



2005 Water Year
SWATARA CREEK BASIN
01572190 Swatara Creek near Inwood, PA

Latitude: 40° 28 ' 45"

Longitude: 076° 31 ' 52"

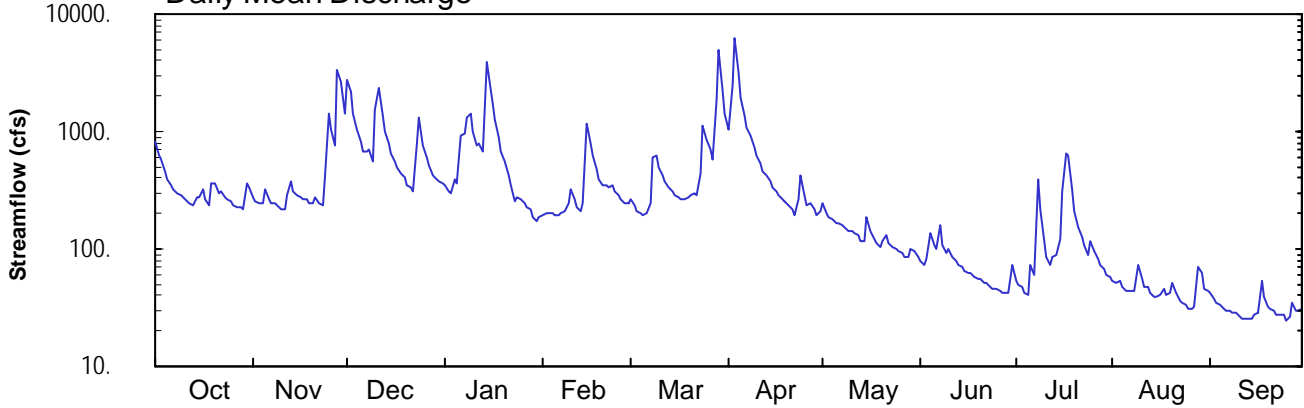
Hydrologic Unit Code: 02050305

Lebanon County

Datum: 426.13 feet

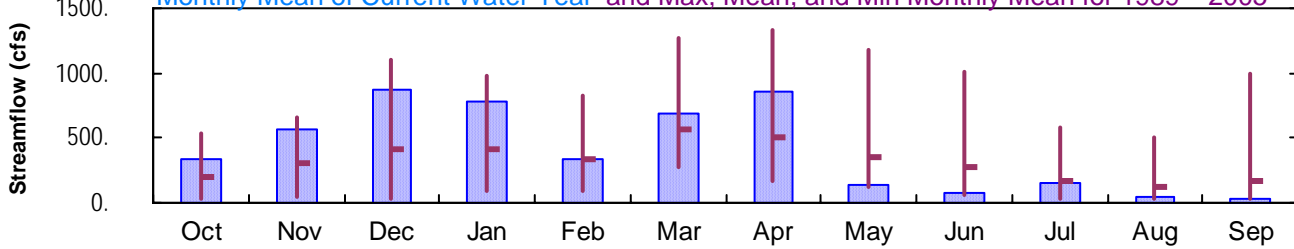
Drainage Area: 167. mi²

Daily Mean Discharge

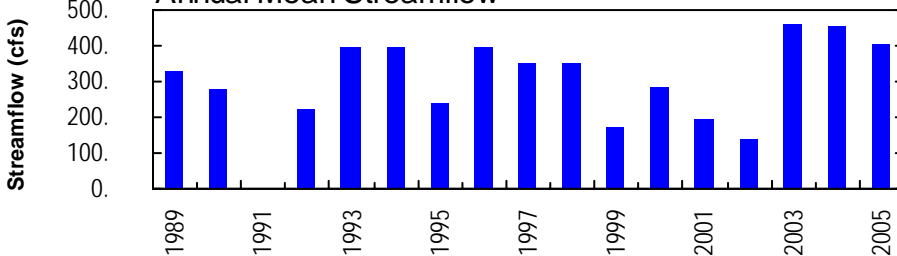


Monthly Statistics

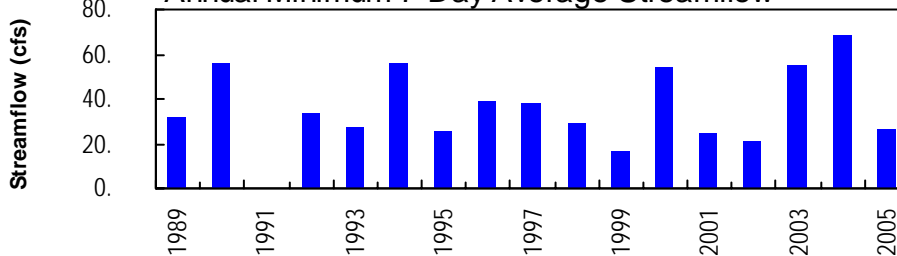
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1989 – 2005



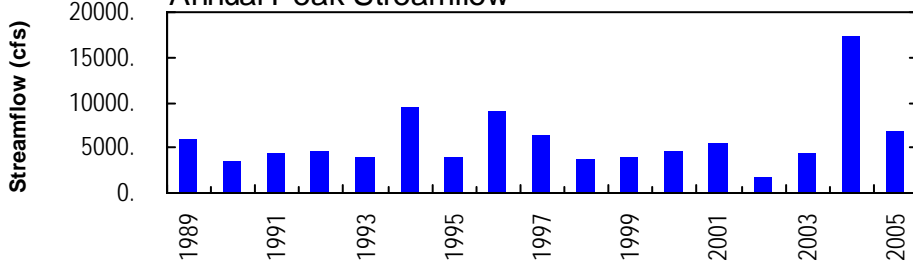
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



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 8.8 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)
Nov. 28	1815	5,670	12.68	Jan. 14	1700	5,700	12.72
Dec. 1	1600	4,220	10.94	Mar. 29	0545	6,310	13.39
Dec. 10	2345	3,070	9.45	Apr. 3	1315	*6,870	*13.97
Dec. 23	2200	2,340	8.37				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	824	280	2780	343	e195	260	1050	248	79	54	54	43
2	634	257	2210	313	e200	240	2440	204	74	50	51	38
3	575	247	1390	303	e205	213	6250	189	81	47	53	35
4	465	248	1030	385	e200	200	3220	179	137	42	48	33
5	398	321	824	360	196	196	1940	169	106	41	45	31
6	351	267	677	919	197	200	1380	164	98	75	44	30
7	325	249	678	953	201	244	1080	160	159	61	44	30
8	303	241	699	1290	212	601	922	152	110	398	44	28
9	287	226	561	1430	247	626	726	144	91	214	73	28
10	276	217	1540	989	319	486	618	139	102	115	57	28
11	259	217	2340	767	266	421	532	136	86	85	47	26
12	247	288	1360	804	228	371	464	130	80	73	47	26
13	239	383	1000	690	210	338	422	118	74	84	42	26
14	275	308	785	3910	246	309	379	118	69	89	39	25
15	271	290	641	3010	1180	282	337	184	66	121	39	28
16	325	278	556	1760	792	272	305	144	62	314	40	29
17	268	269	503	1260	630	269	287	121	62	641	45	53
18	240	260	447	e900	484	266	268	113	59	625	40	40
19	357	250	414	e675	397	274	254	105	56	323	42	33
20	359	248	354	e550	352	285	239	117	55	206	51	31
21	303	272	329	e425	351	301	220	132	52	151	42	30
22	305	247	313	e350	332	286	197	111	51	126	37	28
23	275	236	782	e260	342	442	268	103	48	108	34	27
24	261	415	1300	e275	311	1140	432	100	46	90	34	27
25	251	1420	771	e265	291	868	284	97	46	116	31	25
26	239	1030	604	e250	262	699	232	94	44	96	31	27
27	230	752	512	e230	250	588	243	87	43	82	32	35
28	223	3410	428	e220	244	1900	219	85	42	74	72	30
29	214	2650	408	e190	---	4990	196	101	43	66	63	30
30	369	1420	380	e175	---	2270	211	98	74	61	46	31
31	337	---	356	e185	---	1430	---	87	---	57	44	---
TOTAL	10285	17196	26972	24436	9340	21267	25615	4129	2195	4685	1411	931
MEAN	332	573	870	788	334	686	854	133	73.2	151	45.5	31.0
MAX	824	3410	2780	3910	1180	4990	6250	248	159	641	73	53
MIN	214	217	313	175	195	196	196	85	42	41	31	25
CFSM	1.99	3.43	5.21	4.72	2.00	4.11	5.11	0.80	0.44	0.90	0.27	0.19
IN.	2.29	3.83	6.01	5.44	2.08	4.74	5.71	0.92	0.49	1.04	0.31	0.21

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

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MEAN	199	308	415	406	329	573	506	357	279	174	129	171
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	31.0
(WY)	2002	2002	1999	2002	2002	1990	1995	1999	1999	1999	1999	2005

e Estimated.

SWATARA CREEK BASIN

01572190 SWATARA CREEK NEAR INWOOD, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		FOR PERIOD OF DAILY RECORD	
ANNUAL TOTAL	169451		148462		317	
ANNUAL MEAN	463		407		459	
HIGHEST ANNUAL MEAN					2003	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	10500	Sep 18	6250	Apr 3	10500	Sep 18 2004
LOWEST DAILY MEAN	57	Jul 11	25	Sep 14,25	17	Aug 2 1999 ^a
ANNUAL SEVEN-DAY MINIMUM	69	Jul 5	27	Sep 8	17	Aug 2 1999
MAXIMUM PEAK FLOW			6870	Apr 3	^b 17300	Sep 18 2004
MAXIMUM PEAK STAGE			13.97	Apr 3	19.67	Sep 18 2004
INSTANTANEOUS LOW FLOW			24	Sep 25,26	17	Aug 2 1999 ^c
ANNUAL RUNOFF (CFSM)	2.77		2.44		1.90	
ANNUAL RUNOFF (INCHES)	37.75		33.07		25.79	
10 PERCENT EXCEEDS	837		920		691	
50 PERCENT EXCEEDS	286		240		178	
90 PERCENT EXCEEDS	130		40		44	

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

^b From rating curve extended above 14,500 ft³/s.

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

