03588500 SHOAL CREEK AT IRON CITY, TN

LOCATION.--Lat 35°01'27", long 87°34'44", Lawrence County, Hydrologic Unit 06030005, on right downstream bank at bridge, on county road, 400 ft downstream from Holly Creek, 1,350 ft upstream from Louisville and Nashville Railroad bridge, 1,350 ft northeast of Iron City Post Office, and at mile 22.3.

DRAINAGE AREA.--348 mi^2.

PERIOD OF RECORD.--July 1925 to September 1994, October 2000 to current year.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1113: 1927(M). WSP 1436: 1926(M), 1927-29, 1930(M), 1932, 1933(M).

GAGE.--Data collection platform and pressure sensor. Datum of gage is 534.22 ft above NGVD of 1929. Prior to Feb. 25, 1931, nonrecording gage at railroad bridge, 1350 ft downstream at datum 0.85 ft. lower. Feb. 25, 1931, to Sept. 30, 1933, nonrecording gage at site 825 ft downstream and Oct. 1, 1933, to Sept. 30, 1957, water-stage recorder at site 750 ft downstream at datum 0.69 ft higher.

REMARKS.--No estimated daily discharges. Records good. Maximum gage height at present site and datum, 24.4 ft, from high water profile. Prior to January 1951, diurnal fluctuation at low flow caused by powerplant near Lawrenceburg. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREME OUTSIDE PERIOD OF RECORD.--Flood in March 1902 reached a stage about 3 ft higher than that of Mar. 21, 1955, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 19	1445	*41,900	*22.26	Dec 9	1745	14,700	14.68
Nov 24	1330	7,360	10.68	Dec 23	1000	10,300	12.61
Dec 1	0030	20,600	17.02	Jan 8	0730	10,300	12.59
Dec 7	1530	18,900	16.38	Feb 21	2230	8,560	11.54

Minimum discharge, 145 ft^3/s, Aug. 27.

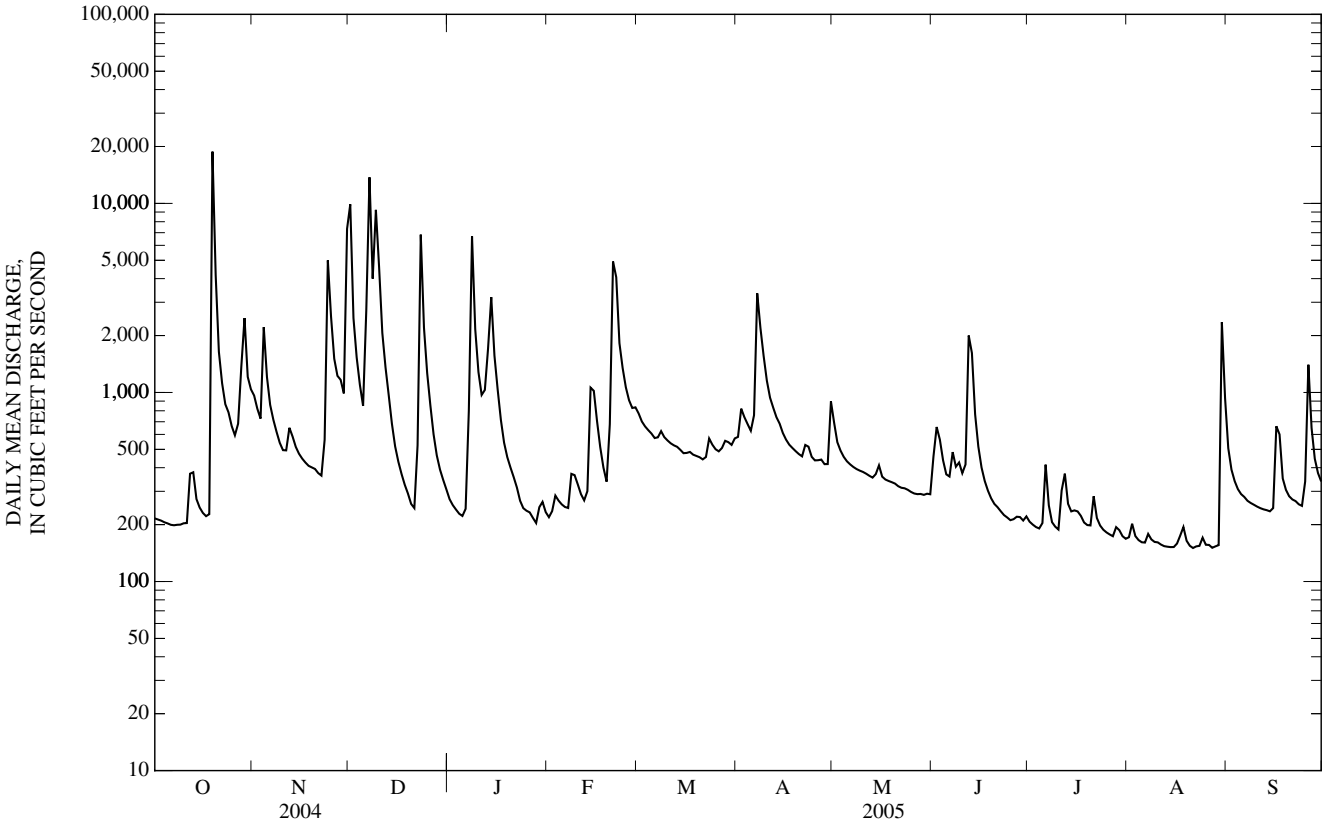
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	963	9,890	272	219	774	582	691	458	207	172	507
2	213	820	2,480	254	236	702	821	546	657	200	202	391
3	210	727	1,530	240	285	661	740	493	563	194	174	340
4	206	2,220	1,100	228	268	632	680	457	438	191	166	308
5	203	1,210	849	222	256	606	627	432	369	204	161	290
6	200	860	2,730	242	248	574	758	417	359	415	161	280
7	198	717	13,700	799	245	579	3,340	403	484	253	179	267
8	200	619	4,000	6,690	371	624	2,200	394	405	206	167	260
9	200	542	9,240	2,160	366	581	1,560	386	426	195	162	255
10	203	495	4,610	1,280	326	558	1,150	380	374	188	161	249
11	204	494	2,060	970	290	538	938	372	416	303	157	244
12	372	651	1,360	1,030	269	525	830	362	2,000	372	154	241
13	378	585	967	1,710	301	516	740	355	1,620	258	153	238
14	273	515	683	3,190	1,060	497	684	370	767	235	152	235
15	246	474	519	1,570	1,020	477	610	412	518	238	152	245
16	231	447	430	1,030	707	479	563	359	401	235	159	663
17	222	426	371	716	514	485	529	346	340	222	175	600
18	227	409	325	543	401	469	508	340	302	205	194	351
19	18,800	402	292	455	337	462	489	335	276	199	164	305
20	4,180	394	257	401	679	454	472	330	257	198	155	283
21	1,640	375	245	357	4,930	443	459	319	247	282	150	272
22	1,120	363	526	314	4,070	456	528	313	235	217	153	266
23	867	562	6,840	267	1,820	571	517	311	225	198	154	256
24	785	5,000	2,200	244	1,350	529	457	306	218	188	171	251
25	664	2,520	1,270	237	1,060	501	437	298	211	182	156	338
26	594	1,510	854	232	910	488	438	292	214	177	156	1,400
27	683	1,220	601	217	828	509	442	290	220	174	151	649
28	1,370	1,170	465	204	834	555	418	291	219	194	153	446
29	2,470	989	391	247	---	546	418	287	210	187	156	375
30	1,210	7,340	345	264	---	528	897	291	221	174	2,360	338
31	1,040	---	307	233	---	571	---	289	---	168	935	---
TOTAL	39,625	35,019	71,437	26,818	24,200	16,890	23,832	11,467	13,650	6,859	8,015	11,143
MEAN	1,278	1,167	2,304	865	864	545	794	370	455	221	259	371
MAX	18,800	7,340	13,700	6,690	4,930	774	3,340	691	2,000	415	2,360	1,400
MIN	198	363	245	204	219	443	418	287	210	168	150	235
CFSM	3.67	3.35	6.62	2.49	2.48	1.57	2.28	1.06	1.31	0.64	0.74	1.07
IN.	4.24	3.74	7.64	2.87	2.59	1.81	2.55	1.23	1.46	0.73	0.86	1.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

MEAN	252	457	796	1,039	1,235	1,292	974	733	388	303	226	230
MAX	1,290	1,894	2,968	3,604	3,562	3,626	2,227	3,425	1,876	1,131	615	1,296
(WY)	(1933)	(1978)	(1927)	(1974)	(1948)	(1975)	(1964)	(1991)	(1928)	(1932)	(1926)	(1979)
MIN	69.4	123	165	170	273	373	222	169	118	105	94.8	64.8
(WY)	(1932)	(1955)	(1964)	(1981)	(1941)	(1966)	(1986)	(1936)	(1988)	(1943)	(1988)	(1925)

03588500 SHOAL CREEK AT IRON CITY, TN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1925 - 2005	
ANNUAL TOTAL	350,243		288,955			
ANNUAL MEAN	957		792		658	
HIGHEST ANNUAL MEAN					1,178	1973
LOWEST ANNUAL MEAN					281	1981
HIGHEST DAILY MEAN	18,800	Oct 19	18,800	Oct 19	44,000	Feb 13, 1948
LOWEST DAILY MEAN	198	Oct 7	150	Aug 21	41	Sep 22, 1925
ANNUAL SEVEN-DAY MINIMUM	201	Oct 5	155	Aug 10	55	Sep 3, 1925
MAXIMUM PEAK FLOW			41,900	Oct 19	a132,000	Mar 21, 1955
MAXIMUM PEAK STAGE			22.26	Oct 19	b27.25	Mar 21, 1955
INSTANTANEOUS LOW FLOW			145	Aug 27	38	Aug 31, 1943
ANNUAL RUNOFF (CFSM)	2.75		2.27		1.89	
ANNUAL RUNOFF (INCHES)	37.44		30.89		25.70	
10 PERCENT EXCEEDS	1,530		1,360		1,300	
50 PERCENT EXCEEDS	494		394		323	
90 PERCENT EXCEEDS	249		193		131	

a From rating curve extended above 50,000 ft^3/s on basis of slope-area measurement.
b Site and datum then in use (see REMARKS).