



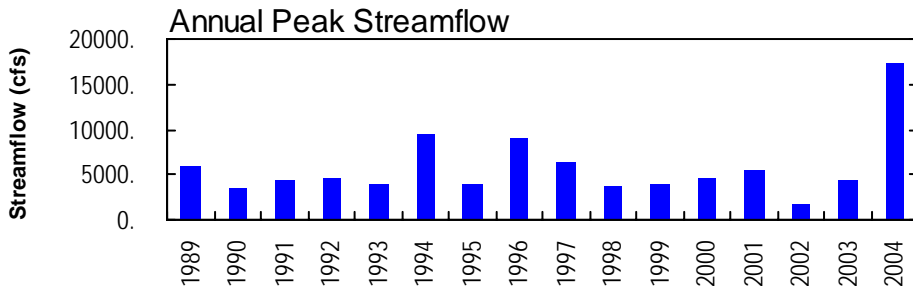
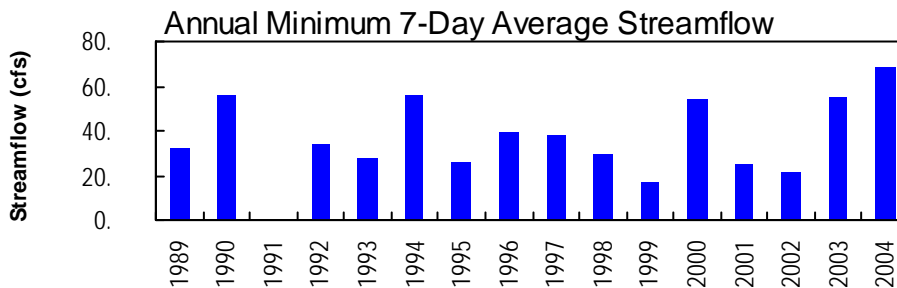
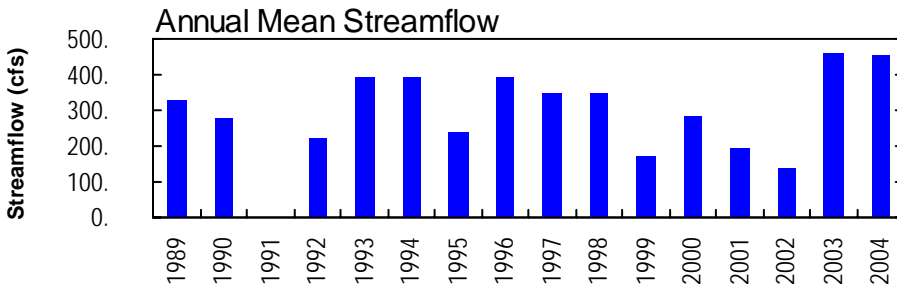
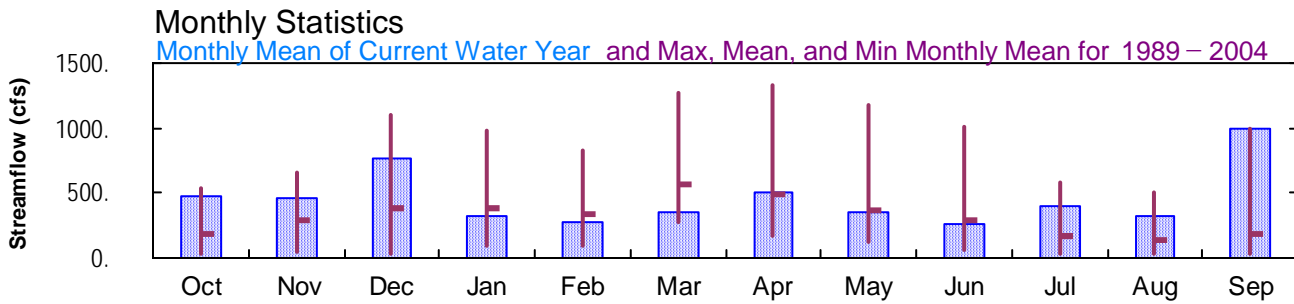
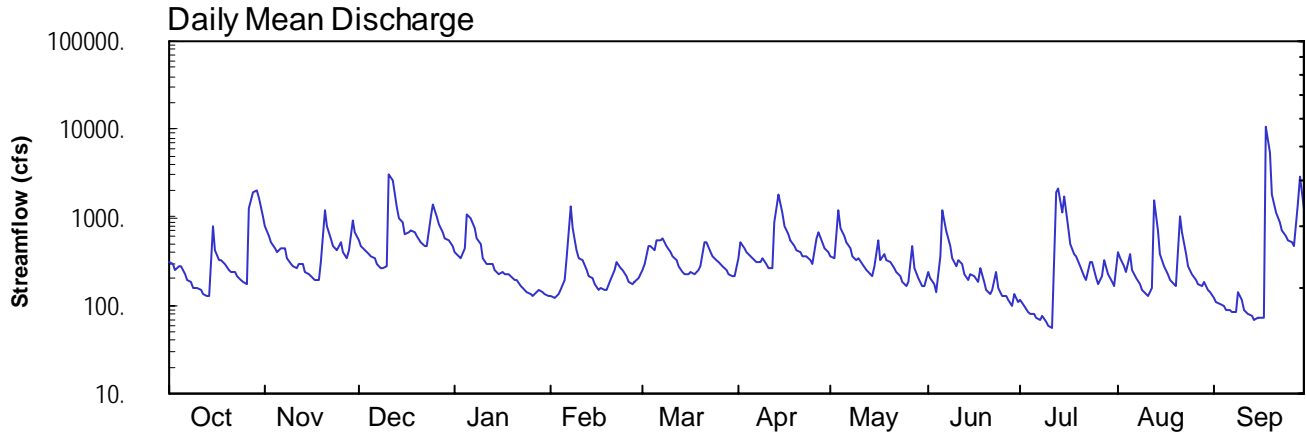
2004 Water Year SWATARA CREEK BASIN

01572190 Swatara Creek near Inwood, PA

Latitude: 40° 28 ' 45"
Lebanon County

Longitude: 076° 31 ' 52"
Datum: 426.13 feet

Hydrologic Unit Code: 02050305
Drainage Area: 167. mi²



01572190-Swatara Creek near Inwood

SWATARA CREEK BASIN

01572190 SWATARA CREEK NEAR INWOOD, PA

LOCATION.--Lat 40°28'45", long 76°31'52", Lebanon County, Hydrologic Unit 02050305, on right bank 20 ft downstream from single-span steel-truss bridge on Appalachian Trail, 0.4 mi upstream from steel-truss bridge at Inwood, 0.5 mi downstream from Trout Run, and 2.0 mi north of Lickdale.

DRAINAGE AREA.--167 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 426.13 ft above North American Vertical Datum of 1988.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 10.2 ft³/s. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Oct. 27	2145	2,900	9.04	July 12	2115	4,620	11.44
Oct. 29	1515	2,650	8.63	July 15	0030	2,440	8.38
Dec. 11	2015	4,780	11.63	Sept. 18	1615	*17,300	*19.67
Apr. 14	0400	2,120	7.73	Sept. 29	0145	4,310	11.05

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	791	562	407	127	249	340	356	233	115	395	125
2	293	624	474	366	124	296	529	349	208	97	338	111
3	251	512	429	350	137	470	441	1170	172	86	276	103
4	273	436	384	441	e150	460	396	760	144	79	233	97
5	274	408	365	1070	197	433	356	609	359	80	385	90
6	224	454	e350	981	350	549	321	514	1170	73	251	89
7	198	436	e300	739	1310	544	304	442	708	68	201	85
8	185	340	e270	588	751	566	303	372	467	77	171	84
9	159	294	267	508	426	479	351	331	348	66	147	142
10	156	274	281	e350	341	400	292	338	286	59	134	117
11	146	268	3080	e300	324	355	263	291	324	57	125	89
12	137	300	2650	e300	248	324	270	256	294	1900	157	79
13	131	297	1320	e300	213	276	872	236	225	2120	1530	75
14	128	243	986	e250	202	243	1790	213	198	1120	696	69
15	790	224	856	e230	178	233	1130	286	226	1700	390	72
16	423	209	e630	e240	147	232	803	559	213	790	286	70
17	321	198	e680	e230	159	238	647	318	188	494	230	74
18	324	189	729	e225	148	226	544	375	263	391	198	10500
19	289	315	687	e210	146	255	471	327	186	358	178	5490
20	258	1220	607	e195	189	277	420	314	152	276	165	1840
21	243	799	511	e190	254	516	395	268	133	221	1010	1150
22	233	592	459	e165	312	509	368	244	146	194	691	868
23	215	474	458	e155	265	410	362	212	238	313	391	709
24	195	422	1030	e145	249	358	329	183	154	311	285	619
25	181	517	1420	e135	216	332	291	166	126	207	232	561
26	175	398	1050	e130	185	305	587	185	129	177	198	513
27	1290	345	820	144	175	281	690	464	114	215	175	470
28	1930	413	669	150	180	256	522	272	100	332	164	1430
29	2060	905	574	140	208	229	446	200	134	232	183	2910
30	1660	683	549	134	---	213	395	164	109	187	152	1250
31	1050	---	478	127	---	210	---	170	---	166	140	---
TOTAL	14509	13580	23925	9895	7911	10724	15228	10944	7747	12561	10107	29881
MEAN	468	453	772	319	273	346	508	353	258	405	326	996
MAX	2060	1220	3080	1070	1310	566	1790	1170	1170	2120	1530	10500
MIN	128	189	267	127	124	210	263	164	100	57	125	69
CFSM	2.80	2.71	4.62	1.91	1.63	2.07	3.04	2.11	1.55	2.43	1.95	5.96
IN.	3.23	3.03	5.33	2.20	1.76	2.39	3.39	2.44	1.73	2.80	2.25	6.66

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

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	191	291	386	383	329	566	482	371	292	175	135	181
MAX	538	662	1098	987	832	1263	1325	1184	1007	576	512	996
(WY)	1997	1993	1997	1996	1998	1994	1993	1989	2003	1989	2003	2004
MIN	35.1	40.8	35.8	94.6	96.4	271	165	123	58.3	26.2	31.5	32.7
(WY)	2002	2002	1999	2002	2002	1990	1995	1999	1999	1999	1999	1995

e Estimated.

SWATARA CREEK BASIN

01572190 SWATARA CREEK NEAR INWOOD, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	184508		167012			
ANNUAL MEAN	506		456		311	
HIGHEST ANNUAL MEAN					459	
LOWEST ANNUAL MEAN					140	
HIGHEST DAILY MEAN	3540	Mar 21	10500	Sep 18	10500	Sep 18 2004
LOWEST DAILY MEAN	85	Jul 21	57	Jul 11	17	Aug 2 1999 ^a
ANNUAL SEVEN-DAY MINIMUM	99	Jul 15	69	Jul 5	17	Aug 2 1999
MAXIMUM PEAK FLOW			^b 17300	Sep 18	^b 17300	Sep 18 2004
MAXIMUM PEAK STAGE			19.67	Sep 18	19.67	Sep 18 2004
INSTANTANEOUS LOW FLOW			56	Jul 11	17	Aug 2 1999 ^c
ANNUAL RUNOFF (CFSM)	3.03		2.73		1.86	
ANNUAL RUNOFF (INCHES)	41.10		37.20		25.30	
10 PERCENT EXCEEDS	1060		860		681	
50 PERCENT EXCEEDS	340		291		174	
90 PERCENT EXCEEDS	139		129		46	

^a Also Aug. 3-8, 12, 13.

^b Also Aug. 3-8, 12, 13, Sept. 5, 1999.