

**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 downstream side of bridge on SR 3017 at Utica and 2,000 ft upstream from Mill Creek.

**DRAINAGE AREA.**--1,028 mi<sup>2</sup>.

**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 National Geodetic Vertical Datum of 1929. 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 July 1970 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 about 36,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e504	e1460	4160	1660	6950	2020	4480	3550	1990	418	1430	120
2	e487	e1250	3570	1450	8290	1900	3790	3610	1650	378	776	117
3	e469	e1170	3040	1310	8290	2380	5240	3390	1350	344	512	115
4	e417	e1220	2470	1230	6820	3120	6200	2970	1130	315	409	117
5	e391	e1120	1900	1190	4900	2700	5270	2550	1040	285	360	114
6	e435	e1040	1540	1110	3950	2300	4360	2160	2390	262	318	105
7	e461	e955	1290	1090	3480	2310	3660	1870	2750	242	274	104
8	e600	e891	1090	1110	3170	2330	3200	1680	2400	229	236	100
9	e608	e859	982	1080	2940	2220	3150	1740	2030	232	216	98
10	e574	e891	903	1080	2900	2290	3710	1960	1790	289	198	94
11	e530	e912	838	1190	3420	2430	3550	1970	1580	274	181	90
12	e496	e848	756	1350	3600	2310	3060	3170	1360	259	171	84
13	e498	e805	735	1440	3190	2240	3120	8240	1160	249	170	80
14	e507	e783	e948	1420	2770	2180	5060	11400	1160	228	166	93
15	e517	e762	e1840	1420	2550	2070	6530	11800	1170	209	176	133
16	e609	e740	e2300	1540	2500	2340	8470	10100	1500	193	179	238
17	e720	e708	e3120	1600	2590	2580	5800	7950	1800	184	193	290
18	e1120	e698	4850	1530	2500	2350	4660	7270	1510	184	230	417
19	e1070	e708	5140	1350	2260	2130	3780	6360	1200	174	226	319
20	e850	e945	4360	1190	2210	2150	3450	5190	930	166	214	246
21	e757	e1550	3860	1270	2940	2820	3280	4000	753	153	181	214
22	e998	e1340	3160	1340	3490	2960	3050	3310	661	145	181	186
23	e1290	e1150	3150	1300	3240	2620	2870	2900	607	163	222	170
24	e1280	e984	4780	1920	2790	2500	2640	2640	605	165	217	151
25	e1370	e1290	4680	3420	2420	2640	2370	2460	519	164	190	138
26	e1430	e2180	3700	3390	2270	2890	2180	2810	475	166	170	128
27	e1690	e1980	2930	3000	2300	4460	1970	3430	476	156	164	164
28	e2420	e1710	2500	2630	2240	4640	2140	2880	563	154	154	352
29	e2330	e2130	2310	2500	---	4240	3480	2420	562	1610	146	750
30	e2040	e3330	2060	3280	---	4860	3920	2250	475	3780	138	747
31	e1710	---	1820	5150	---	5200	---	2180	---	2470	128	---
TOTAL	29178	36409	80782	55540	100970	86180	118440	130210	37586	14240	8526	6074
MEAN	941	1214	2606	1792	3606	2780	3948	4200	1253	459	275	202
MAX	2420	3330	5140	5150	8290	5200	8470	11800	2750	3780	1430	750
MIN	391	698	735	1080	2210	1900	1970	1680	475	145	128	80
CFM	0.92	1.18	2.53	1.74	3.51	2.70	3.84	4.09	1.22	0.45	0.27	0.20
IN.	1.06	1.32	2.92	2.01	3.65	3.12	4.29	4.71	1.36	0.52	0.31	0.22

e Estimated.

FRENCH CREEK BASIN

03024000 FRENCH CREEK AT UTICA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1261	2255	2744	2520	2945	3542	3085	1758	1240	778	695	877
MAX	3954	6309	6029	5426	6394	5778	5101	4200	4659	2629	3297	3408
(WY)	1991	1986	1978	1993	1976	1977	1994	2002	1986	1987	1980	1990
MIN	121	176	583	869	629	1622	1655	452	209	192	112	71.7
(WY)	1992	1992	1999	1977	1987	2000	1976	1985	1991	1995	1991	1995

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1974 - 2002

ANNUAL TOTAL		490796		704135								
ANNUAL MEAN		1345		1929					1969			
HIGHEST ANNUAL MEAN									2459			1997
LOWEST ANNUAL MEAN									1044			1999
HIGHEST DAILY MEAN				8870	Feb 11		11800	May 15	18100	Feb 21	1981	
LOWEST DAILY MEAN				e105	Sep 18,19		80	Sep 13	60	Sep 15	1991	
ANNUAL SEVEN-DAY MINIMUM				a109	Sep 15		91	Sep 8	67	Sep 7	1995	
MAXIMUM PEAK FLOW							12200	May 15	18400	Feb 21	1981	
MAXIMUM PEAK STAGE							9.42	May 15	11.64	Feb 21	1981	
ANNUAL RUNOFF (CFSM)				1.31			1.88		1.92			
ANNUAL RUNOFF (INCHES)				17.76			25.48		26.02			
10 PERCENT EXCEEDS				3120			3970		4470			
50 PERCENT EXCEEDS				920			1440		1310			
90 PERCENT EXCEEDS				140			170		231			

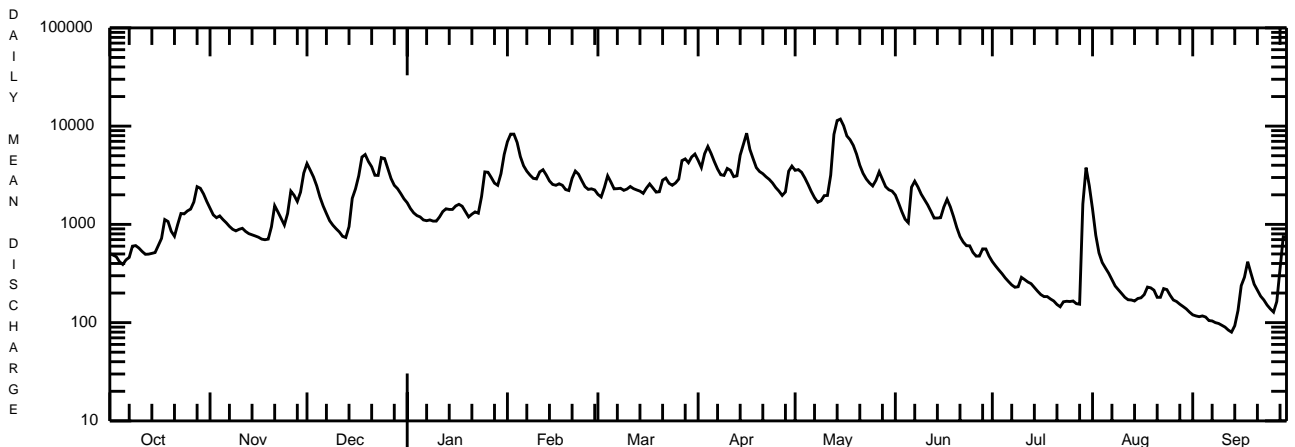
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	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	3744	3983	4471	7284	5894	7359	6688	4160	3717	2015	1907	2148
(WY)	1946	1971	1951	1937	1938	1964	1947	1956	1947	1967	1956	1958
MIN	69.5	183	227	403	523	1768	575	349	124	77.1	77.8	80.4
(WY)	1964	1954	1961	1961	1934	1937	1946	1934	1934	1934	1954	1954

SUMMARY STATISTICS WATER YEARS 1933 - 1973

ANNUAL MEAN	1751	
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
MAXIMUM PEAK FLOW	b23800	Mar 7 1964
MAXIMUM PEAK STAGE	c13.2	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 Computed using estimated daily discharges.
- b From rating curve extended above 20,700 ft<sup>3</sup>/s.
- c From floodmark in gage well.
- e Estimated.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002