

FRENCH CREEK BASIN

03024000 FRENCH CREEK AT UTICA, PA

LOCATION.--Lat 41°26'15", long 79°57'22", Venango County, Hydrologic Unit 05010004, on right bank at upstream side of bridge on SR 3017 at Utica and 2,000 ft upstream from Mill Creek.

DRAINAGE AREA.--1,028 mi².

PERIOD OF RECORD.--August 1932 to current year.

REVISED RECORDS.--WSP 743: Drainage area. WSP 823: 1936 (M). WSP 1275: 1933, 1936.

GAGE.--Water-stage recorder. Datum of gage is 1,019.44 ft above sea level. Prior to Nov. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1971 by Union City Reservoir (station 03021518) 50 mi upstream, serving as a retarding basin, and since January 1974 by Woodcock Creek Lake (station 03022550), 25 mi upstream. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1912, 15.7 ft in March 1913, discharge 35,600 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	111	243	e400	2910	1990	1650	1140	969	258	192	160
2	82	110	227	e390	3360	2360	1850	1020	770	248	158	137
3	82	110	226	e390	4480	2660	1960	910	688	226	136	120
4	84	108	235	e410	4750	4280	1920	814	673	211	146	109
5	83	107	240	e410	4230	4040	2250	747	647	191	145	100
6	79	109	236	e430	3710	3650	2240	693	604	179	133	95
7	84	113	239	e440	3240	3000	2020	654	532	281	130	92
8	223	129	264	e460	2900	2580	1800	621	462	474	130	90
9	290	135	265	e470	2600	2290	2030	630	395	369	129	89
10	527	151	248	e480	2540	2000	3740	671	352	332	121	89
11	415	300	235	e500	2520	1680	3910	737	520	260	119	90
12	284	291	223	e520	2610	1510	4000	634	540	257	116	93
13	216	363	213	e540	3320	1350	3430	557	499	234	115	94
14	174	374	203	e560	3080	1230	2790	498	413	198	125	96
15	151	323	198	e570	2640	1210	2290	459	360	172	133	93
16	138	289	195	e600	2460	1160	2070	438	331	157	121	86
17	150	270	192	e640	2530	1400	2590	405	319	147	113	84
18	171	257	204	e700	2900	3380	3660	381	293	150	110	82
19	186	236	216	e740	2690	4380	3840	547	270	154	108	78
20	167	225	231	e800	2260	3820	3640	825	249	156	105	77
21	152	221	275	e1000	1930	3300	3020	985	237	140	106	80
22	149	219	1400	e1450	1600	2860	2850	795	225	146	104	83
23	149	219	2990	e3000	1330	2640	2910	590	214	178	104	79
24	143	219	2160	9760	1060	2420	3470	737	204	149	112	77
25	143	219	1830	10800	944	2380	3300	1530	201	138	223	76
26	139	228	1380	9900	873	2210	e2600	2300	192	128	239	75
27	134	233	1120	7210	815	1920	e2300	2180	183	121	209	75
28	129	234	e800	5820	1150	1780	e1850	1920	187	120	178	75
29	122	243	e660	5200	---	1740	e1550	1650	227	142	227	78
30	116	247	e500	4240	---	1690	e1330	1440	294	129	238	214
31	113	---	e430	3450	---	1640	---	1190	---	130	201	---
TOTAL	5157	6393	18078	72280	71432	74550	78860	28698	12050	6175	4526	2866
MEAN	166	213	583	2332	2551	2405	2629	926	402	199	146	95.5
MAX	527	374	2990	10800	4750	4380	4000	2300	969	474	239	214
MIN	79	107	192	390	815	1160	1330	381	183	120	104	75
CFSM	.16	.21	.57	2.27	2.48	2.34	2.56	.90	.39	.19	.14	.09
IN.	.19	.23	.65	2.62	2.58	2.70	2.85	1.04	.44	.22	.16	.10

e Estimated.

FRENCH CREEK BASIN

03024000 FRENCH CREEK AT UTICA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1306	2352	2769	2625	2931	3693	3059	1701	1249	819	683	948
MAX (WY)	1991	1986	1978	1993	1976	1977	1994	1996	1986	1987	1980	1990
MIN (WY)	1992	1992	1999	1977	1987	1990	1976	1985	1991	1995	1991	1995

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1974 - 1999

ANNUAL TOTAL	521178	381065	
ANNUAL MEAN	1428	1044	2006
HIGHEST ANNUAL MEAN			2459
LOWEST ANNUAL MEAN			1044
HIGHEST DAILY MEAN	16100	Jan 10	10800
LOWEST DAILY MEAN	79	Oct 6	75
ANNUAL SEVEN-DAY MINIMUM	82	Sep 30	76
INSTANTANEOUS PEAK FLOW			11200
INSTANTANEOUS PEAK STAGE			9.04
ANNUAL RUNOFF (CFSM)	1.39		1.02
ANNUAL RUNOFF (INCHES)	18.86		13.79
10 PERCENT EXCEEDS	3740	2940	4550
50 PERCENT EXCEEDS	323	332	1350
90 PERCENT EXCEEDS	106	107	236

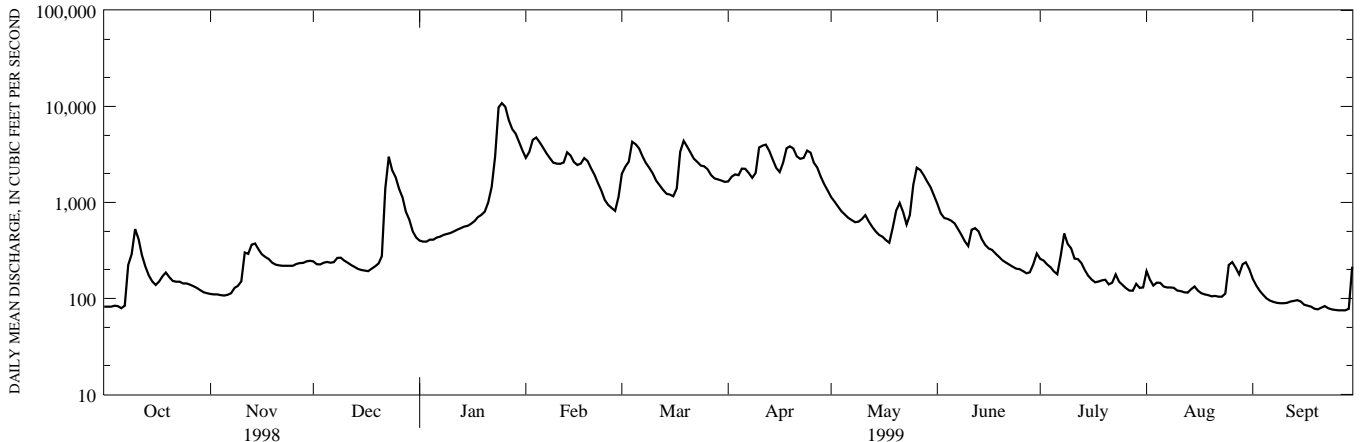
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	695	1506	2238	2590	2713	3915	3147	1684	953	555	408	440
MAX (WY)	1946	1971	1951	1937	1938	1964	1947	1956	1947	1967	1956	1958
MIN (WY)	1964	1954	1961	1961	1934	1937	1946	1934	1934	1934	1954	1954

SUMMARY STATISTICS WATER YEARS 1933 - 1973

ANNUAL MEAN	1751	1956
HIGHEST ANNUAL MEAN	2539	1956
LOWEST ANNUAL MEAN	1146	1934
HIGHEST DAILY MEAN	23000	Mar 6 1964
LOWEST DAILY MEAN	45	Sep 1 1933
ANNUAL SEVEN-DAY MINIMUM	48	Aug 27 1933
INSTANTANEOUS PEAK FLOW	a23800	Mar 7 1964
INSTANTANEOUS PEAK STAGE	b13.2	Mar 7 1964
INSTANTANEOUS LOW FLOW	43	Jul 30 1934
ANNUAL RUNOFF (CFSM)	1.70	
ANNUAL RUNOFF (INCHES)	23.15	
10 PERCENT EXCEEDS	4370	
50 PERCENT EXCEEDS	940	
90 PERCENT EXCEEDS	147	

a From rating curve extended above 20,700 ft³/s.
 b From floodmark in gage well.



1-YEAR HYDROGRAPH
 OCTOBER 1, 1998 TO SEPTEMBER 30, 1999