

## 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 mi<sup>2</sup>.

**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 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Dec. 18	0615	*9,560	*a7.32	No other peak greater than base discharge.			

a From outside high-water mark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	179	356	e430	1270	613	1750	571	303	250	142	100
2	250	170	307	e380	1230	609	1460	502	439	334	131	104
3	239	171	276	e340	1080	589	1250	475	507	306	135	95
4	225	175	218	e320	890	584	1160	457	478	264	174	78
5	379	180	242	e300	830	656	999	426	370	361	130	75
6	389	154	226	e300	806	610	983	412	318	421	118	67
7	312	160	234	e310	830	569	1370	377	297	337	101	82
8	273	161	245	e300	851	743	1190	355	276	277	80	78
9	236	163	228	e290	737	827	1160	344	266	350	75	63
10	215	220	178	e250	973	794	1260	347	235	291	78	78
11	211	342	225	e240	1110	737	1260	335	223	314	155	95
12	204	258	215	e230	887	701	1540	320	222	247	125	79
13	198	200	188	e220	800	1440	1330	310	241	229	103	73
14	192	190	322	e220	774	1570	1180	287	296	212	96	80
15	204	196	595	e230	837	1300	1060	279	246	192	89	94
16	177	194	562	e240	829	1180	1570	271	317	170	84	82
17	188	182	6350	e250	985	1310	1610	258	449	172	81	77
18	264	181	7440	e260	812	1250	1620	267	418	171	89	76
19	367	157	2700	e430	693	1030	1390	274	292	159	79	71
20	316	170	1910	1130	668	927	1220	274	252	146	87	75
21	245	167	1390	841	683	960	1130	278	347	141	93	98
22	239	164	1150	595	588	1320	1040	524	502	136	79	102
23	210	151	e980	491	559	1080	936	652	682	132	74	92
24	200	156	e930	473	559	940	857	469	598	129	80	108
25	197	151	e830	496	582	845	774	350	446	119	82	677
26	193	251	e720	423	847	780	725	354	368	146	70	450
27	179	547	e670	415	790	712	660	378	318	235	68	187
28	174	392	e600	381	677	658	649	454	296	160	79	132
29	200	305	e520	341	---	622	614	475	262	149	74	118
30	170	339	e510	639	---	2560	575	412	250	135	70	102
31	159	---	e460	1410	---	2450	---	326	---	137	71	---
TOTAL	7272	6426	31777	13175	23177	30966	34322	11813	10514	6822	2992	3688
MEAN	235	214	1025	425	828	999	1144	381	350	220	96.5	123
MAX	389	547	7440	1410	1270	2560	1750	652	682	421	174	677
MIN	159	151	178	220	559	569	575	258	222	119	68	63
CFSM	.49	.44	2.12	.88	1.71	2.07	2.37	.79	.73	.46	.20	.25
IN.	.56	.49	2.45	1.01	1.79	2.38	2.64	.91	.81	.53	.23	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

MEAN	564	717	965	981	992	1419	1220	880	594	426	300	329
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1976 - 2001	
ANNUAL TOTAL	268960		182944			
ANNUAL MEAN	735		501		781	
HIGHEST ANNUAL MEAN					1225	1978
LOWEST ANNUAL MEAN					380	1981
HIGHEST DAILY MEAN	9760	Mar 22	7440	Dec 18	23800	Jan 25 1979
LOWEST DAILY MEAN	151	Nov 23	63	Sep 9	49	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	159	Nov 19	73	Aug 25	55	Aug 6 1999
MAXIMUM PEAK FLOW			9560	Dec 18	29400	Sep 27 1975
MAXIMUM PEAK STAGE			a7.32	Dec 18	15.36	Sep 27 1975
INSTANTANEOUS LOW FLOW			56	Sep 10	56	Sep 10 2001
ANNUAL RUNOFF (CFSM)	1.52		1.04		1.62	
ANNUAL RUNOFF (INCHES)	20.71		14.09		21.98	
10 PERCENT EXCEEDS	1520		1130		1730	
50 PERCENT EXCEEDS	420		306		437	
90 PERCENT EXCEEDS	188		94		133	

a From outside high-water mark.

