Water-Data Report 2009

08052745 Doe Branch at US Highway 380 near Prosper, TX

Upper Trinity Basin
Elm Fork Trinity Subbasin

LOCATION.--Lat 33°13′09″, long 96°53′30″ referenced to North American Datum of 1927, Denton County, TX, Hydrologic Unit 12030103, on right bank at downstream side of Hwy 380.

DRAINAGE AREA.--38.5 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 2004 to current year.

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

REMARKS.--Records good except those for estimated daily mean discharges, which are poor. Since installation of gage, at least 10% of contributing drainage area has been regulated. The Upper Trinity Regional Water District discharges water through a pipeline from Jim L. Chapman Lake into the channel upstream from this station, which accounts for nearly all base flows at this site.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	92	116	104	13	1.5	13	105	214	18	40	104	100
2	93	117	104	11	1.4	13	105	589	55	39	103	100
3	93	121	105	15	1.4	13	106	1,920	35	40	100	92
4	95	113	106	15	7.9	14	104	74	21	44	99	90
5	96	127	106	11	1.2	13	107	28	19	28	99	100
6	100	114	90	10	1.2	15	105	50	23	69	104	99
7	103	126	100	10	1.2	15	103	e37	24	94	101	72
8	92	125	103	10	1.2	16	105	23	24	86	98	95
9	96	125	110	12	1.7	58	106	20	18	93	97	97
10	96	127	107	9.3	2.8	106	103	18	18	99	97	98
11	94	180	104	12	75	117	103	36	48	101	98	113
12	95	116	103	12	19	404	114	53	29	101	98	122
13	98	102	103	12	14	200	114	24	15	102	99	199
14	100	95	103	9.6	12	279	107	21	18	102	99	663
15	102	108	102	9.7	12	146	105	20	19	98	98	266
16	103	105	102	9.8	11	115	86	643	27	102	100	121
17	102	104	102	10	12	117	99	117	22	94	100	173
18	102	104	103	15	12	94	110	30	0.48	100	101	151
19	99	103	105	12	11	110	86	22	0.59	98	99	111
20	105	104	97	9.7	11	109	75	22	0.52	100	99	103
21	94	104	104	9.6	13	109	74	15	0.46	99	108	101
22	104	103	106	9.5	15	108	79	25	0.44	102	100	101
23	105	103	107	13	17	107	88	25	0.46	100	100	99
24	104	104	109	12	12	108	91	22	0.42	94	99	98
25	105	104	110	11	16	109	91	16	0.39	90	99	97
26	112	104	113	1.0	16	110	92	21	0.48	101	96	95
27	103	103	98	1.4	16	108	96	24	33	114	100	94
28	103	130	98	1.7	16	107	97	14	16	116	101	94
29	e106	103	96	1.6	---	108	107	14	29	104	99	95
30	e113	103	74	1.2	---	105	1,420	20	35	307	100	94
31	116	---	13	1.5	---	105	---	24	---	125	98	---
Total	3,121	3,393	3,087	291.6	331.5	3,151	4,283	4,181	550.24	2,982	3,093	3,933
Mean	101	113	99.6	9.41	11.8	102	143	135	18.3	96.2	99.8	131
Max	116	180	113	15	75	404	1,420	1,920	55	307	108	663
Min	92	95	13	1.0	1.2	13	74	14	0.39	28	96	72
Ac-ft	6,190	6,730	6,120	578	658	6,250	8,500	8,290	1,090	5,910	6,130	7,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	58.3	81.3	63.2	77.7	56.6	103	105	79.7	115	137	83.7	87.3
Max	101	136	107	113	132	209	147	135	287	313	99.8	131
(WY)	(2009)	(2005)	(2007)	(2007)	(2008)	(2008)	(2007)	(2009)	(2007)	(2007)	(2009)	(2009)
Min	17.8	17.7	8.98	9.41	11.8	19.4	48.5	40.0	18.3	80.1	51.2	28.1
(WY)	(2008)	(2008)	(2008)	(2009)	(2009)	(2005)	(2008)	(2008)	(2009)	(2005)	(2007)	(2007)

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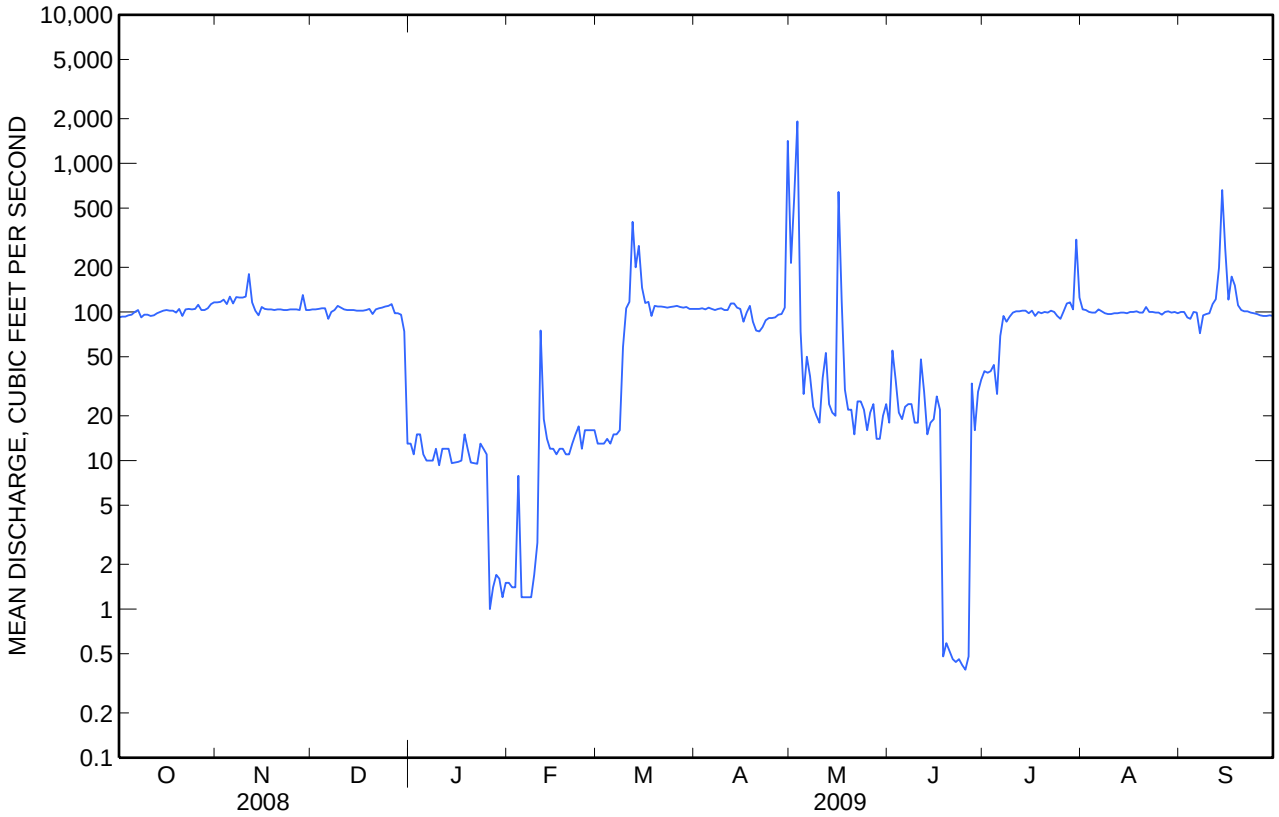
SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 2005 - 2009	
Annual total	36,627.59		32,397.34			
Annual mean	100		88.8		87.4	
Highest annual mean					109	2007
Lowest annual mean					68.9	2005
Highest daily mean	1,450	Mar 3	1,920	May 3	1,920	May 3, 2009
Lowest daily mean	0.99	Jan 17	0.39	Jun 25	0.05	Dec 16, 2005
Annual seven-day minimum	17	Apr 25	0.45	Jun 20	0.45	Jun 20, 2009
Maximum peak flow			4,630	May 3	4,630	May 3, 2009
Maximum peak stage			538.51	May 3	538.51	May 3, 2009
Annual runoff (ac-ft)	72,650		64,260		63,300	
10 percent exceeds	124		114		113	
50 percent exceeds	100		98		89	
90 percent exceeds	20		11		12