## **Texas Water Development Board**





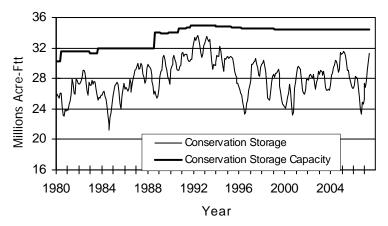
## RESERVOIR STORAGE

June 2007

Near the end of June, the 77 reservoirs monitored for this report held 31.3 million acre-feet in conservation storage. As a statewide total, the state's major reservoirs are approximately 91 percent full, which is above normal for this time of year. Storage went up during the month by 1.06 million acre-feet (3% of conservation storage capacity). Compared to last year, storage increased by 4.53 million acre-feet (13%).

Toward the end of June, 42 reservoirs were at 100% of their capacities. Regionally, storage was 99% of capacity in the Upper Coast Region, 98% in North Central and East Regions, and 97% in South Central Region, but High Plains and Trans-Pecos Regions are still experiencing storage below 32% of their regional capacities. Six out the nine Regions observed increases in storage. Only the Trans-Pecos Region had a 2% decrease. Compared to this time last year, the storage increased in all Regions, by 1% to 25%.

## CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS



Current data are based on elevation near end of month at 77 reservoirs that represent 98 percent of total conservation storage capacity in Texas reservoirs having a capacity of 5,000 acre-feet or more.

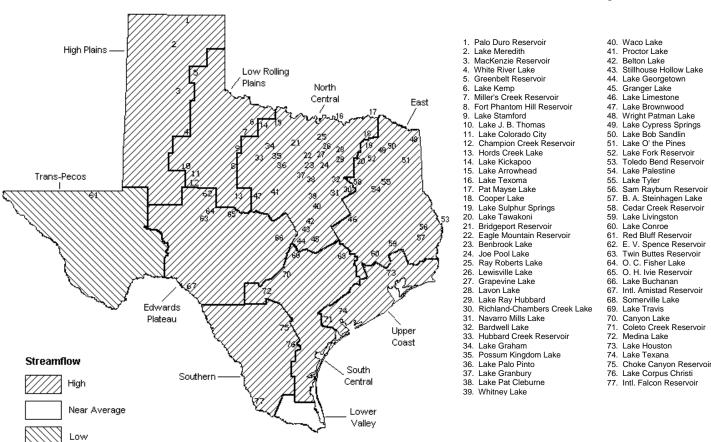
# **STREAMFLOW**

Of 29 reporting index stations in June, computed 30-day mean flows were very high (<5%) at 7 stations, high (5% - 30%) at 15 stations, low (70% - 95%) at 2 stations, and near normal (30% - 70% exceedance) at the remaining 5 stations. Compared to May, flows have increased at 12 index stations and decreased at 17 stations.

On a regional basis, flows in June were very high in the North Central Region, low in the Trans-Pecos Region, and high in all other Regions. Streamflow in the Lower Valley Region is not monitored.

### JUNE STREAMFLOW CONDITIONS

#### Reservoirs Shown on Map



## CONSERVATION STORAGE DATA FOR SELECTED MAJOR TEXAS RESERVOIRS

	Τ.,	g	<b>.</b>		GI '		·					
Name of Lake	No.	Conservation	Conservation		Change since		Change since					
or Reservoir	on	Storage	Storage		Late May		Late June					
	Map	Capacity	Late June. 2007		2007 (acre-		2006					
		(acre-feet)	(acre-feet)	(%)	feet)	(%)	(acre-feet)	(%)				
	•	HIGH	PLAINS				•	<u> </u>				
Palo Duro Reservoir	1	60,900	2,560	4	-450	-1	1,470	2				
Lake Meredith (Texas)	2	500,000	115,000	23	-1,280	0	2,530	1				
Lake Meredith		•	•		•		•					
(Texas and Oklahoma)	(2)	779,560	115,000	15	-1,280	0	2,530	0				
MacKenzie Reservoir	3	46,250	9,310	20	70	0	300	1				
White River Lake	4	31,850	5,010	16	180	1	970	3				
TOTAL		639,000	131,880	21	-1,480	0	5,270	1				
LOW ROLLING PLAINS												
Greenbelt Reservoir	5	58,200	25,040	43	530	1	5,410	9				
Lake Kemp	6	319,600	291,260	91	42,840	13	67,330	21				
Miller's Creek Reservoir	7	27,890	27,890	100	6,630	24	4,930	18				
Fort Phantom Hill Reservoir	8	70,030	62,540	89	10,330	15	11,150	16				
Lake Stamford	9	52,700	51,830	98	3,830	7	7,650	15				
Lake J. B. Thomas	10	202,300	34,170	17	-570	0	-8,950	-4				
Lake Colorado City	11	30,800	26,040	85	100	0	350	1				
Champion Creek Reservoir	12	41,600	6,560	16	-40	0	640	2				
Hords Creek Lake	13	8,600	8,010	93	2,390	28	2,240	26				
TOTAL		811,720	533,340	66	66,040	8	90,750	11				
		NORTH	CENTRAL									
Lake Kickapoo	14	106,000	80,250	76	9,450	9	940	1				
Lake Arrowhead	15	262,100	217,730	83	26,420	10	15,920	6				
Lake Texoma	16	2,722,300	2,722,300	100	0	0	177,280	7				
Pat Mayse Lake	17	124,500	124,500	100	140	0	33,530	27				
Cooper Lake	18	273,000	232,390	85	50,070	18	86,190	32				
Lake Sulphur Springs	19	17,710	17,710	100	0	0	1,460	8				
Lake Tawakoni	20	936,200	856,800	92	94,100	10	213,900	23				
Bridgeport Reservoir	21	374,830	374,830	100	61,030	16	129,730	35				
Eagle Mountain Reservoir	22	178,380	178,380	100	0	0	37,580	21				
Benbrook Lake	23	88,200	88,200	100	0	0	18,390	21				
Joe Pool Lake	24	175,800	175,800	100	0	0	2,810	2				
Ray Roberts Lake	25	798,760	798,760	100	56,210	7	102,480	13				
Lewisville Lake	26	555,000	555,000	100	0	0	126,530	23				
Grapevine Lake	27	187,700	187,700	100	0	0	53,880	29				
Lavon Lake	28	443,800	443,800	100	0	0	187,370	42				
Lake Ray Hubbard	29	413,420	413,420	100	0	0	38,320	9				
Richland-Chambers Creek Lake	30	1,103,820	1,103,820	100	0	0	221,320	20				
Navarro Mills Lake	31	55,810	55,810	100	0	0	22,520	40				
Bardwell Lake	32	53,580	53,580	100	0	0	9,740	18				
Hubbard Creek Reservoir	33	317,800	255,720	80	75,180	24	74,350	23				
Lake Graham	34	45,000	45,000	100	1,630	4	1,800	4				
Possum Kingdom Lake	35	551,820	536,750	97	-1,350	0	23,690	4				
Lake Palo Pinto	36	27,650	27,650	100	180	1	8,200	30				
Lake Granbury	37	135,680	130,690	96	-4,390	-3	-410	0				
Lake Pat Cleburne	38	25,300	25,300	100	0	0	1,980	8				
Whitney Lake	39	622,800	622,800	100	0	0	73,660	12				
Waco Lake	40	144,500	144,500	100	0	0	0	0				
Proctor Lake	41	55,590	55,590	100	0	0	17,640	32				
Belton Lake	42	434,500	434,500	100	0	0	31,930	7				
Stillhouse Hollow Lake	43	226,060	226,060	100	0	0	0	0				
Lake Georgetown	44	37,010	37,010	100	0	0	14,140	38				

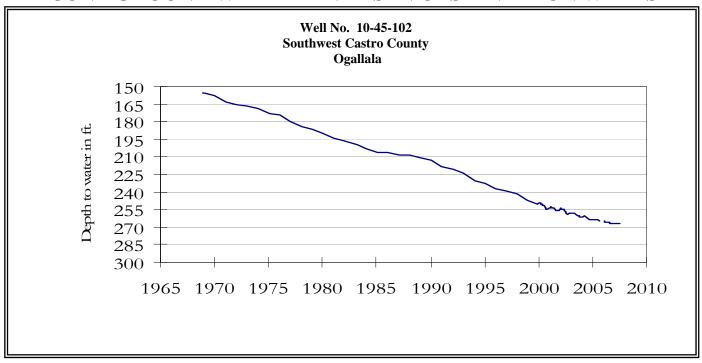
Granger Lake	45	54,280	54,280	100	0	0	1,100	2
Lake Limestone	46	215,750	215,750	100	0	0	8,000	4
Lake Brownwood	47	143,400	143,400	100	10,720	7	29,500	21
TOTAL		11,908,050	11,635,780	98	379,390	3	1,765,470	15
		₽.Z	ST					
Wright Patman Lake	48	142,700	142,700	100	0	0	0	0
Lake Cypress Springs	49	66,800	66,800	100	90	0	8,240	12
Lake Bob Sandlin	50	202,300	159,900	79	17,700	9	8,800	4
Lake O' the Pines	51	252,000	252,000	100	0	0	55,670	22
Lake Fork Reservoir	52	635,200	635,200	100	0	0	40,400	6
Toledo Bend Reservoir	53	4,472,900	4,354,000	97	106,000	2	824,000	18
Lake Palestine	54	411,300	411,300	100	0	0	56,550	14
Lake Tyler	55	73,700	73,700	100	0	0	16,380	22
Sam Rayburn Reservoir	56	2,876,300	2,876,300	100	0	0	198,100	7
B. A. Steinhagen Lake	57	94,200	61,990	66	61,750	66	32,080	34
Cedar Creek Reservoir	58	637,050	637,050	100	0	0	93,450	15
Lake Livingston	59	1,750,000	1,750,000	100	0	0	224,000	13
Lake Conroe	60	429,900	420,300	98	1,800	0	73,000	17
TOTAL		12,044,350	11,841,240	98	187,340	2	1,630,670	14
		TDANC	_DECOC					
- 1 - 1 - 66			-PECOS		4 740	_	0.040	_
Red Bluff Reservoir	61	307,000	97,730	32	-4,740	-2	2,940	1
TOTAL		307,000	97,730	32	-4,740	-2	2,940	1
		EDWARDS	PLATEAU					
E. V. Spence Reservoir	62	488,760	74,320	15	-1,050	0	-6,100	-1
Twin Buttes Reservoir	63	177,800	49,750	28	1,580	1	5,770	3
O.C. Fisher Lake	64	119,200	7,910	7	-170	0	-2,890	-2
O. H. Ivie Reservoir	65	554,340	302,500	55	41,300	7	41,200	7
Lake Buchanan	66	896,980	856,280	95	78,750	9	183,940	21
Amistad Reservoir (Texas)	67	1,771,030	2,174,000	123	166,000	9	244,000	14
Amistad Reservoir								
(Texas and Mexico)	(67)	3,151,300	2,736,000	87	169,000	5	306,000	10
TOTAL		4,008,110	3,464,760	86	286,410	7	465,920	12
			CENTRAL					
Somerville Lake	68	155,060	155,060	100	0	0	24,180	16
Lake Travis	69	1,144,100	1,144,100	100	0	0	348,600	30
Canyon Lake	70	385,600	385,600	100	0	0	41,250	11
Coleto Creek Reservoir	71	35,060	31,930	91	-160	0	6,620	19
Medina Lake	72	254,000	206,300	81	25,800	10	67,400	27
TOTAL		1,973,820	1,922,990	97	25,640	1	488,050	25
		UPPER	COAST					
Lake Houston	73	128,860	128,860	100	0	0	0	0
Lake Texana	74	157,900	153,730	97	400	0	3,090	2
TOTAL		286,760	282,590	99	400	0	3,090	1
Challe Convers Days			HERN	0.0	44 500	_	64 500	^
Choke Canyon Reservoir	75 76	695,260	627,500	90	44,100	6 14	64,500	9 67
Lake Corpus Christi Falcon Reservoir (Texas)	76 77	241,240	241,240 553,000	100 36	34,140 45,000	14 3	161,350 -146,000	67 -9
Falcon Reservoir	//	1,555,120	553,000	36	45,000	3	-140,000	-9
(Texas and Mexico)	(77)	2,653,290	797,000	30	119,000	4	-224,000	-8
TOTAL	(,,,	2,491,620	1,421,740	57	123,240	5	79,850	3
		_,,	_,, 10	٠,		-	. 3 , 3 3 0	J
STATE TOTAL		34,470,430	31,332,050	91	1,062,240	3	4,532,010	13

#### Note:

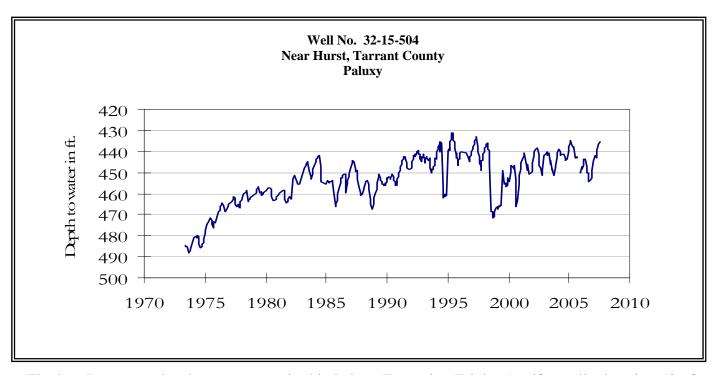
Conservation storage capacity is the space available to store water above the level of invert of lowest outlet works and below the level of top of conservation pool or normal maximum operating level. Conservation storage refers to the volume of water held within the conservation storage space. Not included is any water in flood control storage (above the top of conservation pool or normal maximum operating level), or any water in so called dead storage (in the bottom of the reservoir, below the invert of lowest outlet works and consequently not removable by gravity flow alone.) Percentage of conservation storage is based on the conservation storage capacity of the reservoir and the conservation storage in the reservoir for date shown. Percent change is given by % Change = 100 \* (current conservation storage - past conservation storage)/conservation storage capacity.

Current data are based on elevations near end of month at 77 reservoirs that together represent 98 percent of the total conservation storage capacity of major Texas reservoirs (those with capacity of 5,000 acre-feet or more each). Preliminary figures are shown for the Texas' share of conservation storage in all reservoirs.

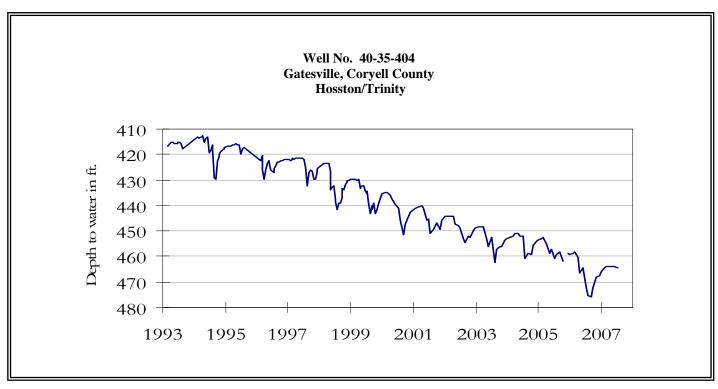
### JUNE GROUND WATER LEVELS IN OBSERVATION WELLS



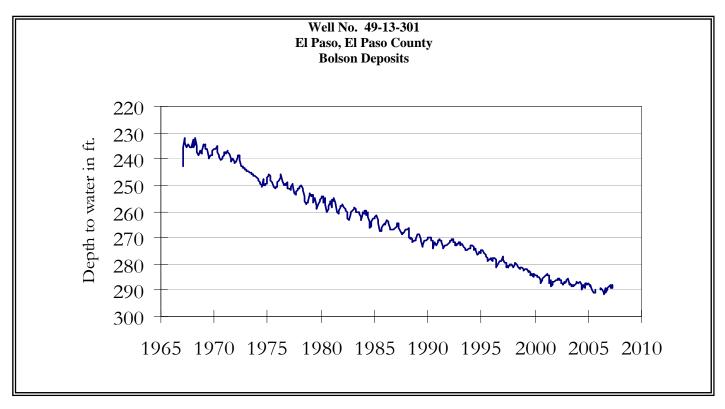
The late June water-level measurement in this Ogallala Aquifer well, elevation 3,816 feet above sea level, was 267.34 feet below land surface. This measurement was 0.33 feet below last month's measurement, 1.18 feet below last year's measurement, and 111.34 feet below the initial measurement recorded in 1968. No water level measurements were recorded for September through December 2005.



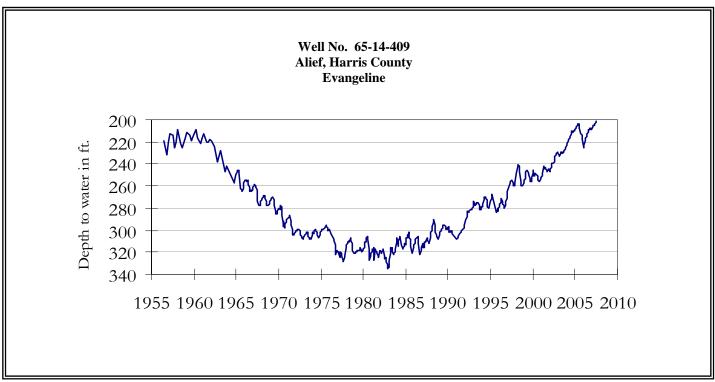
The late June water-level measurement in this Paluxy Formation Trinity Aquifer well, elevation 535 feet above sea level, was 435.50 feet below land surface. This measurement was 1.07 feet above last month's measurement, 14.67 feet above last year's measurement, and 57.50 feet below the initial measurement recorded in 1953. No water level measurements were recorded for September or October 2005.



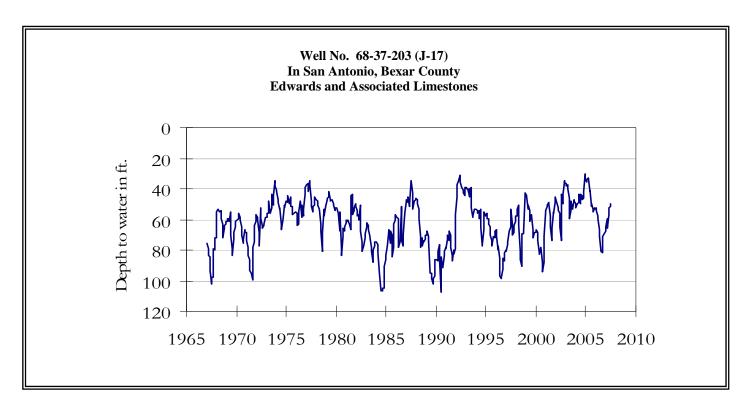
The late June water-level measurement in this Hosston Formation Trinity Aquifer well, elevation 823 feet above sea level, was 464.22 feet below land surface. This water level was 0.36 feet below last month's measurement, 8.18 feet above last year's measurement, and 172.22 feet below the initial measurement recorded in 1955. No water level measurement was recorded for October 2005.



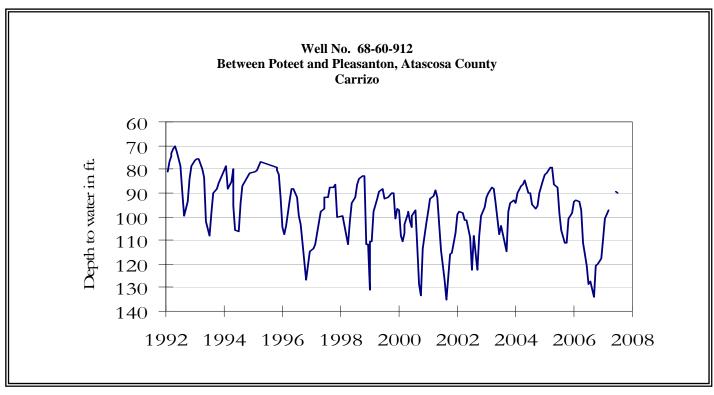
The water-level measurement was not available for this Hueco Bolson Aquifer well (recorder under repair). The graph presented is from last month's report.



The late June water-level measurement in this Evangeline Formation Gulf Coast Aquifer well, elevation 66 feet above sea level, was 200.92 feet below land surface. This was 1.23 feet above last month's measurement, 11.07 feet above last year's measurement, and 65.42 feet below the initial measurement recorded in 1947.

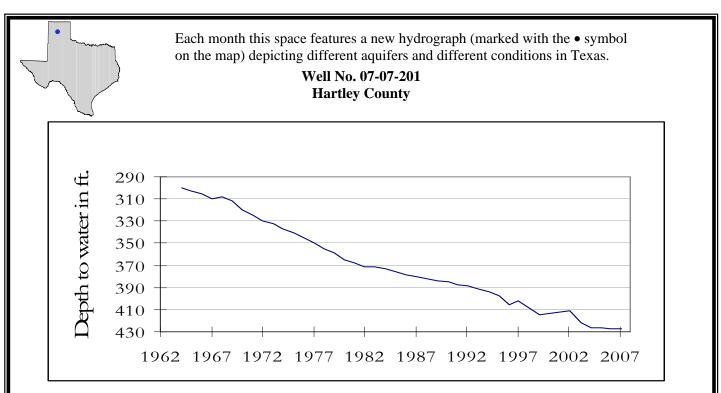


The late June water-level measurement in this Edwards (BFZ) Aquifer well, elevation 731 feet above sea level, was 50.10 feet below land surface. This was 1.40 feet above last month's measurement, 31.01 feet above last year's measurement, and 3.46 feet below the initial measurement recorded in 1962.



The late June water-level measurement in this Carrizo Aquifer well, elevation 446 feet above sea level, was 90.31 feet below land surface. This measurement was 0.93 feet below last month's measurement, 37.97 feet above last year's measurement, and 54.95 feet below the initial measurement recorded in 1965. No water level measurements were recorded for March and April 2007.

#### HYDROGRAPH OF THE MONTH



This water level observation well, located 20 miles east of Dalhart, at an elevation of 3821 feet ASL, was completed in the Ogallala Aquifer. Water level declines of up to 300 feet have occurred in this aquifer over the last 45 years.

June, 2007

Water level measurements were available for six of the seven key monitoring wells. Water levels rose in three of the monitoring wells since the beginning of June, ranging from 1.07 feet in the Tarrant Co. Paluxy well to 1.40 feet in the Bexar Co. Edwards well. Water levels declined in the remaining monitoring wells, ranging from 0.33 feet in the Castro Co. Ogallala well to 0.93 feet in the Atascosa Co.Carrizo well. The J-17 well recorded a water level of 50.10 feet below land surface. This water level is 29.90 feet above the Stage 1 critical management level.

TEXAS WATER DEVELOPMENT BOARD 1700 N. CONGRESS AVE. P.O. BOX 13231 AUSTIN TX 78711-3231