Water-Data Report 2013

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TN

French Broad-Holston Basin
Lower French Broad Subbasin

LOCATION.--Lat 35°52′42″, long 83°34′40″ referenced to North American Datum of 1927, Sevier County, TN, Hydrologic Unit 06010107, on left bank downstream of West Prong of Little Pigeon River, 0.6 miles downstream of bridge on State Highway 66 at Sevierville, Sevier County, and at river mile 4.4.

DRAINAGE AREA.--353.00 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1920 to Feb. 1982, Apr. 1, 2012 to current year. Prior to Nov. 1920 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 783: 1921-34. WSP 1336: 1921(M), 1922, 1923(m), WRD TN 1972: 1969(M), 1970(M), 1971(P)

GAGE.--Water stage recorder. Datum of gage is 879.45 ft. National Geodetic Vertical Datum of 1929. Nov. 23,1920 to June 13,1928, nonrecording gage and June 14,1928 to June 1,1966; water stage recorder, at site 0.1 mi.upstream at datum 1.99 ft. higher. June 2,1966 to June 5,1967, at site 1.5 mi. downstream at datum 7.31 ft. lower.

REMARKS.--Records fair. Some regulation at low flow caused by small mills above station prior to 1967.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft^3/s Mar. 26,1965, gage height, 16.09 ft. at site and datum then in use; minimum, 2.8 ft^3/s Sept 21,1925; minimum gage height, 0.08 ft. Dec.23,1965, at site and datum then in use; minimum daily discharge, 8.4 ft^3/s, Sept. 9,1925

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25,1875 reached a stage of 18 ft., discharge, 55,000 ft^3/s; that of Apr. 1,1896, 16.8 ft., discharge, 46,000 ft^3/s ; and that of Mar. 7,1867, 16.5 ft., discharge, 43,000 ft^3/s, all at site 0.1 mi. upstream, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,000 ft^3/s, Jan. 30, gage height, 11.22 ft; minimum discharge, 109 ft^3/s, Oct. 26.

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TN—Continued

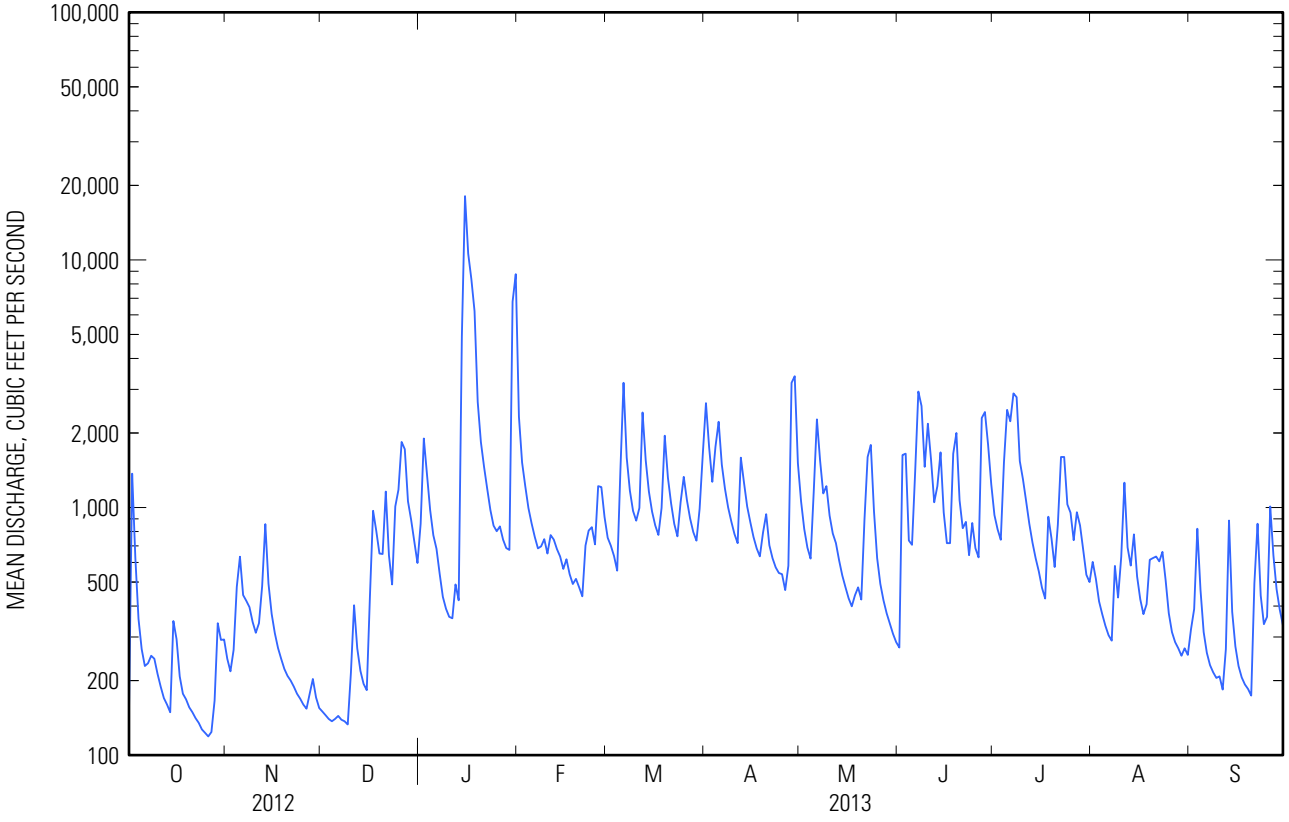
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	151	245	150	860	2,330	755	2,640	1,060	272	932	603	322
2	1,370	218	145	1,900	1,520	701	1,750	819	1,630	816	515	389
3	627	266	140	1,360	1,220	637	1,270	689	1,650	741	418	821
4	355	478	137	976	995	556	1,760	622	736	1,520	371	465
5	268	633	140	773	863	1,400	2,220	1,160	707	2,480	333	314
6	229	443	144	681	761	3,190	1,490	2,270	1,400	2,230	305	259
7	235	420	139	540	684	1,590	1,190	1,550	2,940	2,890	290	231
8	252	396	137	436	697	1,170	1,000	1,140	2,570	2,790	581	216
9	245	345	133	390	745	969	878	1,220	1,460	1,540	433	205
10	213	312	215	362	652	885	781	928	2,180	1,300	633	208
11	189	341	403	357	774	996	718	786	1,560	1,060	1,260	184
12	170	481	270	489	742	2,420	1,590	718	1,050	860	690	268
13	160	857	219	422	679	1,550	1,260	612	1,220	722	583	886
14	149	493	194	4,910	634	1,160	1,010	532	1,670	624	779	379
15	348	372	183	18,100	565	963	872	477	955	552	527	275
16	294	311	437	10,600	618	847	760	430	718	474	426	229
17	208	271	970	8,360	538	775	684	399	718	429	371	206
18	177	245	805	6,210	491	996	635	442	1,650	918	407	193
19	168	223	652	2,670	515	1,950	792	476	2,000	750	615	185
20	156	209	649	1,840	476	1,320	940	425	1,070	575	625	174
21	149	200	1,160	1,460	438	1,040	704	892	825	852	634	494
22	141	189	641	1,190	702	859	624	1,600	875	1,600	606	860
23	135	177	489	977	807	765	573	1,790	642	1,600	662	441
24	127	169	1,010	845	833	1,050	544	967	866	1,030	509	338
25	123	160	1,180	802	710	1,330	538	625	685	953	374	362
26	119	154	1,840	839	1,220	1,070	464	492	629	738	314	1,010
27	124	177	1,720	742	1,210	903	582	422	2,300	957	286	641
28	166	203	1,060	686	917	796	3,190	374	2,430	847	270	468
29	341	171	892	674	---	735	3,390	340	1,790	675	252	387
30	292	155	729	6,780	---	988	1,510	309	1,240	535	270	335
31	293	---	597	8,760	---	1,640	---	286	---	500	254	---
Total	7,974	9,314	17,580	85,991	23,336	36,006	36,359	24,852	40,438	34,490	15,196	11,745
Mean	257	310	567	2,774	833	1,161	1,212	802	1,348	1,113	490	392
Max	1,370	857	1,840	18,100	2,330	3,190	3,390	2,270	2,940	2,890	1,260	1,010
Min	119	154	133	357	438	556	464	286	272	429	252	174
Cfsm	0.73	0.88	1.61	7.86	2.36	3.29	3.43	2.27	3.82	3.15	1.39	1.11
In.	0.84	0.98	1.85	9.06	2.46	3.79	3.83	2.62	4.26	3.63	1.60	1.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	229	343	633	861	1,010	1,096	807	547	411	419	357	229
Max	997	1,191	1,933	2,774	2,566	2,875	1,464	1,741	1,348	1,375	982	1,245
(WY)	(1973)	(1958)	(1962)	(2013)	(1957)	(1963)	(1936)	(1929)	(2013)	(1971)	(1942)	(1928)
Min	46.4	59.3	89.3	124	181	298	192	156	112	85.3	33.8	55.9
(WY)	(1954)	(1940)	(1940)	(1981)	(1941)	(1931)	(1942)	(1941)	(1936)	(1944)	(1925)	(1954)

03470000 LITTLE PIGEON RIVER AT SEVIERVILLE, TN—Continued

SUMMARY STATISTICS

	Water Year 2013		Water Years 1921 - 2013	
Annual total	343,281			
Annual mean	940		576	
Highest annual mean			940	2013
Lowest annual mean			290	1941
Highest daily mean	18,100	Jan 15	25,700	Mar 12, 1963
Lowest daily mean	119	Oct 26	8.4	Sep 9, 1925
Annual seven-day minimum	131	Oct 21	24	Aug 28, 1925
Maximum peak flow	23,000	Jan 30	41,000	Mar 26, 1965
Maximum peak stage	11.22	Jan 30	16.09	Mar 26, 1965
Instantaneous low flow	109	Oct 26	2.8	Sep 21, 1925
Annual runoff (cfsm)	2.66		1.63	
Annual runoff (inches)	36.18		22.18	
10 percent exceeds	1,660		1,150	
50 percent exceeds	652		343	
90 percent exceeds	189		101