07040110 ST. FRANCIS RIVER NEAR PIGGOTT, AR

St. Francis Basin
Lower St. Francis Subbasin

LOCATION.--Lat 36°23′49″, long 90°04′42″ referenced to North American Datum of 1983, in SW ¼ SW ¼ sec.3, T.20 N., R.9 E., Clay County, AR, Hydrologic Unit 08020203, at bridge on State Hwy 1, 6.0 mi east of Piggott.

DRAINAGE AREA.--1,780 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct 1977 to current year.

REMARKS.--As the number of streams on which streamflow information is likely to be desired far exceeds the number of continuous-record stream-gaging stations feasible to operate at one time, the USGS collects limited streamflow data at sites other than the continuous-record stream-gaging stations. When discharge measurements are made at sites not included in the continuous-record or partial-record program, these measurements, generally made in times of drought or flood to give better areal coverage to those events, and others collected for some special reason are called measurements at miscellaneous sites. Discharge measurements in the following table were made at this special study or miscellaneous site during the 2010 water year.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Date	Discharge, in ft³/s	Gage height, in ft
Oct 13, 2009	1,930	11.73
Nov 18, 2009	4,560	17.20
Dec 16, 2009	3,610	15.21
Jan 19, 2010	3,700	15.60
Feb 16, 2010	3,290	14.91
Mar 24, 2010	4,330	16.65
Apr 13, 2010	972	8.94
May 18, 2010	1,720	11.05
Jun 22, 2010	417	6.40
Jul 19, 2010	806	7.87
Aug 24, 2010	162	4.61
Sep 21, 2010	810	7.81

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Oct 1977 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 3

[ft³/s, cubic feet per second; m, meters; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius]

Date	Sample start time	Discharge, instantaneous, ft³/s (00061)	Temperature, water, °C (00010)	Transparency, water, in situ, Secchi disc, m (00078)	Sample source (72005)	Sampler type (84164)	Sampling method (82398)	Bed sediment, dry sieved, sieve diameter, percent smaller than 2 millimeters (80169)	Bed sediment, dry sieved, sieve diameter, percent smaller than 4 millimeters (80170)
10-13-2009	1350	1,930	15.84	.12	--	Sampler US DH-59	EWI	--	--
11-18-2009	0950	4,336	12.85	.12	Mainstream	Sampler US DH-59	EWI	--	--
11-18-2009	1025	225	12.87	.21	Overbank	Sampler US DH-59	EWI	82	87
12-16-2009	1210	3,610	5.82	.24	--	Sampler US DH-59	EWI	--	--
01-19-2010	1240	3,730	4.11	.15	Mainstream	Sampler US DH-59	EWI	--	--
01-19-2010	1310	59.9	4.14	.12	Overbank	Sampler US DH-59	EWI	99	100
02-16-2010	1320	3,290	3.21	.15	--	Sampler US DH-59	EWI	--	--
03-24-2010	1215	3,990	12.8	.12	Mainstream	Sampler US DH-59	EWI	--	--
03-24-2010	1240	229	12.8	.12	Overbank	Sampler US DH-59	EWI	62	67
04-13-2010	1125	972	18.86	.21	--	Sampler US DH-59	EWI	--	--
05-18-2010	1430	1,720	22.22	.15	--	Sampler US DH-59	EWI	--	--
06-22-2010	1315	417	33.99	.24	--	Sampler US DH-59	EWI	--	--
07-19-2010	1330	806	30.8	.24	--	Sampler US DH-59	EWI	--	--
08-24-2010	1300	162	29.7	.24	--	Sampler US DH-59	EWI	--	--
09-21-2010	1340	810	27.1	.24	--	Sampler US DH-59	EWI	--	--

07040110 ST. FRANCIS RIVER NEAR PIGGOTT, AR—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
Part 2 of 3
[ft³/s, cubic feet per second; m, meters; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius]

Date	Bed sediment, dry sieved, sieve diameter, percent smaller than 8 millimeters (80171)	Bed sediment, fall diameter (deionized water), percent smaller than 0.0625 millimeters (80158)	Bed sediment, fall diameter (deionized water), percent smaller than 0.125 millimeters (80159)	Bed sediment, fall diameter (deionized water), percent smaller than 0.25 millimeters (80160)	Bed sediment, fall diameter (deionized water), percent smaller than 0.5 millimeters (80161)	Bed sediment, fall diameter (deionized water), percent smaller than 1 millimeter (80162)	Bed sediment, fall diameter (deionized water), percent smaller than 2 millimeters (80163)	Suspended sediment, fall diameter (deionized water), percent smaller than 0.0625 mm (70342)	Suspended sediment, fall diameter (deionized water), percent smaller than 0.125 mm (70343)	Suspended sediment, fall diameter (deionized water), percent smaller than 0.25 mm (70344)
10-13-2009	--	6	16	96	100	--	--	95	96	99
11-18-2009	--	9	23	95	100	--	--	92	95	98
11-18-2009	100	42	51	58	64	82	--	97	97	99
12-16-2009	--	6	16	97	100	--	--	76	82	96
01-19-2010	--	4	14	96	100	--	--	77	82	99
01-19-2010	--	77	82	89	95	99	--	95	96	96
02-16-2010	--	14	21	95	100	--	--	77	80	98
03-24-2010	--	41	61	96	100	--	--	69	71	80
03-24-2010	100	14	17	26	36	46	62	82	86	88
04-13-2010	--	3	17	96	99	100	--	97	97	97
05-18-2010	--	31	47	94	99	100	--	94	94	98
06-22-2010	--	1	2	76	100	--	--	98	98	100
07-19-2010	--	20	33	81	95	100	--	97	97	100
08-24-2010	--	16	31	91	100	--	--	98	98	100
09-21-2010	--	17	21	78	98	100	--	100	--	--

07040110 ST. FRANCIS RIVER NEAR PIGGOTT, AR—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
Part 3 of 3
[ft³/s, cubic feet per second; m, meters; mg/L, milligrams per liter; mm, millimeters; °C, degrees Celsius]

Date	Suspended sediment, fall diameter (deionized water), percent smaller than 0.5 mm (70345)	Suspended sediment, fall diameter (deionized water), percent smaller than 1 millimeter (70346)	Suspended sediment concen tration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-13-2009	100	--	178	927.6
11-18-2009	100	--	375	4,390
11-18-2009	100	--	92	55.9
12-16-2009	100	--	76	740.8
01-19-2010	100	--	110	1,108
01-19-2010	100	--	27	4.37
02-16-2010	100	--	81	719.5
03-24-2010	97	100	213	2,295
03-24-2010	93	100	206	127.4
04-13-2010	100	--	85	223.1
05-18-2010	100	--	120	557.3
06-22-2010	--	--	101	113.7
07-19-2010	--	--	99	215.4
08-24-2010	--	--	77	33.7
09-21-2010	--	--	104	227.4