

2004 Water Year
 SWATARA CREEK BASIN

01571820 Swatara Creek at Ravine, PA

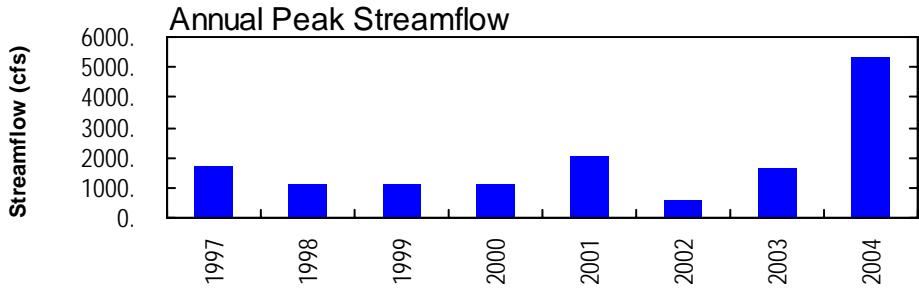
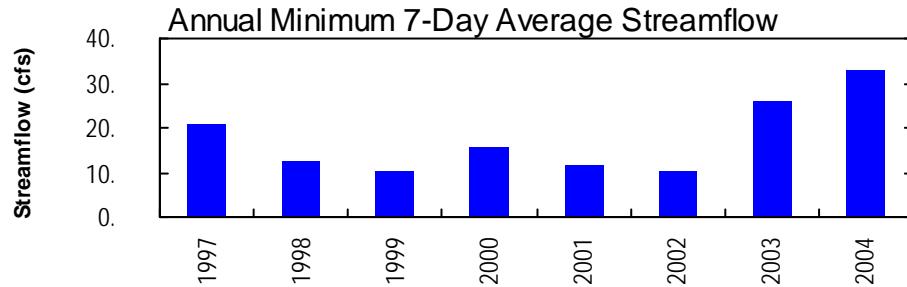
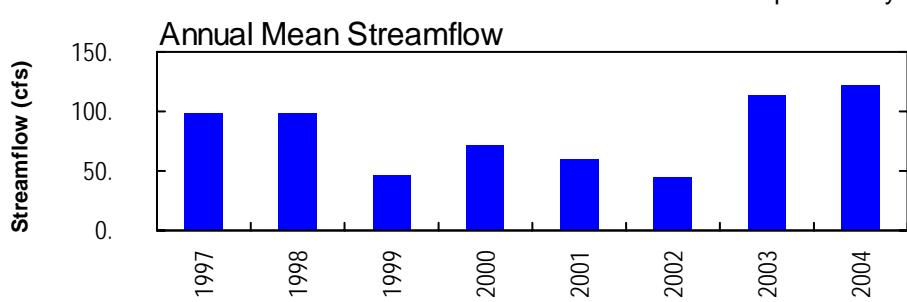
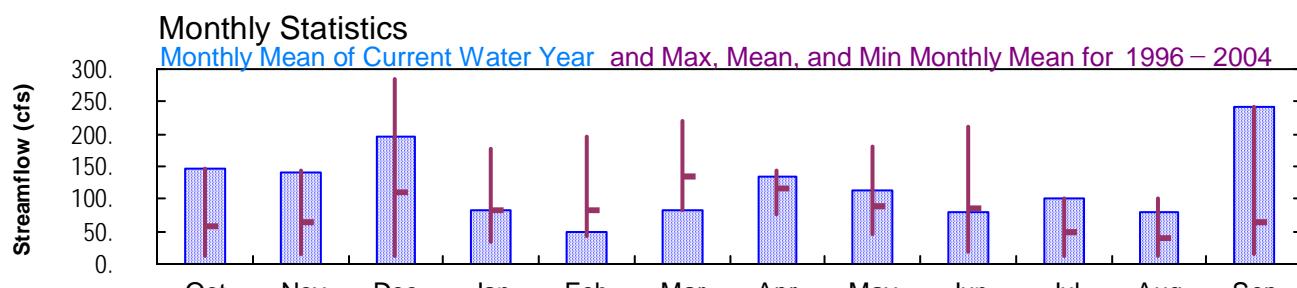
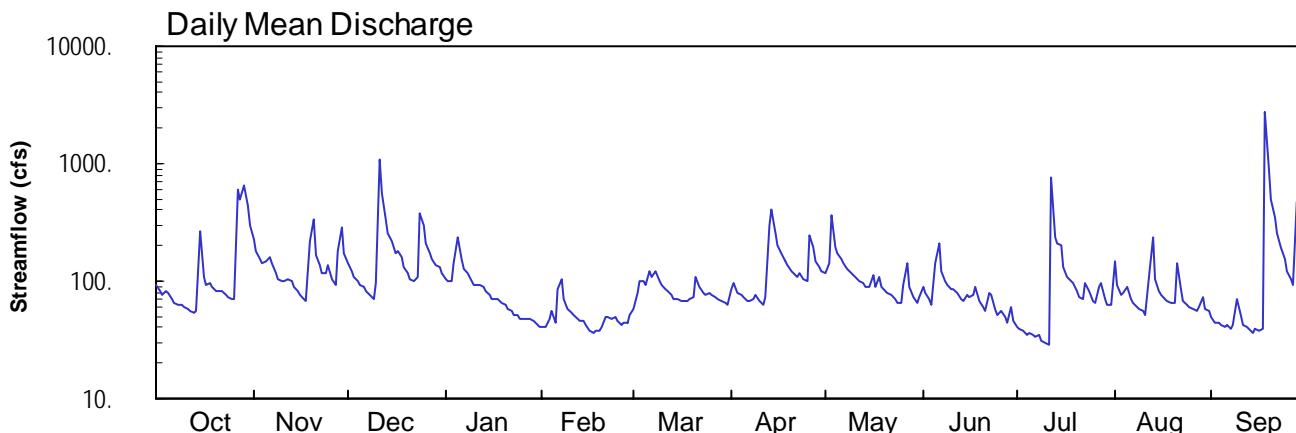
 Latitude: $40^{\circ} 34' 50''$

 Longitude: $076^{\circ} 24' 18''$

Hydrologic Unit Code: 02050305

Schuylkill County

Datum: 590 feet

 Drainage Area: 43.3 mi²


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.--No estimated daily discharges. Records fair except those above 638 ft³/s, 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)
Oct. 27	1745	1,140	3.16	Apr. 13	2300	670	2.50
Oct. 29	1100	966	2.92	May 3	0115	636	2.45
Nov. 19	2330	702	2.55	July 12	1230	2,380	4.56
Dec. 11	1045	1,780	3.92	Sept. 18	0630	*5,310	*a8.16
Dec. 24	1530	708	2.56	Sept. 28	1800	1,190	3.22

a From floodmark.

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	91	224	144	106	41	59	86	115	87	41	146	49
2	83	183	123	100	40	80	97	143	80	39	92	45
3	76	153	107	99	47	98	80	360	70	37	77	45
4	82	144	98	143	55	99	76	198	63	35	79	42
5	79	149	93	240	45	94	72	172	141	37	89	41
6	70	158	90	157	85	120	68	154	209	35	69	42
7	65	144	82	129	103	109	67	141	122	33	64	40
8	64	116	75	116	69	123	71	126	102	35	60	42
9	62	104	71	108	57	102	77	118	91	31	57	69
10	59	100	94	94	53	92	67	113	84	29	55	52
11	57	98	1070	91	51	86	64	104	87	29	52	42
12	56	105	552	91	48	82	73	99	79	769	107	41
13	54	100	336	88	46	75	297	95	70	234	239	39
14	55	89	258	81	45	70	407	88	67	208	103	37
15	260	81	215	76	43	69	255	91	76	205	84	39
16	106	75	170	69	38	68	200	113	73	131	76	38
17	91	72	179	71	37	67	170	88	75	108	70	40
18	96	69	160	70	37	66	150	110	91	101	66	2710
19	89	220	130	65	38	69	136	90	68	95	65	875
20	81	336	116	62	41	74	123	83	59	83	65	502
21	81	167	105	59	49	107	115	79	56	74	143	350
22	81	135	99	57	50	90	109	76	78	71	85	253
23	77	116	106	52	49	78	115	70	76	98	68	192
24	73	117	370	51	50	77	106	66	58	83	63	151
25	71	135	293	48	45	79	99	65	52	68	61	124
26	71	103	211	48	43	76	241	91	56	64	58	105
27	604	94	175	48	43	75	192	142	49	87	56	93
28	494	177	151	48	44	70	147	88	45	96	61	477
29	638	285	136	46	51	66	133	73	59	71	72	440
30	437	172	133	44	---	64	123	66	46	63	58	240
31	296	---	118	41	---	63	74	---	62	56	---	
TOTAL	4599	4221	6060	2598	1443	2547	4016	3491	2369	3152	2496	7255
MEAN	148	141	195	83.8	49.8	82.2	134	113	79.0	102	80.5	242
MAX	638	336	1070	240	103	123	407	360	209	769	239	2710
MIN	54	69	71	41	37	59	64	65	45	29	52	37
CFSM	3.43	3.25	4.51	1.94	1.15	1.90	3.09	2.60	1.82	2.35	1.86	5.59
IN.	3.95	3.63	5.21	2.23	1.24	2.19	3.45	3.00	2.04	2.71	2.14	6.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	58.6	62.8	109	82.3	83.7	136	116	89.7	87.0	47.5	40.6	64.6
MAX	148	143	284	177	196	220	144	181	212	102	101	242
(WY)	2004	1997	1997	1998	1998	2003	1998	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	2002	1998	

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1996 - 2004
ANNUAL TOTAL	47539	44247	
ANNUAL MEAN	130	121	81.5
HIGHEST ANNUAL MEAN			121
LOWEST ANNUAL MEAN			44.9
HIGHEST DAILY MEAN	1070	Dec 11	2002
LOWEST DAILY MEAN	31	Jul 31	2710 Sep 18 2004
ANNUAL SEVEN-DAY MINIMUM	36	Jul 15	9.3 Sep 10 2002
MAXIMUM PEAK FLOW		b5310 Sep 18	10 Dec 14 1998
MAXIMUM PEAK STAGE		a8.16 Sep 18	Sep 18 2004
INSTANTANEOUS LOW FLOW		27 Jul 12	9.2 Oct 14 2001
ANNUAL RUNOFF (CFSM)	3.01	2.79	1.88
ANNUAL RUNOFF (INCHES)	40.84	38.01	25.59
10 PERCENT EXCEEDS	254	208	154
50 PERCENT EXCEEDS	90	81	58
90 PERCENT EXCEEDS	48	45	15

a From floodmark.

b From rating curve extended above 638 ft³/s based on a straight line extension.

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 except for periods Nov. 12-17 and Aug. 3 to Sept. 10, which are fair, and Oct. 29 to Nov. 4, Nov. 20 to Dec. 10, and Dec. 23-29, which are poor. pH records rated good except for period Sept. 20-24, which is fair. 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, 301, microsiemens, Feb. 6; minimum, 63, microsiemens, Sept. 18, 19.

pH: Maximum, 7.3, Aug. 12; minimum, 5.5, Sept. 18, 19.

WATER TEMPERATURE: Maximum, 21.5°C, July 5; minimum, 0.0°C, several days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency col- lecting (00027)	Agency ana- lyzing (00028)	Instan- taneous dis- charge, cfs (00061)	Oxi- dation re- duction poten- tial, mV (00090)	Tur- bidity, water, unfiltrd 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										
01...	0830	1028	1028	92	297	13	10.9	100	7.2	6.5
27...	0415	1028	89203	--	--	--	--	--	--	7.2
27...	1030	1028	89203	--	--	--	--	--	--	6.9
27...	1500	1028	89203	934	--	--	--	--	6.8	6.8
27...	1900	1028	89203	911	--	--	--	--	6.6	6.5
28...	0700	1028	89203	446	--	--	--	--	6.8	6.3
28...	0845	1028	89203	417	391	37	11.3	99	6.8	6.3
NOV										
19...	1515	1028	89203	114	--	--	--	--	6.8	6.7
19...	1700	1028	89203	278	--	--	--	--	6.9	6.8
19...	1900	1028	89203	398	--	--	--	--	6.7	6.9
19...	2100	1028	89203	456	--	--	--	--	6.6	5.9
19...	2300	1028	89203	573	--	--	--	--	6.5	6.1
20...	0300	1028	89203	431	--	--	--	--	6.5	4.8
20...	1100	1028	89203	281	--	--	--	--	6.5	5.4
24...	0915	1028	89203	114	276	10	11.6	100	6.4	6.2
DEC										
30...	0915	1028	89203	140	289	15	13.0	100	6.6	6.5
MAR										
01...	0915	1028	89203	66	383	10	13.4	101	6.7	6.5
APR										
12...	2000	1028	89203	92	--	--	--	--	6.8	6.6
13...	0300	1028	89203	281	--	--	--	--	6.6	6.5
13...	1700	1028	89203	171	--	--	--	--	6.5	6.3
13...	2100	1028	89203	456	--	--	--	--	6.7	6.4
14...	1100	1028	89203	324	--	--	--	--	6.4	6.3
20...	0900	1028	89203	114	309	14	11.0	101	6.7	6.3
JUN										
02...	0845	1028	89203	76	286	31	10.4	99	6.8	6.5
JUL										
14...	1145	1028	89203	126	--	--	--	--	6.5	6.7
14...	1600	1028	89203	166	--	--	--	--	6.5	6.3
14...	1900	1028	89203	320	--	--	--	--	6.6	6.3
14...	2100	1028	89203	349	--	--	--	--	6.5	6.1
15...	0100	1028	89203	267	--	--	--	--	6.4	6.4
15...	1300	1028	89203	166	--	--	--	--	6.5	6.4
19...	0915	1028	89203	94	281	12	9.9	100	6.5	6.2
AUG										
12...	1415	1028	89203	74	--	--	--	--	6.8	6.6
12...	1430	1028	89203	65	--	--	--	--	6.8	6.5
12...	1500	1028	89203	66	--	--	--	--	7.0	6.8
12...	1900	1028	89203	150	--	--	--	--	6.7	6.5
13...	0100	1028	89203	209	--	--	--	--	6.7	6.5
13...	0300	1028	89203	297	--	--	--	--	6.8	6.6
13...	0700	1028	89203	289	--	--	--	--	6.6	6.2
SEP										
13...	0900	1028	89203	42	253	6.0	10.4	101	6.7	6.6
17...	2200	1028	89203	50	--	--	--	--	6.9	6.7
18...	0100	1028	89203	106	--	--	--	--	6.8	6.4
18...	0400	1028	89203	5030	--	--	--	--	6.0	6.2
18...	0700	1028	89203	6680	--	--	--	--	5.7	6.0
21...	0830	1028	89203	--	--	--	--	--	--	6.3

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

	Specif. conduct- tance, wat μS/cm	Temper- ature, deg C	Calcium water, mg/L	Calcium unfltrd water, mg/L	Magnes- ium recover- able, mg/L	Magnes- ium, water, mg/L	Magnes- ium, unfltrd water, mg/L	Potas- sium, water, mg/L	Potas- sium, unfltrd water, mg/L	Potas- sium, water, mg/L	Sodium, water, unfltrd recover- able, mg/L
Date	25 degC (00095)	(00010)	(00915)	(00916)	(00925)	(00927)	(00935)	(00937)	(00930)	(00929)	
OCT											
01...	196	11.6	10.8	10.8	8.55	8.55	1.07	1.08	4.65	4.65	
27...	--	--	13.5	13.8	9.90	10.1	1.30	1.40	5.50	6.10	
27...	--	--	10.8	11.0	6.90	6.90	1.40	1.50	5.70	5.10	
27...	98.0	12.3	9.00	9.10	5.40	5.40	1.50	1.50	5.20	5.60	
27...	92.0	11.8	8.00	8.30	4.20	4.30	1.50	1.50	6.10	2.20	
28...	106	9.80	6.70	6.60	4.10	4.20	1.30	1.30	2.80	3.20	
28...	111	9.60	--	--	--	--	--	--	--	--	
NOV											
19...	181	12.2	12.0	12.5	8.60	9.00	1.00	1.10	2.70	2.80	
19...	170	12.2	11.0	12.2	7.10	7.70	1.00	1.20	2.50	2.80	
19...	155	11.6	10.6	11.3	6.20	6.40	1.30	1.40	2.50	2.70	
19...	122	11.2	7.70	7.90	4.40	4.60	1.30	1.40	2.00	2.10	
19...	123	10.8	7.70	8.20	4.30	4.50	1.30	1.40	2.00	2.10	
20...	117	10.2	6.90	7.30	4.00	4.30	1.30	1.40	2.00	2.20	
20...	124	9.50	7.40	7.70	5.00	5.20	1.10	1.10	2.10	2.20	
24...	178	8.90	10.1	10.0	8.10	8.10	1.00	.900	5.10	4.90	
DEC											
30...	177	5.70	10.9	11.0	9.10	9.20	1.20	1.10	5.60	5.60	
MAR											
01...	192	3.50	12.7	12.8	9.30	9.40	1.30	1.30	6.50	6.60	
APR											
12...	180	7.80	11.7	12.0	8.20	8.30	1.20	1.20	7.90	8.10	
13...	149	6.90	10.9	10.5	7.00	6.90	1.20	1.20	8.60	8.30	
13...	144	7.40	8.60	8.70	5.40	5.40	1.30	1.30	7.90	7.80	
13...	131	7.70	9.00	9.00	5.40	5.60	1.20	1.30	8.00	7.90	
14...	125	7.70	7.20	7.30	4.40	4.50	1.30	1.30	7.10	7.20	
20...	166	12.0	10.7	10.7	8.10	7.80	1.10	1.10	5.60	5.70	
JUN											
02...	188	13.3	12.7	13.1	9.40	9.70	1.50	1.50	6.30	6.70	
JUL											
14...	154	16.7	9.50	9.30	6.00	5.90	1.10	1.00	4.40	4.30	
14...	139	16.8	9.60	9.70	6.20	6.10	1.00	1.00	4.40	4.10	
14...	144	17.1	10.2	10.3	6.40	6.40	1.00	1.00	5.00	4.90	
14...	131	17.3	9.80	9.80	6.00	5.90	1.00	1.00	4.70	4.60	
15...	125	17.0	9.90	9.70	5.70	5.70	1.00	1.00	4.60	4.50	
15...	138	16.9	9.20	8.90	5.70	5.50	1.20	1.10	4.80	4.80	
19...	177	16.0	10.8	11.8	8.00	15.5	1.30	.900	5.10	3.40	
AUG											
12...	220	17.4	14.6	15.3	11.0	11.3	1.30	1.40	5.80	6.00	
12...	216	17.4	16.6	17.0	11.3	11.4	1.50	1.50	6.90	6.90	
12...	216	17.8	18.0	20.5	7.70	8.30	1.60	1.80	5.40	5.60	
12...	181	18.2	11.3	13.4	5.90	6.30	1.80	3.40	5.20	6.00	
13...	166	17.7	12.8	11.8	6.10	6.10	3.30	1.80	5.90	5.30	
13...	148	17.7	10.0	10.1	5.10	5.20	1.70	1.70	5.00	5.00	
13...	129	17.6	8.50	8.80	4.80	4.90	2.00	2.00	4.40	4.60	
SEP											
13...	238	15.2	18.3	19.0	13.7	14.0	1.40	1.50	6.50	6.90	
17...	229	16.9	16.7	20.3	11.1	12.3	1.60	1.70	6.70	7.10	
18...	186	17.8	12.7	14.4	5.70	6.00	1.90	2.00	5.40	5.30	
18...	71.0	17.3	5.80	6.50	2.30	2.40	2.10	2.10	3.70	2.70	
18...	63.0	16.7	5.30	5.70	2.20	2.20	2.10	2.10	3.30	2.60	
21...	--	--	11.5	11.4	10.0	9.80	1.30	1.20	4.40	4.10	

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	ANC, wat unf fixed end pt, lab, CaCO ₃ (00417)	Acidity water, unfltrd mg/L as CaCO ₃ (70508)	Chlor- ide, heated, filtrd, mg/L (00940)	Fluor- ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L (00955)	Silica, water, unfiltrd mg/L (00956)	Sulfate water, filtrd, mg/L (00945)	Sulfate water, unfiltrd mg/L (00946)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite water, fltrd, mg/L as N (00613)
OCT										
01...	7.00	--	7.58	<.010	6.90	6.95	63.9	80.0	.100	<.030
27...	10.8	--	12.4	<.010	--	--	63.9	--	.220	<.030
27...	14.0	--	7.00	<.010	--	--	42.9	--	.240	<.030
27...	11.7	--	6.69	<.010	--	--	34.2	--	.260	<.030
27...	9.40	--	7.36	<.010	--	--	29.0	--	.230	<.030
28...	6.00	--	5.94	<.010	--	--	28.2	--	.190	<.030
28...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	6.40	--	11.0	<.010	--	--	55.1	--	.210	<.030
19...	7.90	--	11.4	<.010	--	--	47.8	--	.210	<.030
19...	5.10	--	9.84	<.010	--	--	42.5	--	.260	<.030
19...	4.50	--	11.3	<.010	--	--	31.1	--	.250	<.030
19...	4.30	--	9.42	<.010	--	--	32.4	--	.260	<.030
20...	1.40	--	11.3	<.010	--	--	29.7	--	.240	<.030
20...	2.30	--	17.5	<.010	--	--	33.5	--	.200	<.030
24...	6.60	--	8.50	<.010	--	--	53.3	--	.110	<.030
DEC										
30...	4.00	--	8.32	<.010	--	--	58.3	--	.150	<.030
MAR										
01...	7.80	--	11.7	--	--	--	60.6	--	--	--
APR										
12...	8.90	--	16.6	<.010	--	--	51.7	--	.330	.060
13...	7.70	--	13.8	<.010	--	--	43.3	--	.390	.040
13...	3.80	--	14.4	<.010	--	--	35.3	--	.340	.030
13...	7.40	--	13.7	<.010	--	--	34.7	--	.330	.040
14...	4.60	--	12.6	<.010	--	--	29.4	--	.330	<.030
20...	5.30	--	9.79	--	--	--	53.3	--	--	--
JUN										
02...	7.20	--	15.1	--	--	--	61.6	--	--	--
JUL										
14...	4.20	--	6.44	--	--	--	35.9	--	.250	--
14...	4.50	--	6.64	--	--	--	38.1	--	.260	--
14...	7.30	--	7.33	--	--	--	37.7	--	.260	--
14...	6.10	--	7.18	--	--	--	34.5	--	.270	--
15...	7.60	--	5.96	--	--	--	33.2	--	.270	--
15...	4.60	--	7.68	--	--	--	33.5	--	.220	--
19...	4.30	--	7.94	--	--	--	47.8	--	.370	--
AUG										
12...	6.90	--	8.91	<.010	--	--	65.6	--	.270	<.030
12...	8.50	--	9.48	<.010	--	--	68.8	--	.320	<.030
12...	19.1	--	7.12	.060	--	--	47.2	--	.510	<.030
12...	7.00	--	9.14	<.010	--	--	43.2	--	.650	.050
13...	6.70	--	7.54	.040	--	--	40.9	--	.380	.030
13...	6.80	--	7.16	<.010	--	--	34.1	--	.360	.060
13...	5.20	--	7.12	<.010	--	--	31.2	--	.280	.060
SEP										
13...	7.70	--	14.8	<.010	--	--	82.1	--	.240	<.030
17...	12.1	--	9.87	--	--	--	67.6	--	--	--
18...	9.20	--	6.66	--	--	--	44.9	--	--	--
18...	6.00	--	5.07	--	--	--	19.1	--	--	--
18...	5.30	--	4.97	--	--	--	19.3	--	--	--
21...	5.30	--	6.83	--	--	--	59.2	--	--	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Ortho-phosphate, mg/L as P (00671)	Phosphorus, water, filtrd, mg/L (00666)	Phosphorus, water, unfiltrd, mg/L (00665)	Alum-inum, water, filtrd, µg/L (01106)	Alum-inum, water, recoverable, µg/L (01105)	Antimony, water, filtrd, µg/L (01095)	Antimony, water, unfiltrd, µg/L (01097)	Arsenic, water, filtrd, µg/L (01000)	Arsenic, water, unfiltrd, µg/L (01002)
OCT									
01...	<.020	<.001	<.001	27.0	330	.022	.023	<.200	<.200
27...	<.020	--	--	<100	600	--	--	--	--
27...	<.020	--	--	<100	500	--	--	--	--
27...	<.020	--	--	<100	600	--	--	--	--
27...	<.020	--	--	100	700	--	--	--	--
28...	<.020	--	--	100	400	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
NOV									
19...	<.020	--	--	<100	700	--	--	--	--
19...	<.020	--	--	<100	1800	--	--	--	--
19...	<.020	--	--	<100	1700	--	--	--	--
19...	<.020	--	--	100	800	--	--	--	--
19...	<.020	--	--	<100	600	--	--	--	--
20...	<.020	--	--	300	500	--	--	--	--
20...	<.020	--	--	200	500	--	--	--	--
24...	<.020	--	--	<100	300	--	--	--	--
DEC									
30...	<.020	--	--	<100	400	--	--	--	--
MAR									
01...	--	--	--	<100	400	--	--	--	--
APR									
12...	<.020	--	--	<100	1600	--	--	--	--
13...	<.020	--	--	300	2100	--	--	--	--
13...	<.020	--	--	200	700	--	--	--	--
13...	<.020	--	--	400	1000	--	--	--	--
14...	<.020	--	--	<100	600	--	--	--	--
20...	--	--	--	<100	300	--	--	--	--
JUN									
02...	--	--	--	<100	300	--	--	--	--
JUL									
14...	--	--	--	<100	200	--	--	--	--
14...	--	--	--	<100	200	--	--	--	--
14...	--	--	--	<100	600	--	--	--	--
14...	--	--	--	<100	400	--	--	--	--
15...	--	--	--	<100	500	--	--	--	--
15...	--	--	--	<100	300	--	--	--	--
19...	--	--	--	<100	600	--	--	--	--
AUG									
12...	<.020	--	--	<100	400	--	--	--	--
12...	<.020	--	--	<100	700	--	--	--	--
12...	<.020	--	--	200	1700	--	--	--	--
12...	<.020	--	--	300	1000	--	--	--	--
13...	<.020	--	--	200	600	--	--	--	--
13...	<.020	--	--	<100	500	--	--	--	--
13...	<.020	--	--	200	600	--	--	--	--
SEP									
13...	<.020	--	--	<100	200	--	--	--	--
17...	--	--	--	<100	500	--	--	--	--
18...	--	--	--	<100	3100	--	--	--	--
18...	--	--	--	200	1800	--	--	--	--
18...	--	--	--	300	1400	--	--	--	--
21...	--	--	--	<100	400	--	--	--	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Germanium, water, fltrd, (01125)	Germanium, water, unfltrd (01127)	Holmium water, fltrd, (50577)	Holmium water, unfltrd (01247)	Iron, water, fltrd, (01046)	Iron, water, unfltrd (01045)	Lanthanum, water, recover- able, fltrd, (01180)	Lanthanum, water, unfltrd (01182)	Lead, water, fltrd, (01049)	Lead, water, unfltrd (01051)
OCT										
01...	<.020	<.020	.014	.032	430	1060	.290	.540	.071	.430
27...	--	--	--	--	90.0	2410	--	--	--	--
27...	--	--	--	--	100	1610	--	--	--	--
27...	--	--	--	--	140	1770	--	--	--	--
27...	--	--	--	--	160	1820	--	--	--	--
28...	--	--	--	--	180	750	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	--	--	--	--	50.0	2330	--	--	--	--
19...	--	--	--	--	50.0	6950	--	--	--	--
19...	--	--	--	--	80.0	7760	--	--	--	--
19...	--	--	--	--	100	2500	--	--	--	--
19...	--	--	--	--	100	1240	--	--	--	--
20...	--	--	--	--	180	920	--	--	--	--
20...	--	--	--	--	180	1010	--	--	--	--
24...	--	--	--	--	1150	870	--	--	--	--
DEC										
30...	--	--	--	--	450	1110	--	--	--	--
MAR										
01...	--	--	--	--	300	980	--	--	--	--
APR										
12...	--	--	--	--	190	5070	--	--	--	--
13...	--	--	--	--	860	6680	--	--	--	--
13...	--	--	--	--	390	1510	--	--	--	--
13...	--	--	--	--	1040	2790	--	--	--	--
14...	--	--	--	--	90.0	1130	--	--	--	--
20...	--	--	--	--	450	1170	--	--	--	--
JUN										
02...	--	--	--	--	260	1050	--	--	--	--
JUL										
14...	--	--	--	--	210	490	--	--	--	--
14...	--	--	--	--	220	600	--	--	--	--
14...	--	--	--	--	140	1990	--	--	--	--
14...	--	--	--	--	140	1110	--	--	--	--
15...	--	--	--	--	160	1510	--	--	--	--
15...	--	--	--	--	230	650	--	--	--	--
19...	--	--	--	--	230	1880	--	--	--	--
AUG										
12...	--	--	--	--	100	1910	--	--	--	--
12...	--	--	--	--	90.0	3030	--	--	--	--
12...	--	--	--	--	350	8390	--	--	--	--
12...	--	--	--	--	830	5610	--	--	--	--
13...	--	--	--	--	370	1690	--	--	--	--
13...	--	--	--	--	180	1520	--	--	--	--
13...	--	--	--	--	170	1380	--	--	--	--
SEP										
13...	--	--	--	--	330	600	--	--	--	--
17...	--	--	--	--	220	2760	--	--	--	--
18...	--	--	--	--	260	12300	--	--	--	--
18...	--	--	--	--	470	4720	--	--	--	--
18...	--	--	--	--	500	3030	--	--	--	--
21...	--	--	--	--	550	1280	--	--	--	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Lithium water, filtrd, µg/L (01130)	Lithium water, recover -able, µg/L (01132)	Mangan- ese, water, unfltrd filtrd, µg/L (01056)	Mangan- ese, water, recover -able, µg/L (01055)	Molyb- denum, water, filtrd, µg/L (01060)	Molyb- denum, water, unfltrd filtrd, µg/L (01062)	Neodyn- ium, water, recover -able, µg/L (50579)	Neodyn- ium, water, unfltrd filtrd, µg/L (01237)	Nickel, water, filtrd, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)
OCT										
01...	12.0	12.0	646	646	.290	.280	.260	.580	26.5	27.0
27...	--	--	370	610	--	--	--	--	16.0	24.0
27...	--	--	210	260	--	--	--	--	13.0	15.0
27...	--	--	160	220	--	--	--	--	11.0	13.0
27...	--	--	160	250	--	--	--	--	14.0	10.0
28...	--	--	320	380	--	--	--	--	10.0	16.0
28...	--	--	--	--	--	--	--	--	--	--
NOV										
19...	--	--	510	580	--	--	--	--	14.0	20.0
19...	--	--	390	540	--	--	--	--	20.0	19.0
19...	--	--	370	550	--	--	--	--	10.0	16.0
19...	--	--	320	390	--	--	--	--	6.00	14.0
19...	--	--	370	420	--	--	--	--	11.0	19.0
20...	--	--	350	390	--	--	--	--	13.0	14.0
20...	--	--	360	420	--	--	--	--	17.0	17.0
24...	--	--	590	590	--	--	--	--	23.0	25.0
DEC										
30...	--	--	610	610	--	--	--	--	26.0	25.0
MAR										
01...	--	--	700	710	--	--	--	--	25.0	25.0
APR										
12...	--	--	480	590	--	--	--	--	20.0	25.0
13...	--	--	410	530	--	--	--	--	20.0	20.0
13...	--	--	380	400	--	--	--	--	15.0	15.0
13...	--	--	380	400	--	--	--	--	15.0	15.0
14...	--	--	310	350	--	--	--	--	15.0	15.0
20...	--	--	480	560	--	--	--	--	25.0	25.0
JUN										
02...	--	--	560	600	--	--	--	--	20.0	25.0
JUL										
14...	--	--	240	260	--	--	--	--	20.0	20.0
14...	--	--	270	300	--	--	--	--	20.0	20.0
14...	--	--	280	380	--	--	--	--	20.0	25.0
14...	--	--	250	300	--	--	--	--	15.0	20.0
15...	--	--	220	290	--	--	--	--	15.0	20.0
15...	--	--	290	300	--	--	--	--	20.0	20.0
19...	--	--	510	1030	--	--	--	--	23.0	48.0
AUG										
12...	--	--	50.0	230	--	--	--	--	15.0	20.0
12...	--	--	60.0	290	--	--	--	--	15.0	20.0
12...	--	--	20.0	500	--	--	--	--	<5.00	20.0
12...	--	--	210	280	--	--	--	--	15.0	15.0
13...	--	--	30.0	270	--	--	--	--	<5.00	15.0
13...	--	--	120	240	--	--	--	--	15.0	15.0
13...	--	--	140	250	--	--	--	--	15.0	15.0
SEP										
13...	--	--	600	630	--	--	--	--	30.0	25.0
17...	--	--	190	1000	--	--	--	--	15.0	15.0
18...	--	--	50.0	1370	--	--	--	--	<5.00	40.0
18...	--	--	130	900	--	--	--	--	10.0	30.0
18...	--	--	200	670	--	--	--	--	10.0	20.0
21...	--	--	530	520	--	--	--	--	30.0	30.0

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Zinc, water, unfltrd fltrd, μg/L (01090)	Zinc, water, recover -able, μg/L (01092)	Uranium natural water, fltrd, μg/L (22703)	Uranium natural water unfltrd μg/L (28011)
OCT				
01...	68.5	64.5	.020	.050
27...	63.0	73.0	--	--
27...	21.0	32.0	--	--
27...	31.0	30.0	--	--
27...	21.0	32.0	--	--
28...	43.0	45.0	--	--
28...	--	--	--	--
NOV				
19...	58.0	58.0	--	--
19...	71.0	61.0	--	--
19...	41.0	57.0	--	--
19...	59.0	57.0	--	--
19...	50.0	45.0	--	--
20...	71.0	54.0	--	--
20...	73.0	41.0	--	--
24...	326	74.0	--	--
DEC				
30...	68.0	62.0	--	--
MAR				
01...	50.0	55.0	--	--
APR				
12...	40.0	70.0	--	--
13...	45.0	85.0	--	--
13...	45.0	55.0	--	--
13...	35.0	45.0	--	--
14...	35.0	40.0	--	--
20...	70.0	95.0	--	--
JUN				
02...	40.0	45.0	--	--
JUL				
14...	40.0	45.0	--	--
14...	40.0	45.0	--	--
14...	45.0	85.0	--	--
14...	90.0	120	--	--
15...	20.0	45.0	--	--
15...	85.0	90.0	--	--
19...	61.0	61.0	--	--
AUG				
12...	45.0	70.0	--	--
12...	25.0	60.0	--	--
12...	10.0	110	--	--
12...	25.0	60.0	--	--
13...	15.0	40.0	--	--
13...	15.0	35.0	--	--
13...	40.0	65.0	--	--
SEP				
13...	45.0	50.0	--	--
17...	30.0	515	--	--
18...	15.0	185	--	--
18...	25.0	85.0	--	--
18...	25.0	65.0	--	--
21...	70.0	75.0	--	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	200	182	192	---	---	---	159	137	153	186	180	183
2	199	181	191	---	---	---	155	120	129	190	184	187
3	208	180	194	295	192	236	158	120	131	195	187	190
4	209	175	192	205	147	172	177	120	134	189	150	176
5	210	176	193	180	153	168	159	125	136	151	140	145
6	210	185	199	166	149	158	173	124	144	165	149	158
7	204	181	191	170	148	158	165	123	133	170	162	167
8	202	180	193	175	156	167	165	152	160	173	169	171
9	212	182	194	183	163	175	163	153	156	181	171	175
10	229	192	212	183	170	176	223	162	182	193	180	188
11	236	207	219	184	161	174	202	88	114	195	188	191
12	231	206	218	177	157	166	131	108	122	190	183	186
13	237	214	225	177	158	167	147	131	139	190	185	188
14	235	178	221	182	159	170	151	146	149	197	190	193
15	191	119	137	186	163	174	171	151	160	202	176	196
16	190	151	172	189	163	175	170	162	165	206	175	194
17	198	175	188	199	166	188	180	164	169	205	199	202
18	193	172	182	207	199	202	169	161	165	205	196	200
19	199	175	188	206	113	181	171	166	169	206	199	202
20	202	181	192	---	---	---	171	166	169	209	204	206
21	207	181	193	154	124	146	178	168	172	213	206	209
22	202	183	193	163	148	158	183	175	179	210	204	207
23	205	186	194	174	160	167	183	172	179	226	208	217
24	207	187	198	180	163	173	192	134	161	220	214	216
25	213	196	204	174	154	162	153	136	146	224	214	218
26	213	192	204	183	172	176	164	153	159	220	216	217
27	212	90	134	190	169	183	170	164	167	220	214	216
28	127	94	113	193	130	170	173	170	172	217	208	212
29	127	94	109	137	123	131	176	172	174	221	213	215
30	159	114	127	159	133	146	180	172	176	222	218	220
31	---	---	---	---	---	---	185	174	180	226	211	220
MONTH	237	90	185	295	113	171	223	88	156	226	140	196
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	228	216	221	198	190	192	191	165	177	170	163	167
2	237	217	224	191	148	176	171	164	167	176	130	168
3	270	216	228	154	140	147	179	171	175	140	116	126
4	264	217	235	156	151	154	181	176	178	150	139	145
5	226	217	220	157	154	155	185	178	181	159	149	154
6	301	204	232	165	155	159	185	182	184	163	157	160
7	204	178	186	169	156	160	184	179	181	167	161	164
8	201	187	192	166	159	163	197	178	181	175	165	169
9	220	193	206	166	161	164	181	172	175	178	171	174
10	219	202	209	166	163	165	178	174	176	180	173	176
11	219	210	215	165	162	164	186	176	179	185	175	179
12	221	215	218	171	165	167	188	163	181	191	181	185
13	220	214	217	174	170	172	164	117	142	198	184	190
14	220	214	218	176	173	174	133	116	126	199	192	195
15	224	218	220	180	173	175	142	133	137	204	186	197
16	233	217	223	---	---	---	147	142	145	192	176	183
17	227	206	220	203	179	191	153	147	150	205	178	191
18	230	216	223	212	196	204	161	151	156	202	169	180
19	224	216	220	224	206	215	166	158	162	196	185	191
20	224	215	219	225	205	214	171	163	167	198	190	194
21	223	212	218	205	173	184	173	168	170	202	192	195
22	212	204	207	176	171	173	178	171	173	206	197	201
23	210	203	206	180	175	178	178	171	173	208	202	206
24	227	207	217	180	176	178	175	169	171	211	204	207
25	224	215	218	176	167	170	183	172	175	217	210	213
26	220	212	216	173	167	169	179	126	147	218	159	198
27	220	214	217	174	172	173	148	131	141	182	136	164
28	217	205	211	176	173	175	159	147	152	201	181	192
29	206	197	202	186	174	179	164	158	161	213	201	208
30	---	---	---	190	186	188	169	162	165	215	211	212
31	---	---	---	189	184	187	---	---	---	218	191	210
MONTH	301	178	216	225	140	176	197	116	165	218	116	184

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	205	186	191	240	235	237	215	137	164	229	222	225
2	204	181	192	260	238	250	170	145	161	227	223	225
3	210	198	204	265	258	261	196	170	186	235	227	232
4	215	210	213	265	259	262	200	162	193	236	232	234
5	214	134	184	262	250	256	182	164	173	234	229	231
6	164	133	146	270	253	260	211	182	195	239	230	235
7	181	163	173	273	267	270	210	204	206	247	237	241
8	196	181	188	269	264	267	211	205	207	245	230	239
9	202	193	197	270	263	267	225	210	217	237	190	216
10	205	196	201	276	266	270	233	222	226	224	218	221
11	210	191	197	278	271	274	233	225	230	232	223	226
12	209	196	201	277	68	132	237	157	209	242	232	237
13	214	207	209	147	88	118	168	126	139	243	238	240
14	215	209	212	156	120	143	186	154	173	241	237	239
15	214	194	203	145	120	134	199	185	191	246	236	242
16	209	190	198	164	145	155	205	199	201	247	241	245
17	210	167	201	174	164	169	206	201	204	242	214	236
18	191	167	179	173	166	170	213	204	207	216	63	87
19	208	191	199	184	167	176	214	212	213	75	63	69
20	212	206	209	193	183	189	215	202	213	---	---	---
21	220	212	216	235	192	208	207	147	158	---	---	---
22	236	174	212	224	213	216	191	159	177	---	---	---
23	210	181	195	214	152	187	201	191	196	---	---	---
24	237	210	223	188	152	167	213	201	205	---	---	---
25	236	232	234	208	188	201	217	212	214	211	208	210
26	238	226	231	212	207	210	217	214	216	212	209	210
27	240	231	235	211	158	193	223	215	218	223	204	207
28	240	226	238	178	160	165	226	191	219	206	97	157
29	237	210	223	197	178	189	194	167	181	140	105	123
30	239	231	234	207	197	202	211	194	203	154	140	148
31	---	---	---	216	207	212	222	211	218	---	---	---
MONTH	240	133	205	278	68	207	237	126	197	247	63	207
YEAR	301	63	188									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.8	6.8	6.8	6.8	6.7	6.7	6.8	6.6	6.7	6.6	6.5	6.5
2	6.8	6.8	6.8	6.8	6.6	6.7	6.6	6.5	6.6	7.1	6.5	6.5
3	6.8	6.8	6.8	6.8	6.6	6.8	6.6	6.5	6.5	6.6	6.3	6.4
4	6.8	6.8	6.8	6.8	6.7	6.7	6.5	6.5	6.5	6.6	6.5	6.5
5	6.8	6.8	6.8	6.8	6.7	6.8	6.6	6.5	6.6	6.5	6.4	6.5
6	6.8	6.6	6.8	6.8	6.7	6.8	6.6	6.5	6.6	6.5	6.4	6.5
7	6.7	6.6	6.6	7.0	6.6	6.8	6.8	6.6	6.7	6.6	6.4	6.5
8	6.7	6.7	6.7	6.9	6.7	6.8	6.7	6.7	6.7	6.6	6.5	6.5
9	6.7	6.6	6.7	6.8	6.7	6.7	6.7	6.6	6.7	6.6	6.5	6.6
10	6.9	6.7	6.8	6.7	6.7	6.7	6.8	6.6	6.7	6.7	6.5	6.6
11	6.9	6.8	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.8	6.6	6.7
12	6.8	6.8	6.8	6.7	6.7	6.7	6.8	6.7	6.7	6.7	6.6	6.7
13	6.9	6.8	6.9	6.7	6.7	6.7	6.8	6.4	6.5	6.8	6.6	6.7
14	6.9	6.9	6.9	6.7	6.7	6.7	6.4	6.3	6.4	6.8	6.7	6.7
15	6.9	6.9	6.9	6.7	6.7	6.7	6.4	6.3	6.3	6.8	6.7	6.7
16	6.9	6.9	6.9	6.7	6.7	6.7	6.3	6.3	6.3	6.8	6.7	6.7
17	6.9	6.8	6.9	6.8	6.7	6.8	6.3	6.3	6.3	6.9	6.7	6.7
18	6.8	6.8	6.8	6.8	6.8	6.8	6.5	6.3	6.5	6.9	6.7	6.7
19	6.9	6.8	6.9	6.9	6.8	6.8	6.7	6.5	6.7	6.7	6.6	6.7
20	6.9	6.8	6.9	6.9	6.8	6.8	6.7	6.6	6.7	6.7	6.7	6.7
21	7.0	6.9	6.9	6.8	6.6	6.7	6.7	6.6	6.7	6.8	6.7	6.7
22	6.9	6.9	6.9	6.7	6.6	6.7	6.7	6.6	6.7	6.8	6.7	6.7
23	6.9	6.9	6.9	6.7	6.7	6.7	6.6	6.5	6.6	6.8	6.7	6.8
24	6.9	6.9	6.9	6.7	6.6	6.7	6.6	6.5	6.5	6.9	6.7	6.8
25	6.9	6.9	6.9	6.7	6.7	6.7	6.6	6.5	6.5	6.8	6.8	6.8
26	6.9	6.8	6.8	6.8	6.7	6.7	6.6	6.4	6.5	7.0	6.2	6.8
27	6.8	6.7	6.8	6.8	6.7	6.8	6.4	6.3	6.4	6.8	6.6	6.7
28	6.8	6.8	6.8	6.9	6.8	6.8	6.4	6.4	6.4	6.8	6.6	6.7
29	6.8	6.8	6.8	6.9	6.4	6.8	6.5	6.3	6.4	6.9	6.8	6.8
30	--	--	--	6.7	6.7	6.7	6.5	6.4	6.5	6.9	6.8	6.9
31	--	--	--	6.7	6.7	6.7	--	--	--	6.9	6.8	6.8
MAX	7.0	6.9	6.9	7.0	6.8	6.8	6.8	6.7	6.7	7.1	6.8	6.9
MIN	6.7	6.6	6.6	6.7	6.4	6.7	6.3	6.3	6.3	6.5	6.2	6.4
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.6	6.6	6.9	6.7	6.8
2	6.9	6.8	6.8	7.0	6.8	6.9	6.8	6.6	6.7	6.9	6.9	6.9
3	6.8	6.8	6.8	7.1	6.9	6.9	6.9	6.7	6.8	6.9	6.8	6.8
4	6.8	6.8	6.8	7.1	6.9	7.0	7.0	6.8	6.8	6.9	6.8	6.8
5	6.9	6.6	6.8	7.1	6.8	7.0	6.9	6.8	6.8	6.9	6.9	6.9
6	6.6	6.6	6.6	7.1	6.9	7.0	6.9	6.7	6.8	6.9	6.8	6.8
7	6.8	6.6	6.7	7.0	6.9	6.9	6.8	6.7	6.8	6.9	6.7	6.8
8	6.8	6.7	6.8	7.1	6.8	6.9	6.9	6.8	6.8	6.9	6.8	6.8
9	6.8	6.7	6.7	7.2	6.9	7.1	6.9	6.8	6.8	7.0	6.8	6.8
10	6.7	6.6	6.7	7.2	7.0	7.0	6.9	6.7	6.8	6.9	6.8	6.8
11	6.7	6.7	6.7	7.1	6.9	7.0	7.0	6.8	6.9	6.9	6.8	6.8
12	6.7	6.6	6.7	7.1	5.7	6.2	7.3	6.4	6.8	6.8	6.7	6.8
13	6.8	6.6	6.7	6.5	6.0	6.4	6.8	6.6	6.7	6.8	6.7	6.7
14	6.8	6.7	6.8	6.4	6.5	6.5	6.8	6.7	6.7	6.9	6.8	6.8
15	6.8	6.7	6.7	6.6	6.4	6.5	6.8	6.7	6.7	6.9	6.7	6.8
16	6.8	6.7	6.7	6.6	6.5	6.5	6.9	6.7	6.8	6.9	6.7	6.8
17	7.1	6.6	6.8	6.6	6.5	6.5	6.9	6.7	6.8	6.9	6.8	6.9
18	6.8	6.6	6.7	6.6	6.5	6.6	6.8	6.8	6.8	6.9	5.5	5.7
19	6.9	6.7	6.9	6.7	6.5	6.6	6.8	6.7	6.7	6.2	5.5	6.0
20	6.9	6.9	6.9	6.7	6.6	6.7	7.0	6.7	6.8	6.4	6.1	6.3
21	6.9	6.8	6.9	6.9	6.7	6.8	6.9	6.7	6.8	6.5	6.4	6.5
22	7.0	6.6	6.8	6.8	6.7	6.7	6.9	6.7	6.8	6.6	6.5	6.5
23	6.9	6.7	6.8	6.8	6.6	6.6	6.9	6.8	6.8	6.6	6.5	6.6
24	6.9	6.8	6.9	6.8	6.6	6.7	6.9	6.8	6.9	6.7	6.5	6.6
25	7.0	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8	6.6	6.6	6.6
26	6.9	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8	6.6	6.5	6.6
27	6.9	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8	6.7	6.6	6.6
28	6.9	6.9	6.9	6.7	6.7	6.7	6.9	6.8	6.8	6.7	6.2	6.6
29	6.9	6.8	6.9	6.7	6.7	6.7	6.8	6.7	6.8	6.4	6.3	6.4
30	6.9	6.8	6.8	6.7	6.7	6.7	6.9	6.7	6.8	6.5	6.4	6.5
31	--	--	--	6.7	6.6	6.7	6.8	6.7	6.8	--	--	--
MAX	7.1	6.9	6.9	7.2	7.0	7.1	7.3	6.8	6.9	7.0	6.9	6.9
MIN	6.6	6.6	6.6	6.5	5.7	6.2	6.8	6.4	6.6	6.2	5.5	5.7

YEAR	MAX	MAXIMUM	7.3	MINIMUM	6.2
	MIN	MAXIMUM	7.0	MINIMUM	5.5
	MEDIAN	MAXIMUM	7.1	MINIMUM	5.7

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	11.5	12.0	12.5	10.0	11.5	7.5	6.0	7.0	6.0	5.0	5.5
2	13.0	10.0	11.0	13.0	11.5	12.5	6.0	4.5	5.5	7.0	5.0	6.0
3	11.0	9.0	10.0	13.5	12.0	13.0	5.0	4.0	4.5	8.0	7.0	7.5
4	10.5	10.0	10.5	13.5	11.5	12.5	5.5	3.5	4.5	8.5	6.5	8.0
5	11.0	9.0	10.0	13.0	12.5	12.5	5.5	3.5	5.0	6.5	6.0	6.0
6	10.5	8.0	9.5	13.0	12.5	12.5	4.0	3.0	3.5	6.0	3.0	5.0
7	11.0	8.0	9.5	12.5	10.0	11.5	4.0	3.0	3.5	3.0	2.0	2.5
8	12.5	9.5	11.0	10.0	7.0	9.0	4.0	2.5	3.5	3.5	2.0	3.0
9	13.5	10.5	12.0	7.5	6.0	6.5	5.0	3.5	4.5	3.0	1.0	2.5
10	14.0	12.0	13.0	7.0	5.0	6.0	6.0	4.5	5.5	1.0	0.5	1.0
11	14.0	12.0	13.0	8.0	6.0	6.5	6.5	6.0	6.5	2.5	1.0	1.5
12	13.5	11.0	12.5	10.0	8.0	9.0	6.0	5.5	6.0	4.0	2.5	3.0
13	14.0	11.5	13.0	10.5	6.5	8.5	5.5	5.0	5.5	5.0	2.5	4.0
14	12.5	11.0	11.5	7.0	5.5	6.5	5.5	4.0	4.5	2.5	1.5	2.0
15	13.0	11.5	12.0	8.5	7.0	7.5	5.5	4.5	5.0	1.5	0.0	1.0
16	11.5	9.5	10.5	8.5	7.0	7.5	5.5	4.5	5.0	0.5	0.0	0.5
17	11.0	10.5	11.0	9.5	8.5	9.0	6.0	5.0	5.5	1.5	0.5	1.0
18	11.0	9.5	10.5	9.5	8.0	8.5	5.0	4.5	4.5	3.0	1.5	2.5
19	11.5	10.0	10.5	12.0	9.5	11.0	5.5	4.5	5.0	2.5	1.5	2.0
20	11.0	8.5	10.0	10.5	8.5	9.5	5.0	4.0	4.5	2.5	1.0	1.5
21	13.0	10.0	11.0	9.5	7.5	8.5	4.5	3.5	4.0	2.0	0.5	1.0
22	12.0	9.5	11.0	9.5	8.0	9.0	5.5	4.0	5.0	3.0	1.0	1.5
23	9.5	7.5	8.5	9.5	7.5	8.5	6.5	5.5	6.0	1.0	0.0	0.5
24	9.0	6.5	8.0	10.0	8.0	9.0	6.5	5.5	6.0	1.0	0.0	0.5
25	9.5	6.5	8.0	8.0	6.5	7.0	5.5	5.0	5.0	0.5	0.0	0.5
26	12.0	9.5	11.0	7.5	6.0	6.5	5.5	4.5	5.0	1.0	0.0	0.5
27	13.0	11.0	12.0	8.0	6.5	7.5	6.0	5.0	5.5	1.0	0.5	1.0
28	11.0	9.5	10.5	10.0	8.0	9.0	6.0	4.5	5.0	1.0	0.5	1.0
29	11.0	10.0	10.5	8.5	6.5	7.0	6.0	4.5	5.0	1.5	0.5	1.0
30	11.0	9.0	10.0	7.5	6.5	7.0	6.0	5.0	5.5	1.0	0.5	0.5
31	11.0	9.0	10.5	---	---	---	6.0	5.0	5.5	1.0	0.0	0.5
MONTH	14.0	6.5	10.8	13.5	5.0	9.0	7.5	2.5	5.0	8.5	0.0	2.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.5	0.0	0.5	5.5	3.0	4.5	9.0	8.0	8.0	16.5	12.0	14.0
2	1.5	0.5	1.0	7.5	4.5	5.5	8.0	7.5	8.0	15.0	14.0	14.5
3	1.0	0.0	1.0	6.5	4.0	5.5	8.0	7.5	7.5	14.0	11.0	12.0
4	3.0	1.0	2.0	6.0	5.0	5.5	7.5	5.5	7.0	12.5	9.5	11.0
5	2.5	1.0	2.0	6.5	5.5	6.0	7.5	3.5	5.0	12.0	9.5	10.5
6	2.0	1.0	1.5	8.0	6.5	7.0	8.5	3.5	6.0	13.5	9.5	11.5
7	3.0	2.0	2.5	8.0	5.5	6.5	11.0	6.5	8.5	14.5	11.5	13.0
8	2.0	0.5	1.0	6.5	5.5	6.0	8.5	6.5	7.5	14.0	11.5	12.5
9	2.5	0.0	1.0	6.0	4.5	5.5	10.5	7.0	8.5	15.0	11.0	13.0
10	4.5	2.0	3.0	6.5	4.0	5.0	11.0	6.0	8.5	16.0	13.0	14.5
11	4.0	2.0	3.0	7.0	4.0	5.5	8.5	7.0	7.5	17.0	13.5	15.5
12	4.0	1.5	2.5	6.0	4.0	5.0	8.5	7.0	7.5	17.5	14.0	15.5
13	4.5	2.5	3.0	6.0	3.0	4.5	7.5	6.5	7.0	18.0	14.5	16.0
14	3.5	1.5	2.5	5.5	3.0	4.5	8.5	7.5	7.5	17.0	15.0	16.0
15	3.0	0.5	1.5	8.0	4.5	6.0	10.0	6.5	8.0	18.5	14.5	16.5
16	1.0	0.0	0.5	5.5	2.5	4.0	10.5	6.5	8.5	17.5	15.5	16.0
17	1.0	0.0	0.5	5.0	3.0	4.0	12.5	7.5	10.0	17.0	14.0	15.5
18	2.5	0.5	1.5	6.5	3.5	5.0	14.5	10.0	12.0	17.5	15.0	16.0
19	4.5	1.5	3.0	6.0	3.5	4.5	15.0	11.0	13.0	16.0	14.5	15.5
20	5.0	2.0	3.5	7.0	2.5	5.0	14.5	12.0	13.0	15.5	14.0	14.5
21	5.5	3.5	4.5	6.0	4.0	5.5	14.0	11.5	12.5	16.5	14.5	15.5
22	5.0	3.0	3.5	5.0	2.5	4.0	14.5	12.0	13.0	18.5	15.0	16.5
23	5.0	2.0	3.5	6.0	2.0	4.0	13.0	12.0	12.5	19.5	15.5	17.5
24	3.5	2.5	3.5	7.5	3.5	5.5	15.0	11.0	13.0	19.0	16.0	17.5
25	4.0	1.0	2.5	7.5	6.5	6.5	12.0	10.0	11.0	19.0	15.5	17.0
26	4.0	0.5	2.5	10.5	6.5	8.5	10.5	10.0	10.5	16.5	15.5	16.0
27	5.0	2.0	3.5	11.0	9.0	10.0	12.0	9.5	10.5	17.0	15.5	16.0
28	5.5	2.0	3.5	12.0	8.5	10.0	12.0	7.5	9.5	17.5	15.5	16.0
29	6.0	2.0	4.0	11.5	8.0	9.5	14.0	9.0	11.5	16.0	13.0	14.5
30	---	---	---	8.5	7.0	7.5	15.5	11.0	13.0	16.0	11.5	13.5
31	---	---	---	9.0	7.0	8.0	---	---	---	14.5	13.5	13.5
MONTH	6.0	0.0	2.3	12.0	2.0	5.9	15.5	3.5	9.5	19.5	9.5	14.7

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004