08091750 Squaw Creek near Glen Rose, TX

Middle Brazos-Bosque Basin
Middle Brazos-Lake Whitney Subbasin

LOCATION.--Lat 32°16′12″, long 97°43′56″ referenced to North American Datum of 1927, Somervell County, TX, Hydrologic Unit 12060202, on left bank at downstream side of highway embankment 25 ft left of left end of bridge on State Highway 144, 2.1 mi upstream from mouth, 2.5 mi downstream from Squaw Creek Dam, and 2.8 mi northeast of Glen Rose.

DRAINAGE AREA.--70.3 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1973 to Sept. 2006 (discontinued).

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 599.00 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since Feb. 1977, at least 10% of contributing drainage area has been regulated. No known diversions. During the year, low flows were sustained by releases from a pipeline used to divert water from Lake Granbury (station 08090900) to Squaw Creek Reservoir.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--4 years (1974-77) prior to regulation by Squaw Creek Reservoir 8.41 ft^3/s (6,090 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1934, about 20.5 ft in May 1957, from information by Texas Department of Transportation (discharge not determined).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1974-1977: Maximum discharge 9,030 ft^3/s Apr. 8, 1975 (gage height, 11.90 ft), from rating curve extended above 1,000 ft^3/s on basis of area-velocity study; minimum, 0.02 ft^3/s, Aug. 28 and 29, 1974.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	15	53	6.9	3.1	6.8	6.9	e16	e15	e19	14	3.8	25
2	13	51	4.4	3.1	6.6	6.8	e16	e16	29	15	3.5	24
3	13	52	5.0	3.2	6.2	6.3	e16	30	30	18	3.5	23
4	13	55	5.0	3.1	6.3	6.6	e16	33	31	23	3.4	27
5	13	58	4.8	3.4	5.7	7.1	e16	47	29	27	3.5	32
6	22	61	4.1	2.9	6.2	7.3	e16	68	28	28	3.5	27
7	15	65	6.8	2.5	5.9	7.8	e16	59	28	25	3.7	23
8	9.2	68	7.1	5.4	5.9	9.3	e15	52	28	22	3.8	22
9	8.0	70	4.2	7.2	5.6	10	e15	47	28	21	3.7	21
10	8.5	64	4.2	9.0	6.9	8.1	e15	45	26	18	3.6	21
11	11	53	4.3	8.4	9.9	8.3	e15	37	21	13	3.9	24
12	17	47	4.2	8.2	10	8.6	e15	31	17	8.6	3.8	26
13	20	46	3.4	8.4	8.9	11	e15	28	16	6.5	3.5	24
14	24	40	1.3	7.8	9.0	17	e15	26	20	6.0	3.7	21
15	26	46	4.1	7.9	8.2	20	e15	24	15	7.2	3.7	19
16	28	21	4.3	7.8	8.0	e14	e15	20	10	9.1	3.5	16
17	30	14	4.6	8.0	8.2	e14	e15	18	11	11	3.5	21
18	32	10	4.6	7.3	8.7	e14	e15	17	38	12	3.4	27
19	33	9.3	4.6	7.8	8.7	e15	e14	16	37	13	3.5	21
20	35	14	4.6	8.1	8.3	e31	e14	15	34	12	3.7	19
21	38	7.4	4.7	8.0	7.3	e29	e17	13	30	13	3.7	14
22	38	6.9	4.9	9.1	8.9	e24	e16	13	27	14	4.0	12
23	42	6.0	4.5	7.8	8.9	e22	e16	12	26	11	4.3	13
24	36	5.6	11	7.5	13	e20	e15	13	29	6.8	4.2	13
25	32	5.1	4.3	7.4	23	e19	e15	15	30	5.1	3.7	8.6
26	33	4.2	3.9	6.9	7.7	e18	e15	16	26	4.8	4.1	8.9
27	35	20	4.3	7.3	7.2	e18	e15	14	20	3.4	5.6	9.7
28	36	17	3.7	17	7.2	e17	e15	12	18	3.0	22	12
29	36	5.5	3.4	7.8	---	e17	e15	11	18	2.9	28	7.7
30	38	4.5	3.7	7.3	---	e17	e16	e12	16	3.2	25	7.9
31	50	---	3.3	7.3	---	e17	---	e12	---	3.3	25	---
Total	799.7	979.5	144.2	216.0	233.2	447.1	460	787	735	379.9	201.8	569.8
Mean	25.8	32.6	4.65	6.97	8.33	14.4	15.3	25.4	24.5	12.3	6.51	19.0
Max	50	70	11	17	23	31	17	68	38	28	28	32
Min	8.0	4.2	1.3	2.5	5.6	6.3	14	11	10	2.9	3.4	7.7
Ac-ft	1,590	1,940	286	428	463	887	912	1,560	1,460	754	400	1,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2006[2], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	13.4	13.4	23.5	11.8	17.9	27.9	21.3	43.8	45.8	9.65	13.1	11.3
Max	110	81.5	416	66.0	162	132	169	336	362	36.0	143	41.2
(WY)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1990)	(1989)	(1989)	(1995)	(1995)	(2003)
Min	1.54	1.95	2.36	1.62	2.42	1.61	1.78	2.39	1.28	1.59	1.47	1.91
(WY)	(1993)	(1993)	(1978)	(1998)	(1999)	(1978)	(1978)	(1978)	(1978)	(1978)	(1992)	(1994)

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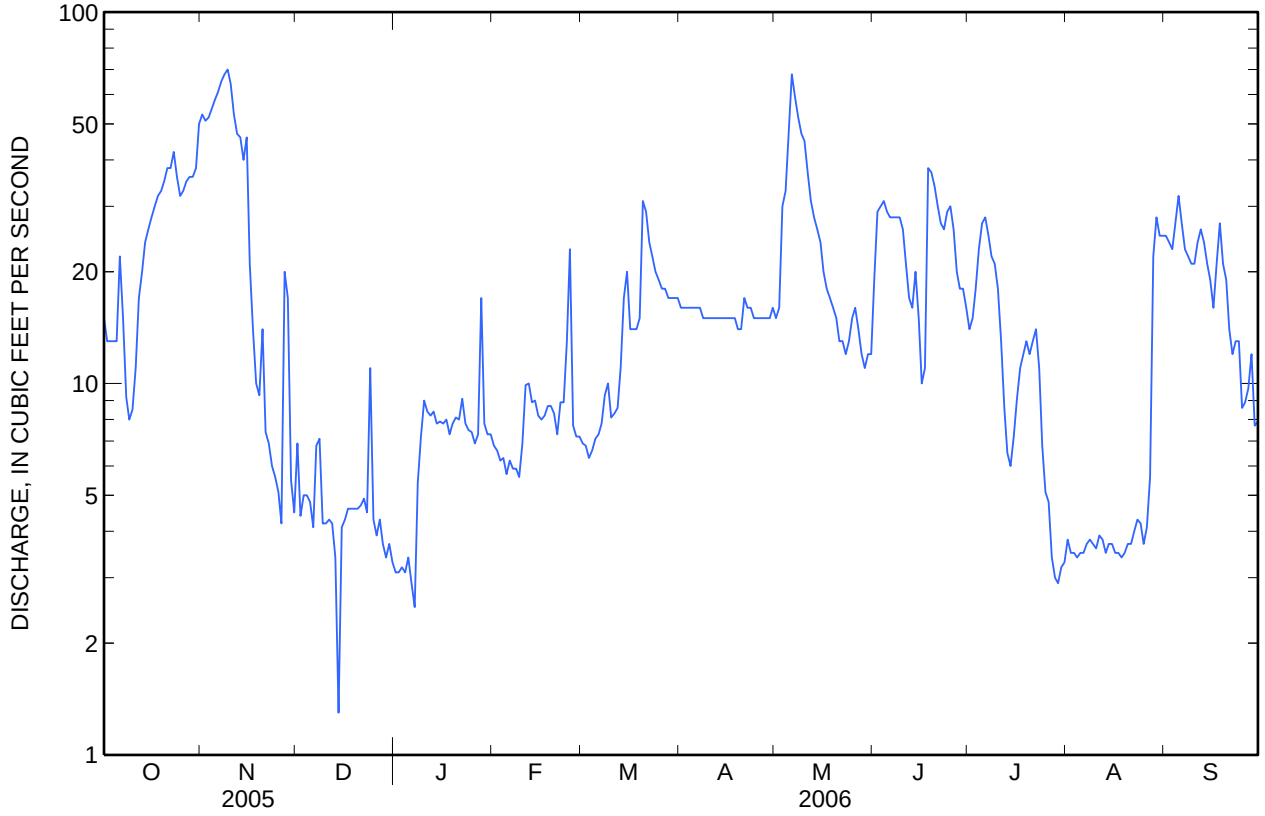
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1978 - 2006 [z]	
Annual total	4,415.07		5,953.2			
Annual mean	12.1		16.3		21.1	
Highest annual mean					89.9	1992
Lowest annual mean					2.18	1978
Highest daily mean	70	Nov 9	70	Nov 9	4,380	Dec 20, 1991
Lowest daily mean	0.38	Mar 16	1.3	Dec 14	0.38	Mar 16, 2005
Annual seven-day minimum	2.5	Jan 20	3.0	Jan 1	0.70	Oct 22, 1992
Maximum peak flow			111	May 6	8,940	Jun 13, 1989
Maximum peak stage			2.87	May 6	11.85	Jun 13, 1989
Annual runoff (ac-ft)	8,760		11,810		15,270	
10 percent exceeds	32		33		41	
50 percent exceeds	5.3		13		4.5	
90 percent exceeds	3.7		3.8		2.5	

[z] Period of regulated streamflow.