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 mi^2.

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 sea level, from topographic map.

REMARKS.--Records poor. Other data for this project presented in tables on pages 316-370.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge ft^3/s	Gage Height (ft)
Dec. 17	0415	*2,030	*4.17

No other peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	39	55	65	68	182	77	30	75	21	32
2	16	12	35	53	66	67	166	75	49	69	19	22
3	15	12	31	51	63	65	152	72	65	53	19	22
4	18	12	31	49	57	67	147	67	44	54	24	23
5	24	12	32	48	59	68	131	65	37	68	47	26
6	20	11	31	49	59	64	162	61	33	65	26	21
7	17	12	29	47	57	65	153	58	31	50	22	18
8	14	12	30	46	55	66	135	58	30	46	20	18
9	13	12	29	44	56	68	138	56	27	46	20	18
10	13	25	28	41	91	68	143	51	26	44	21	20
11	13	21	29	40	76	66	145	49	29	44	21	19
12	12	16	30	40	68	67	146	46	33	40	20	15
13	12	14	27	37	67	153	133	45	40	38	18	14
14	12	15	39	36	70	e165	126	43	28	37	18	17
15	11	13	40	38	91	e140	122	41	26	38	17	14
16	12	12	74	37	87	e125	179	39	56	36	16	13
17	16	12	1280	36	95	e135	165	39	104	36	18	13
18	47	11	409	37	82	e125	181	38	45	34	17	11
19	35	11	240	56	77	e110	154	37	37	31	17	12
20	23	11	181	67	77	e105	144	35	49	30	26	14
21	20	12	139	52	77	e115	138	41	196	28	20	14
22	17	12	119	44	69	e130	130	70	211	25	19	13
23	15	12	101	41	69	e110	123	57	166	25	18	10
24	16	15	91	42	e60	135	113	41	121	23	17	36
25	15	16	82	41	e75	126	105	37	94	41	17	88
26	15	58	76	38	e90	120	99	41	78	60	17	32
27	14	52	71	e37	e80	114	93	42	69	31	17	23
28	14	40	67	e36	e75	108	89	50	61	25	18	18
29	12	37	63	35	---	107	83	39	57	24	17	16
30	12	44	60	67	---	342	81	35	55	23	16	15
31	12	---	57	75	---	210	---	32	---	23	26	---
TOTAL	521	565	3590	1415	2013	3474	4058	1537	1927	1262	629	627
MEAN	16.8	18.8	116	45.6	71.9	112	135	49.6	64.2	40.7	20.3	20.9
MAX	47	58	1280	75	95	342	182	77	211	75	47	88
MIN	11	11	27	35	55	64	81	32	26	23	16	10
CFSM	.39	.43	2.67	1.05	1.66	2.59	3.12	1.15	1.48	.94	.47	.48
IN.	.45	.49	3.08	1.22	1.73	2.98	3.49	1.32	1.66	1.08	.54	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

MEAN	49.6	50.7	104	88.1	104	139	113	82.4	71.7	42.4	28.5	33.1
MAX	135	143	284	177	196	196	144	181	110	64.2	39.9	70.7
(WY)	1997	1997	1997	1998	1998	1998	1998	1998	1998	1996	1996	1999
MIN	16.8	16.5	11.4	45.6	70.0	101	75.4	47.0	18.4	13.5	16.5	15.7
(WY)	2001	1999	1999	2001	2000	1999	1999	1999	1999	1999	1999	1998

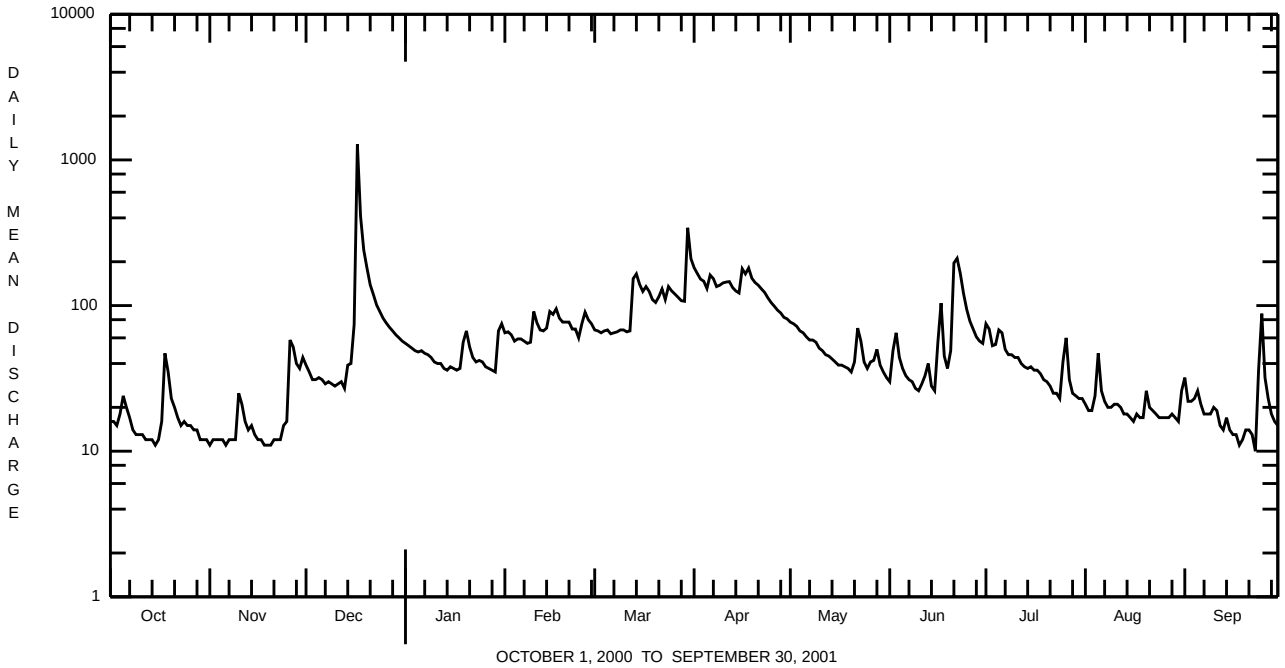
e Estimated.

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	25925		21618			
ANNUAL MEAN	70.8		59.2		74.8	
HIGHEST ANNUAL MEAN					98.7	1997
LOWEST ANNUAL MEAN					46.6	1999
HIGHEST DAILY MEAN	1280	Dec 17	1280	Dec 17	1280	Dec 17 2000
LOWEST DAILY MEAN	**a**11	Oct 15	10	Sep 23	9.8	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	12	Nov 16	12	Nov 16	10	Dec 14 1998
MAXIMUM PEAK FLOW			2030	Dec 17	**b**2030	Dec 17 2000
MAXIMUM PEAK STAGE			4.17	Dec 17	4.17	Dec 17 2000
INSTANTANEOUS LOW FLOW			9.6	Sep 23,24	**a**9.6	Oct 2 1998
ANNUAL RUNOFF (CFSM)	1.64		1.37		1.73	
ANNUAL RUNOFF (INCHES)	22.27		18.57		23.46	
10 PERCENT EXCEEDS	141		128		145	
50 PERCENT EXCEEDS	48		40		50	
90 PERCENT EXCEEDS	15		14		15	

a First occurrence.
b From rating curve extended above 638 ft^3/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 fair except for periods Nov. 21 to Feb. 6, and May 21 to June 19, which are poor. pH records rated 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. Other data for this project presented in tables on pages 316-370. Figure 10 shows the location of sites sampled as part of the Swatara Creek Project. Abbreviations used: E, estimated.

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, 371, microsiemens, Aug. 5; minimum, 86, microsiemens, Dec. 17.
PH: Maximum, 7.7, May 16 minimum, 4.5, Oct. 2.
WATER TEMPERATURE: Maximum, 23.5°C, Aug. 8; minimum, 0.0°C, Dec. 14, Jan. 21, 23.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	OXIDATION REDUCTION POTENTIAL (MV) (00090)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	SPECIFIC CONDUCTANCE (µS/CM) (00095)
OCT										
02...	1445	9813	1028	15	26	9.9	96	4.5	6.6	266
NOV										
21...	0815	9813	1028	12	378	13.0	96	6.6	6.3	271
JAN										
08...	1130	930	1028	45	350	14.7	108	6.6	6.8	237
MAR										
13...	0930	930	1028	174	349	10.1	77	6.5	6.0	165
MAY										
21...	1100	930	1028	35	312	11.0	102	6.6	6.7	256
21...	2230	930	1028	74	--	--	--	6.8	6.7	217
22...	0400	930	1028	69	--	--	--	6.8	6.8	202
22...	0600	930	1028	74	--	--	--	6.7	6.8	201
22...	0800	930	1028	83	--	--	--	6.7	7.1	203
22...	1200	930	1028	79	--	--	--	6.7	6.8	193
22...	1400	930	1028	72	--	--	--	6.7	6.8	196
22...	1800	930	1028	65	--	--	--	6.7	6.8	190
JUL										
16...	0745	930	1028	37	319	10.5	103	6.7	7.1	288
AUG										
05...	0000	930	1028	36	--	--	--	6.9	6.7	323
05...	0030	930	1028	53	--	--	--	6.9	6.7	335
05...	0200	930	1028	94	--	--	--	7.0	6.8	282
05...	0600	930	1028	62	--	--	--	6.8	6.8	251
05...	1200	930	1028	40	--	--	--	6.9	7.0	271
31...	1930	930	1028	42	--	--	--	6.7	6.8	286
31...	2100	930	1028	68	--	--	--	6.6	6.5	277
31...	2200	930	1028	71	--	--	--	6.7	6.7	277
SEP										
01...	0000	930	1028	46	--	--	--	7.0	6.5	277
01...	0400	930	1028	36	--	--	--	6.7	7.1	235
01...	1000	930	1028	32	--	--	--	6.8	6.7	255
24...	1745	930	1028	21	--	--	--	6.8	6.5	317
24...	2000	930	1028	24	--	--	--	6.8	6.7	320
24...	2200	930	1028	128	--	--	--	6.7	6.8	257
24...	2230	930	1028	281	--	--	--	6.9	6.7	255
25...	0000	930	1028	252	--	--	--	7.0	6.7	170
25...	0400	930	1028	130	--	--	--	6.9	6.6	187
25...	1400	930	1028	66	--	--	--	6.7	6.5	221
26...	0000	930	1028	43	--	--	--	6.6	6.6	250
26...	1330	930	1028	30	335	10.1	96	6.7	--	278
26...	1359	930	1028	30	--	--	--	6.7	6.7	278
26...	1400	930	1028	30	--	--	--	6.7	6.8	278

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG) (00927)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K) (00937)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA) (00929)	ACIDITY TOTAL HEATED (MG/L AS CAC03) (70508)
OCT										
02...	14.0	17.8	19.2	13.6	14.8	1.05	1.4	6.8	7.0	.00
NOV										
21...	2.8	21.7	21.8	18.4	18.5	--	--	7.3	7.4	.00
JAN										
08...	2.7	14.0	14.0	11.0	11.0	1.10	1.2	6.5	6.4	--
MAR										
13...	4.0	10.0	10.0	6.10	6.00	1.20	1.4	11.0	12.0	--
MAY										
21...	12.2	15.0	17.0	13.0	14.0	1.20	1.2	5.9	5.8	--
21...	12.2	15.0	16.0	10.0	11.0	1.30	1.3	6.2	6.1	--
22...	12.2	14.0	15.0	9.60	9.90	1.30	1.3	6.1	5.8	--
22...	12.3	13.0	13.0	9.50	9.70	1.30	1.3	6.5	6.4	--
22...	12.3	15.0	15.0	8.90	9.30	1.10	1.2	5.6	5.8	--
22...	12.8	15.0	17.0	9.00	9.50	1.20	1.2	5.9	5.8	--
22...	13.5	15.0	14.0	8.90	9.20	1.20	1.3	5.9	6.0	--
22...	13.7	15.0	16.0	8.90	9.30	1.20	1.2	5.3	5.2	--
JUL										
16...	14.8	21.0	20.0	16.0	15.0	1.30	1.3	7.0	6.9	--
AUG										
05...	19.0	27.0	27.0	15.0	15.0	1.90	2.6	7.8	7.7	--
05...	18.9	28.0	28.0	16.0	16.0	2.00	3.1	7.5	8.6	--
05...	18.9	25.0	27.0	10.0	11.0	2.80	5.8	7.3	9.0	--
05...	18.5	22.0	23.0	9.50	9.90	3.90	6.0	7.1	7.1	--
05...	19.8	23.0	24.0	10.0	11.0	3.10	5.6	7.4	9.2	--
31...	20.4	20.0	21.0	14.0	14.0	1.60	2.8	7.3	8.0	--
31...	19.7	14.0	22.0	12.0	15.0	1.40	2.9	2.5	8.9	--
31...	20.3	20.0	21.0	15.0	14.0	1.60	3.6	7.0	8.0	--
SEP										
01...	20.1	20.0	21.0	15.0	15.0	1.70	3.2	7.0	8.0	--
01...	19.1	18.0	20.0	9.70	10.0	1.80	3.4	6.0	6.3	--
01...	18.3	20.0	21.0	12.0	12.0	1.90	3.1	6.4	7.6	--
24...	16.5	23.0	23.0	16.0	16.0	1.70	1.9	8.4	8.3	--
24...	16.6	20.0	21.0	14.0	15.0	1.70	2.8	7.7	7.8	--
24...	17.2	18.0	21.0	12.0	12.0	1.70	4.5	7.4	9.9	--
24...	17.2	17.0	21.0	6.80	7.90	2.60	5.8	7.1	8.8	--
25...	17.7	17.0	21.0	5.80	7.80	2.80	7.4	5.1	5.9	--
25...	16.7	14.0	15.0	6.60	6.80	3.10	4.3	6.0	6.7	--
25...	15.7	16.0	16.0	8.50	8.10	2.80	3.0	6.6	6.6	--
26...	13.8	19.0	18.0	12.0	11.0	2.30	2.5	7.5	7.4	--
26...	12.8	--	--	--	--	--	--	--	--	--
26...	13.1	20.0	19.0	13.0	13.0	2.20	2.2	8.1	8.1	--
26...	13.1	20.0	19.0	13.0	12.0	2.20	2.1	8.1	8.0	--

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (µG/L AS AL) (01105)	ARSENIC DIS-SOLVED (µG/L AS AS) (01000)	ARSENIC TOTAL (µG/L AS AS) (01002)	BARIUM, DIS-SOLVED (µG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (µG/L AS BA) (01007)
OCT										
02...	10	9.4	95.8	8	<200	<200	--	--	--	--
NOV										
21...	10	9.1	110	10	<200	297	--	--	--	--
JAN										
08...	8	--	77.0	--	60	400	--	--	20.0	20.0
MAR										
13...	6	--	41.0	--	50	1700	<400	<40	23.0	34.0
MAY										
21...	8	--	82.0	--	80	380	<40.0	<40	20.0	20.0
21...	9	--	68.0	--	100	2000	<40.0	<40	20.0	27.0
22...	8	--	61.0	--	100	1100	<40.0	<40	21.0	25.0
22...	7	--	60.0	--	140	1000	<40.0	<40	22.0	26.0
22...	7	--	62.0	--	160	1000	<40.0	<40	20.0	24.0
22...	6	--	63.0	--	150	630	<40.0	<40	21.0	22.0
22...	6	--	63.0	--	140	590	<40.0	<40	21.0	22.0
22...	7	--	62.0	--	160	460	<40.0	<40	21.0	21.0
JUL										
16...	12	--	100	--	20	70	<40.0	<40	21.0	21.0
AUG										
05...	12	--	120	--	50	4100	<40.0	<40	21.0	230
05...	9	--	120	--	190	5200	<40.0	<40	23.0	470
05...	17	--	87.0	--	220	16000	<40.0	<40	18.0	570
05...	12	--	81.0	--	50	12000	<40.0	<40	20.0	350
05...	10	--	88.0	--	100	14000	<40.0	<40	20.0	520
31...	9	--	96.0	--	40	6800	<40.0	<40	16.0	450
31...	8	--	85.0	--	<20	5900	<40.0	<40	23.0	600
31...	12	--	100	--	80	9700	<40.0	<40	20.0	550
SEP										
01...	7	--	100	--	120	11000	<40.0	<40	20.0	560
01...	15	--	68.0	--	50	7800	<40.0	<40	13.0	850
01...	8	--	87.0	--	60	5900	<40.0	<40	19.0	620
24...	9	--	110	--	<20	2300	<40.0	<40	19.0	28.0
24...	13	--	97.0	--	80	6300	<40.0	<40	17.0	48.0
24...	11	--	82.0	--	660	17000	<40.0	<40	19.0	1200
24...	16	--	57.0	--	760	17000	<40.0	<40	21.0	1300
25...	18	--	49.0	--	560	27000	<40.0	<40	20.0	1100
25...	9	--	52.0	--	280	5600	<40.0	<40	19.0	1100
25...	7	--	68.0	--	70	1600	<40.0	<40	23.0	34.0
26...	7	--	85.0	--	40	850	<40.0	<40	23.0	29.0
26...	--	--	--	--	--	--	--	--	--	--
26...	8	--	93.0	--	20	390	<40.0	<40	24.0	26.0
26...	7	--	94.0	--	20	370	<40.0	<40	24.0	26.0

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (µG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (µG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (µG/L AS CR) (01034)	COBALT, DIS-SOLVED (µG/L AS CO) (01035)	COBALT, TOTAL RECOV-ERABLE (µG/L AS CO) (01037)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)
OCT										
02...	--	--	--	--	--	--	--	--	520	1010
NOV										
21...	--	--	--	--	--	--	--	--	940	1880
JAN										
08...	<6.00	<6.00	12.0	14	17.0	16	<6.0	<6.0	1200	1800
MAR										
13...	<6.00	<3.00	<6.0	4	10.0	12	<6.0	7.0	290	5000
MAY										
21...	<3.00	<3.00	<3.0	3	14.0	15	11.0	3.0	380	1500
21...	<3.00	<3.00	<3.0	<3	7.00	20	9.0	15.0	<10	7800
22...	<3.00	<3.00	<3.0	<3	8.00	19	10.0	17.0	<10	3700
22...	<3.00	<3.00	<3.0	<3	7.00	13	<3.0	8.0	<10	3200
22...	<3.00	<3.00	<3.0	<3	9.00	16	9.0	11.0	<10	3200
22...	<3.00	<3.00	<3.0	<3	10.0	15	6.0	6.0	<10	1900
22...	<3.00	<3.00	<3.0	<3	10.0	14	4.0	<3.0	40	1700
22...	<3.00	<3.00	3.0	<3	10.0	13	4.0	4.0	30	1400
JUL										
16...	27.0	190	<3.0	<3	14.0	13	<3.0	<3.0	70	60
AUG										
05...	<3.00	11.0	<3.0	3	6.00	28	<3.0	9.0	<10	11000
05...	<3.00	11.0	<3.0	4	7.00	27	<3.0	10.0	550	16000
05...	<3.00	10.0	5.0	15	<3.00	47	<3.0	27.0	530	37000
05...	<3.00	13.0	<3.0	12	<3.00	36	<3.0	19.0	60	29000
05...	<3.00	6.00	<3.0	11	<3.00	16	<3.0	5.0	140	16000
31...	<3.00	<3.00	<3.0	5	<3.00	56	<3.0	19.0	<10	19000
31...	<3.00	<3.00	<3.0	5	18.0	33	<3.0	11.0	360	15000
31...	<3.00	<3.00	<3.0	7	3.00	37	<3.0	14.0	170	23000
SEP										
01...	<3.00	<3.00	<3.0	10	5.00	60	<3.0	26.0	390	37000
01...	<3.00	<3.00	<3.0	7	<3.00	44	<3.0	17.0	70	22000
01...	<3.00	<3.00	<3.0	6	<3.00	20	<3.0	9.0	90	13000
24...	<3.00	<3.00	<3.0	<3	5.00	21	<3.0	<3.0	<10	7800
24...	<3.00	<3.00	<3.0	7	5.00	28	<3.0	8.0	270	16000
24...	<3.00	4.00	<3.0	10	11.0	94	<3.0	31.0	3300	54000
24...	<3.00	3.00	<3.0	16	10.0	75	4.0	33.0	3300	46000
25...	<3.00	4.00	<3.0	24	8.00	90	<3.0	58.0	1900	60000
25...	<3.00	<3.00	<3.0	5	4.00	24	<3.0	19.0	810	12000
25...	<3.00	<3.00	<3.0	3	5.00	12	<3.0	6.0	130	2800
26...	<3.00	<3.00	<3.0	<3	9.00	13	<3.0	<3.0	170	1900
26...	--	--	--	--	--	--	--	--	--	--
26...	<3.00	<3.00	<3.0	<3	11.0	13	<3.0	6.0	50	1000
26...	<3.00	<3.00	<3.0	<3	13.0	13	<3.0	<3.0	120	950

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)	NICKEL, DIS-SOLVED (µG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (µG/L AS SE) (01145)	SELE-NIUM, TOTAL (µG/L AS SE) (01147)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
OCT										
02...	--	--	613	630	--	--	--	--	--	--
NOV										
21...	--	--	916	946	--	--	--	--	--	--
JAN										
08...	<80.0	<80	820	770	27.0	28	<200	<200	67	58
MAR										
13...	<80.0	<40	440	480	12.0	16	<200	<100	69	58
MAY										
21...	<40.0	<40	590	670	28.0	39	<100	<100	60	66
21...	<40.0	<40	430	85000	19.0	28	<100	<100	42	100
22...	<40.0	<40	470	73000	24.0	26	<100	<100	56	86
22...	<40.0	<40	450	65000	17.0	22	<100	<100	41	65
22...	<40.0	<40	520	71000	20.0	26	<100	<100	48	74
22...	<40.0	<40	580	71000	23.0	32	<100	<100	49	72
22...	<40.0	<40	570	64000	24.0	23	<100	<100	48	54
22...	<40.0	<40	570	65000	25.0	26	<100	<100	50	60
JUL										
16...	<40.0	<40	710	690	31.0	28	<100	<100	55	62
AUG										
05...	<40.0	<40	520	1100	17.0	36	<100	<100	29	890
05...	<40.0	<40	620	1100	19.0	37	<100	<100	26	370
05...	<40.0	<40	240	1700	8.00	51	<100	<100	13	520
05...	<40.0	<40	160	1700	9.00	46	<100	<100	11	270
05...	<40.0	<40	360	640	7.00	29	<100	<100	54	350
31...	<40.0	<40	50.0	2000	<5.00	56	<100	<100	25	650
31...	<40.0	<40	960	1200	30.0	41	<100	<100	59	480
31...	<40.0	<40	250	1400	16.0	46	<100	<100	32	390
SEP										
01...	<40.0	<40	330	2000	17.0	69	<100	<100	33	490
01...	<40.0	<40	50.0	1700	<5.00	45	<100	<100	7	440
01...	<40.0	<40	260	870	8.00	28	<100	<100	17	310
24...	<40.0	<40	430	1000	17.0	29	<100	<100	29	84
24...	<40.0	<40	410	1100	14.0	34	<100	<100	24	120
24...	<40.0	<40	580	3300	15.0	90	<100	<100	42	1200
24...	<40.0	<40	440	3100	11.0	75	<100	<100	45	600
25...	<40.0	<40	390	3800	9.00	94	<100	<100	26	460
25...	<40.0	<40	270	1100	11.0	26	<100	<100	24	260
25...	<40.0	<40	400	620	17.0	22	<100	<100	28	55
26...	<40.0	<40	580	700	23.0	25	<100	<100	38	58
26...	--	--	--	--	--	--	--	--	--	--
26...	<40.0	<40	680	740	24.0	29	<100	<100	37	110
26...	<40.0	<40	710	720	27.0	28	<100	<100	47	57

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	295	261	281	305	273	287	236	199	213	175	168	172
2	288	203	271	302	270	283	242	211	221	176	166	173
3	294	267	281	294	264	276	232	215	223	182	171	176
4	316	252	295	303	268	287	237	214	227	183	173	178
5	285	243	256	285	261	271	265	227	248	179	171	176
6	264	245	253	289	258	273	240	224	233	191	174	183
7	290	249	265	317	267	291	238	223	231	192	181	186
8	293	261	276	298	261	273	255	221	236	252	181	202
9	282	261	272	278	245	266	260	228	240	221	206	212
10	293	265	277	253	213	236	243	223	234	216	204	208
11	305	271	291	242	222	232	246	221	232	224	204	209
12	282	266	274	252	223	240	262	230	244	230	206	216
13	287	269	278	261	238	248	244	227	236	229	206	214
14	305	269	287	282	248	269	282	221	248	229	209	215
15	307	271	284	272	247	259	260	220	236	234	208	223
16	288	266	277	275	251	262	249	171	215	239	214	221
17	289	254	273	281	252	265	171	86	103	224	212	217
18	282	174	226	293	259	276	138	116	127	235	213	223
19	213	186	198	274	256	264	135	125	131	272	221	237
20	239	206	221	275	253	265	145	130	137	227	204	209
21	272	227	253	302	262	282	149	141	145	222	203	210
22	269	242	254	288	263	273	146	135	139	227	213	220
23	270	249	258	282	261	270	148	139	144	230	216	223
24	293	252	270	294	267	278	149	144	146	226	216	222
25	295	257	274	302	265	284	151	143	147	236	217	224
26	277	255	266	278	153	214	157	149	154	226	216	220
27	273	250	259	187	163	172	158	151	153	237	217	223
28	296	254	278	210	184	198	158	149	153	239	224	230
29	289	260	273	222	185	204	164	156	161	232	220	226
30	285	261	272	217	193	206	161	156	159	270	221	242
31	298	267	278	---	---	---	169	159	162	241	207	214
MONTH	316	174	267	317	153	257	282	86	190	272	166	210

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	219	212	216	203	183	189	166	156	161	216	200	206
2	220	212	216	197	182	190	170	163	166	221	206	214
3	216	210	213	190	177	184	175	164	170	225	208	218
4	213	207	210	197	179	187	185	169	175	228	208	219
5	211	205	208	213	188	197	185	174	180	237	221	228
6	233	206	215	214	193	205	186	162	174	241	224	232
7	232	212	222	245	194	213	178	163	169	242	227	234
8	231	205	218	250	209	230	183	164	175	249	230	240
9	231	208	219	230	213	223	187	165	179	251	238	244
10	229	173	196	230	209	219	183	167	174	254	238	244
11	196	180	187	224	201	211	185	167	178	256	241	247
12	209	191	197	217	196	205	182	170	176	258	239	250
13	206	186	194	216	146	181	185	159	175	261	242	250
14	203	182	191	---	---	---	193	168	179	268	247	259
15	193	173	184	---	---	---	190	176	183	268	251	259
16	183	170	176	---	---	---	181	159	166	276	251	263
17	182	171	175	---	---	---	187	166	173	277	260	269
18	191	174	183	---	---	---	178	165	171	273	252	264
19	190	174	183	---	---	---	184	174	178	268	252	260
20	186	171	180	---	---	---	188	173	178	280	252	269
21	201	172	184	---	---	---	190	177	182	280	211	248
22	191	180	184	---	---	---	191	177	184	221	182	196
23	213	183	192	---	---	---	196	179	187	229	199	211
24	---	---	---	189	176	184	200	185	192	245	216	229
25	---	---	---	186	178	181	206	190	197	262	235	247
26	---	---	---	195	180	187	208	190	199	264	231	247
27	---	---	---	195	185	190	208	188	197	247	226	237
28	---	---	---	197	185	190	211	195	204	247	212	224
29	---	---	---	201	185	194	213	201	208	253	222	235
30	---	---	---	189	134	148	215	202	209	271	238	250
31	---	---	---	161	149	155	---	---	---	283	255	271
MONTH	233	170	198	250	134	193	215	156	181	283	182	241

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	276	255	266	210	139	193	324	296	306	280	223	256
2	259	223	235	242	195	222	312	292	303	308	273	290
3	256	208	228	251	228	241	321	291	309	328	303	316
4	256	219	238	255	229	243	364	287	308	332	280	311
5	288	248	268	243	187	219	371	237	274	329	281	299
6	291	270	281	223	185	199	312	267	290	329	304	315
7	300	276	287	254	215	236	314	297	305	322	300	312
8	313	289	302	256	238	247	327	296	306	347	300	319
9	312	293	302	260	225	243	327	304	316	349	317	329
10	324	298	307	266	243	256	319	245	290	329	260	307
11	327	287	305	276	245	260	309	277	291	336	288	312
12	321	187	297	290	257	272	311	293	302	338	309	322
13	260	188	240	290	270	279	311	292	301	335	306	322
14	282	253	265	288	262	277	327	284	309	343	307	325
15	302	273	283	298	273	288	326	300	310	337	307	318
16	312	184	295	298	273	288	323	301	311	333	311	320
17	228	188	205	308	273	286	328	301	314	355	319	336
18	266	220	244	310	286	298	324	302	311	340	311	326
19	283	258	270	304	277	287	324	301	311	356	320	341
20	283	195	261	315	277	292	330	232	281	348	289	319
21	227	113	165	308	282	293	295	263	280	323	280	306
22	154	124	140	307	282	293	327	281	303	342	312	327
23	168	147	157	318	292	306	330	302	317	339	315	326
24	187	160	175	320	295	306	325	300	311	337	170	311
25	187	148	169	313	171	280	340	305	323	259	170	216
26	186	148	165	232	164	199	339	312	324	295	250	274
27	190	161	177	273	223	246	331	309	320	324	280	298
28	193	166	180	296	256	270	337	313	328	329	300	314
29	202	181	190	297	279	287	342	319	328	327	300	314
30	210	187	197	316	282	297	341	313	326	352	307	326
31	---	---	---	322	290	305	344	220	318	---	---	---
MONTH	327	113	236	322	139	265	371	220	307	356	170	310
YEAR	371	86	240									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	6.8	6.7	6.7	6.6	6.5	6.6	6.9	6.7	6.8	6.6	6.4	6.4
2	7.0	4.5	6.8	7.0	6.6	6.7	6.9	6.7	6.7	6.6	6.5	6.6
3	7.1	6.3	7.0	7.0	6.7	6.9	6.8	6.7	6.8	6.6	6.4	6.5
4	7.0	6.5	6.9	6.9	6.6	6.7	6.9	6.7	6.8	6.6	6.4	6.5
5	7.0	6.6	6.9	6.9	6.8	6.8	6.8	6.6	6.7	6.6	6.4	6.5
6	7.0	6.6	6.9	6.8	6.7	6.8	6.8	6.7	6.8	6.6	6.4	6.5
7	6.9	6.7	6.8	6.8	6.5	6.6	6.9	6.7	6.8	6.6	6.4	6.5
8	6.9	6.7	6.7	6.9	6.6	6.8	6.8	6.6	6.7	6.7	6.4	6.6
9	6.9	6.8	6.9	6.9	6.7	6.8	6.8	6.5	6.6	6.7	6.4	6.5
10	6.9	6.8	6.9	7.0	6.8	6.9	6.8	6.6	6.7	6.5	6.4	6.5
11	6.8	6.7	6.8	6.8	6.7	6.8	6.8	6.7	6.7	6.6	6.5	6.6
12	6.8	6.7	6.8	6.8	6.6	6.7	6.8	6.6	6.7	6.6	6.4	6.5
13	6.9	6.8	6.8	6.7	6.6	6.6	6.8	6.7	6.7	6.7	6.5	6.6
14	6.9	6.7	6.8	6.7	6.5	6.5	6.8	6.6	6.7	6.8	6.6	6.7
15	6.7	6.6	6.7	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.6	6.7
16	6.8	6.6	6.7	6.6	6.5	6.6	6.8	6.6	6.8	6.8	6.6	6.7
17	6.8	6.7	6.8	6.6	6.5	6.6	6.7	5.5	5.7	6.8	6.7	6.8
18	7.0	6.6	6.8	6.6	6.5	6.5	6.2	5.8	6.0	6.8	6.6	6.7
19	6.9	6.7	6.8	6.6	6.5	6.5	6.2	6.1	6.2	6.8	6.6	6.7
20	6.9	6.6	6.7	6.6	6.5	6.6	6.2	6.1	6.2	6.7	6.5	6.6
21	6.9	6.7	6.8	6.6	6.5	6.5	6.3	6.1	6.2	6.7	6.4	6.6
22	6.9	6.8	6.8	6.7	6.5	6.6	6.3	5.9	6.2	6.7	6.4	6.6
23	6.9	6.8	6.8	6.7	6.6	6.6	6.3	6.1	6.2	6.8	6.6	6.7
24	6.9	6.8	6.8	6.7	6.5	6.6	6.4	6.2	6.3	6.8	6.6	6.7
25	6.8	6.6	6.8	6.6	6.5	6.6	6.4	6.3	6.3	6.8	6.6	6.7
26	6.8	6.5	6.8	6.8	6.5	6.7	6.4	6.2	6.3	6.8	6.7	6.7
27	6.8	6.6	6.8	6.7	6.6	6.7	6.4	6.3	6.4	6.8	6.7	6.8
28	6.8	6.6	6.7	6.7	6.5	6.6	6.5	6.3	6.4	6.8	6.6	6.7
29	6.7	6.6	6.7	6.8	6.5	6.6	6.4	6.3	6.3	6.8	6.7	6.8
30	6.7	6.6	6.7	6.9	6.7	6.8	6.5	6.4	6.4	6.8	6.7	6.8
31	6.7	6.6	6.7	---	---	---	6.5	6.4	6.5	6.8	6.5	6.6
MAX	7.1	6.8	7.0	7.0	6.8	6.9	6.9	6.7	6.8	6.8	6.7	6.8
MIN	6.7	4.5	6.7	6.6	6.5	6.5	6.2	5.5	5.7	6.5	6.4	6.4

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	6.8	6.6	6.7	6.4	6.3	6.4	6.3	6.2	6.3	6.7	6.5	6.6
2	6.8	6.6	6.7	6.4	6.3	6.4	6.3	6.2	6.2	6.6	6.5	6.6
3	6.8	6.5	6.6	6.4	6.3	6.4	6.3	6.2	6.3	6.7	6.5	6.6
4	6.7	6.5	6.6	6.6	6.4	6.5	6.3	6.2	6.2	6.7	6.6	6.6
5	6.7	6.5	6.6	6.5	6.4	6.4	6.4	6.2	6.3	6.7	6.5	6.6
6	6.7	6.5	6.6	6.5	6.4	6.5	6.5	6.2	6.3	6.8	6.6	6.7
7	6.7	6.6	6.6	6.6	6.3	6.5	6.4	6.2	6.3	6.8	6.6	6.7
8	6.7	6.6	6.6	6.5	6.3	6.4	6.4	6.2	6.4	6.7	6.6	6.7
9	6.7	6.6	6.6	6.5	6.4	6.4	6.8	6.3	6.4	6.7	6.6	6.7
10	6.7	6.5	6.6	6.5	6.4	6.4	6.5	6.4	6.4	6.8	6.6	6.7
11	6.6	6.5	6.6	6.5	6.3	6.4	6.4	6.3	6.4	6.8	6.6	6.7
12	6.6	6.3	6.4	6.7	6.4	6.5	6.4	6.3	6.3	6.8	6.7	6.8
13	6.5	6.3	6.4	6.7	6.5	6.5	6.5	6.3	6.4	6.8	6.6	6.8
14	6.4	6.3	6.4	---	---	---	6.4	6.3	6.4	6.7	6.6	6.6
15	6.6	6.4	6.5	---	---	---	6.5	6.4	6.4	6.8	6.7	6.7
16	6.6	6.4	6.4	---	---	---	6.5	6.4	6.4	7.7	6.7	6.8
17	6.6	6.4	6.5	---	---	---	6.4	6.3	6.4	7.6	7.1	7.3
18	6.5	6.3	6.4	---	---	---	6.4	6.3	6.3	7.1	6.9	6.9
19	6.5	6.4	6.4	---	---	---	6.4	6.2	6.3	6.9	6.8	6.9
20	6.6	6.5	6.5	---	---	---	6.4	6.3	6.3	6.9	6.7	6.8
21	6.6	6.4	6.5	---	---	---	6.3	6.2	6.3	6.8	6.6	6.7
22	6.5	6.4	6.4	---	---	---	6.5	6.3	6.4	6.8	6.6	6.7
23	6.5	6.4	6.5	---	---	---	6.4	6.4	6.4	6.8	6.6	6.7
24	---	---	---	6.4	6.3	6.4	6.5	6.4	6.5	6.8	6.7	6.7
25	---	---	---	6.4	6.3	6.4	6.5	6.4	6.5	6.8	6.6	6.7
26	---	---	---	6.4	6.3	6.4	6.5	6.4	6.5	6.8	6.6	6.6
27	---	---	---	6.4	6.3	6.4	6.6	6.5	6.5	6.8	6.7	6.7
28	---	---	---	6.5	6.4	6.4	6.6	6.5	6.5	6.8	6.6	6.7
29	---	---	---	6.5	6.3	6.4	6.6	6.5	6.6	6.8	6.6	6.7
30	---	---	---	6.5	6.2	6.3	6.6	6.5	6.6	6.9	6.8	6.8
31	---	---	---	6.4	6.3	6.3	---	---	---	6.8	6.7	6.8
MAX	6.8	6.6	6.7	6.7	6.5	6.5	6.8	6.5	6.6	7.7	7.1	7.3
MIN	6.4	6.3	6.4	6.4	6.2	6.3	6.3	6.2	6.2	6.6	6.5	6.6

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

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	13.0	9.0	11.0	9.5	6.5	8.0	5.5	4.0	4.5	2.5	1.5	2.0
2	14.0	11.0	12.5	10.0	6.5	8.0	4.0	1.5	3.0	2.0	1.0	1.5
3	16.0	11.5	13.5	10.5	6.5	8.5	2.0	.5	1.5	2.0	1.0	1.5
4	16.0	12.0	14.0	10.5	8.5	9.5	2.0	.5	1.0	2.5	1.5	2.0
5	15.0	13.5	14.0	9.0	6.5	8.0	3.5	1.5	2.5	2.0	.5	1.0
6	15.0	13.0	14.0	8.0	5.5	6.5	2.0	1.0	1.5	3.5	2.0	2.5
7	13.0	10.0	11.5	8.5	5.0	7.0	2.5	1.0	1.5	3.5	2.0	2.5
8	10.0	7.5	9.0	10.5	7.5	9.0	3.0	1.5	2.5	3.0	2.0	2.5
9	8.5	6.5	7.5	11.0	10.0	10.5	3.0	1.5	2.5	3.0	1.0	2.0
10	9.5	7.0	8.0	12.0	10.0	11.0	3.0	.5	2.0	2.5	1.0	1.5
11	11.0	7.5	9.0	10.0	8.5	9.5	4.5	3.0	3.5	3.0	1.0	2.0
12	12.0	7.5	10.0	10.0	8.0	9.0	5.0	2.0	4.0	3.5	2.0	2.5
13	12.5	8.0	10.0	9.5	8.5	9.0	2.0	.5	1.5	2.5	1.0	2.0
14	13.5	9.5	11.5	10.0	6.5	9.0	3.0	.0	2.0	3.0	1.0	2.0
15	14.0	10.0	12.0	7.0	5.5	6.5	3.5	2.0	2.5	4.0	3.0	3.5
16	14.0	12.0	12.5	6.5	4.5	6.0	3.5	2.5	3.0	4.0	3.5	3.5
17	13.0	12.0	12.0	7.0	5.0	6.0	5.0	3.0	4.0	4.0	3.0	3.5
18	13.0	12.0	12.5	6.0	4.5	5.5	4.5	4.0	4.0	3.5	3.0	3.5
19	13.0	10.0	11.5	5.0	3.0	4.0	4.5	4.0	4.0	3.5	3.0	3.5
20	12.0	8.0	10.0	4.0	1.5	3.0	4.0	3.0	3.5	3.0	1.5	3.0
21	13.0	9.5	11.0	4.0	2.0	3.0	3.5	2.5	3.0	1.5	.0	1.0
22	12.0	9.0	10.5	2.5	1.0	1.5	4.0	2.0	3.5	1.5	.5	.5
23	10.5	7.0	9.0	2.0	.5	1.0	2.5	1.5	2.0	1.0	.0	.5
24	11.5	8.5	10.0	2.5	.5	1.5	3.0	1.5	2.5	1.5	.5	1.0
25	13.5	10.0	11.5	3.0	1.0	2.0	2.0	1.0	1.5	3.0	1.0	2.0
26	13.5	10.5	12.0	5.5	3.0	4.5	2.5	1.0	1.5	1.5	.5	1.0
27	13.0	10.0	11.5	6.5	5.0	5.5	2.5	1.5	2.0	3.0	1.5	2.0
28	12.0	8.5	11.0	7.5	5.5	6.5	2.0	1.5	1.5	2.5	1.0	1.5
29	9.0	6.5	7.5	6.5	5.0	6.0	2.5	1.0	1.5	2.0	.5	1.0
30	9.0	6.0	7.5	6.0	4.5	5.5	2.5	1.5	2.0	3.0	2.0	2.5
31	9.5	6.0	7.5	---	---	---	2.0	1.5	1.5	4.0	2.5	3.0
MONTH	16.0	6.0	10.8	12.0	.5	6.3	5.5	.0	2.5	4.0	.0	2.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			**MARCH**			**APRIL**			**MAY**	
1	4.5	3.0	4.0	4.5	2.5	3.5	6.5	5.5	6.0	16.0	9.5	13.0
2	4.5	2.0	3.5	5.0	3.5	4.5	7.0	5.5	6.5	16.0	11.0	13.5
3	2.5	1.0	1.5	6.5	4.5	5.5	7.5	5.0	6.5	17.5	12.0	14.5
4	3.0	1.0	2.0	4.5	2.0	4.0	9.5	6.0	7.5	18.0	13.0	15.5
5	2.5	1.5	2.0	3.5	1.5	2.5	10.0	5.5	7.5	15.5	12.5	14.5
6	4.5	2.5	3.5	3.0	1.0	2.0	7.5	7.5	7.5	15.5	10.0	12.5
7	5.0	3.5	4.0	6.0	2.5	4.0	8.5	7.5	8.0	14.5	9.5	12.0
8	4.0	2.5	3.0	6.0	3.5	4.5	8.5	7.0	7.5	15.0	10.5	12.5
9	5.5	3.5	4.5	6.0	3.5	4.5	12.5	8.0	10.0	16.0	12.0	14.0
10	5.5	2.5	4.5	6.0	2.5	4.0	12.0	9.5	10.5	16.5	11.5	14.0
11	3.0	1.0	2.0	5.5	2.5	4.0	10.5	9.0	9.5	17.5	12.0	15.0
12	2.5	1.0	2.0	6.0	2.5	4.5	10.0	9.0	9.5	16.0	13.5	15.0
13	5.5	2.5	4.0	5.0	4.0	4.5	13.0	10.0	11.0	15.5	11.5	13.0
14	5.0	4.0	4.5	---	---	---	12.5	9.0	10.5	13.5	10.0	12.0
15	5.5	4.5	5.0	---	---	---	11.5	8.5	10.5	15.0	9.5	12.0
16	4.5	4.5	4.5	---	---	---	10.0	8.5	9.5	15.0	9.5	12.5
17	4.5	2.0	3.5	---	---	---	8.5	7.0	8.0	12.5	12.0	12.0
18	3.0	1.5	2.0	---	---	---	9.0	6.0	7.5	12.5	11.5	12.0
19	3.5	1.0	2.5	---	---	---	9.5	6.0	7.5	17.0	12.5	14.5
20	5.5	3.5	4.5	---	---	---	9.0	6.5	8.0	14.0	12.5	13.0
21	5.5	2.5	4.5	---	---	---	10.5	8.5	9.5	13.0	12.0	12.5
22	2.5	.5	1.5	---	---	---	14.0	9.5	11.5	14.0	12.0	13.0
23	3.5	1.0	2.5	---	---	---	16.0	11.0	13.5	16.5	12.5	14.5
24	---	---	---	7.0	4.5	6.0	15.0	11.0	13.0	17.0	13.0	15.0
25	---	---	---	6.0	4.0	5.0	11.5	9.0	10.5	16.0	14.0	14.5
26	---	---	---	5.5	4.0	4.5	13.0	7.5	10.0	14.5	13.5	14.0
27	---	---	---	5.0	2.5	4.0	13.0	8.5	10.5	15.0	13.0	14.0
28	---	---	---	7.0	3.0	5.0	13.0	9.5	11.0	15.5	13.0	14.0
29	---	---	---	5.5	4.0	5.0	13.0	7.5	10.5	16.0	12.0	13.5
30	---	---	---	5.5	4.0	5.0	14.5	8.0	11.0	15.5	12.0	13.5
31	---	---	---	6.5	5.0	5.5	---	---	---	15.0	10.0	12.5
MONTH	5.5	.5	3.3	7.0	1.0	4.4	16.0	5.0	9.3	18.0	9.5	13.5

SWATARA CREEK BASIN

01571820 SWATARA CREEK NEAR RAVINE, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	12.5	10.5	11.5	18.5	16.0	17.5	20.5	15.5	18.0	20.5	17.0	19.0
2	14.5	12.0	13.0	17.0	14.5	16.0	21.0	16.0	18.5	18.0	13.5	16.0
3	14.5	13.0	13.5	17.0	12.5	15.0	20.0	17.0	18.5	17.5	13.5	15.5
4	16.0	12.0	14.0	18.0	15.0	16.0	21.0	17.5	19.0	20.5	16.0	17.5
5	17.0	12.5	15.0	19.0	16.0	17.0	21.5	18.5	19.5	19.0	15.5	17.0
6	16.0	14.0	15.0	18.0	15.0	16.5	22.0	18.0	20.0	17.5	13.0	15.5
7	18.5	14.0	16.0	18.0	13.5	15.5	23.0	18.0	20.5	18.5	13.0	15.5
8	18.0	13.0	15.0	17.0	15.5	16.0	23.5	19.0	21.0	20.0	15.0	17.0
9	18.0	12.5	15.0	20.0	15.5	17.5	23.0	18.5	20.5	19.5	15.5	17.5
10	17.5	12.5	15.0	19.0	16.0	17.5	21.0	19.5	20.5	20.0	17.5	18.5
11	18.5	14.5	16.0	20.0	16.0	17.5	20.0	18.5	19.5	18.5	15.0	17.0
12	20.0	15.0	17.0	18.5	14.5	16.5	19.5	18.0	18.5	18.0	13.5	16.0
13	20.0	16.0	18.0	17.5	13.5	15.5	21.0	18.0	19.5	18.5	13.0	16.0
14	21.0	16.5	18.5	17.5	14.0	16.0	21.0	18.0	19.5	16.5	13.0	15.5
15	20.0	17.5	18.5	19.0	14.0	16.5	21.5	17.0	19.0	15.0	11.0	13.0
16	19.0	17.0	18.0	18.5	15.0	16.5	21.0	17.5	19.0	15.5	10.5	13.0
17	20.0	17.0	18.0	20.5	16.0	18.0	22.0	18.5	19.5	16.0	11.0	13.5
18	20.0	16.0	18.0	19.5	16.5	18.0	20.0	17.0	18.5	16.0	12.0	14.0
19	20.5	15.5	18.0	20.5	16.5	18.5	20.5	16.5	18.5	16.5	12.5	14.5
20	21.5	16.5	18.5	20.0	16.0	17.5	20.5	18.0	19.0	16.5	15.5	16.0
21	19.0	17.5	18.0	20.0	14.5	17.0	19.5	16.5	18.0	18.5	15.5	16.5
22	17.5	16.5	17.0	20.0	15.0	17.5	20.5	16.0	18.0	18.5	14.5	16.5
23	16.5	15.5	16.0	20.5	15.5	18.0	18.0	16.5	17.0	18.5	14.0	16.0
24	16.5	14.0	15.5	22.5	17.5	19.5	21.0	16.5	18.5	18.0	14.5	15.5
25	17.0	14.0	15.5	22.5	18.5	20.5	19.5	16.0	17.5	17.5	14.0	16.0
26	17.5	14.0	15.5	20.5	17.5	19.0	20.5	16.0	18.5	14.0	11.5	12.5
27	18.5	14.5	16.0	19.5	15.0	17.0	20.5	18.0	19.0	13.5	11.5	12.5
28	19.0	15.0	17.0	18.0	15.0	16.5	21.0	16.5	18.5	12.5	10.5	11.5
29	18.5	15.5	17.0	17.5	16.0	16.5	21.0	16.5	18.5	14.0	11.5	12.5
30	19.5	15.5	17.5	18.0	16.0	17.0	19.0	16.5	18.0	12.0	9.0	11.0
31	---	---	---	20.0	16.0	17.5	21.5	17.5	19.5	---	---	---
MONTH	21.5	10.5	16.2	22.5	12.5	17.1	23.5	15.5	19.0	20.5	9.0	15.3
YEAR	23.5	.0	10.3									