

SWATARA CREEK BASIN

01572025 SWATARA CREEK NEAR PINE GROVE, PA

LOCATION.--Lat 40°31'57", long 76°24'09", Schuylkill County, Hydrologic Unit 02050305, on right bank 1.0 mi downstream from Lower Little Swatara Creek, 1.3 mi southwest of Pine Grove, and 1.6 mi upstream from bridge on Interstate Highway 81.

DRAINAGE AREA.--116 mi².

PERIOD OF RECORD.--October 1988 to January 1991, October 1991 to current year.

REVISED RECORDS.--WDR PA-90-2: 1989.

GAGE.--Water-stage recorder. Datum of gage is 480.66 ft above North American Vertical Datum of 1988.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 20	2330	3,090	10.64	Aug. 4	1315	1,600	8.04
June 7	1715	1,730	8.30	Aug. 11	1700	1,870	8.57
June 13	0515	3,070	10.60	Sept. 23	0800	2,430	9.57
June 21	0715	*3,550	*11.32				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	263	171	528	124	175	479	188	1130	227	116	114
2	43	221	157	1150	127	272	446	215	797	205	128	153
3	43	190	145	778	125	e265	390	213	618	190	113	376
4	50	171	e120	608	252	260	350	183	993	173	658	364
5	60	151	e122	487	e170	240	354	172	825	158	652	214
6	46	241	e125	422	e130	471	314	169	623	148	936	168
7	39	188	e105	375	e135	331	294	170	997	167	572	144
8	35	148	e115	357	e110	273	290	215	1050	174	443	129
9	34	132	e105	396	e105	371	317	183	752	140	484	120
10	40	136	e110	423	e107	e290	346	171	577	137	529	110
11	410	138	292	364	e80	263	741	169	483	156	902	104
12	505	193	837	309	e62	241	965	160	733	129	859	99
13	274	270	621	279	e65	425	681	150	1880	112	573	107
14	196	218	1210	252	e69	563	534	141	792	104	426	143
15	156	195	977	234	e63	500	453	134	549	99	319	133
16	376	219	679	211	e60	591	399	134	431	94	287	366
17	416	516	502	e190	e68	783	350	144	362	89	273	192
18	267	646	400	e170	e75	929	317	136	473	86	220	155
19	208	463	353	e160	e90	844	301	128	367	91	192	273
20	177	379	719	e160	e85	1250	272	119	669	81	172	243
21	150	324	629	e150	e110	2190	260	131	2760	83	160	194
22	130	365	508	e145	e210	1240	265	123	1420	170	150	175
23	118	347	427	e140	e400	884	238	117	964	340	150	1550
24	101	294	365	e130	e350	691	217	259	697	711	129	883
25	85	267	366	e135	e250	572	204	259	544	268	120	590
26	286	239	334	139	e170	528	281	617	444	179	116	464
27	212	235	290	e125	198	499	267	531	372	145	117	380
28	177	210	268	e112	186	410	208	425	318	141	108	412
29	161	193	253	e115	---	452	201	400	279	119	101	309
30	239	186	239	e118	---	536	197	318	252	103	123	240
31	304	---	239	122	---	524	---	352	---	94	115	---
TOTAL	5388	7738	11783	9284	3976	17863	10931	6826	23151	5113	10243	8904
MEAN	174	258	380	299	142	576	364	220	772	165	330	297
MAX	505	646	1210	1150	400	2190	965	617	2760	711	936	1550
MIN	34	132	105	112	60	175	197	117	252	81	101	99
CFSM	1.50	2.22	3.28	2.58	1.22	4.97	3.14	1.90	6.65	1.42	2.85	2.56
IN.	1.73	2.48	3.78	2.98	1.28	5.73	3.51	2.19	7.42	1.64	3.28	2.86

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF DAILY RECORD, BY WATER YEAR (WY)

	125	198	249	267	232	396	327	258	218	117	89.2	90.8
MEAN	125	198	249	267	232	396	327	258	218	117	89.2	90.8
MAX	361	396	745	683	555	846	874	756	772	378	330	297
(WY)	1997	1993	1997	1996	1998	1994	1993	1989	2003	1989	2003	2003
MIN	27.3	32.1	27.4	70.4	82.8	185	135	91.9	46.6	23.1	19.7	26.1
(WY)	2002	2002	1999	2002	2002	1990	1995	1999	1999	1999	2002	1995

e Estimated.

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01572025 SWATARA CREEK NEAR PINE GROVE, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	59043		121200			
ANNUAL MEAN	162		332		211	
HIGHEST ANNUAL MEAN					332	2003
LOWEST ANNUAL MEAN					104	2002
HIGHEST DAILY MEAN	1210	Dec 14	2760	Jun 21	4130	Nov 28 1993
LOWEST DAILY MEAN	14	Sep 11,14	34	Oct 9	14	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	15	Sep 8	43	Oct 4	15	Sep 8 2002
MAXIMUM PEAK FLOW			a3550	Jun 21	a5880	Nov 28 1993
MAXIMUM PEAK STAGE			11.32	Jun 21	14.17	Nov 28 1993
INSTANTANEOUS LOW FLOW			31	Oct 10	13	Sep 10 2002 ^b
ANNUAL RUNOFF (CFSM)	1.39		2.86		1.82	
ANNUAL RUNOFF (INCHES)	18.93		38.87		24.68	
10 PERCENT EXCEEDS	364		685		440	
50 PERCENT EXCEEDS	108		239		127	
90 PERCENT EXCEEDS	21		105		34	

^a From rating curve extended above 3,300 ft³/s on basis of step-backwater analysis.

^b Also Sept. 12, 14, 2002.

