

SWATARA CREEK BASIN

0157155014 SWATARA CREEK, SITE C3, AT NEWTOWN, PA
(Swatara Creek Project)

LOCATION.--Lat 40°39'28", long 76°20'43", Schuylkill County, Hydrologic Unit 02050305, on left bank 500 ft downstream from bridge on U.S. Highway 209. Located on Swatara Coal Company property.

DRAINAGE AREA.--2.92 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those above 44 ft³/s and those for estimated daily discharges, which are poor. Diversion upstream from station into limestone treatment system used to remediate acid mine drainage.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	0830	95	2.59	Mar. 28	2230	88	2.55
Dec. 23	1530	78	2.48	Apr. 2	1630	*122	*2.75
Jan. 14	0430	90	2.56				

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	9.0	3.2	23	5.5	2.8	3.4	13	3.5	1.2	1.2	1.1	1.1
2	8.2	2.7	16	5.2	2.6	3.3	43	3.1	1.1	3.1	1.1	0.96
3	7.5	2.6	14	5.3	2.2	3.3	60	3.0	1.4	1.2	0.99	0.88
4	6.8	3.3	11	5.8	2.1	4.1	29	2.7	2.0	1.0	0.93	0.84
5	6.2	3.8	9.7	5.9	2.0	3.6	20	2.4	1.3	0.99	0.89	0.83
6	5.6	3.2	8.6	8.7	2.0	3.1	15	2.4	6.9	1.7	0.80	0.79
7	5.3	3.0	8.8	7.5	2.2	4.1	12	2.3	6.6	2.7	0.76	0.78
8	4.9	2.7	8.1	10	2.5	8.4	10	2.1	3.5	14	1.2	0.76
9	4.7	2.6	7.6	9.9	3.1	7.0	8.2	2.1	3.8	5.5	2.4	0.74
10	4.5	2.5	17	9.4	4.0	5.8	7.3	2.0	3.7	3.8	1.6	0.71
11	4.2	2.5	15	8.7	3.0	5.5	6.6	1.8	3.1	2.8	1.4	0.68
12	4.1	5.6	13	8.5	2.8	5.2	5.6	1.7	2.6	2.2	1.3	0.71
13	3.9	4.7	11	9.4	2.6	4.9	5.1	1.6	2.2	2.0	1.3	0.67
14	4.7	3.8	9.5	47	5.4	4.5	4.6	2.4	2.0	1.7	1.2	0.73
15	4.8	3.7	8.4	26	9.5	4.3	4.2	4.6	1.7	1.7	1.2	0.72
16	5.1	3.5	7.5	18	7.5	4.1	3.9	2.5	1.5	2.2	1.2	0.93
17	4.3	3.4	6.9	14	7.3	4.1	3.6	2.1	1.4	9.8	1.2	1.3
18	4.0	3.3	6.2	11	6.7	4.4	3.2	2.0	1.5	6.1	1.1	0.97
19	6.0	3.2	5.9	9.2	6.1	4.7	3.0	1.9	1.3	4.3	1.5	0.71
20	5.0	3.4	5.9	8.2	5.5	5.3	2.9	2.6	1.3	3.7	1.3	0.86
21	4.7	3.5	5.0	7.3	5.4	5.7	2.6	2.1	1.2	3.0	1.1	0.83
22	4.8	3.3	4.7	e6.5	5.0	5.6	2.5	1.9	1.1	2.6	1.1	0.78
23	4.5	3.6	20	e6.0	4.5	8.8	4.0	1.7	1.0	2.1	1.0	0.77
24	4.4	12	14	e5.5	4.3	9.7	5.1	1.7	0.99	1.8	0.97	0.68
25	4.2	21	11	e5.0	4.0	9.6	3.7	1.5	0.93	2.3	0.93	0.68
26	4.0	14	9.6	e4.5	3.7	9.1	3.2	1.4	0.84	1.6	0.90	0.78
27	4.0	12	8.5	e4.0	3.5	8.6	3.5	1.3	0.81	1.7	0.90	0.90
28	4.1	40	7.5	e3.5	3.4	31	3.0	1.5	0.78	1.5	1.6	0.74
29	3.9	22	6.9	e3.0	---	38	3.0	1.5	1.4	1.3	1.2	0.78
30	6.9	16	6.3	3.2	---	23	3.5	1.4	2.2	1.2	1.1	0.76
31	4.1	---	5.9	3.0	---	16	---	1.2	---	1.1	1.1	---
TOTAL	158.4	214.1	312.5	284.7	115.7	258.2	294.3	66.0	61.35	91.89	36.37	24.37
MEAN	5.11	7.14	10.1	9.18	4.13	8.33	9.81	2.13	2.04	2.96	1.17	0.81
MAX	9.0	40	23	47	9.5	38	60	4.6	6.9	14	2.4	1.3
MIN	3.9	2.5	4.7	3.0	2.0	3.1	2.5	1.2	0.78	0.99	0.76	0.67

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

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	3.75	4.26	6.52	5.33	4.47	7.47	6.27	4.24	4.30	2.27
MAX	7.81	8.40	15.3	10.9	10.4	11.9	9.81	9.19	12.5	3.87
(WY)	1997	1997	1997	1998	1998	2003	2005	1998	2003	2003
MIN	1.10	0.86	0.71	1.94	2.41	4.83	3.95	2.05	0.89	0.10
(WY)	1999	1999	1999	2002	2004	2004	1999	1999	1999	1999

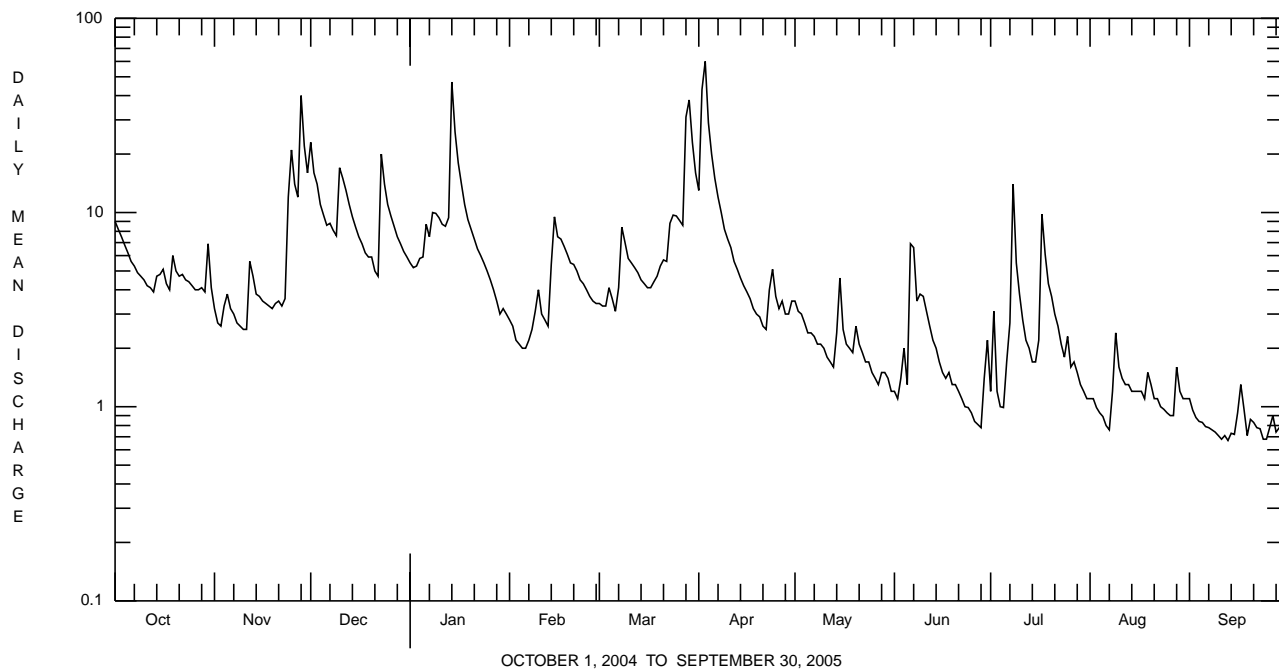
e Estimated.

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005	
ANNUAL TOTAL	2257.6		1917.88			
ANNUAL MEAN	6.17		5.25		4.60	
HIGHEST ANNUAL MEAN					6.77 2003	
LOWEST ANNUAL MEAN					2.61 1999	
HIGHEST DAILY MEAN	e400	Sep 18	60	Apr 3	e400	Sep 18 2004
LOWEST DAILY MEAN	1.4	Jul 11	0.67	Sep 13	0.00	Jul 27 1999a
ANNUAL SEVEN-DAY MINIMUM	1.6	Jul 5	0.71	Sep 9	0.00	Jul 29 1999
MAXIMUM PEAK FLOW			b122	Apr 2	b483	Sep 18 2004
MAXIMUM PEAK STAGE			2.75	Apr 2	c3.60	Sep 18 2004
INSTANTANEOUS LOW FLOW			0.25	Sep 19	0.00	Jul 27 1999a
10 PERCENT EXCEEDS	9.1		10		9.0	
50 PERCENT EXCEEDS	4.0		3.5		3.1	
90 PERCENT EXCEEDS	2.2		0.93		0.77	

- a** Several days.
b From rating curve extended above 44 ft³/s.
c From crest-stage gage.
e Estimated.



SWATARA CREEK BASIN

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WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1996 to May 2003.

pH: July 1996 to May 2003.

WATER TEMPERATURE: July 1996 to current year.

INSTRUMENTATION.--Water-quality monitor (in situ system). Automatic pumping sampler for stormflow samples since July 1996. Water temperature taken from in-situ transducer beginning May 2003.

REMARKS.--Water temperature records rated fair to 10°C, poor above 10°C.. 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, 438 microsiemens, Aug. 13, 1999; minimum, 51 microsiemens, July 24, 1997.

pH: Maximum, 8.2, Aug. 20, 2001; minimum, 3.6, Oct. 21-23, 25, Dec. 3, 1996.

WATER TEMPERATURE: Maximum, 23.5°C, July 5, 6, 1999; minimum, 0.0°C, many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 21.8°C, Aug. 14; minimum 0.3°C, many days during winter.

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

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Oxidation-reduction potential, mV (00090)	Turbidity, water, unfltrd field, NTU (61028)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)
OCT 05...	1300	1028	--	6.3	414	4.1	11.8	102	5.7	--
NOV 02...	1000	1028	89203	2.6	419	2.3	10.7	94	6.0	5.9
DEC 22...	0945	1028	89203	4.7	399	2.2	14.1	103	5.7	5.5
FEB 09...	1000	1028	89203	2.9	387	--	12.5	96	6.2	6.0
MAR 23...	1200	1028	89203	7.7	391	--	12.3	95	6.1	5.4
MAY 04...	1132	1028	89203	2.8	384	2.6	11.5	100	5.9	5.7
JUN 21...	1230	1028	89203	1.2	359	6.3	9.5	96	5.8	5.6
JUL 18...	1145	1028	89203	6.3	465	--	8.7	94	5.2	5.6
SEP 01...	1200	1028	89203	1.1	365	--	8.7	93	6.5	6.2

Date	Specific conductance, wat unfltrd, 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, unfltrd, mg/L (00915)	Calcium water unfltrd recover-able, mg/L (00916)	Magnesium water, unfltrd, mg/L (00925)	Magnesium water, unfltrd recover-able, mg/L (00927)	Potassium water, unfltrd, mg/L (00935)	Potassium water, unfltrd recover-able, mg/L (00937)	Sodium, water, unfltrd, mg/L (00930)	Sodium, water, unfltrd recover-able, mg/L (00929)
OCT 05...	138	10.7	--	--	--	--	--	--	--	--
NOV 02...	128	9.1	7.90	7.9	4.70	4.9	.90	.8	16.0	5.5
DEC 22...	129	2.1	8.20	6.8	6.60	5.5	.90	.8	5.70	5.0
FEB 09...	114	3.8	6.30	6.4	4.50	4.5	.80	.9	5.10	4.9
MAR 23...	104	4.1	5.50	5.8	4.00	4.2	1.00	.9	5.10	5.3
MAY 04...	129	8.4	7.30	7.1	5.10	5.0	1.00	.8	5.80	5.2
JUN 21...	149	15.5	9.70	9.3	7.10	6.8	.80	.7	6.00	5.6
JUL 18...	112	18.9	5.90	5.1	4.00	3.5	1.10	1.0	6.40	5.4
SEP 01...	175	18.5	12.3	12.1	8.90	8.7	1.10	1.1	6.90	6.7

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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, unfltrd water, recover- able, µg/L (01105)	Bromine water unfltrd mg/L (71871)
OCT 05...	--	--	--	--	--	--	--	--	--	--
NOV 02...	2	11.6	--	38.3	--	--	--	<100	400	--
DEC 22...	2	7.9	--	45.0	--	--	--	300	600	--
FEB 09...	3	9.0	--	35.9	--	--	--	<100	500	--
MAR 23...	2	7.8	<.01	26.7	.49	<.030	<.020	200	1100	.19
MAY 04...	3	8.2	<.01	35.2	.43	<.030	<.020	<100	400	.18
JUN 21...	2	14.2	.38	107	.51	<.030	<.020	<100	500	.21
JUL 18...	2	9.6	--	32.3	--	--	--	400	500	--
SEP 01...	4	10.6	--	55.2	--	--	--	<100	<100	--

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...	--	--	--	--	--	--	--	--
NOV 02...	100	230	290	290	245	20.0	385	55.0
DEC 22...	640	640	400	350	35.0	25.0	85.0	70.0
FEB 09...	390	510	300	310	25.0	25.0	65.0	60.0
MAR 23...	440	890	260	260	20.0	20.0	65.0	75.0
MAY 04...	180	310	300	280	20.0	25.0	60.0	65.0
JUN 21...	80.0	330	280	270	30.0	25.0	65.0	70.0
JUL 18...	400	500	280	250	25.0	20.0	65.0	60.0
SEP 01...	40.0	120	180	170	20.0	20.0	40.0	45.0

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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	13.2	10.9	12.1	10.1	8.7	9.5	7.8	7.0	7.6	7.1	5.0	5.9
2	13.3	12.3	12.9	10.3	8.8	9.6	7.4	6.2	6.8	5.1	4.3	4.7
3	13.1	10.8	11.8	10.5	7.2	9.4	6.9	5.7	6.2	6.7	5.1	6.0
4	12.4	9.5	11.0	7.5	6.1	6.7	6.4	4.9	5.8	7.0	6.1	6.7
5	11.6	9.2	10.3	7.8	6.1	7.1	7.4	6.0	6.6	6.1	4.4	5.4
6	10.5	7.7	9.2	7.8	5.4	6.6	6.1	5.6	5.8	4.4	4.1	4.2
7	12.0	8.9	10.4	9.2	6.2	7.8	6.8	6.0	6.2	4.5	3.9	4.2
8	12.6	10.1	11.4	8.2	5.5	6.9	8.1	6.6	7.4	4.4	4.2	4.3
9	12.4	10.4	11.5	5.5	3.8	4.8	6.7	5.7	6.3	4.9	4.3	4.6
10	12.0	10.2	11.3	4.9	2.8	4.0	7.2	6.6	6.9	5.8	4.8	5.2
11	10.5	9.0	9.8	6.7	4.5	5.6	8.0	7.1	7.5	4.9	4.5	4.8
12	10.2	8.1	9.1	6.2	5.7	6.0	7.2	6.7	6.9	5.2	4.8	5.0
13	10.5	8.1	9.4	5.7	3.8	4.9	6.8	5.9	6.5	8.0	5.1	6.0
14	10.7	9.8	10.2	4.9	3.0	3.9	5.9	4.3	5.3	8.8	5.7	6.7
15	11.2	10.1	10.7	6.0	3.4	4.6	4.6	3.3	4.0	5.7	4.5	5.1
16	10.3	8.4	9.7	6.7	4.6	5.6	4.5	2.8	3.8	5.0	4.3	4.6
17	8.7	7.5	8.1	7.1	4.6	5.9	5.2	3.6	4.5	4.3	2.1	3.4
18	9.1	6.6	8.0	8.4	6.9	7.7	4.3	2.4	3.4	2.1	0.8	1.4
19	9.0	8.6	8.8	9.2	7.9	8.4	5.2	1.9	3.8	2.1	0.7	1.3
20	9.1	8.6	8.8	8.3	7.8	7.9	1.9	0.3	0.6	3.2	1.9	2.5
21	9.0	8.7	8.9	9.2	7.6	8.3	1.3	0.3	0.8	2.0	0.3	0.9
22	9.6	8.0	8.8	7.9	6.8	7.3	3.4	1.3	2.5	0.8	0.3	0.7
23	8.5	6.3	7.5	7.8	6.9	7.3	6.6	3.4	5.0	0.8	0.3	0.5
24	8.1	6.9	7.5	9.9	7.8	8.5	4.3	3.4	3.9	0.9	0.3	0.6
25	9.3	8.0	8.6	10.2	6.9	9.1	3.6	2.3	3.0	2.2	0.6	1.6
26	9.9	8.5	9.3	7.0	6.2	6.6	3.6	2.1	2.8	3.4	0.9	2.4
27	9.7	7.5	8.6	7.9	6.7	7.3	3.1	1.3	2.1	0.9	0.3	0.7
28	9.2	7.7	8.5	9.0	7.9	8.5	2.5	0.8	1.8	0.8	0.4	0.7
29	9.3	7.5	8.5	8.0	7.3	7.7	4.6	2.5	3.8	0.8	0.3	0.7
30	11.0	9.3	10.2	8.0	7.1	7.6	5.2	4.5	4.8	2.0	0.5	1.2
31	12.0	9.8	11.0	---	---	---	6.2	4.6	5.5	2.0	0.3	1.1
MONTH	13.3	6.3	9.7	10.5	2.8	7.0	8.1	0.3	4.8	8.8	0.3	3.3
	FEBRUARY			MARCH			APRIL			MAY		
1	1.7	0.3	0.9	2.2	0.3	1.2	9.4	6.9	8.0	12.0	8.3	10
2	1.9	0.3	0.9	2.6	0.3	1.0	8.2	6.8	7.3	9.2	6.6	8.0
3	2.4	0.6	1.5	2.0	0.3	0.8	7.2	6.0	6.4	9.4	5.7	7.6
4	3.3	1.7	2.3	2.1	0.3	1.0	8.3	6.0	7.0	10.1	6.0	7.8
5	3.9	1.5	2.4	2.7	0.3	1.2	9.0	6.2	7.6	10.8	5.3	8.1
6	4.0	1.1	2.4	3.8	0.3	1.8	11.0	7.0	8.9	10.1	6.8	8.4
7	4.2	1.6	2.7	5.8	1.9	3.4	11.2	8.6	9.8	12.8	6.1	9.2
8	4.7	2.7	3.5	3.3	0.3	1.8	11.1	8.9	9.8	13.7	8.0	10.5
9	4.6	3.4	3.9	1.5	0.3	0.8	10.9	7.2	9.0	15.3	8.6	11.7
10	4.0	1.9	3.4	2.4	0.3	1.2	11.5	6.6	9.0	15.9	9.8	12.6
11	2.4	0.3	1.3	2.8	1.1	2.0	11.2	7.9	9.2	16.9	11.0	13.8
12	2.7	0.8	1.8	4.1	1.3	2.7	9.9	5.8	7.7	15.3	10.5	13.2
13	3.0	1.1	2.0	3.8	1.2	2.6	10.1	5.3	7.6	13.4	8.0	10.7
14	2.4	1.3	1.8	4.1	1.3	2.5	11.3	6.5	8.6	15.8	10.2	12.8
15	4.7	2.4	3.6	4.3	0.6	2.3	10.7	6.6	8.4	15.6	12.9	13.9
16	4.8	3.4	4.0	4.8	1.3	2.8	10.7	5.2	7.8	13.1	10.9	12.1
17	4.1	2.2	3.2	4.9	1.7	3.0	12.0	5.7	8.7	12.4	9.1	10.7
18	2.2	0.8	1.5	5.8	2.3	3.7	12.9	7.0	9.8	13.0	8.5	10.8
19	2.2	0.5	1.2	5.8	1.9	3.8	14.4	8.1	11.0	13.1	8.6	10.9
20	3.0	0.4	1.9	4.4	3.9	4.1	15.6	10.4	12.7	11.5	9.4	10.5
21	2.9	0.3	1.9	4.8	3.8	4.2	13.3	9.3	11.7	12.9	8.8	10.8
22	4.5	2.8	3.4	6.6	2.8	4.5	9.3	7.1	8.2	12.6	10.2	11.3
23	3.9	1.9	3.0	4.3	2.4	3.6	10.7	8.0	9.0	11.9	9.8	10.7
24	1.9	0.3	1.2	4.5	2.7	3.7	9.8	6.7	7.8	11.2	10.4	10.8
25	2.0	0.3	0.9	5.2	3.9	4.4	7.4	6.0	6.7	10.7	9.8	10.2
26	2.6	0.3	1.4	5.3	3.7	4.5	11.4	5.6	8.3	14.2	10.0	11.9
27	2.5	0.3	1.2	5.7	4.7	5.2	12.6	9.1	10.2	14.8	10.2	12.4
28	2.0	0.3	1.1	5.2	4.3	4.6	11.4	7.6	9.2	12.9	11.1	12.1
29	---	---	---	6.8	4.9	6.0	9.4	6.8	8.2	14.0	10.4	12.0
30	---	---	---	7.8	5.4	6.6	9.4	8.5	8.8	13.4	10.2	11.6
31	---	---	---	7.2	6.0	6.8	---	---	---	14.8	10.2	12.4
MONTH	4.8	0.3	2.2	7.8	0.3	3.2	15.6	5.2	8.7	16.9	5.3	11.0

SWATARA CREEK BASIN

0157155014 SWATARA CREEK, SITE C3, AT NEWTOWN, 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
1	14.9	11.2	13.1	19.3	17.4	18.4	19.2	17.2	18.1	19.2	18.0	18.6
2	15.1	11.6	13.2	19.2	17.0	18.4	20.4	17.6	18.9	19.1	16.7	18.0
3	13.1	12.5	12.8	18.3	15.3	16.9	20.6	18.0	19.3	18.2	16.5	17.4
4	14.4	12.8	13.5	19.1	15.9	17.5	20.8	18.3	19.5	17.9	16.0	17.0
5	16.9	13.0	14.9	18.4	16.9	17.7	19.6	18.5	19.1	17.6	15.3	16.6
6	17.8	14.4	15.9	19.0	17.3	18.0	19.1	17.6	18.5	17.4	15.1	16.4
7	17.6	15.0	16.3	19.1	17.3	18.0	19.0	17.2	18.1	17.4	15.1	16.4
8	18.1	15.1	16.5	17.8	16.9	17.5	18.8	17.9	18.3	17.3	15.0	16.3
9	18.0	15.4	16.7	17.8	16.2	16.8	18.9	17.9	18.3	17.5	15.8	16.6
10	17.9	16.4	16.9	17.8	15.5	16.6	19.8	17.5	18.5	17.1	15.1	16.2
11	17.5	16.3	16.9	17.9	15.2	16.6	20.4	18.0	19.1	16.5	14.1	15.4
12	18.6	16.2	17.2	18.0	16.1	17.0	20.9	18.3	19.5	17.0	14.2	15.7
13	18.6	16.1	17.3	18.6	16.6	17.5	21.5	19.0	20.2	17.8	15.3	16.6
14	19.4	16.7	18.0	18.0	16.9	17.4	21.8	19.3	20.5	18.0	15.9	17.0
15	18.5	17.0	17.8	18.2	17.1	17.5	20.8	19.3	19.9	19.0	17.4	18.0
16	17.5	15.4	16.6	18.1	17.3	17.6	19.5	18.2	18.8	19.5	18.4	18.9
17	15.8	13.6	14.7	20.3	17.9	19.2	19.9	17.9	18.7	19.0	17.9	18.4
18	14.9	13.0	14.1	19.8	18.6	19.1	19.2	17.0	18.3	18.2	16.7	17.6
19	15.1	13.1	14.1	19.2	17.8	18.5	18.7	17.9	18.2	18.2	16.3	17.2
20	15.6	13.3	14.5	18.8	17.3	18.0	19.0	17.5	18.1	18.2	17.1	17.6
21	16.7	13.4	15.1	18.7	16.6	17.6	20.2	18.3	19.1	17.5	15.9	16.9
22	17.0	14.6	15.7	18.7	16.9	17.8	18.9	17.3	18.3	17.4	15.1	16.4
23	16.5	13.1	14.9	18.6	16.8	17.7	18.0	16.1	17.2	18.0	16.9	17.4
24	17.5	13.3	15.4	17.6	15.2	16.6	17.8	16.1	17.0	17.2	15.8	16.4
25	18.8	15.2	16.9	19.1	16.7	17.7	17.5	15.0	16.4	16.6	16.1	16.4
26	19.4	16.2	17.7	19.9	17.3	18.6	17.3	15.8	16.7	17.4	16.6	17.0
27	19.6	16.9	18.2	20.0	18.1	19.0	17.4	16.3	16.9	17.4	15.2	16.5
28	20.5	17.4	18.9	18.7	16.9	17.8	18.0	16.8	17.3	15.5	13.4	14.6
29	19.4	18.1	18.8	18.2	16.0	17.2	18.6	17.2	17.8	15.8	14.1	15.3
30	20.0	17.8	18.8	19.0	16.8	17.8	18.9	18.0	18.3	14.1	12.4	13.4
31	---	---	---	18.9	16.8	17.8	19.9	18.8	19.4	---	---	---
MONTH	20.5	11.2	16.0	20.3	15.2	17.7	21.8	15.0	18.5	19.5	12.4	16.7
YEAR	21.8	0.3	9.9									

CROSS-SECTION ANALYSES, 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)	Sam- pling depth, feet (00003)	Temper- ature, deg C (00010)	Loca- tion in X-sect. looking downstrm ft from l bank (00009)
JUL 2005							
18...	1146	1028	1028	5.9	.00	--	.9
18...	1147	1028	1028	--	.30	18.7	2.0
18...	1148	1028	1028	--	.30	18.7	3.0
18...	1149	1028	1028	--	.30	18.7	4.0
18...	1150	1028	1028	--	.30	18.7	5.0
18...	1151	1028	1028	--	.30	18.7	6.0
18...	1152	1028	1028	--	.40	18.8	7.0
18...	1153	1028	1028	--	.30	18.8	8.0
18...	1154	1028	1028	--	.30	18.8	9.0
18...	1155	1028	1028	--	.20	18.8	10.0
18...	1156	1028	1028	--	.30	18.8	11.0
18...	1157	1028	1028	--	.20	18.8	12.0
18...	1158	1028	1028	--	.20	18.8	13.0
18...	1159	1028	1028	--	.20	18.8	14.0
18...	1200	1028	1028	--	.10	18.8	15.0
18...	1201	1028	1028	--	.00	--	17.0