



2005 Water Year
SWATARA CREEK BASIN
01571820 Swatara Creek at Ravine, PA

Latitude: 40° 34 ' 50"

Longitude: 076° 24 ' 18"

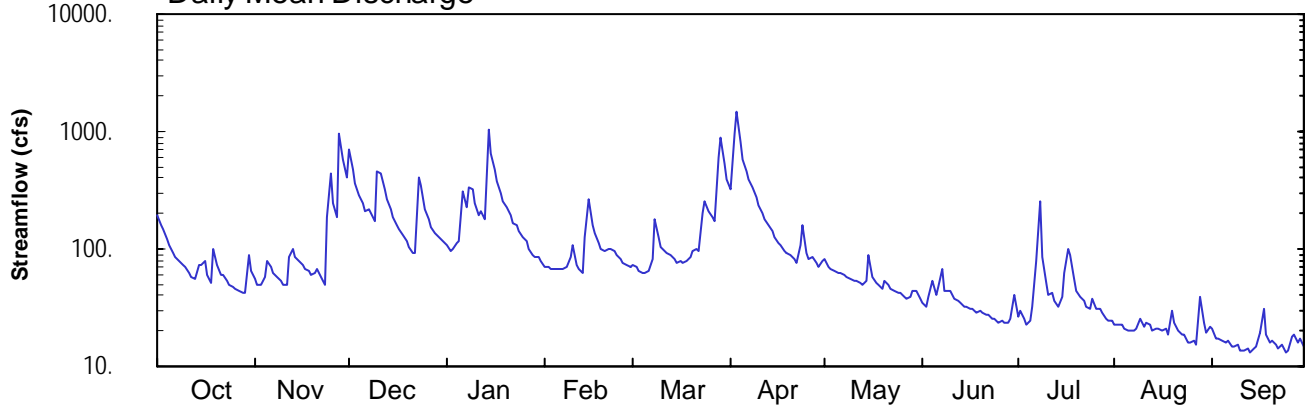
Hydrologic Unit Code: 02050305

Schuylkill County

Datum: 590 feet

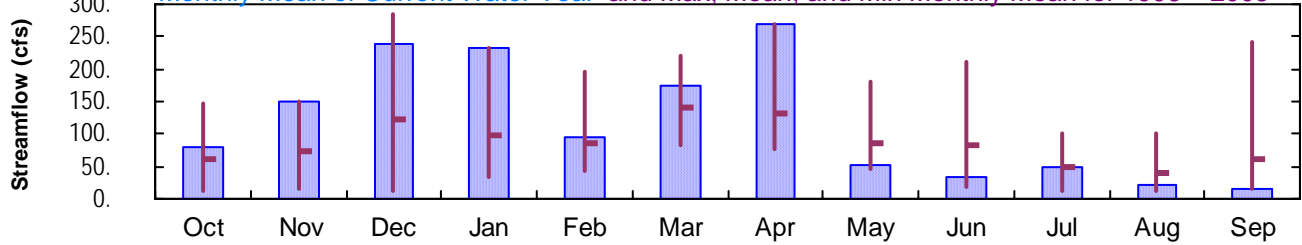
Drainage Area: 43.3 mi²

Daily Mean Discharge

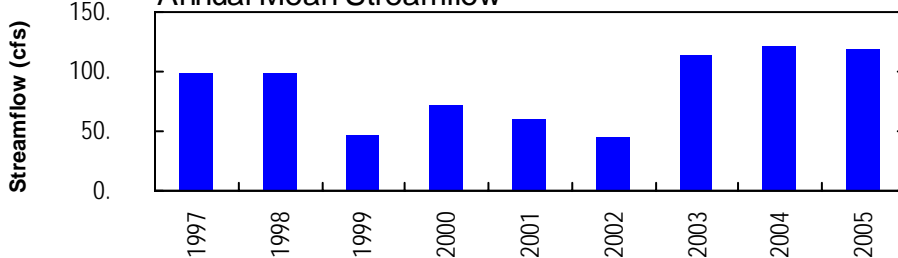


Monthly Statistics

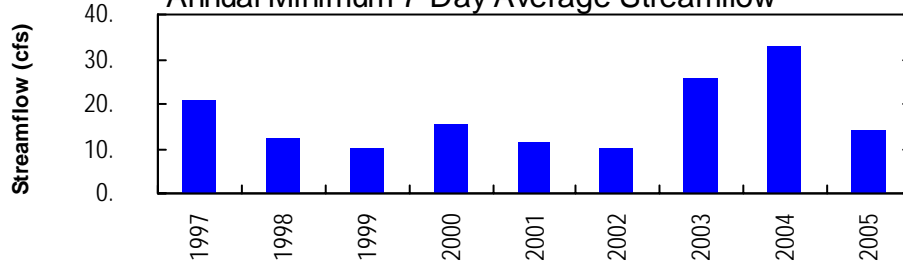
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1996 – 2005



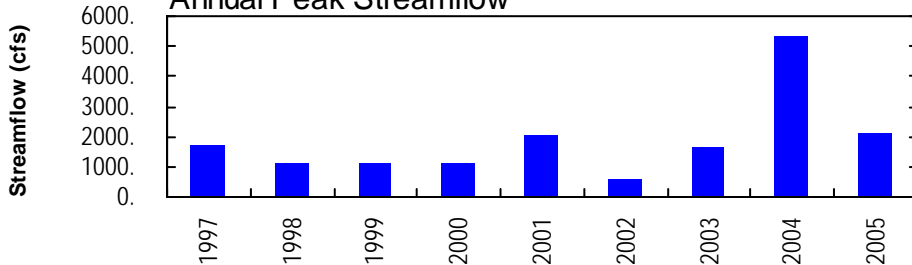
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA
(Swatara Creek Project)

LOCATION.--Lat 40°34'50", long 76°24'18", Schuylkill County, Hydrologic Unit 02050305, on right bank 800 ft downstream of Adam's Run, 1,000 ft downstream from State Highway 125 bridge crossing Swatara Creek and 0.4 mi north of Ravine.

DRAINAGE AREA.--43.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those above 638 ft³/s and those for estimated daily discharges, which are poor.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	0845	1,920	4.06	Jan. 14	0915	1,490	3.59
Dec. 1	1030	1,070	3.06	Mar. 28	2300	1,430	3.52
Dec. 10	1700	734	2.60	Apr. 3	0145	*2,120	*4.27
Dec. 23	1630	1,180	3.21				

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	192	e56	691	107	e71	75	320	83	35	27	23	21
2	161	e49	470	96	e71	69	958	70	33	30	22	17
3	146	e50	365	102	e68	65	1470	67	39	25	23	17
4	123	e59	291	e113	68	64	810	65	53	23	21	16
5	107	e78	244	e118	67	62	572	62	41	24	20	16
6	93	e70	207	308	67	65	457	62	48	32	20	16
7	87	e62	216	223	67	81	389	59	68	78	20	15
8	80	e58	203	e335	69	180	340	59	44	259	21	15
9	74	e53	175	e325	e85	126	273	55	45	86	26	15
10	69	e50	460	e242	e107	103	234	55	43	52	22	14
11	63	e49	445	e197	74	98	204	54	38	41	24	14
12	58	e86	325	e209	67	93	179	51	37	42	23	14
13	57	e98	267	e180	63	88	163	49	34	36	20	13
14	73	e86	219	1060	125	83	144	53	33	32	21	14
15	72	e78	186	660	270	77	127	89	32	39	21	15
16	79	e73	163	480	161	78	113	58	31	63	20	19
17	60	e68	147	383	138	78	107	52	31	98	21	31
18	52	e66	130	294	114	80	98	49	29	89	19	19
19	99	e61	119	251	100	86	92	45	29	55	30	16
20	73	e64	103	229	95	94	90	54	28	44	24	17
21	61	e67	94	195	99	101	83	50	28	39	20	15
22	61	e58	92	164	99	95	77	46	27	36	18	14
23	53	50	408	158	96	198	109	43	25	32	18	15
24	50	188	354	e141	88	257	157	42	25	31	16	13
25	48	433	220	e126	81	208	94	42	24	38	16	14
26	45	244	181	118	76	188	81	40	25	31	17	18
27	45	183	155	100	72	173	86	38	23	31	16	18
28	42	977	134	88	71	606	76	40	24	28	38	16
29	42	581	130	86	---	883	70	44	26	26	24	17
30	89	408	120	86	---	529	79	43	41	25	20	15
31	66	---	115	e78	---	399	---	38	---	24	21	---
TOTAL	2420	4503	7429	7252	2629	5382	8052	1657	1039	1516	665	489
MEAN	78.1	150	240	234	93.9	174	268	53.5	34.6	48.9	21.5	16.3
MAX	192	977	691	1060	270	883	1470	89	68	259	38	31
MIN	42	49	92	78	63	62	70	38	23	23	16	13
CFSM	1.80	3.47	5.53	5.40	2.17	4.01	6.20	1.23	0.80	1.13	0.50	0.38
IN.	2.08	3.87	6.38	6.23	2.26	4.62	6.92	1.42	0.89	1.30	0.57	0.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)

MEAN	60.8	72.5	124	99.2	84.8	140	133	85.6	81.2	47.7	38.7	59.8
MAX	148	150	284	234	196	220	268	181	212	102	101	242
(WY)	2004	2005	1997	2005	1998	2003	2005	1998	2003	2004	2003	2004
MIN	13.2	16.5	11.4	34.3	42.9	82.2	75.4	47.0	18.4	13.5	13.0	15.7
(WY)	2002	1999	1999	2002	2002	2004	1999	1999	1999	1999	2002	1998

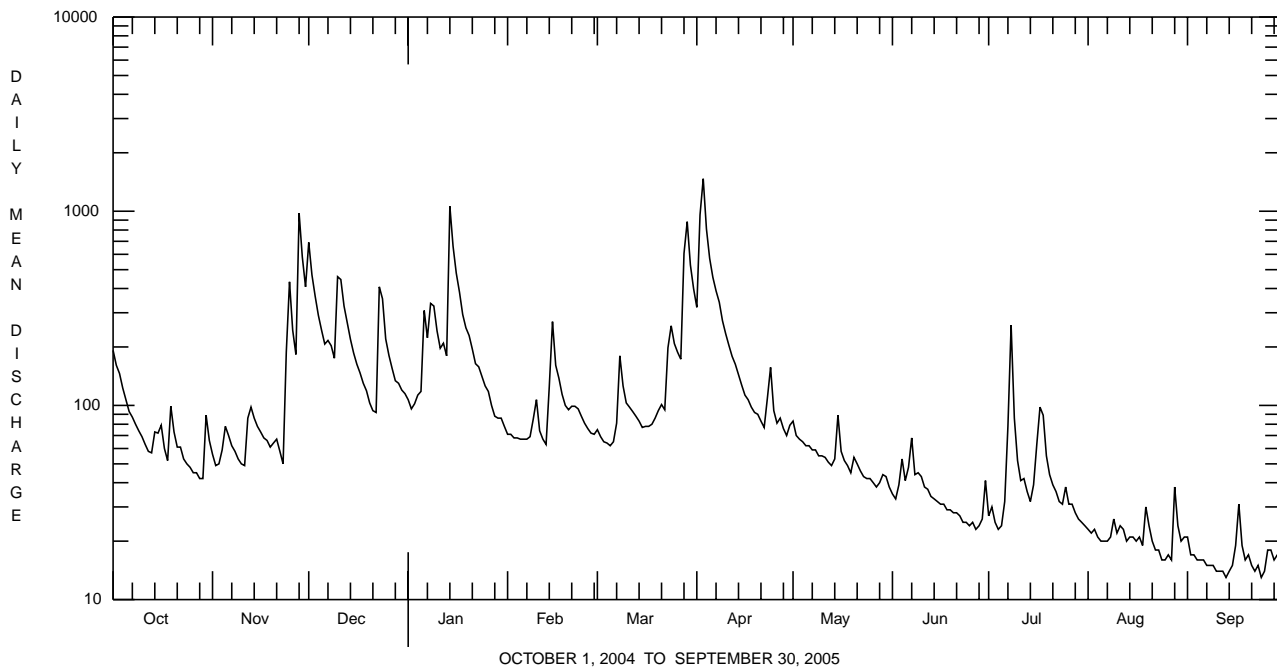
e Estimated.

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	43719		43033			
ANNUAL MEAN	119		118		85.6	
HIGHEST ANNUAL MEAN					121	2004
LOWEST ANNUAL MEAN					44.9	2002
HIGHEST DAILY MEAN	2710	Sep 18	1470	Apr 3	2710	Sep 18 2004
LOWEST DAILY MEAN	29	Jul 10,11	13	Sep 13,24	9.3	Sep 10 2002
ANNUAL SEVEN-DAY MINIMUM	33	Jul 5	14	Sep 8	10	Dec 14 1998
MAXIMUM PEAK FLOW			a2120	Apr 3	a5310	Sep 18 2004
MAXIMUM PEAK STAGE			4.27	Apr 3	b8.16	Sep 18 2004
INSTANTANEOUS LOW FLOW			12	Sep 11c	9.2	Oct 14 2001
ANNUAL RUNOFF (CFSM)	2.76		2.72		1.98	
ANNUAL RUNOFF (INCHES)	37.56		36.97		26.85	
10 PERCENT EXCEEDS	211		262		164	
50 PERCENT EXCEEDS	76		67		58	
90 PERCENT EXCEEDS	44		20		15	

- a From rating curve extended above 638 ft³/s based on a straight line extension.
- b From floodmark.
- c Also Sept. 13, 14, 24, 25.



SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued
(Swatara Creek Project)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1996 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1996 to current year.

pH: April 1996 to current year.

WATER TEMPERATURE: April 1996 to current year.

INSTRUMENTATION.--Water-quality monitor (in situ system). Automatic pumping sampler for stormflow samples since July 1996.

REMARKS.--Specific conductance records rated good. pH records rated good. Water temperature records rated good. Interruptions in the record were due to malfunctions of the instrumentation. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 538 microsiemens, Jan. 9, 1999; minimum, 27 microsiemens, June 11, 1997.

pH: Maximum, 8.2, July 30, 1999; minimum, 4.7, June 13, 1998.

WATER TEMPERATURE: Maximum, 26.5°C, July 5, 6, 1999, Aug. 1, 1999; minimum, 0.0°C, many days during winters.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 344, microsiemens, Aug. 12; minimum, 76, microsiemens, Nov. 28.

PH: Maximum, 7.4, Sept. 19, 28-30; minimum, 5.9, Mar. 12.

WATER TEMPERATURE: Maximum, 23.5°C, Aug. 13, 14; minimum, 0.1°C, Jan. 28.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Oxi- dation re- duc- tion poten- tial, mV (00090)	Tur- bidity, water, unfltrd field, NTU (61028)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)
OCT										
05...	0830	1028	--	109	300	8.8	11.8	101	6.7	--
28...	1015	1028	89203	43	265	2.6	11.6	100	6.8	6.7
DEC										
21...	0915	1028	89203	94	439	11	14.6	104	6.8	6.2
FEB										
16...	0900	1028	89203	157	335	11	12.6	97	6.5	6.6
APR										
02...	0130	1028	89203	293	--	--	--	--	6.2	6.6
02...	0900	1028	89203	578	--	--	--	--	6.2	6.4
02...	1400	1028	89203	912	--	--	--	--	6.2	6.5
02...	1630	1028	89203	1880	--	--	--	--	6.2	6.5
02...	1900	1028	89203	1680	--	--	--	--	6.3	6.6
02...	2130	1028	89203	1510	--	--	--	--	6.2	6.3
02...	2300	1028	89203	1540	--	--	--	--	6.1	6.4
03...	0330	1028	89203	2060	--	--	--	--	6.3	6.4
03...	0600	1028	89203	1720	--	--	--	--	6.2	6.4
04...	0430	1028	89203	919	--	--	--	--	6.0	6.2
05...	1600	1028	89203	559	--	--	--	--	6.1	6.6
06...	1930	1028	89203	429	--	--	--	--	6.3	6.2
20...	0945	1028	89203	90	160	12	10.3	98	6.7	6.8
JUN										
07...	1115	1028	89203	63	307	150	10.0	104	6.8	6.7
29...	2215	1028	89203	42	--	--	--	--	7.0	7.0
29...	2315	1028	89203	46	--	--	--	--	7.1	6.9
30...	0000	1028	89203	67	--	--	--	--	6.9	6.8
30...	0200	1028	89203	54	--	--	--	--	7.0	6.9
30...	0400	1028	89203	59	--	--	--	--	7.0	6.8
30...	0600	1028	89203	48	--	--	--	--	6.9	6.8
30...	0800	1028	89203	43	--	--	--	--	6.9	6.7
JUL										
07...	1515	1028	89203	185	--	--	--	--	7.1	6.8
07...	1530	1028	89203	261	--	--	--	--	6.9	6.7
07...	1600	1028	89203	266	--	--	--	--	7.1	6.9
07...	1800	1028	89203	134	--	--	--	--	6.7	6.4
07...	2000	1028	89203	169	--	--	--	--	6.8	6.5
07...	2200	1028	89203	148	--	--	--	--	6.9	5.8
08...	0000	1028	89203	116	--	--	--	--	6.7	6.1
08...	0600	1028	89203	213	--	--	--	--	6.9	6.8
08...	0800	1028	89203	283	--	--	--	--	6.9	6.8
08...	1200	1028	89203	440	--	--	--	--	6.8	6.7
08...	1600	1028	89203	297	--	--	--	--	6.7	6.7
09...	0000	1028	89203	145	--	--	--	--	6.8	6.8
09...	0600	1028	89203	98	--	--	--	--	6.8	6.7
19...	1045	1028	89203	56	306	--	8.8	96	6.7	7.2
20...	1630	1028	89203	42	364	--	8.4	96	6.9	7.0
AUG										
30...	1015	1028	89203	20	427	--	9.1	97	7.0	7.0

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Specif. conduc- tance, wat unfltrd µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover -able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)	Magnes- ium, water, recover -able, mg/L (00927)	Potas- sium, water, fltrd, mg/L (00935)	Potas- sium, water, recover -able, mg/L (00937)	Sodium, water, fltrd, mg/L (00930)	Sodium, water, recover -able, mg/L (00929)
OCT										
05...	185	11.2	--	--	--	--	--	--	--	--
28...	219	9.0	16.0	16.2	12.1	12.3	1.20	1.2	5.10	5.3
DEC										
21...	187	1.6	14.4	13.1	11.9	10.8	1.10	1.1	5.00	4.8
FEB										
16...	164	4.3	9.90	10.6	7.10	7.5	1.10	1.2	6.40	6.4
APR										
02...	149	9.3	9.30	9.7	7.20	7.5	1.20	1.2	5.80	5.9
02...	140	8.0	8.30	8.0	5.70	5.5	1.40	1.1	6.60	6.2
02...	125	7.7	7.00	7.1	4.40	4.4	1.50	1.3	6.30	5.8
02...	96	8.0	5.80	7.5	3.00	3.6	1.50	1.6	5.40	5.3
02...	85	7.7	5.40	6.1	2.80	3.1	1.70	1.5	4.70	4.5
02...	84	7.8	5.20	5.4	3.00	3.1	1.40	1.3	4.30	4.2
02...	82	7.8	5.00	5.2	2.90	3.0	1.20	1.1	4.60	4.3
03...	97	7.4	5.90	7.0	2.90	3.4	1.50	1.5	4.80	4.6
03...	90	7.0	5.30	5.6	3.00	3.2	1.40	1.3	4.30	4.2
04...	122	6.4	6.90	6.8	5.30	5.2	1.20	1.1	4.80	4.5
05...	146	9.9	8.50	8.4	7.10	7.1	1.20	1.1	4.60	4.2
06...	160	11.5	9.40	9.3	8.10	7.9	1.20	1.1	4.60	4.3
20...	209	12.2	13.8	16.0	11.0	13.0	1.30	1.4	5.30	6.0
JUN										
07...	184	17.1	12.8	14.0	7.60	8.5	2.00	2.3	6.90	6.9
29...	252	20.2	19.2	19.2	12.7	12.9	4.80	1.7	22.0	7.6
29...	253	20.1	19.2	19.9	12.1	12.6	3.10	2.0	14.3	8.8
30...	258	19.6	18.5	19.5	12.3	12.8	2.50	2.1	10.9	8.1
30...	261	19.2	19.4	20.1	12.2	12.6	2.30	2.1	9.50	8.3
30...	250	19.1	18.9	19.3	11.0	11.2	2.30	2.3	9.30	8.6
30...	264	18.6	19.5	20.2	11.6	11.9	2.40	2.4	9.60	9.5
30...	288	18.4	20.7	21.4	12.2	12.5	2.70	2.8	10.8	11.0
JUL										
07...	262	19.8	18.9	17.6	12.8	11.4	1.90	1.9	8.00	7.4
07...	268	19.4	19.4	19.1	12.9	11.9	1.90	2.0	8.10	7.6
07...	165	20.7	14.8	15.8	7.10	7.1	1.50	1.8	5.10	4.7
07...	146	20.5	10.8	11.6	6.10	6.0	1.50	1.9	4.80	4.4
07...	165	19.8	12.1	11.3	6.80	6.2	1.60	1.6	5.60	5.2
07...	207	19.2	16.8	15.9	7.60	6.9	2.20	2.2	7.00	6.4
08...	209	19.3	17.2	16.0	7.90	7.2	2.10	2.1	6.40	5.8
08...	175	18.3	12.7	11.7	6.30	5.7	2.00	1.8	7.60	6.8
08...	163	18.1	11.7	10.7	5.90	5.3	1.90	1.7	7.50	6.8
08...	150	18.0	10.3	9.8	5.10	4.6	2.40	2.2	7.40	6.5
08...	142	18.3	9.70	9.0	5.20	4.6	2.10	2.0	6.30	5.7
09...	156	17.9	10.5	9.5	6.10	5.4	1.90	1.7	6.50	5.8
09...	168	16.9	11.5	10.3	7.00	6.1	1.80	1.6	6.80	6.1
19...	203	19.7	13.9	12.3	10.1	8.9	1.90	1.7	7.90	7.2
20...	224	22.0	15.6	13.8	10.9	9.4	2.10	1.8	8.70	7.6
AUG										
30...	281	18.7	21.7	20.9	15.4	14.6	2.20	2.0	9.50	8.7

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Alum- inum, water, fltrd, µg/L (01106)	Alum- inum, water, recover- able, µg/L (01105)	Bromine water unfltrd mg/L (71871)
OCT										
05...	--	--	--	--	--	--	--	--	--	--
28...	8	19.7	--	80.4	--	--	--	<100	200	--
DEC										
21...	11	10.9	--	67.2	--	--	--	<100	400	--
FEB										
16...	6	12.8	--	46.4	--	--	--	<100	400	--
APR										
02...	5	8.0	<.01	41.3	.52	<.030	<.020	<100	500	.19
02...	6	9.5	<.01	34.1	.55	<.030	<.020	200	900	.18
02...	6	9.4	<.01	27.0	.58	<.030	<.020	<100	1400	.18
02...	6	8.2	<.01	20.4	.61	<.030	<.020	200	4300	.18
02...	6	7.3	<.01	18.5	.60	<.030	<.020	200	2300	.18
02...	5	7.3	<.01	18.8	.60	<.030	<.020	200	1300	.18
02...	5	7.0	<.01	19.1	.61	<.030	<.020	<100	1200	.18
03...	7	7.0	<.01	19.9	.58	<.030	<.020	200	3000	.18
03...	5	6.8	<.01	20.0	.59	<.030	<.020	500	1500	.18
04...	4	6.8	<.01	31.7	.53	<.030	<.020	<100	600	.18
05...	5	7.0	<.01	43.8	.52	<.030	<.020	<100	500	.18
06...	4	7.5	<.01	48.5	.50	<.030	<.020	<100	500	.19
20...	7	7.4	<.01	70.0	.47	<.030	<.020	<100	400	.19
JUN										
07...	9	10.3	<.01	50.6	.67	<.030	<.020	<100	800	.21
29...	12	10.5	--	76.8	--	--	--	<100	900	--
29...	14	11.2	--	71.3	--	--	--	300	1500	--
30...	11	10.9	--	77.4	--	--	--	<100	2700	--
30...	12	10.8	--	75.4	--	--	--	<100	1500	--
30...	11	10.9	--	71.0	--	--	--	<100	1000	--
30...	8	11.9	--	76.4	--	--	--	<100	1100	--
30...	9	14.9	--	84.0	--	--	--	<100	700	--
JUL										
07...	12	11.7	--	85.1	--	--	--	<100	4200	--
07...	10	13.2	--	86.3	--	--	--	<100	7600	--
07...	19	9.4	--	45.3	--	--	--	<100	7000	--
07...	9	7.2	--	43.4	--	--	--	<100	4500	--
07...	7	8.1	--	43.4	--	--	--	<100	1900	--
07...	4	11.8	--	63.0	--	--	--	<100	3300	--
08...	5	8.9	--	68.1	--	--	--	<100	2700	--
08...	7	9.8	--	48.5	--	--	--	<100	900	--
08...	9	10.3	--	43.3	--	--	--	<100	1300	--
08...	10	10.3	--	36.4	--	--	--	<100	2600	--
08...	7	8.9	--	37.0	--	--	--	<100	1600	--
09...	7	9.1	--	41.2	--	--	--	<100	600	--
09...	6	10.5	--	45.3	--	--	--	<100	500	--
19...	10	10.9	--	58.6	--	--	--	<100	200	--
20...	9	13.0	--	75.0	--	--	--	<100	200	--
AUG										
30...	12	13.1	--	94.6	--	--	--	<100	<100	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover- able, µg/L (01045)	Mangan- ese, water, fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover- able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover- able, µg/L (01092)
OCT								
05...	--	--	--	--	--	--	--	--
28...	330	670	600	610	30.0	30.0	65.0	75.0
DEC								
21...	520	1090	640	600	30.0	30.0	75.0	70.0
FEB								
16...	350	910	430	560	20.0	25.0	50.0	105
APR								
02...	110	1330	420	440	20.0	25.0	55.0	80.0
02...	300	2450	330	370	15.0	20.0	40.0	80.0
02...	100	3910	250	420	15.0	20.0	35.0	70.0
02...	280	12400	160	920	10.0	30.0	25.0	115
02...	290	5690	150	560	10.0	20.0	25.0	70.0
02...	180	3090	190	400	10.0	15.0	40.0	65.0
02...	110	2890	200	390	10.0	15.0	45.0	55.0
03...	220	6450	190	650	10.0	25.0	20.0	80.0
03...	870	3410	240	420	15.0	15.0	35.0	55.0
04...	190	1310	320	340	20.0	20.0	50.0	60.0
05...	70.0	960	400	390	20.0	25.0	60.0	65.0
06...	100	1000	430	410	25.0	25.0	80.0	75.0
20...	140	990	510	580	30.0	35.0	75.0	90.0
JUN								
07...	330	2480	390	510	15.0	20.0	30.0	50.0
29...	380	4520	60.0	730	<5.00	25.0	40.0	115
29...	1080	6290	110	580	<5.00	20.0	30.0	80.0
30...	40.0	18000	<10.0	1020	<5.00	35.0	60.0	125
30...	30.0	9560	<10.0	790	<5.00	25.0	10.0	95.0
30...	40.0	6930	<10.0	560	<5.00	20.0	65.0	65.0
30...	40.0	8010	50.0	640	10.0	20.0	15.0	95.0
30...	20.0	7210	70.0	590	10.0	20.0	15.0	90.0
JUL								
07...	30.0	20400	20.0	2630	10.0	70.0	45.0	280
07...	20.0	33900	20.0	4190	10.0	100	20.0	410
07...	40.0	38300	<10.0	3400	<5.00	85.0	15.0	355
07...	50.0	16200	<10.0	1550	<5.00	40.0	15.0	155
07...	40.0	5740	<10.0	600	10.0	20.0	25.0	85.0
07...	30.0	7190	100	680	10.0	25.0	20.0	90.0
08...	30.0	5650	310	750	15.0	30.0	25.0	85.0
08...	80.0	3410	60.0	420	10.0	20.0	20.0	95.0
08...	110	4880	70.0	530	10.0	20.0	20.0	65.0
08...	110	11600	60.0	1080	10.0	30.0	30.0	115
08...	130	4210	120	490	10.0	20.0	15.0	60.0
09...	180	1700	130	350	15.0	20.0	35.0	55.0
09...	190	1570	230	330	15.0	15.0	20.0	35.0
19...	210	720	410	390	20.0	20.0	35.0	40.0
20...	110	530	390	370	20.0	20.0	30.0	30.0
AUG								
30...	120	370	240	260	15.0	15.0	25.0	30.0

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	162	153	157	---	---	---	136	92	110	189	186	188
2	165	161	163	---	---	---	129	110	121	195	183	191
3	176	163	172	---	---	---	137	129	133	195	163	184
4	196	176	180	---	---	---	148	137	143	184	172	175
5	199	181	190	---	---	---	156	148	152	178	170	173
6	205	196	199	---	---	---	162	156	159	172	141	150
7	209	204	206	---	---	---	164	151	159	155	143	148
8	209	206	207	---	---	---	163	151	155	---	---	---
9	210	205	208	---	---	---	168	153	165	---	---	---
10	217	209	213	---	---	---	153	106	127	---	---	---
11	222	216	219	---	---	---	129	107	120	---	---	---
12	223	219	221	---	---	---	140	129	135	---	---	---
13	224	220	222	---	---	---	148	140	144	---	---	---
14	224	202	210	---	---	---	155	148	151	159	95	112
15	209	187	203	---	---	---	163	154	159	138	116	128
16	193	182	185	---	---	---	167	163	165	150	138	145
17	209	193	202	---	---	---	171	167	169	163	150	157
18	216	209	212	---	---	---	174	171	172	176	163	170
19	212	164	179	---	---	---	177	171	174	179	175	178
20	191	166	178	---	---	---	187	176	182	186	177	181
21	200	191	196	---	---	---	188	185	187	188	182	184
22	200	197	199	---	---	---	190	186	188	194	187	192
23	205	199	202	218	196	198	222	110	166	193	187	189
24	211	205	209	199	118	176	150	112	133	---	---	195
25	223	210	212	125	112	118	163	150	157	---	---	194
26	216	210	211	141	125	134	171	163	167	201	193	196
27	218	213	217	142	140	141	177	168	172	207	199	201
28	221	217	219	142	76	101	185	176	182	217	202	208
29	219	216	217	125	102	116	190	182	184	219	202	210
30	219	178	192	136	125	130	190	185	187	208	202	205
31	192	178	186	---	---	---	190	187	188	214	208	211
MONTH	224	153	200	218	76	139	222	92	158	219	95	179
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	219	211	214	231	191	204	149	143	146	198	191	194
2	---	---	---	233	208	216	151	80	120	201	198	200
3	---	---	---	226	219	222	118	79	101	206	201	203
4	219	215	216	239	215	227	136	118	128	211	205	207
5	221	216	218	238	220	231	151	136	144	213	207	210
6	222	217	220	245	234	240	161	150	156	214	210	211
7	221	214	218	248	236	242	170	161	165	216	207	210
8	220	213	216	---	---	---	172	165	168	219	208	214
9	---	---	---	202	190	196	179	172	176	218	212	214
10	207	188	195	196	185	190	183	178	181	218	211	215
11	204	195	198	205	190	194	186	182	184	221	214	217
12	211	204	208	198	190	193	189	185	188	233	218	223
13	213	208	210	200	193	196	192	185	189	235	221	226
14	239	176	216	201	195	197	196	189	193	232	213	221
15	176	145	152	198	193	196	199	192	196	232	196	203
16	171	158	165	199	195	198	200	196	198	212	201	207
17	171	167	169	199	191	195	202	197	201	220	209	213
18	182	171	175	193	189	191	207	202	204	222	217	219
19	185	177	183	190	182	185	207	203	204	222	217	220
20	179	156	169	183	173	176	210	207	208	225	209	218
21	180	144	168	175	171	172	214	208	210	212	208	210
22	178	143	160	172	168	169	215	210	213	220	211	215
23	158	140	146	180	150	167	217	178	201	226	218	220
24	145	140	142	159	148	153	182	166	172	225	216	220
25	176	142	154	155	147	150	198	178	189	225	218	221
26	176	160	169	153	148	150	204	198	201	222	217	220
27	189	176	183	155	149	151	205	193	197	230	221	226
28	193	186	190	155	117	143	206	196	201	237	219	230
29	---	---	---	130	116	124	207	205	206	233	203	218
30	---	---	---	138	130	135	207	194	201	214	204	210
31	---	---	---	143	137	140	---	---	---	228	211	216
MONTH	239	140	186	248	116	185	217	79	181	237	191	215

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	235	227	229	276	243	266	260	254	256	296	288	294
2	262	232	243	267	237	249	257	253	255	292	285	288
3	233	211	227	263	250	254	273	257	264	294	285	289
4	211	201	206	257	251	254	280	272	276	293	285	290
5	214	201	207	270	250	258	272	263	266	296	287	291
6	226	199	217	263	235	253	271	263	267	310	293	305
7	214	183	194	268	128	227	270	265	268	309	295	302
8	221	206	213	234	142	165	286	256	270	300	294	296
9	224	186	215	207	156	181	283	263	271	310	300	307
10	227	199	216	232	207	222	301	275	290	311	298	305
11	225	222	223	261	231	243	323	272	285	303	293	299
12	233	224	228	266	183	250	344	289	305	307	300	303
13	234	227	232	252	229	246	291	280	286	308	303	306
14	239	231	235	260	252	256	320	289	296	307	299	304
15	248	239	244	261	229	250	329	300	307	307	303	305
16	249	242	246	253	181	224	306	283	294	305	244	291
17	248	244	246	218	172	194	294	280	289	278	212	263
18	246	240	244	188	163	174	295	288	292	306	278	294
19	251	243	247	231	188	207	288	226	267	304	291	300
20	251	247	249	234	224	228	275	267	271	314	289	307
21	262	251	256	236	228	231	281	273	277	315	303	309
22	260	255	259	238	233	236	279	272	275	320	303	309
23	263	253	256	241	234	237	292	279	286	323	318	320
24	272	261	266	246	241	243	290	261	279	328	322	324
25	269	263	266	243	195	223	286	277	282	327	311	319
26	270	260	265	241	228	238	290	285	287	321	292	313
27	269	259	264	241	229	235	291	283	286	304	263	291
28	271	259	266	250	235	242	291	197	247	302	295	300
29	272	251	266	256	246	250	286	267	279	305	281	298
30	292	232	265	275	256	267	287	279	282	313	290	303
31	---	---	---	263	256	259	300	283	293	---	---	---
MONTH	292	183	240	276	128	234	344	197	279	328	212	301
YEAR	344	76	213									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	6.6	6.6	6.6	---	---	---	6.6	6.5	6.6	6.8	6.7	6.7
2	6.6	6.6	6.6	---	---	---	6.6	6.6	6.6	6.8	6.8	6.8
3	6.7	6.6	6.7	---	---	---	6.6	6.6	6.6	6.8	6.7	6.8
4	6.7	6.7	6.7	---	---	---	6.7	6.6	6.6	6.8	6.7	6.7
5	7.0	6.7	6.8	---	---	---	6.7	6.7	6.7	6.7	6.7	6.7
6	6.8	6.8	6.8	---	---	---	6.8	6.7	6.7	6.7	6.5	6.6
7	6.9	6.8	6.9	---	---	---	6.8	6.7	6.8	6.6	6.6	6.6
8	6.9	6.8	6.8	---	---	---	6.8	6.7	6.8	---	---	---
9	6.9	6.8	6.9	---	---	---	6.8	6.8	6.8	---	---	---
10	7.0	6.9	6.9	---	---	---	6.8	6.7	6.7	---	---	---
11	7.0	6.9	6.9	---	---	---	6.7	6.7	6.7	---	---	---
12	7.0	6.9	7.0	---	---	---	6.7	6.6	6.6	---	---	---
13	7.0	7.0	7.0	---	---	---	6.7	6.6	6.6	---	---	---
14	7.0	6.9	7.0	---	---	---	6.7	6.7	6.7	6.9	6.3	6.4
15	6.9	6.8	6.9	---	---	---	6.8	6.7	6.7	6.3	6.3	6.3
16	6.9	6.8	6.8	---	---	---	6.7	6.7	6.7	6.3	6.2	6.3
17	6.9	6.8	6.8	---	---	---	6.8	6.7	6.8	6.4	6.3	6.4
18	6.9	6.8	6.9	---	---	---	6.8	6.8	6.8	6.4	6.4	6.4
19	6.9	6.8	6.9	---	---	---	6.8	6.8	6.8	6.4	6.4	6.4
20	6.9	6.8	6.9	---	---	---	6.8	6.8	6.8	6.4	6.4	6.4
21	6.9	6.9	6.9	---	---	---	6.8	6.8	6.8	6.4	6.4	6.4
22	6.9	6.9	6.9	---	---	---	6.8	6.7	6.7	6.5	6.4	6.4
23	7.0	6.9	6.9	7.0	6.9	6.9	6.8	6.5	6.7	6.6	6.5	6.5
24	6.9	6.9	6.9	7.0	6.7	6.9	6.6	6.5	6.6	---	---	---
25	6.9	6.9	6.9	6.9	6.7	6.8	6.6	6.6	6.6	---	---	---
26	6.9	6.9	6.9	6.8	6.7	6.8	6.6	6.6	6.6	6.8	6.1	6.6
27	6.9	6.8	6.8	6.7	6.7	6.7	6.6	6.6	6.6	6.8	6.0	6.7
28	6.9	6.8	6.8	6.8	6.4	6.5	6.6	6.6	6.6	6.8	6.8	6.8
29	6.9	6.9	6.9	6.5	6.4	6.5	6.6	6.6	6.6	6.8	6.7	6.8
30	7.0	6.8	6.9	6.5	6.5	6.5	6.7	6.6	6.7	6.8	6.8	6.8
31	6.9	6.8	6.9	---	---	---	6.8	6.7	6.7	---	---	---
MAX	7.0	7.0	7.0	7.0	6.9	6.9	6.8	6.8	6.8	6.9	6.8	6.8
MIN	6.6	6.6	6.6	6.5	6.4	6.5	6.6	6.5	6.6	6.3	6.0	6.3

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.8	6.8	6.8	6.7	6.7	6.7	6.2	6.1	6.1	6.7	6.6	6.6
2	---	---	---	6.8	6.7	6.7	6.3	6.1	6.2	6.7	6.6	6.7
3	---	---	---	6.8	6.7	6.7	6.4	6.0	6.0	6.8	6.6	6.6
4	6.8	6.7	6.8	6.7	6.7	6.7	6.1	6.0	6.0	6.7	6.6	6.7
5	6.8	6.7	6.8	6.8	6.7	6.7	6.2	6.1	6.1	6.7	6.6	6.7
6	6.8	6.7	6.7	6.8	6.7	6.8	6.3	6.1	6.2	6.7	6.5	6.6
7	6.7	6.7	6.7	6.8	6.8	6.8	6.3	6.2	6.3	6.9	6.6	6.7
8	6.7	6.7	6.7	---	---	---	6.4	6.3	6.4	6.9	6.7	6.7
9	6.7	6.6	6.7	6.7	6.6	6.6	6.5	6.4	6.4	6.9	6.6	6.8
10	6.7	6.6	6.6	6.7	6.6	6.6	6.5	6.4	6.5	6.9	6.7	6.8
11	6.7	6.6	6.6	6.7	6.6	6.6	6.5	6.5	6.5	6.9	6.6	6.8
12	6.7	6.6	6.6	6.7	5.9	6.7	6.6	6.5	6.5	6.9	6.7	6.8
13	6.7	6.7	6.7	6.7	6.4	6.7	6.9	6.5	6.7	6.9	6.7	6.8
14	6.7	6.5	6.7	6.7	6.3	6.6	6.8	6.7	6.7	7.0	6.7	6.8
15	6.5	6.4	6.5	6.6	6.2	6.6	6.8	6.7	6.7	7.0	6.6	6.7
16	6.5	6.5	6.5	6.6	6.3	6.6	6.7	6.6	6.7	6.8	6.6	6.7
17	6.5	6.4	6.4	6.6	6.5	6.6	6.7	6.6	6.7	6.8	6.7	6.8
18	6.4	6.4	6.4	6.6	6.4	6.5	6.7	6.6	6.7	6.8	6.7	6.8
19	6.5	6.4	6.4	6.5	6.3	6.5	6.8	6.6	6.7	7.0	6.8	6.9
20	6.6	6.5	6.5	6.5	6.4	6.4	6.8	6.6	6.7	6.9	6.7	6.8
21	6.6	6.5	6.6	6.5	6.4	6.4	6.8	6.7	6.7	6.9	6.7	6.8
22	6.7	6.6	6.6	6.5	6.4	6.5	6.7	6.7	6.7	7.0	6.8	6.9
23	6.7	6.6	6.6	6.5	6.3	6.5	6.7	6.6	6.6	7.0	6.9	6.9
24	6.6	6.5	6.6	6.4	6.3	6.4	6.7	6.5	6.6	7.0	6.9	6.9
25	6.6	6.5	6.6	6.4	6.3	6.4	6.7	6.6	6.6	6.9	6.9	6.9
26	6.6	6.6	6.6	6.4	6.3	6.3	6.7	6.5	6.6	7.0	6.8	6.9
27	6.7	6.6	6.6	6.3	6.3	6.3	6.7	6.3	6.6	6.9	6.8	6.8
28	6.7	6.7	6.7	6.4	6.1	6.3	6.7	6.6	6.6	6.9	6.7	6.8
29	---	---	---	6.4	6.1	6.1	6.7	6.6	6.6	6.9	6.7	6.8
30	---	---	---	6.1	6.0	6.1	6.6	6.6	6.6	6.9	6.7	6.8
31	---	---	---	6.1	6.0	6.1	---	---	---	7.0	6.8	6.9
MAX	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.7	6.7	7.0	6.9	6.9
MIN	6.4	6.4	6.4	6.1	5.9	6.1	6.1	6.0	6.0	6.7	6.5	6.6
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.0	6.8	6.9	7.0	6.9	6.9	6.9	6.7	6.8	7.1	6.9	6.9
2	7.0	6.9	6.9	7.1	6.9	7.0	6.9	6.8	6.8	7.3	6.8	7.0
3	6.9	6.8	6.9	7.1	7.0	7.0	7.0	6.7	6.8	7.2	6.9	7.0
4	6.9	6.7	6.8	7.2	7.0	7.1	7.0	6.8	6.9	7.2	6.9	7.0
5	6.9	6.8	6.8	7.1	7.0	7.1	7.0	6.9	6.9	7.2	6.9	7.0
6	6.9	6.8	6.8	7.2	7.0	7.1	7.0	6.8	6.9	7.1	6.9	6.9
7	6.9	6.7	6.9	7.1	6.6	7.0	7.0	6.8	6.9	7.1	6.9	7.0
8	7.0	6.8	6.9	6.9	6.7	6.8	7.0	6.8	6.9	7.1	6.9	7.0
9	7.1	6.8	6.9	7.0	6.8	6.9	7.0	6.8	6.9	7.1	6.9	6.9
10	7.0	6.8	6.9	7.0	6.9	7.0	7.0	6.8	6.9	7.2	6.9	7.0
11	6.9	6.8	6.9	7.1	6.9	7.0	7.2	6.8	7.0	7.2	7.0	7.0
12	7.0	6.8	6.9	7.0	6.8	6.9	7.2	6.9	7.0	7.0	6.9	7.0
13	7.0	6.9	7.0	7.0	6.8	6.9	7.2	6.8	6.9	7.1	7.0	7.0
14	7.1	7.0	7.0	7.0	6.8	6.9	7.2	6.8	7.0	7.2	7.0	7.0
15	7.0	6.9	7.0	6.9	6.7	6.8	7.3	6.9	6.9	7.1	6.9	7.0
16	7.0	6.9	7.0	6.9	6.6	6.8	7.0	6.9	6.9	7.1	6.9	7.0
17	7.0	6.9	7.0	6.9	6.6	6.8	7.2	6.9	6.9	7.1	6.8	6.9
18	7.1	6.9	7.0	6.8	6.5	6.7	7.2	6.8	6.9	7.2	7.0	7.0
19	7.1	7.1	7.1	6.8	6.7	6.8	7.0	6.8	6.9	7.4	7.1	7.2
20	7.2	7.0	7.1	6.9	6.7	6.8	7.1	6.8	6.9	7.2	7.0	7.1
21	7.2	7.1	7.1	6.8	6.8	6.8	7.2	6.7	6.9	7.2	7.0	7.1
22	7.1	7.0	7.1	6.8	6.7	6.8	7.2	6.8	6.9	7.3	6.9	7.1
23	7.1	6.9	7.1	6.9	6.8	6.8	7.1	6.8	6.9	7.2	6.9	7.0
24	7.0	6.9	6.9	6.8	6.7	6.8	7.1	6.8	6.9	7.3	7.0	7.1
25	7.0	6.9	6.9	6.8	6.7	6.8	7.2	6.9	6.9	7.2	7.0	7.1
26	7.1	6.8	6.9	6.8	6.7	6.7	7.2	6.8	6.9	7.2	7.0	7.1
27	7.1	6.9	7.0	6.9	6.7	6.8	7.3	6.8	7.0	7.3	7.1	7.2
28	7.0	6.9	7.0	6.9	6.8	6.8	7.0	6.8	6.8	7.4	7.1	7.2
29	7.1	6.9	7.0	6.9	6.8	6.8	---	---	---	7.4	7.2	7.2
30	7.1	6.9	7.0	6.9	6.8	6.8	7.2	6.9	7.0	7.4	7.2	7.2
31	---	---	---	6.9	6.7	6.8	7.1	6.9	7.0	---	---	---
MAX	7.2	7.1	7.1	7.2	7.0	7.1	7.3	6.9	7.0	7.4	7.2	7.2
MIN	6.9	6.7	6.8	6.8	6.5	6.7	6.9	6.7	6.8	7.0	6.8	6.9
YEAR	MAX			MAXIMUM	7.4	MINIMUM	6.1					
	MIN			MAXIMUM	7.2	MINIMUM	5.9					
	MEDIAN			MAXIMUM	7.2	MINIMUM	6.0					

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.5	12.4	13.5	---	---	---	8.5	7.6	8.2	7.4	5.4	6.4
2	14.4	13.6	14.0	---	---	---	8.0	6.9	7.5	6.0	5.2	5.6
3	14.2	12.4	13.4	---	---	---	7.1	6.2	6.7	7.3	5.9	6.7
4	13.6	11.0	12.4	---	---	---	7.0	5.6	6.4	7.6	6.8	7.2
5	12.7	10.8	11.9	---	---	---	7.8	6.6	7.1	6.8	5.4	6.3
6	12.0	9.3	10.7	---	---	---	7.0	6.4	6.7	5.4	4.8	4.9
7	13.0	10.1	11.5	---	---	---	7.3	6.9	7.0	5.3	4.7	5.0
8	13.7	11.0	12.3	---	---	---	8.5	7.2	7.8	---	---	---
9	13.5	11.5	12.5	---	---	---	7.6	6.6	7.2	---	---	---
10	13.3	11.7	12.5	---	---	---	7.7	7.4	7.5	---	---	---
11	12.4	10.7	11.5	---	---	---	8.3	7.5	7.9	---	---	---
12	11.8	9.6	10.7	---	---	---	7.6	7.2	7.4	---	---	---
13	11.7	9.3	10.6	---	---	---	7.3	6.4	7.0	---	---	---
14	12.0	11.1	11.6	---	---	---	6.4	5.0	5.9	9.6	6.0	7.3
15	12.4	11.6	12.0	---	---	---	5.1	4.2	4.7	6.0	4.9	5.3
16	11.7	10.1	11.2	---	---	---	5.0	3.6	4.4	5.4	4.6	5.0
17	10.5	9.0	9.7	---	---	---	5.8	4.5	5.1	5.0	3.1	4.2
18	10.4	7.8	9.2	---	---	---	5.1	3.5	4.3	3.1	2.2	2.5
19	10.4	10.0	10.2	---	---	---	5.7	3.1	4.6	3.2	2.1	2.5
20	10.5	10.1	10.3	---	---	---	3.1	0.6	1.3	4.2	2.9	3.6
21	10.5	10.2	10.4	---	---	---	2.8	1.2	2.1	3.4	1.5	2.4
22	11.0	9.6	10.3	---	---	---	4.7	2.7	3.7	1.7	0.2	1.0
23	10.0	8.2	9.2	9.2	8.4	8.8	7.5	4.2	5.7	2.0	0.7	1.4
24	9.5	8.2	8.9	10.8	9.2	9.8	4.2	3.4	3.8	---	---	---
25	10.7	9.4	10.0	11.0	7.9	10.2	3.5	2.6	3.1	---	---	---
26	11.3	10.0	10.6	7.9	6.9	7.5	3.6	2.0	2.8	4.8	2.7	3.9
27	11.2	8.8	10	8.7	7.6	8.1	3.5	1.9	2.5	2.7	0.4	1.3
28	10.8	8.9	9.9	9.6	8.6	9.3	3.2	1.4	2.3	1.4	0.1	0.8
29	10.6	8.9	9.7	8.6	8.0	8.3	5.2	3.2	4.3	2.4	0.3	1.3
30	12.1	10.6	11.4	8.6	7.6	8.1	5.8	5.2	5.5	3.8	2.1	2.8
31	13.3	11.3	12.2	---	---	---	6.8	5.5	6.2	---	---	---
MONTH	14.5	7.8	11.1	11.0	6.9	8.8	8.5	0.6	5.4	9.6	0.1	4.0
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	3.7	1.5	2.6	10.5	7.7	9.0	12.8	10.1	11.1
2	---	---	---	3.5	1.6	2.5	9.5	7.7	8.2	10.4	8.3	9.4
3	---	---	---	3.4	0.4	1.8	7.8	6.6	7.0	10.4	7.1	8.8
4	5.1	3.4	4.2	3.4	0.5	2.0	9.1	6.3	7.5	10.4	7.5	9.0
5	5.4	3.1	4.2	4.0	0.4	2.2	10.0	6.9	8.4	12.4	6.8	9.6
6	5.4	2.8	4.1	5.3	1.2	3.2	11.7	8.0	9.8	11.6	8.5	10.0
7	5.6	3.0	4.3	6.9	3.4	4.9	12.0	9.5	10.8	13.9	7.6	10.6
8	6.6	4.3	5.2	---	0.7	---	12.5	10.2	11.2	14.9	9.4	11.9
9	---	---	---	2.7	0.3	1.3	12.1	8.6	10.4	16.5	10.1	13.2
10	5.6	3.5	4.8	3.4	0.6	1.9	12.6	8.3	10.4	17.0	11.3	14.1
11	3.7	1.9	2.9	3.8	2.2	3.0	12.6	9.6	10.7	17.9	12.5	15.1
12	4.7	2.5	3.5	5.0	2.5	3.7	11.5	7.8	9.6	16.7	12.6	14.8
13	4.6	2.7	3.7	5.6	2.5	3.9	11.6	7.3	9.3	14.7	9.6	12.2
14	3.9	3.0	3.5	5.5	2.7	3.9	12.6	8.0	10.1	17.1	11.4	14.2
15	5.3	3.3	4.3	5.6	2.0	3.7	12.2	8.5	10.1	16.9	14.2	15.3
16	5.4	4.2	4.7	6.1	2.9	4.3	12.1	7.2	9.5	15.0	12.8	13.9
17	5.0	3.2	4.1	6.2	3.2	4.5	13.0	7.5	10.1	13.9	10.5	12.3
18	3.2	1.8	2.5	7.2	3.6	5.2	13.9	8.7	11.2	15.1	9.8	12.4
19	3.4	1.4	2.3	7.1	3.5	5.3	15.2	9.6	12.3	15.0	9.7	12.5
20	4.0	2.1	3.0	5.6	5.2	5.4	16.1	11.6	13.6	13.3	10.9	12.0
21	4.0	1.6	3.0	5.8	5.0	5.3	14.6	11.5	13.1	14.6	9.7	12.1
22	5.7	4.0	4.7	7.8	4.0	5.8	11.5	9.0	9.9	14.8	11.3	12.8
23	5.4	3.7	4.4	5.7	3.4	4.9	11.4	9.4	10.2	13.7	11.1	12.3
24	3.7	1.9	3.0	5.3	3.4	4.4	10.8	8.4	9.4	12.6	11.8	12.2
25	3.5	1.4	2.4	6.1	4.7	5.2	8.9	7.6	8.3	12.1	11.0	11.5
26	4.1	1.2	2.6	6.2	4.4	5.4	12.4	7.0	9.5	15.9	11.0	13.3
27	4.2	1.3	2.9	6.6	5.8	6.2	13.5	10.4	11.5	16.7	11.0	13.9
28	3.5	1.6	2.6	6.4	5.1	5.5	12.1	9.4	10.6	14.3	12.4	13.5
29	---	---	---	7.4	5.3	6.4	10.9	8.4	9.7	15.5	11.2	13.3
30	---	---	---	8.6	5.8	7.2	10.5	9.9	10.2	14.6	11.1	13.0
31	---	---	---	8.0	6.7	7.5	---	---	---	16.4	11.0	13.7
MONTH	6.6	1.2	3.6	8.6	0.3	4.3	16.1	6.3	10.1	17.9	6.8	12.4

