

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 National Geodetic Vertical Datum of 1929 (levels by Susquehanna River Basin Commission).

REMARKS.--No estimated daily discharges. Records fair. The Pennsylvania American Water Company diverts water upstream from station for municipal supply of city of Lebanon. Diversion for the year was equivalent to a mean daily discharge of 10.0 ft³/s. 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)
May 18	2215	*3,480	*4.07	(No peaks above base discharge.)			

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	91	83	166	117	358	121	989	958	379	237	77	106
2	86	86	198	93	376	138	831	1230	340	205	66	123
3	81	86	150	104	328	521	685	1820	300	186	79	129
4	81	73	145	100	302	623	629	1190	264	178	75	129
5	80	80	115	91	257	395	549	969	313	158	53	107
6	84	77	116	95	238	342	509	820	386	154	29	80
7	92	75	127	102	272	318	477	717	612	156	47	61
8	76	89	105	112	238	269	440	681	444	126	76	52
9	79	76	212	134	223	269	431	760	339	128	61	54
10	79	95	265	143	206	308	510	836	274	166	53	36
11	77	82	196	195	228	358	491	627	260	151	50	49
12	83	79	169	312	302	297	396	565	242	132	50	66
13	79	82	148	358	248	295	384	892	241	119	49	66
14	82	79	190	273	215	310	435	1240	306	103	53	47
15	108	86	301	248	203	272	1930	978	384	107	70	57
16	143	78	269	226	197	264	1590	765	340	100	106	72
17	135	87	214	223	198	261	1120	643	274	96	113	147
18	105	84	322	195	190	415	921	1950	260	82	119	162
19	100	81	430	153	165	703	899	2280	319	73	70	108
20	93	93	335	121	156	1090	815	1420	354	83	38	91
21	78	88	262	192	175	1950	722	1150	264	83	47	33
22	77	89	235	215	173	1260	795	978	221	60	55	38
23	83	98	199	186	167	938	733	833	205	78	86	204
24	81	89	210	362	157	768	584	722	179	122	114	168
25	78	111	212	794	149	656	530	646	219	145	97	103
26	77	381	185	593	147	742	545	588	172	113	116	74
27	85	306	141	464	151	2750	485	559	214	101	127	384
28	78	173	131	396	148	1800	674	499	869	96	95	893
29	73	139	150	359	---	1280	1490	455	401	138	140	493
30	73	136	99	334	---	1040	1030	426	282	119	160	266
31	76	---	92	346	---	900	---	394	---	96	164	---
TOTAL	2693	3261	6089	7636	6167	21653	22619	28591	9657	3891	2535	4398
MEAN	86.9	109	196	246	220	698	754	922	322	126	81.8	147
MAX	143	381	430	794	376	2750	1930	2280	869	237	164	893
MIN	73	73	92	91	147	121	384	394	172	60	29	33
CFSM	0.18	0.23	0.41	0.51	0.46	1.45	1.56	1.91	0.67	0.26	0.17	0.30
IN.	0.21	0.25	0.47	0.59	0.47	1.67	1.74	2.20	0.74	0.30	0.20	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

MEAN	546	695	936	954	964	1392	1203	882	583	414	292	322
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	109	111	79.9	220	459	420	295	158	78.9	81.8	73.0
(WY)	1981	2002	1981	1981	2002	1985	1995	1999	1999	1999	2002	1980

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR			FOR 2002 WATER YEAR			WATER YEARS 1976 - 2002		
ANNUAL TOTAL	149512			119190					
ANNUAL MEAN	410			327			765		
HIGHEST ANNUAL MEAN							1225		
LOWEST ANNUAL MEAN							327		
HIGHEST DAILY MEAN	2560	Mar 30		2750	Mar 27		23800	Jan 25	1979
LOWEST DAILY MEAN	63	Sep 9		29	Aug 6		29	Aug 6	2002
ANNUAL SEVEN-DAY MINIMUM	73	Aug 25		52	Aug 6		52	Aug 6	2002
MAXIMUM PEAK FLOW				3480	May 18		29400	Sep 27	1975
MAXIMUM PEAK STAGE				4.07	May 18		15.36	Sep 27	1975
INSTANTANEOUS LOW FLOW				24	Aug 5 ^a		24	Aug 5	2002 ^a
ANNUAL RUNOFF (CFSM)	0.85			0.68			1.58		
ANNUAL RUNOFF (INCHES)	11.52			9.18			21.51		
10 PERCENT EXCEEDS	1030			817			1680		
50 PERCENT EXCEEDS	264			179			424		
90 PERCENT EXCEEDS	79			76			127		

^a Also Aug. 6, Sept. 10, 14, 15, 21.

