

SWATARA CREEK BASIN

01573560 SWATARA CREEK NEAR HERSHEY, PA

LOCATION.--Lat 40°17'54", long 76°40'05", Dauphin County, Hydrologic Unit 02050305, on left bank, 0.4 mi downstream from Manada Creek, 0.5 mi upstream from State Highway 39, and 1.5 mi northwest of Hershey.

DRAINAGE AREA.--483 mi².

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder and gated concrete control. Datum of gage is 325.94 ft above sea level (levels by Susquehanna River Basin Commission).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No diversion by Hershey Chocolate U.S.A. Satellite and landline telemetry at station.

COOPERATION.--Records of daily diversion furnished by Hershey Chocolate U.S.A., a division of Hershey Foods Corporation.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 6,900 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 22	2215	*11,000	*8.00	June 26	1930	7,840	6.52

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2410	240	424	389	e280	1880	1450	519	556	959	402	349
2	1260	250	388	375	e290	1550	1290	531	542	780	1330	508
3	876	468	360	380	e280	1310	1190	511	501	675	830	363
4	797	439	347	410	e275	1110	1520	477	442	658	1640	286
5	1160	310	338	459	e260	950	1640	462	424	607	808	233
6	872	284	384	398	e240	826	1230	473	734	555	567	199
7	652	253	446	342	e240	720	1090	469	1020	457	601	180
8	546	255	370	324	e220	657	1040	431	585	404	468	164
9	474	247	326	311	e210	619	2200	406	455	386	378	153
10	1220	250	328	528	e200	593	1880	403	382	380	333	174
11	1730	258	389	1570	e200	692	1520	452	366	372	287	161
12	1020	249	358	1040	e190	2490	1390	475	354	334	268	158
13	787	239	326	807	e220	1720	1190	428	586	324	273	323
14	833	236	1060	646	e570	1300	1060	736	828	326	265	434
15	674	247	2950	520	1480	1110	971	592	841	441	237	524
16	542	230	1990	e510	1270	983	924	433	750	828	267	391
17	494	228	1460	e330	1290	1780	956	389	652	510	292	276
18	477	228	1110	e260	1080	1590	1100	387	577	367	241	230
19	428	224	943	e370	961	1260	930	502	661	333	227	390
20	421	224	841	e415	866	1110	794	851	600	328	225	1210
21	427	233	997	e335	798	2340	827	937	542	324	197	673
22	386	240	811	e330	738	9760	1140	709	1420	370	182	453
23	359	224	655	e330	885	6910	945	1020	919	304	183	366
24	347	227	595	e345	1200	3420	838	1630	659	262	221	338
25	320	324	497	e310	1520	2560	775	2120	662	255	212	316
26	293	421	485	e330	1980	2310	706	1510	5910	251	189	527
27	287	1070	543	e300	1790	1790	688	1110	e3210	257	184	459
28	270	981	462	e260	3130	3830	708	960	1620	260	196	371
29	257	643	446	e260	2560	2720	653	830	1280	230	219	316
30	247	512	397	e225	---	2060	605	671	1450	242	182	284
31	245	---	391	e250	---	1680	---	594	---	502	183	---
TOTAL	21111	10234	21417	13659	25223	63630	33250	22018	29528	13281	12087	10809
MEAN	681	341	691	441	870	2053	1108	710	984	428	390	360
MAX	2410	1070	2950	1570	3130	9760	2200	2120	5910	959	1640	1210
MIN	245	224	326	225	190	593	605	387	354	230	182	153
CFSM	1.41	.71	1.43	.91	1.80	4.25	2.29	1.47	2.04	.89	.81	.75
IN.	1.63	.79	1.65	1.05	1.94	4.90	2.56	1.70	2.27	1.02	.93	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2000, BY WATER YEAR (WY)

MEAN	577	737	962	1004	999	1435	1223	900	603	434	308	337
MAX	2632	1427	2693	3370	1963	3848	3207	2708	1959	1536	1036	1320
(WY)	1977	1993	1997	1979	1998	1994	1993	1989	1982	1989	1978	1987
MIN	85.3	152	111	79.9	226	459	420	295	158	78.9	89.4	73.0
(WY)	1981	1982	1981	1981	1980	1985	1995	1999	1999	1999	1999	1980

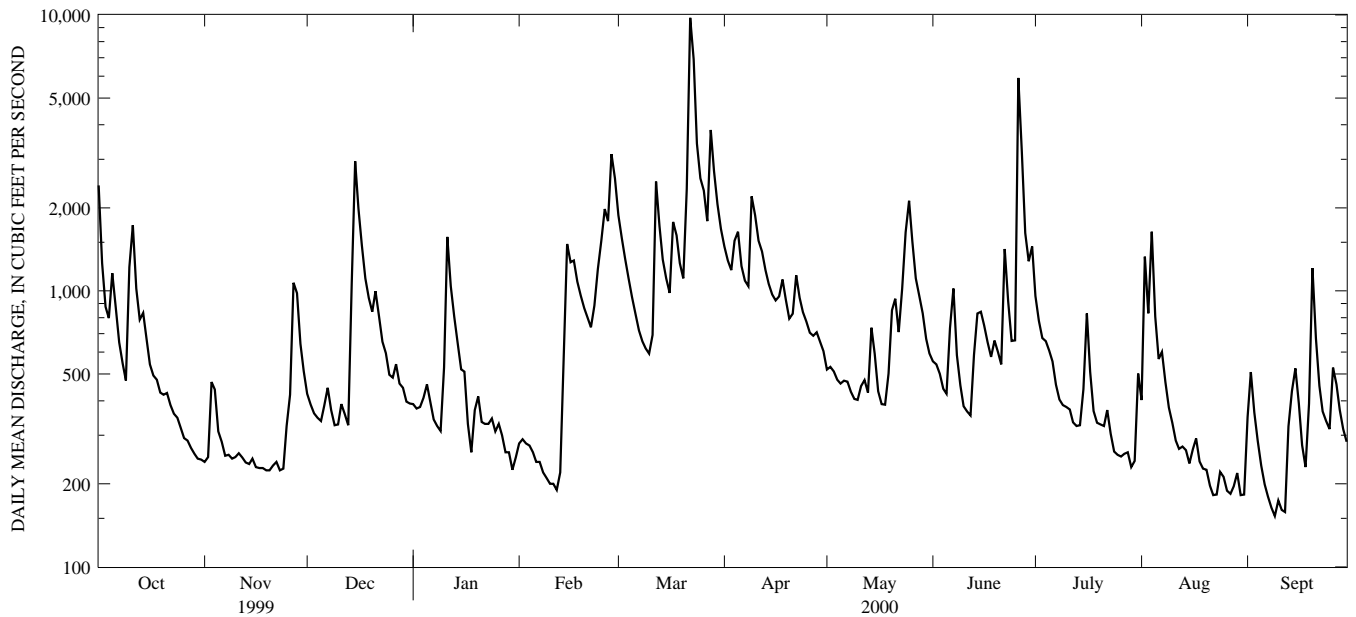
e Estimated.

SWATARA CREEK BASIN

01573560 SWATARA CREEK NEAR HERSHEY, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1976 - 2000	
ANNUAL TOTAL	212162			276247				
ANNUAL MEAN	581			755			793	
HIGHEST ANNUAL MEAN							1225	
LOWEST ANNUAL MEAN							380	
HIGHEST DAILY MEAN	e6300	Jan 24		9760	Mar 22		23800	Jan 25 1979
LOWEST DAILY MEAN	49	Aug 7		153	Sep 9		49	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	55	Aug 6		170	Sep 6		55	Aug 6 1999
INSTANTANEOUS PEAK FLOW				11000	Mar 22		a29400	Sep 27 1975
INSTANTANEOUS PEAK STAGE				8.00	Mar 22		15.36	Sep 27 1975
INSTANTANEOUS LOW FLOW				145	Sep 9		59	Sep 21 1985
ANNUAL RUNOFF (CFSM)	1.20			1.56			1.64	
ANNUAL RUNOFF (INCHES)	16.34			21.28			22.30	
10 PERCENT EXCEEDS	1170			1520			1750	
50 PERCENT EXCEEDS	366			474			442	
90 PERCENT EXCEEDS	75			232			135	

a From rating curve extended above 12,200 ft³/s.
 e Estimated.



1-YEAR HYDROGRAPH
 OCTOBER 1, 1999 TO SEPTEMBER 30, 2000