Water-Data Report 2013

07047950 L'ANGUILLE RIVER AT PALESTINE, AR

St. Francis Basin
L'Anguille Subbasin

LOCATION.--Lat 34°58′22″, long 90°53′08″ referenced to North American Datum of 1983, in NW ¼ SW ¼ sec.10, T.4 N., R.2 E., St Francis County, AR, Hydrologic Unit 08020205, at bridge on U.S. Hwy 70, 1.0 mi east of Palestine, and at river mile 33.6.

DRAINAGE AREA.--786 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Apr 1949 to current year. Oct 1965 to Sep 1977, and Oct 1997 to current year in reports of the U.S. Geological Survey. Apr 1949 to Dec 1963 in reports of Mississippi River Commission. Jan 1964 to current year in reports of U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 166.68 ft above NGVD of 1929. Prior to Nov 1, 1949, nonrecording gage.

REMARKS.--Water-discharge records poor. Water quality data available at the files of the USGS. The stage-discharge relation affected by backwater during high stages of Mississippi River. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1933, 39.7 ft Feb 13, 1937, at present site and datum, from records of U.S. Army Corps of Engineers (backwater from Mississippi River).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,120 ft^3/s, Jan. 16, gage height, 24.93 ft; minimum discharge, 0.00 ft^3/s, Nov. 6, 7, gage height, 12.33 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	74	3.6	6.8	952	1,580	3,120	861	1,310	1,420	1,100	980	933
2	53	2.3	7.2	986	1,720	2,950	890	1,290	1,530	1,040	906	877
3	38	1.3	7.2	995	1,870	2,690	843	1,440	2,530	980	828	819
4	31	0.80	8.7	997	1,980	2,370	694	1,890	4,450	929	766	752
5	26	0.34	14	994	1,990	2,110	614	2,820	5,430	880	737	677
6	24	0.03	28	969	1,920	1,920	572	3,820	5,480	827	738	599
7	20	0.14	90	907	1,830	1,760	585	4,360	5,150	731	748	528
8	17	0.36	110	831	1,770	1,620	513	4,410	4,730	641	757	482
9	14	0.65	112	764	1,690	1,500	393	4,100	4,340	554	739	448
10	26	0.86	210	979	1,660	1,420	301	3,870	3,970	473	706	413
11	68	1.4	430	1,250	1,680	1,370	1,000	3,660	3,540	405	666	393
12	73	51	566	1,400	1,680	1,320	1,540	3,320	3,100	357	647	393
13	58	e75	720	2,060	1,660	1,290	1,980	3,030	2,700	316	692	378
14	41	e237	824	3,830	1,620	1,260	2,280	2,790	2,360	318	741	349
15	27	239	851	5,520	1,570	1,210	2,450	2,580	2,080	353	800	321
16	20	213	809	6,070	1,500	1,160	2,530	2,350	1,860	386	853	311
17	17	194	693	5,730	1,410	1,100	2,400	2,150	1,710	392	904	312
18	31	164	557	5,100	e1,340	1,050	2,210	1,920	1,620	398	947	305
19	40	121	425	4,410	1,300	997	2,330	1,700	1,790	445	980	290
20	98	73	328	3,790	1,240	938	2,350	1,510	2,400	439	1,010	313
21	137	39	245	3,270	1,290	872	2,480	1,460	2,670	503	1,040	546
22	135	23	176	2,840	1,570	804	2,560	1,670	2,570	576	1,070	647
23	119	14	143	2,490	1,870	773	2,510	1,820	2,240	719	1,090	681
24	95	9.6	117	2,220	2,220	803	2,380	1,980	1,930	910	1,100	707
25	61	8.2	101	2,030	2,520	847	2,140	2,120	1,680	1,000	1,110	726
26	34	7.2	130	1,880	2,950	881	1,880	2,170	1,500	1,070	1,100	702
27	18	6.7	286	1,740	3,220	861	1,680	2,130	1,370	1,120	1,090	636
28	8.6	6.3	473	1,620	3,240	766	1,520	1,990	1,290	1,150	1,070	559
29	5.0	6.0	666	1,520	---	664	1,400	1,790	1,220	1,140	1,050	484
30	4.2	6.4	794	1,550	---	624	1,340	1,600	1,160	1,100	1,020	417
31	4.3	---	873	1,530	---	763	---	1,490	---	1,040	980	---
Total	1,417.1	1,505.18	10,800.9	71,224	51,890	41,813	47,226	74,540	79,820	22,292	27,865	15,998
Mean	45.7	50.2	348	2,298	1,853	1,349	1,574	2,405	2,661	719	899	533
Max	137	239	873	6,070	3,240	3,120	2,560	4,410	5,480	1,150	1,110	933
Min	4.2	0.03	6.8	764	1,240	624	301	1,290	1,160	316	647	290
Ac-ft	2,810	2,990	21,420	141,300	102,900	82,940	93,670	147,900	158,300	44,220	55,270	31,730
Cfsm	0.06	0.06	0.44	2.92	2.36	1.72	2.00	3.06	3.39	0.91	1.14	0.68
In.	0.07	0.07	0.51	3.37	2.46	1.98	2.24	3.53	3.78	1.06	1.32	0.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	374	671	1,402	1,537	2,116	1,933	1,573	1,495	618	412	442	587
Max	3,107	5,578	7,477	6,531	7,854	5,720	4,938	6,587	3,919	1,636	1,713	2,130
(WY)	(2010)	(1958)	(2002)	(1950)	(1950)	(1975)	(1973)	(1953)	(1974)	(1967)	(1966)	(1950)
Min	0.13	0.00	2.19	34.5	136	313	147	44.9	23.5	0.06	19.0	66.7
(WY)	(2009)	(1955)	(2006)	(1963)	(1963)	(2007)	(2003)	(1959)	(2008)	(1954)	(1954)	(1954)

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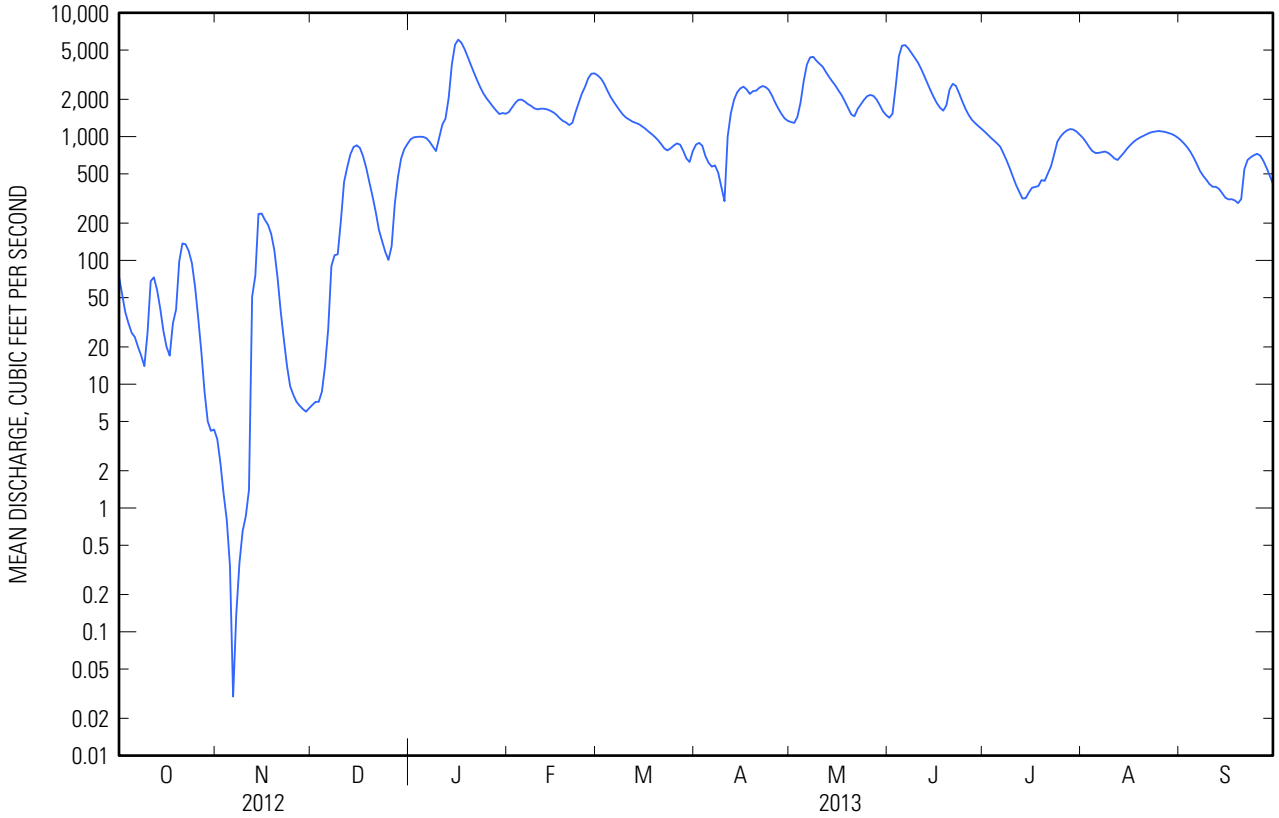
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1949 - 2013	
Annual total	188,020.18		446,391.18			
Annual mean	514		1,223		1,088	
Highest annual mean					2,592	1950
Lowest annual mean					359	2006
Highest daily mean	2,530	Mar 18	6,070	Jan 16	22,400	Dec 18, 2001
Lowest daily mean	0.03	Nov 6	0.03	Nov 6	0.00	Jun 27, 1952 [a]
Annual seven-day minimum	0.45	Nov 4	0.45	Nov 4	0.00	Jul 21, 1952
Maximum peak flow			6,120	Jan 16	[b] 23,000	Dec 19, 2001
Maximum peak stage			24.93	Jan 16	[b] 36.34	May 13, 2011
Instantaneous low flow			0.00	Nov 6 [c]	0.00	Jan 1, 1950 [a]
Annual runoff (ac-ft)	372,900		885,400		788,300	
Annual runoff (cfsm)	0.654		1.56		1.38	
Annual runoff (inches)	8.90		21.13		18.81	
10 percent exceeds	1,510		2,620		2,760	
50 percent exceeds	226		933		482	
90 percent exceeds	25		25		31	

[a] Occurred on many days
[b] Estimated
[c] Also Nov 7