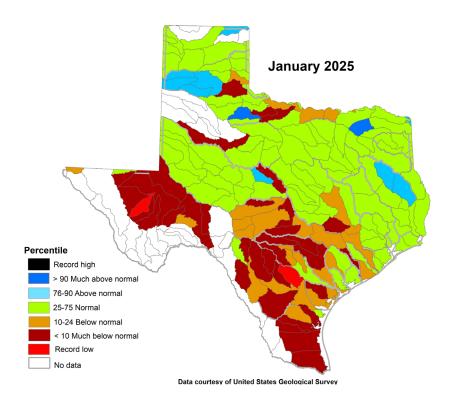
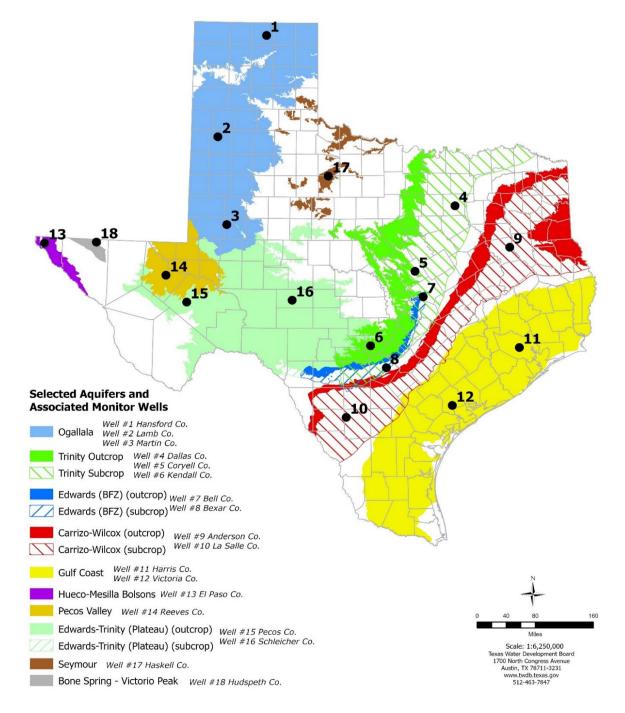


Figure 6: Runoff percentiles by the U.S. Geological Survey's Hydrologic Unit Code

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 <u>Water Data for Texas</u>.



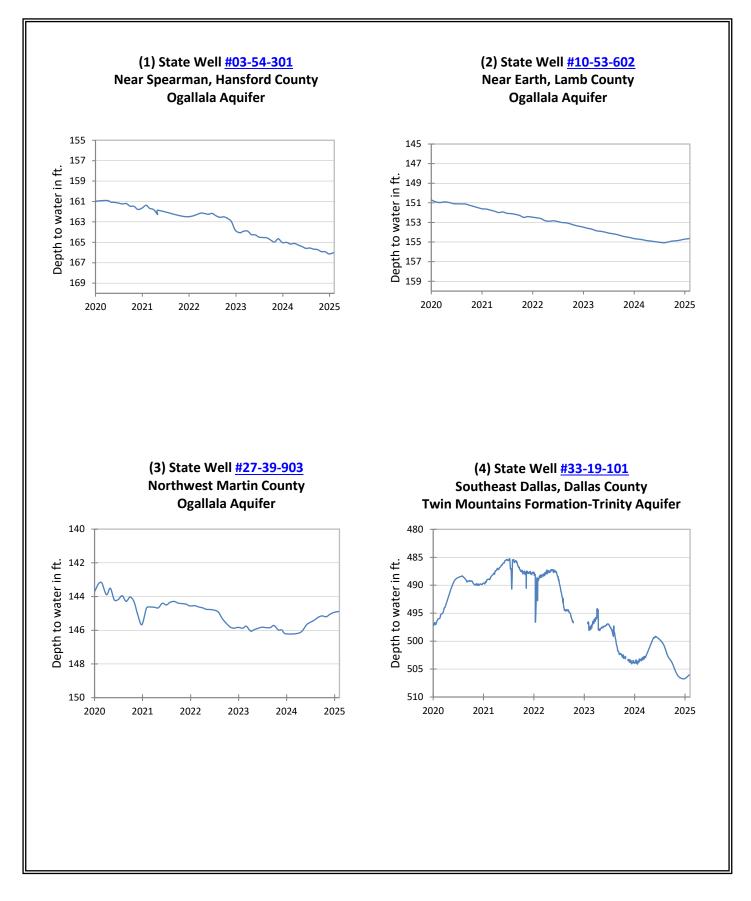
* Well numbers used in this publication on the aquifer map to indicate the monitoring well locations (numbers 1 to 18) are different than the TWDB's seven-digit state well number.

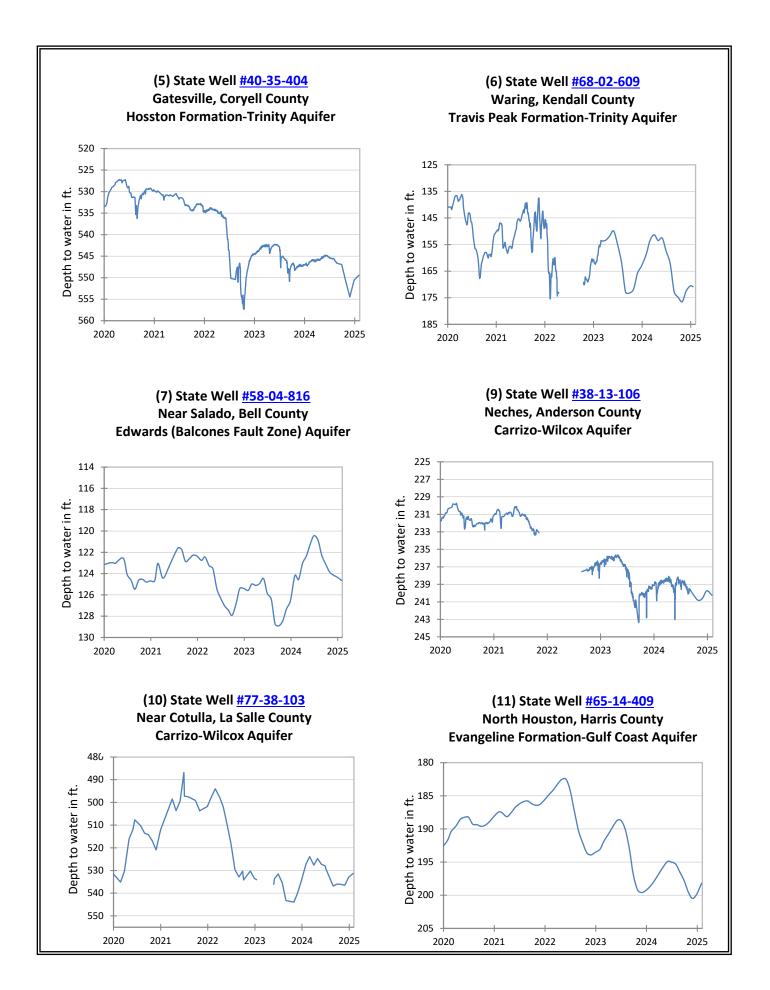
JANUARY 2025 GROUNDWATER LEVELS IN MONITORING WELLS

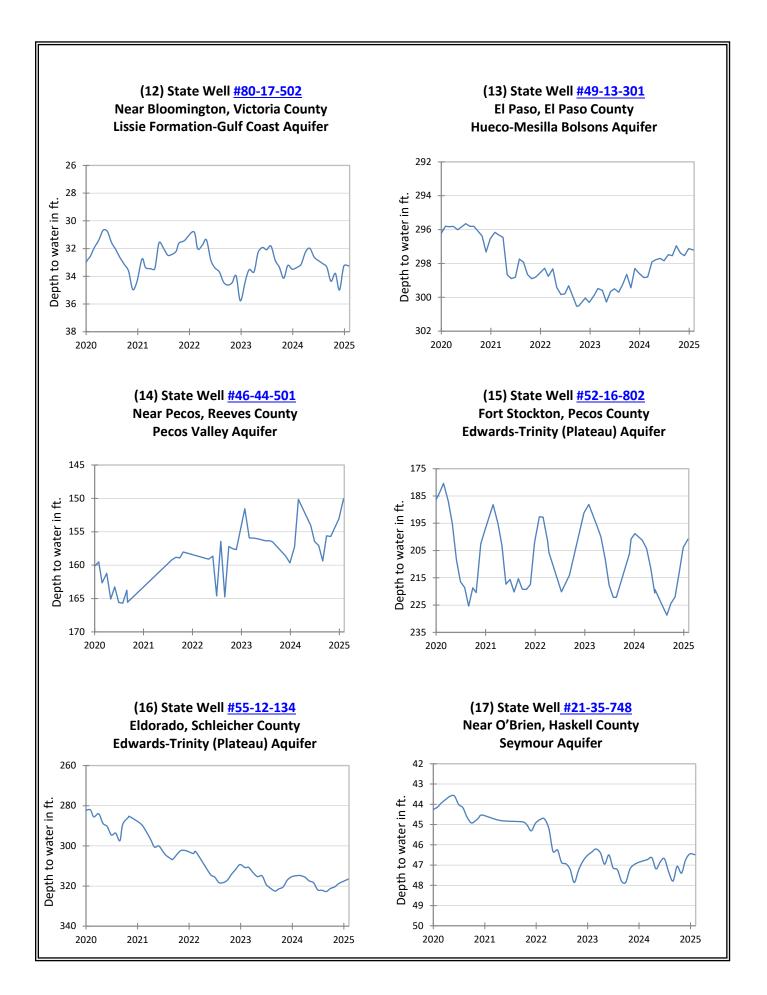
Water level measurements were available for 18 key monitoring wells in the state. Water levels rose in 13 monitoring wells since the beginning of January, with an increase of 0.01 feet in the Victoria County Gulf Coast Aquifer well (#12 on map) to 4.30 feet in the Bexar County Edwards (BFZ) Aquifer well (#8 on map). Water levels declined in five monitoring wells, ranging from a decline of -0.04 feet in the Haskell County Seymour Aquifer well (#17 on map) to -0.51 feet in the Anderson County Carrizo-Wilcox Aquifer well (#9 on map). The J-17 well (#8 on map) in San Antonio recorded a water level of 99.50 feet below land surface or 631.50 feet above mean sea level. Water levels are 1.50 feet above the Stage 4 critical management levels for the San Antonio portion of the Edwards (Balcones Fault Zone) Aquifer; however, the Edwards Aquifer Authority Stage 4 permit reductions remain in effect as a result of well J-17 water levels and area spring flow levels.

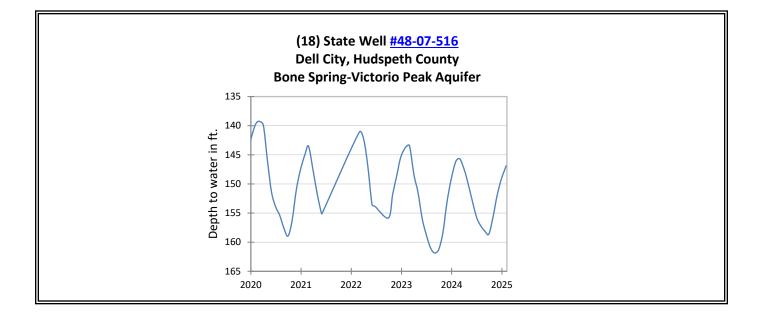
Monitoring Well	January (depth to water, feet)	December (depth to water, feet)	Month Change	Year Change	Historical Change*	First Measured (year)
(1) Hansford 0354301	166.02	166.14	0.12	-1.01	<i>-95.90</i>	1951
(2) Lamb 1053602	154.65	154.71	0.06	0.05	-126.48	1951
(3) Martin 2739903	144.89	144.94	0.05	2.71	-40.00	1964
(4) Dallas 3319101	506.04	506.73	0.69	-2.33	-284.04	1954
(5) Coryell 4035404	549.43	550.54	1.11	-2.63	-257.43	1955
(6) Kendall 6802609	170.81	170.57	-0.24	-12.15	-110.81	1975
(7) Bell 5804816	124.65	124.33	-0.32	-0.48	-1.14	2008
(8) Bexar 6837203	99.50	103.80	4.30	-15.30	-52.86	1932
(9) Anderson 3813106	240.25	239.74	-0.51	-1.39	<i>-95.25</i>	1965
(10) La Salle 7738103	531.32	532.91	1.59	-4.16	-278.25	2003
(11) Harris 6514409	198.19	199.86	1.67	0.35	-62.69	1947
(12) Victoria 8017502	33.25	33.26	0.01	0.10	0.75	1958
(13) El Paso 4913301	297.20	297.12	-0.08	1.64	-65.30	1964
(14) Reeves 4644501	150.07	153.07	3.00	7.17	-57.98	1952
(15) Pecos 5216802	200.81	203.91	3.10	-2.01	46.07	1976
(16) Schleicher 5512134	316.56	317.72	1.16	-1.72	-14.66	2003
(17) Haskell 2135748	46.49	46.45	-0.04	0.30	-3.49	2002
(18) Hudspeth 4807516	146.90	149.17	2.27	-0.64	-42.98	1966

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

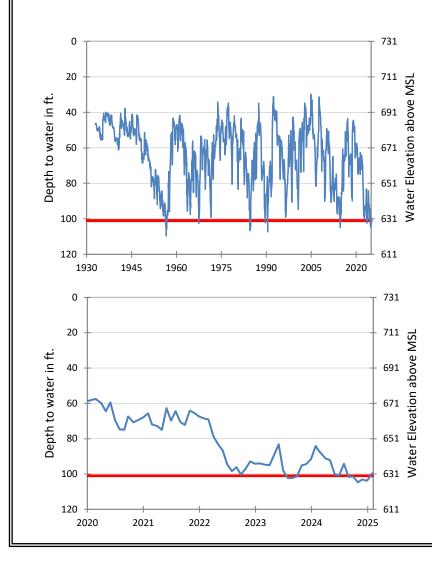








(8) State Well <u>#68-37-203</u> (J-17) San Antonio, Bexar County Edwards (Balcones Fault Zone) Aquifer



The late January water level measurement in this Edwards (Balcones Fault Zone) Aquifer well, located at an elevation of 731 feet above mean sea level, was 99.50 feet below land surface, or 631.50 feet above mean sea level. This was 4.30 feet above last month's measurement, 15.30 feet below last year's measurement, and 52.86 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 Stage 4 permit reductions remain in effect as a result of well J-17 water levels and area spring flow levels.