

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

The Pennsylvania Water-Quality Network (WQN) is a statewide, fixed station water-quality sampling system currently operated by the Department of Environmental Protection (PaDEP), Bureau of Water Supply and Wastewater Management in cooperation with the United States Geological Survey (USGS). It is designed to assess both the quality of Pennsylvania's surface waters and the effectiveness of the water quality management program by accomplishing three basic objectives:

- * Monitor temporal water-quality trends in major surface streams throughout the Commonwealth of Pennsylvania.
- * Monitor temporal water-quality trends in selected reference waters.
- * Monitor temporal water-quality trends in selected Pennsylvania lakes.

Major streams are defined as interstate waters and intrastate streams with drainage areas of roughly 200 mi² or greater. These waters are sampled at or near their mouths to measure overall quality before flows enter the next higher order stream or before exiting the Commonwealth. In this way, trends can be established and the effectiveness of water-quality management programs can be assessed by watershed. Samples are collected on fixed time intervals resulting in coverage of a range of flow regimes. All samples collected from April 1, 2002 through September 30, 2003 were collected by the USGS and analyzed by the PaDEP laboratory in Harrisburg.

Most of the current WQN standard sites are co-located with USGS gage stations and others are equipped with a wire-weight gage. Currently the network consists of 120 standard stream sites, 26 reference stream sites, and 27 lakes distributed across the Commonwealth. This report contains only those sites in the Susquehanna or Potomac River basins. The locations of these sites can be found in figures 5-7. Other data for the WQN can be found in the annual Water Data Reports PA-03-1 and PA-03-3.

Standard stations are sampled bimonthly (6 times per year) for physical and chemical parameters and stream discharge or a stage reading. Reference stations are sampled monthly at 25-30 day intervals for physical and chemical parameters and stream discharge or a stage reading. Benthic macroinvertebrate samples are also collected annually at all WQN stations.

Ninety lakes are part of the WQN. Of these 90 lakes, approximately 15-20 are sampled annually during mid-summer stratification for 5 years; and then a different set of 15-20 lakes is sampled for 5 years. Using this schedule, all 90 lakes are sampled over a 30-year period. However, 27 lakes are scheduled for sampling in the current 5-year sampling period. Lakes are sampled for physical and chemical parameters. Two samples are collected from the deepest point of the lake with the first sample being collected 1-meter below the surface and the second sample collected 1-meter from the bottom. Each sample is analyzed separately. A temperature and dissolved oxygen profile is collected at the site through the water column. This report contains only data for lakes in the Susquehanna and Potomac River basins. The locations of these sites can be found in figures 5-7.

For additional information, contact Andrew Reif at the U.S. Geological Survey, 111 Great Valley Parkway, Malvern, PA 19355; 610-647-9008, (email: agreif@usgs.gov).

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

TABLE 3.--Pennsylvania Water-Quality Network (WQN) station list.

Station number	WQN No.	Location	Latitude	Longitude	Drainage area (mi ²)
01503000	306	Susquehanna River at Conklin, NY	42° 02' 07"	75° 48' 12"	2,232
^a 01518700	324	Tioga River at Tioga Junction, PA	41° 57' 09"	77° 06' 56"	446
^a 01520000	320	Cowanesque River near Lawrenceville, PA	41° 59' 48"	77° 08' 25"	298
01531000	332	Chemung River at Chemung, NY	40° 00' 08"	76° 38' 06"	2,506
01531490	333	Sugar Creek near Towanda, PA	41° 47' 27"	76° 27' 45"	188
^a 01531500	305	Susquehanna River at Towanda, PA	41° 45' 55"	76° 26' 28"	7,797
^a 01532000	318	Towanda Creek near Monroeton, PA	41° 42' 25"	76° 29' 06"	215
01532950	334	Wyalusing Creek near Wyalusing, PA	41° 41' 49"	76° 13' 52"	215
01533610	340	Unnamed Tributary to Tunkhannock Creek at Gelatt, PA	41° 48' 30"	75° 34' 50"	9.00
^a 01534000	317	Tunkhannock Creek near Tunkhannock, PA	41° 33' 30"	75° 53' 42"	383
01534090	323	Susquehanna River at Falls, PA	41° 27' 42"	75° 51' 15"	9,440
^a 01536000	313	Lackawanna River at Old Forge, PA	41° 21' 33"	75° 44' 41"	332
01537700	302	Susquehanna River near Hunlock Creek, PA	41° 11' 19"	76° 05' 13"	10,140
01538600	309	Nescopeck Creek at Nescopeck, PA	41° 02' 46"	76° 13' 28"	171
01539350	339	Little Fishing Creek above Wolfhouse Run near Millville, PA	41° 09' 58"	76° 30' 14"	19.1
015400021	308	Fishing Creek near Bloomsburg, PA	40° 59' 37"	76° 28' 33"	379
^a 01540500	301	Susquehanna River at Danville, PA	40° 57' 29"	76° 37' 10"	11,220
^a 01541000	406	West Branch Susquehanna River at Bower, PA	40° 53' 49"	78° 40' 38"	315
^a 01541500	422	Clearfield Creek at Dimeling, PA	40° 58' 18"	78° 24' 22"	371
01542790	439	Bennett Branch Sinnemahoning Creek at Driftwood, PA	41° 20' 02"	78° 08' 10"	365
^a 01543000	420	Driftwood Branch Sinnemahoning Creek at Sterling Run, PA	41° 24' 48"	78° 11' 50"	272
^a 01543500	418	Sinnemahoning Creek at Sinnemahoning, PA	41° 19' 02"	78° 06' 12"	685
^a 01544000	419	First Fork Sinnemahoning Creek near Sinnemahoning, PA	41° 24' 06"	78° 01' 28"	245
^a 01545000	434	Kettle Creek near Westport, PA	41° 19' 10"	77° 52' 27"	233
^a 01546500	415	Spring Creek near Axemann, PA	40° 53' 23"	77° 47' 40"	87.2
01547400	413	Bald Eagle Creek near Milesburg, PA	40° 58' 31"	77° 44' 35"	296
01547980	423	Beech Creek at Beech Creek, PA	41° 04' 29"	77° 35' 30"	170
01548075	433	Fishing Creek near Cedar Springs, PA	41° 04' 31"	77° 28' 40"	137
01548085	445	Bald Eagle Creek at Castanea, PA	41° 07' 35"	77° 26' 00"	768
01549590	429	Little Pine Creek below Reservoir near Waterville	41° 21' 06"	77° 21' 20"	172
^a 01549700	410	Pine Creek below Little Pine Creek near Waterville, PA	41° 16' 25"	77° 19' 28"	944
^a 01550000	409	Lycoming Creek near Trout Run, PA	41° 25' 06"	77° 01' 59"	173
^a 01551500	402	West Branch Susquehanna River at Williamsport, PA	41° 14' 10"	76° 59' 49"	5,682
^a 01552000	408	Loyalsock Creek at Loyalsockville, PA	41° 19' 30"	76° 54' 46"	435
^a 01552500	446	Muncy Creek near Sonestown, PA	41° 21' 25"	76° 32' 06"	23.8
01553005	444	Muncy Creek near Muncy, PA	41° 12' 27"	76° 45' 09"	209
01553430	447	Spruce Run above Spruce Run Reservoir near Mazeppa, PA	41° 01' 27"	77° 03' 54"	6.70
^a 01553500	401	West Branch Susquehanna River at Lewisburg, PA	40° 58' 05"	76° 52' 25"	6,847
01553990	203	Susquehanna River above Dam at Sunbury, PA	40° 51' 13"	76° 48' 08"	18,300
01554600	268	Penns Creek at Farmers Mills near Spring Mills, PA	40° 51' 57"	77° 36' 35"	13.5
^a 01555000	229	Penns Creek at Penns Creek, PA	40° 52' 00"	77° 02' 55"	301
01555210	228	Middle Creek near Selinsgrove, PA	40° 46' 29"	76° 52' 11"	174
01555859	252	Beaverdam Branch Juniata River near Hollidaysburg, PA	40° 25' 50"	78° 21' 50"	75.4

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TABLE 3.--Pennsylvania Water-Quality Network (WQN) station list.--continued.

Station number	WQN No.	Location	Latitude	Longitude	Drainage area (mi ²)
01556009	224	Frankstown Branch Juniata River at RR at Williamsburg, PA	40° 28' 19"	78° 11' 13"	296
^a 01558000	217	Little Juniata River at Spruce Creek, PA	40° 36' 45"	78° 08' 27"	220
^a 01562000	223	Raystown Branch Juniata River at Saxton, PA	40° 12' 57"	78° 15' 56"	756
01564515	249	Aughwick Creek at Aughwick Mills, PA	40° 20' 05"	77° 51' 36"	356
^a 01567000	214	Juniata River at Newport, PA	40° 28' 42"	77° 07' 46"	3,354
01567795	270	Letort Spring Run at Bonny Brook near Carlisle, PA	40° 10' 39"	77° 11' 10"	7.26
01570400	240	Conodoguinet Creek at mouth at West Fairview, PA	40° 16' 17"	76° 54' 51"	506
01571505	212	Yellow Breeches Creek at New Cumberland, PA	40° 13' 27"	76° 51' 38"	218
01573610	211	Swatara Creek at Harrisburg Airport at Middletown, PA	40° 11' 28"	76° 43' 52"	571
01573750	267	Conewago Creek near Arendtsville, PA	39° 56' 13"	77° 21' 58"	6.90
^a 01574000	210	West Conewago Creek near Manchester, PA	40° 04' 56"	76° 43' 13"	510
01575900	206	Chickies Creek near Marietta, PA	40° 03' 46"	76° 30' 57"	108
01576003	201	Susquehanna River at Columbia, PA	40° 01' 42"	76° 31' 05"	25,990
^a 01576754	231	Conestoga River at Conestoga, PA	39° 56' 47"	76° 22' 05"	470
01576787	204	Pequea Creek at Martic Forge, PA	39° 54' 21"	76° 19' 43"	148
01577180	265	Rambo Run at Meadetown near Stewartstown, PA	39° 49' 21"	76° 31' 59"	10.2
01613500	505	Licking Creek near Sylvan, PA	39° 43' 23"	78° 03' 38"	158
01614500	501	Conococheague Creek at Fairview, MD	39° 42' 59"	77° 49' 29"	494

^aOther data for this station can be found in the continuous station records section of this report.

TABLE 4.--List of lakes sampled as part of the Pennsylvania Water-Quality Network.

Station number	WQN No.	Location	Latitude	Longitude	Drainage area (mi ²)
^a 01541340	L403	Glendale Lake, PA	40° 41' 50"	78° 32' 15"	41.9
01543896	L407	George B. Stevenson Lake near First Fork, PA	41° 24' 35"	78° 01' 15"	243
^a 01544800	L404	Kettle Creek Lake at Kettle Creek Dam, PA	41° 21' 37"	77° 55' 27"	226
01552070	L406	Rose Valley Lake near Bodines, PA	41° 23' 12"	76° 59' 54"	3.43
01553650	L405	Lake Chillisquaque near White Hall, PA	41° 06' 08"	76° 39' 41"	5.52
01555124	L306	Faylor Lake at Beaver Springs, PA	40° 45' 47"	77° 12' 51"	33.3
01555142	L308	Walker Lake at Troxelville, PA	40° 47' 48"	77° 11' 47"	18.5
01564950	L209	Laurel Creek Reservoir near Milroy, PA	40° 43' 48"	77° 37' 45"	
01569200	L210	Letterkenny Reservoir near Roxbury, PA	40° 06' 52"	77° 41' 18"	32.8
01569765	L208	Opossum Lake near Plainfield, PA	40° 13' 32"	77° 16' 32"	4.98
01603700	L504	Lake Koon near Cooks Mill, PA	39° 45' 52"	78° 39' 54"	41.6
01603800	L503	Lake Gordon near Cooks Mill, PA	39° 44' 52"	78° 40' 34"	51.8

^aOther data for this station can be found in the continuous station records section of this report.

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium unfltrd recoverable, mg/L (00916)	Magnesium, water, fltrd, mg/L (00925)
01503000 Susquehanna River at Conklin, NY (LAT 42 02 07N LONG 075 48 12W)													
NOV 2002 06...	1600	1028	9813	2440	40	12.8	7.7	207	5.7	74	--	25.9	--
JAN 2003 06...	1145	1028	9813	5580	40	14.5	7.6	158	.3	55	--	18.1	--
MAY 05...	1200	1028	9813	5690	40	10.7	7.6	145	13.0	57	--	19.0	--
JUL 07...	1200	1028	9813	1070	40	10.0	8.0	228	26.3	88	--	29.8	--
SEP 08...	1315	1028	9813	2540	40	9.3	7.6	148	18.2	54	--	17.3	--
01531000 Chemung River at Chemung, NY (LAT 42 00 08N LONG 076 38 06W)													
NOV 2002 05...	1000	1028	9813	375	30	14.0	8.5	440	4.8	169	--	48.3	--
JAN 2003 08...	0930	1028	9813	2830	30	13.7	7.7	284	.5	91	--	27.1	--
MAY 07...	1000	1028	9813	1360	30	10.8	8.4	286	13.5	120	--	33.3	--
JUL 09...	0830	1028	9813	650	30	8.7	7.9	433	24.9	150	--	43.9	--
SEP 09...	0900	1028	9813	1550	30	8.6	7.8	298	18.7	110	--	34.0	--
01531490 Sugar Creek near Towanda, PA (LAT 41 47 27N LONG 076 27 45W)													
NOV 2002 05...	1245	1028	9813	34	30	15.9	8.8	243	5.4	98	--	29.9	--
JAN 2003 08...	1100	1028	9813	286	30	13.8	7.8	172	.4	61	--	18.3	--
MAR 05...	0915	1028	9813	--	30	14.5	7.5	278	.1	73	--	21.6	--
MAY 07...	1100	1028	9813	159	30	11.3	8.1	135	13.0	58	--	16.7	--
JUL 09...	0945	1028	9813	38	30	9.7	7.8	228	22.8	85	--	26.0	--
SEP 09...	1045	1028	9813	97	30	10.0	7.9	209	17.1	82	--	25.7	--
01532950 Wyalusing Creek near Wyalusing, PA (LAT 41 41 49N LONG 076 13 52W)													
NOV 2002 06...	1245	1028	9813	129	30	13.6	8.0	125	6.5	39	--	11.2	--
JAN 2003 06...	0930	1028	9813	646	30	14.3	7.8	90	.5	27	--	7.3	--
MAR 03...	1015	1028	9813	295	30	13.7	7.0	180	.0	30	--	8.1	--
MAY 05...	0915	1028	9813	346	30	11.8	7.8	82	11.3	28	--	7.7	--
JUL 07...	0945	1028	9813	54	30	10.8	8.0	124	22.9	42	--	11.7	--
SEP 08...	1115	1028	9813	441	30	9.6	7.3	84	16.7	35	--	9.5	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01503000 Susquehanna River at Conklin, NY (LAT 42 02 07N LONG 075 48 12W)													
NOV 2002 06...	2.3	56	--	--	11.7	110	4	.080	.40	<.040	<.01	.012	.69
JAN 2003 06...	2.3	38	--	--	9.0	126	18	<.020	.60	<.040	.02	.014	.69
MAY 05...	2.3	45	--	--	8.2	96	14	<.020	.34	<.040	.03	.023	.58
JUL 07...	3.2	72	--	--	9.3	130	10	<.020	.30	<.040	.01	.025	.56
SEP 08...	2.6	44	--	--	7.5	100	2	<.020	.38	<.040	.02	.030	.39
01531000 Chemung River at Chemung, NY (LAT 42 00 08N LONG 076 38 06W)													
NOV 2002 05...	11.6	106	--	--	37.8	--	20	1.02	.58	<.040	.02	.041	.98
JAN 2003 08...	5.7	59	--	--	20.4	188	<2	<.020	1.23	<.040	.03	.031	1.4
MAY 07...	8.7	87	--	--	22.6	278	<2	<.020	.50	<.040	.01	.040	.83
JUL 09...	9.5	109	--	--	21.2	316	4	<.020	.58	<.040	.03	.048	1.0
SEP 09...	6.2	86	--	--	16.9	236	2	<.020	.56	<.040	.03	.036	.53
01531490 Sugar Creek near Towanda, PA (LAT 41 47 27N LONG 076 27 45W)													
NOV 2002 05...	5.7	68	--	--	22.2	178	<2	<.020	.23	<.040	<.01	.012	.56
JAN 2003 08...	3.7	36	--	--	16.2	146	2	<.020	2.00	<.040	.02	.027	2.3
MAR 05...	4.6	44	--	--	16.9	136	<2	.030	1.78	<.040	.02	.029	2.0
MAY 07...	4.0	47	--	--	13.8	164	2	<.020	.44	<.040	.02	.030	.70
JUL 09...	4.9	74	--	--	13.1	180	<2	<.020	.33	<.040	.02	.025	.63
SEP 09...	4.4	73	--	--	12.0	170	2	<.020	.62	<.040	.03	.033	.65
01532950 Wyalusing Creek near Wyalusing, PA (LAT 41 41 49N LONG 076 13 52W)													
NOV 2002 06...	2.6	24	--	--	13.1	58	4	.080	.38	<.040	<.01	<.010	.60
JAN 2003 06...	2.2	14	--	--	10.3	284	10	<.020	.77	<.040	<.01	.016	.84
MAR 03...	2.5	17	--	--	11.0	84	4	<.020	.98	<.040	.02	.016	1.2
MAY 05...	2.2	21	--	--	9.7	70	10	<.020	.27	<.040	.02	.018	.44
JUL 07...	3.1	33	--	--	9.6	72	2	<.020	.56	<.040	<.01	.018	.71
SEP 08...	2.7	24	--	--	9.1	70	6	<.020	.62	<.040	.02	.030	.57

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd, recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd, recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd, recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd, recover-able, µg/L (01051)
01503000 Susquehanna River at Conklin, NY (LAT 42 02 07N LONG 075 48 12W)													
NOV 2002 06...	2.6	--	--	--	<200	--	--	--	<10	--	150	--	<1.0
JAN 2003 06...	1.9	--	--	--	<200	--	--	--	<10	--	270	--	<1.0
MAY 05...	2.9	--	--	--	400	--	--	--	<10	--	510	--	<1.0
JUL 07...	2.8	--	--	--	<200	--	--	--	<10	--	220	--	<1.0
SEP 08...	3.8	--	--	--	200	--	--	--	<10	--	450	--	<1.0
01531000 Chemung River at Chemung, NY (LAT 42 00 08N LONG 076 38 06W)													
NOV 2002 05...	2.4	--	--	--	<200	--	--	--	<10	--	30	--	<1.0
JAN 2003 08...	2.8	--	--	--	<200	--	--	--	<10	--	250	--	<1.0
MAY 07...	3.2	--	--	--	<200	--	--	--	<10	--	120	--	<1.0
JUL 09...	3.2	--	--	--	<200	--	--	--	<10	--	200	--	<1.0
SEP 09...	3.6	--	--	--	200	--	--	--	<10	--	480	--	<1.0
01531490 Sugar Creek near Towanda, PA (LAT 41 47 27N LONG 076 27 45W)													
NOV 2002 05...	3.1	--	--	--	<200	--	--	--	<10	--	60	--	<1.0
JAN 2003 08...	3.1	--	--	--	<200	--	--	--	<10	--	230	--	<1.0
MAR 05...	3.1	--	--	--	<200	--	--	--	<10	--	250	--	<1.0
MAY 07...	3.5	--	--	--	<200	--	--	--	<10	--	280	--	<1.0
JUL 09...	3.7	--	--	--	<200	--	--	--	<10	--	90	--	<1.0
SEP 09...	4.3	--	--	--	<200	--	--	--	<10	--	270	--	<1.0
01532950 Wyalusing Creek near Wyalusing, PA (LAT 41 41 49N LONG 076 13 52W)													
NOV 2002 06...	1.8	--	--	--	<200	--	--	--	<10	--	50	--	<1.0
JAN 2003 06...	2.0	--	--	--	300	--	--	--	<10	--	430	--	<1.0
MAR 03...	1.4	--	--	--	<200	--	--	--	<10	--	200	--	<1.0
MAY 05...	2.3	--	--	--	<200	--	--	--	<10	--	180	--	<1.0
JUL 07...	2.2	--	--	--	<200	--	--	--	<10	--	60	--	<1.0
SEP 08...	3.1	--	--	--	<200	--	--	--	<10	--	290	--	<1.0

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MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd water, fltrd, µg/L (01056)	Mangan- ese, water, recover -able, µg/L (01055)	Nickel, water, unfltrd water, fltrd, µg/L (01065)	Nickel, water, unfltrd water, recover -able, µg/L (01067)	Zinc, water, unfltrd water, fltrd, µg/L (01090)	Zinc, water, unfltrd water, recover -able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01503000	Susquehanna River at Conklin, NY (LAT 42 02 07N LONG 075 48 12W)						
NOV 2002 06...	--	20	--	<50	--	<10	--
JAN 2003 06...	--	20	--	<50	--	<10	--
MAY 05...	--	40	--	<50	--	<10	--
JUL 07...	--	80	--	<50	--	10	--
SEP 08...	--	40	--	<50	--	100	--
01531000	Chemung River at Chemung, NY (LAT 42 00 08N LONG 076 38 06W)						
NOV 2002 05...	--	<10	--	<50	--	<10	--
JAN 2003 08...	--	40	--	<50	--	<10	--
MAY 07...	--	20	--	<50	--	90	--
JUL 09...	--	60	--	<50	--	<10	--
SEP 09...	--	60	--	<50	--	20	--
01531490	Sugar Creek near Towanda, PA (LAT 41 47 27N LONG 076 27 45W)						
NOV 2002 05...	--	<10	--	<50	--	<10	--
JAN 2003 08...	--	20	--	<50	--	<10	--
MAR 05...	--	20	--	<50	--	<10	--
MAY 07...	--	20	--	<50	--	50	--
JUL 09...	--	20	--	<50	--	10	--
SEP 09...	--	20	--	<50	--	<10	--
01532950	Wyalusing Creek near Wyalusing, PA (LAT 41 41 49N LONG 076 13 52W)						
NOV 2002 06...	--	<10	--	<50	--	<10	--
JAN 2003 06...	--	30	--	<50	--	<10	--
MAR 03...	--	20	--	<50	--	<10	--
MAY 05...	--	20	--	<50	--	<10	--
JUL 07...	--	10	--	<50	--	<10	--
SEP 08...	--	20	--	<50	--	50	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, unfltrd field, std units (00400)	Specific conductance, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium unfltrd water, mg/L (00915)	Calcium unfltrd recoverable, mg/L (00916)	Magnesium, unfltrd water, mg/L (00925)
01533610 Unnamed Tributary to Tunkhannock Creek at Gelatt, PA (LAT 41 48 30N LONG 075 34 50W)													
OCT 2002													
08...	1000	1028	9813	1.1	30	11.6	8.2	137	10.1	58	--	19.6	--
NOV													
21...	1030	1028	9813	23	30	12.9	7.5	80	5.0	27	--	9.0	--
DEC													
10...	1030	1028	9813	--	30	--	8.1	84	.0	35	--	11.6	--
JAN 2003													
07...	0930	1028	9813	25	30	14.4	7.6	78	.3	23	--	7.6	--
APR													
08...	0930	1028	9813	23	30	13.4	7.5	69	2.0	27	--	8.9	--
MAY													
06...	0900	1028	9813	18	30	12.2	7.6	76	8.0	29	--	9.7	--
JUN													
10...	0930	1028	9813	15	30	10.3	7.1	75	11.8	30	--	10.3	--
JUL													
08...	0830	1028	9813	3.4	30	8.9	7.6	104	16.3	41	--	14.0	--
AUG													
11...	1000	1028	9813	19	30	9.4	7.5	97	17.1	40	--	13.5	--
SEP													
11...	1215	1028	9813	9.1	30	10.2	7.4	91	13.9	32	--	11.0	--
01534090 Susquehanna River at Falls, PA (LAT 41 27 42N LONG 075 51 15W)													
NOV 2002													
19...	1210	1028	9813	33000	40	11.3	7.4	187	5.5	61	--	18.9	--
JAN 2003													
22...	1140	1028	9813	E7950	40	15.4	7.1	277	.1	96	--	29.5	--
MAR													
18...	1630	1028	9813	67500	40	11.7	7.7	164	2.1	62	--	17.3	--
MAY													
27...	1640	1028	9813	15000	40	10.6	8.3	210	16.1	77	--	23.6	--
JUL													
28...	1320	1028	9813	12600	40	8.2	7.4	192	22.4	76	--	22.9	--
SEP													
17...	1330	1028	9813	7250	40	9.6	2.3	214	20.5	80	--	24.8	--
01537700 Susquehanna River near Hunlock Creek, PA (LAT 41 11 19N LONG 076 05 13W)													
NOV 2002													
18...	1340	1028	9813	31700	40	9.8	7.4	196	6.9	74	--	22.6	--
JAN 2003													
21...	1500	1028	9813	9260	40	14.3	6.9	298	.1	100	--	30.8	--
MAR													
18...	1230	1028	9813	68300	40	11.6	7.2	172	2.5	62	--	17.9	--
MAY													
28...	0900	1028	9813	15300	40	10.0	7.8	223	15.9	82	--	24.2	--
JUL													
29...	0900	1028	9813	12200	40	7.9	7.2	225	22.3	83	--	24.0	--
SEP													
17...	1700	1028	9813	8090	40	11.3	7.5	237	20.7	88	--	25.4	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01533610 Unnamed Tributary to Tunkhannock Creek at Gelatt, PA (LAT 41 48 30N LONG 075 34 50W)													
OCT 2002 08...	2.2	46	7.4	<.2	11.3	94	2	.100	.31	<.040	<.01	<.010	.51
NOV 21...	1.1	17	6.0	<.2	10.0	50	<2	<.020	.41	<.040	<.01	<.010	.81
DEC 10...	1.4	22	6.4	<.2	9.9	64	<2	<.020	.48	<.040	<.01	<.010	.71
JAN 2003 07...	.9	17	6.4	<.2	8.5	56	4	<.020	.52	<.040	.01	<.010	.55
APR 08...	1.0	15	6.3	<.2	8.3	40	<2	<.020	.47	<.040	<.01	.013	.52
MAY 06...	1.2	20	5.0	<.2	8.0	64	<2	<.020	.34	<.040	<.01	.011	.56
JUN 10...	1.1	22	4.4	<.2	7.5	58	8	<.020	.25	<.040	<.01	.015	.46
JUL 08...	1.5	31	5.6	<.2	7.8	82	<2	<.020	.34	<.040	.01	.052	.44
AUG 11...	1.4	31	5.3	<.2	6.8	66	<2	<.020	.32	<.040	.01	.015	.47
SEP 11...	1.2	28	4.4	<.2	7.2	90	2	<.020	.39	<.040	.01	.015	.54
01534090 Susquehanna River at Falls, PA (LAT 41 27 42N LONG 075 51 15W)													
NOV 2002 19...	3.5	44	--	--	13.3	154	4	<.020	.57	<.040	.03	.062	1.3
JAN 2003 22...	5.4	69	--	--	17.0	138	22	.050	1.21	<.040	.01	.018	1.4
MAR 18...	4.6	33	--	--	11.2	80	366	.050	.82	<.040	.15	.284	1.8
MAY 27...	4.4	61	--	--	11.7	146	16	<.020	.33	<.040	.02	.029	.62
JUL 28...	4.5	61	--	--	10.7	98	44	<.020	.63	<.040	.06	.075	.93
SEP 17...	4.3	66	--	--	12.6	138	18	<.020	.44	<.040	.03	.037	.74
01537700 Susquehanna River near Hunlock Creek, PA (LAT 41 11 19N LONG 076 05 13W)													
NOV 2002 18...	4.3	48	--	--	17.6	140	56	.030	.47	<.040	.02	.093	1.4
JAN 20 21...	6.9	65	--	--	30.5	224	6	.070	1.10	<.040	.02	.016	1.3
MAR 18...	4.3	34	--	--	12.8	164	244	.060	.84	<.040	.08	.263	1.8
MAY 28...	5.3	61	--	--	18.3	158	16	<.020	.35	<.040	.03	.033	.77
JUL 29...	5.5	59	--	--	21.0	186	8	<.020	.66	<.040	.05	.066	1.0
SEP 17...	6.1	58	--	--	28.4	178	12	<.020	.44	<.040	.02	.039	.71

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd, recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd, recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd, recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd, recover-able, µg/L (01051)
01533610 Unnamed Tributary to Tunkhannock Creek at Gelatt, PA (LAT 41 48 30N LONG 075 34 50W)													
OCT 2002 08...	--	1.3	<20	17	27	<4.0	<.20	<4	<4	<20	20	<1.0	<1.0
NOV 21...	--	.8	20	25	34	<4.0	<.20	<4	<4	<20	40	<1.0	<1.0
DEC 10...	--	1.3	<20	23	29	<4.0	<.20	<4	<4	<20	120	<1.0	<1.0
JAN 2003 07...	--	.9	<20	28	46	<4.0	<.20	<4	<4	<20	40	<1.0	<1.0
APR 08...	--	1.2	<20	25	43	<4.0	<.20	<4	<4	<20	40	<1.0	<1.0
MAY 06...	--	1.1	<20	22	47	<4.0	<.20	<4	<4	<20	40	<1.0	<1.0
JUN 10...	--	1.0	<20	<10	33	<4.0	<.20	<4	<4	<20	60	<1.0	<1.0
JUL 08...	--	.9	<20	<10	10	<4.0	<.20	<4	<4	<20	20	<1.0	<1.0
AUG 11...	--	.8	40	<10	26	<4.0	<.20	<4	<4	<20	50	<1.0	<1.0
SEP 11...	--	.5	40	<10	13	<4.0	<.20	<4	<4	<20	20	<1.0	<1.0
01534090 Susquehanna River at Falls, PA (LAT 41 27 42N LONG 075 51 15W)													
NOV 2002 19...	4.2	--	--	--	800	--	--	--	<10	--	1240	--	1.4
JAN 2003 22...	2.6	--	--	--	<200	--	--	--	<10	--	170	--	<1.0
MAR 18...	4.2	--	--	--	6600	--	--	--	<10	--	11100	--	5.8
MAY 27...	3.3	--	--	--	300	--	--	--	<10	--	560	--	<1.0
JUL 28...	4.5	--	--	--	1700	--	--	--	<10	--	1860	--	1.5
SEP 17...	3.7	--	--	--	300	--	--	--	<10	--	380	--	<1.0
01537700 Susquehanna River near Hunlock Creek, PA (LAT 41 11 19N LONG 076 05 13W)													
NOV 2002 18...	3.2	--	--	--	800	--	--	--	<10	--	2390	--	2.2
JAN 2003 21...	1.9	--	--	--	<200	--	--	--	<10	--	860	--	<1.0
MAR 18...	3.9	--	--	--	4200	--	--	--	<10	--	7720	--	7.9
MAY 28...	3.0	--	--	--	400	--	--	--	<10	--	960	--	<1.0
JUL 29...	4.1	--	--	--	1200	--	--	--	<10	--	2400	--	1.5
SEP 17...	3.2	--	--	--	300	--	--	--	<10	--	1050	--	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recover fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover fltrd, µg/L (01055)	Nickel, water, unfltrd recover fltrd, µg/L (01065)	Nickel, water, unfltrd recover fltrd, µg/L (01067)	Zinc, water, unfltrd recover fltrd, µg/L (01090)	Zinc, water, unfltrd recover fltrd, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01533610 Unnamed Tributary to Tunkhannock Creek at Gelatt, PA (LAT 41 48 30N LONG 075 34 50W)							
OCT 2002							
8...	4.7	8.5	<4.0	<4.0	<5.0	<5.0	<5
NOV							
21...	<2.0	4.2	<4.0	<4.0	<5.0	<5.0	<5
DEC							
10...	2.9	3.8	<4.0	<4.0	<5.0	<5.0	<5
JAN 2003							
07...	<2.0	4.7	<4.0	<4.0	<5.0	<5.0	<5
APR							
08...	2.0	4.9	<4.0	<4.0	<5.0	<5.0	<5
MAY							
06...	<2.0	7.8	<4.0	<4.0	<5.0	<5.0	<5
JUN							
10...	<2.0	9.5	<4.0	<4.0	<5.0	<5.0	--
JUL							
08...	2.5	4.5	<4.0	<4.0	<5.0	<5.0	<5
AUG							
11...	2.5	7.7	<4.0	<4.0	<5.0	<5.0	<5
SEP							
11...	2.0	4.5	<4.0	<4.0	<5.0	<5.0	<5
01534090 Susquehanna River at Falls, PA (LAT 41 27 42N LONG 075 51 15W)							
NOV 2002							
19...	--	70	--	<50	--	<10	--
JAN 2003							
22...	--	20	--	<50	--	80	--
MAR							
18...	--	490	--	<50	--	50	--
MAY							
27...	--	50	--	<50	--	<10	--
JUL							
28...	--	80	--	<50	--	<10	--
SEP							
17...	--	30	--	<50	--	100	--
01537700 Susquehanna River near Hunlock Creek, PA (LAT 41 11 19N LONG 076 05 13W)							
NOV 2002							
18...	--	200	--	<50	--	<10	--
JAN 2003							
21...	--	150	--	<50	--	<10	--
MAR							
18...	--	440	--	<50	--	60	--
MAY							
28...	--	100	--	<50	--	60	--
JUL							
29...	--	140	--	<50	--	<10	--
SEP							
17...	--	140	--	<50	--	10	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01538600 Nescopeck Creek at Nescopeck, PA (LAT 41 02 49N LONG 076 13 17W)													
NOV 2002													
18...	1130	1028	9813	971	40	10.5	5.8	197	6.8	64	--	12.0	--
JAN 2003													
21...	1300	1028	9813	264	40	14.6	5.0	351	.1	100	--	20.0	--
MAR													
18...	1030	1028	9813	1650	40	11.4	5.4	214	5.0	51	--	9.6	--
MAY													
28...	1110	1028	9813	299	40	10.9	5.4	234	13.3	74	--	11.6	--
JUL													
29...	1130	1028	9813	152	40	10.7	5.5	413	18.6	140	--	19.4	--
SEP													
17...	1800	1028	9813	221	40	6.4	5.2	268	17.1	100	--	15.0	--
01539350 Little Fishing Creek above Wolfhouse Run near Millville PA (LAT 41 09 58N LONG 076 30 14W)													
OCT 2002													
17...	1200	1028	9813	--	30	10.1	6.7	56	10.9	20	4.92	5.1	1.66
NOV													
20...	1130	1028	9813	76	30	11.9	7.2	54	6.7	19	4.78	4.9	1.64
JAN 2003													
13...	1440	1028	9813	31	30	14.8	7.0	59	.1	21	5.23	5.4	1.84
FEB													
27...	1230	1028	9813	37	30	15.1	6.3	54	.1	18	4.43	4.6	1.44
MAR													
18...	1045	1028	9813	217	30	12.7	6.9	51	4.0	18	4.49	4.7	1.47
APR													
22...	1250	1028	9813	43	30	11.5	6.3	54	10.1	21	5.20	5.3	1.74
MAY													
20...	1400	1028	9813	18	30	9.8	7.3	54	14.1	19	4.69	4.8	1.62
JUN													
18...	1450	1028	9813	36	30	9.2	--	63	13.4	22	5.67	5.7	1.84
JUL													
16...	1100	1028	9813	12	30	8.3	7.5	71	19.2	23	6.27	6.3	1.80
AUG													
06...	1130	1028	9813	40	30	9.5	7.1	73	17.2	26	7.09	7.2	1.92
SEP													
29...	1030	1028	9813	31	30	10.1	6.7	60	12.4	20	5.34	5.4	1.69
015400021 Fishing Creek near Bloomsburg, PA (LAT 40 59 37N LONG 076 28 33W)													
NOV 2002													
20...	1400	1028	9813	1310	30	9.7	7.5	109	8.0	40	10.4	10.4	3.29
JAN 2003													
13...	1130	1028	9813	532	30	11.7	7.9	153	1.5	55	14.9	14.6	4.48
MAR													
18...	1300	1028	9813	3160	30	10.7	7.6	94	6.9	33	8.27	8.7	2.55
MAY													
19...	1135	1028	9813	267	30	9.5	7.9	186	15.2	57	14.1	14.3	5.08
JUL													
16...	1330	1028	9813	214	30	8.0	8.2	211	22.0	69	19.2	19.2	5.17
SEP													
23...	1500	1028	9813	5350	30	10.7	6.5	65	17.0	27	6.30	7.3	1.54

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd as N (00610)	Nitrate water, unfltrd as N (00620)	Nitrite water, unfltrd as N (00615)	Ortho-phosphate, water, unfltrd as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01538600 Nescopeck Creek at Nescopeck, PA (LAT 41 02 49N LONG 076 13 17W)													
NOV 2002 18...	8.1	4	--	--	51.4	146	44	.040	1.38	<.040	.03	.138	2.7
JAN 2003 21...	20.0	2	--	--	110	200	8	.370	1.00	<.040	.02	.032	1.5
MAR 18...	6.7	3	--	--	44.6	76	86	.040	.67	<.040	<.01	.133	1.2
MAY 28...	10.9	4	--	--	67.7	190	6	.070	.75	<.040	.02	.056	1.1
JUL 29...	23.3	2	--	--	144	396	10	.080	1.33	<.040	.01	.030	1.6
SEP 17...	15.6	2	--	--	94.3	260	12	<.020	.74	<.040	.01	.038	.88
01539350 Little Fishing Creek above Wolfhouse Run near Millville PA (LAT 41 09 58N LONG 076 30 14W)													
OCT 2002 17...	1.7	9	2.6	<.2	8.1	50	<2	.120	1.15	<.040	.01	.012	1.5
NOV 20...	1.7	10	3.1	<.2	8.2	28	6	<.020	1.07	<.040	<.01	<.010	1.6
JAN 2003 13...	1.9	10	4.1	<.2	7.9	46	4	<.020	1.24	<.040	<.01	<.010	1.3
FEB 27...	1.5	8	3.3	<.2	7.5	62	<2	<.020	.94	<.040	.01	<.010	1.1
MAR 18...	1.6	8	3.0	<.2	7.8	628	46	<.020	.90	<.040	<.01	.023	1.1
APR 22...	1.8	11	3.8	<.2	6.8	58	<2	<.020	.73	<.040	.01	.012	.95
MAY 20...	1.7	14	3.3	<.2	6.1	56	<2	<.020	.43	<.040	.01	<.010	.55
JUN 18...	1.9	15	4.4	<.2	6.4	62	4	<.020	.72	<.040	.01	.013	.78
JUL 16...	1.8	17	4.6	<.2	5.6	112	14	<.020	.87	<.040	.01	.012	1.0
AUG 06...	2.0	19	.7	<.2	6.9	54	4	<.020	.70	<.040	.01	.016	.81
SEP 29...	1.7	14	3.2	<.2	6.4	36	2	<.020	.83	<.040	<.01	<.010	.72
015400021 Fishing Creek near Bloomsburg, PA (LAT 40 59 37N LONG 076 28 33W)													
NOV 2002 20...	3.3	20	--	--	12.5	82	2	<.020	2.16	<.040	<.01	<.010	2.7
JAN 2003 13...	4.5	25	--	--	13.8	128	<2	<.020	2.68	<.040	<.01	<.010	2.8
MAR 18...	2.8	14	--	--	11.1	42	44	<.020	1.36	<.040	<.01	.035	1.8
MAY 19...	5.1	41	--	--	14.4	120	<2	<.020	1.18	<.040	.01	.016	1.4
JUL 16...	5.2	46	--	--	13.5	152	4	<.020	1.63	<.040	.01	.013	1.8
SEP 23...	2.2	14	--	--	6.8	76	166	<.020	.96	<.040	.03	.148	1.6

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01538600 Nescopeck Creek at Nescopeck, PA (LAT 41 02 49N LONG 076 13 17W)													
NOV 2002 18...	3.8	--	--	--	2400	--	--	--	<10	--	2150	--	2.6
JAN 2003 21...	1.0	--	--	--	3000	--	--	--	10	--	700	--	1.2
MAR 18...	2.5	--	--	--	3800	--	--	--	20	--	4270	--	4.7
MAY 28...	1.9	--	--	--	1500	--	--	--	<10	--	620	--	1.1
JUL 29...	1.4	--	--	--	2100	--	--	--	10	--	340	--	1.2
SEP 17...	1.8	--	--	--	1500	--	--	--	<10	--	490	--	<1.0
01539350 Little Fishing Creek above Wolfhouse Run near Millville PA (LAT 41 09 58N LONG 076 30 14W)													
OCT 2002 17...	--	1.6	300	40	100	<4.0	<.20	<4	<4	20	300	<1.0	<1.0
NOV 20...	--	1.3	40	32	75	<4.0	<.20	<4	<4	20	70	<1.0	<1.0
JAN 2003 13...	--	<.2	40	24	56	<4.0	<.20	<4	<4	30	80	<1.0	<1.0
FEB 27...	--	.9	30	32	80	<4.0	<.20	<4	<4	<20	80	<1.0	<1.0
MAR 18...	--	1.1	70	37	500	<4.0	<.20	<4	<4	20	830	<1.0	<1.0
APR 22...	--	1.5	60	25	95	<4.0	<.20	<4	<4	30	170	<1.0	<1.0
MAY 20...	--	1.0	10	12	24	<4.0	<.20	<4	<4	30	80	<1.0	<1.0
JUN 18...	--	1.1	140	17	100	<4.0	<.20	<4	<4	50	240	<1.0	<1.0
JUL 16...	--	.6	110	17	51	<4.0	<.20	<4	<4	30	130	<1.0	<1.0
AUG 06...	--	1.1	300	39	100	<4.0	<.20	<4	<4	50	260	<1.0	<1.0
SEP 29...	--	.4	40	13	31	<4.0	<.20	<4	<4	50	100	<1.0	<1.0
015400021 Fishing Creek near Bloomsburg, PA (LAT 40 59 37N LONG 076 28 33W)													
NOV 2002 20...	--	1.2	--	32	81	--	--	<4	<4	<20	110	<1.0	<1.0
JAN 2003 13...	--	<.2	--	21	54	--	--	<4	<4	30	80	<1.0	<1.0
MAR 18...	--	1.6	--	33	700	--	--	<4	<4	20	1270	<1.0	1.1
MAY 19...	--	1.7	--	11	36	--	--	<4	<4	20	80	<1.0	<1.0
JUL 16...	--	.8	--	14	38	--	--	<4	<4	20	100	<1.0	<1.0
SEP 23...	--	2.4	--	66	1700	--	--	<4	5	140	4890	<1.0	4.8

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recovery, filtrd, µg/L (01056)	Mangan- ese, water, unfltrd recovery, filtrd, µg/L (01055)	Nickel, water, unfltrd recovery, filtrd, µg/L (01065)	Nickel, water, unfltrd recovery, filtrd, µg/L (01067)	Zinc, water, unfltrd recovery, filtrd, µg/L (01090)	Zinc, water, unfltrd recovery, filtrd, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01538600 Nescopeck Creek at Nescopeck, PA (LAT 41 02 49N LONG 076 13 17W)							
NOV 2002 18...	--	600	--	<50	--	80	--
JAN 2003 21...	--	1000	--	72	--	200	--
MAR 18...	--	640	--	<50	--	120	--
MAY 28...	--	820	--	<50	--	200	--
JUL 29...	--	1690	--	77	--	270	--
SEP 17...	--	1090	--	<50	--	180	--
01539350 Little Fishing Creek above Wolfhouse Run near Millville PA (LAT 41 09 58N LONG 076 30 14W)							
OCT 2002 17...	8.6	20	<4.0	<4.0	<5.0	<5.0	<5
NOV 20...	5.2	8.3	--	<4.0	<5.0	<5.0	<5
JAN 2003 13...	6.6	8.3	<4.0	<4.0	<5.0	<5.0	<5
FEB 27...	8.3	10	<4.0	<4.0	<5.0	<5.0	<5
MAR 18...	20	40	<4.0	<4.0	<5.0	5.3	<5
APR 22...	5.1	8.0	<4.0	<4.0	<5.0	<5.0	<5
MAY 20...	4.6	6.1	<4.0	<4.0	<5.0	<5.0	<5
JUN 18...	10	20	<4.0	<4.0	<5.0	<5.0	<5
JUL 16...	6.3	9.1	<4.0	<4.0	<5.0	<5.0	6
AUG 06...	7.5	20	<4.0	<4.0	<5.0	<5.0	<5
SEP 29...	8.3	10	<4.0	<4.0	<5.0	<5.0	<5
015400021 Fishing Creek near Bloomsburg, PA (LAT 40 59 37N LONG 076 28 33W)							
NOV 2002 20...	7.5	10	<4.0	<4.0	<5.0	<5.0	--
JAN 2003 13...	9.9	10	<4.0	<4.0	<5.0	<5.0	--
MAR 18...	20	60	<4.0	<4.0	<5.0	5.1	--
MAY 19...	9.6	10	<4.0	<4.0	<5.0	<5.0	--
JUL 16...	6.4	8.8	<4.0	<4.0	<5.0	<5.0	--
SEP 23...	20	240	<4.0	4.9	<5.0	20	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01542790 Bennett Branch Sinnemahoning Creek at Driftwood, PA (LAT 41 20 02N LONG 078 08 10W)													
NOV 2002 07...	1300	1028	9813	321	30	12.8	6.5	178	6.1	68	--	16.3	--
JAN 2003 13...	1045	1028	9813	459	30	14.4	6.1	116	.0	45	--	11.1	--
MAY 12...	1130	1028	9813	1230	30	10.2	7.0	76	12.6	32	--	7.8	--
JUL 14...	0930	1028	9813	99	30	8.9	5.6	198	19.7	57	--	12.9	--
SEP 15...	1530	1028	9813	214	30	9.1	7.2	142	20.8	51	--	11.9	--
01547400 Bald Eagle Creek near Milesburg, PA (LAT 40 58 31N LONG 077 44 35W)													
NOV 2002 06...	1140	1028	9813	799	30	10.6	8.0	300	7.4	110	--	29.1	--
JAN 2003 08...	1300	1028	9813	564	30	12.9	7.9	389	4.8	180	--	47.2	--
MAR 12...	1310	1028	9813	458	30	14.2	7.5	367	4.7	140	--	37.1	--
MAY 28...	0800	1028	9813	582	30	9.6	7.8	299	12.5	110	--	29.2	--
JUL 23...	1415	1028	9813	355	30	9.7	8.3	383	18.5	180	--	46.2	--
SEP 17...	1230	1028	9813	422	30	10.8	8.3	354	14.7	160	--	41.4	--
01547980 Beech Creek at Beech Creek, PA (LAT 41 04 29N LONG 077 35 30W)													
NOV 2002 06...	1310	1028	9813	162	30	11.1	5.3	280	5.8	100	--	22.7	--
JAN 2003 08...	1420	1028	9813	427	30	12.6	4.7	139	3.9	48	--	9.7	--
MAR 13...	1500	1028	9813	358	30	12.8	7.0	135	1.8	60	--	14.6	--
MAY 28...	0915	1028	9813	569	30	10.1	4.9	117	11.6	38	--	7.7	--
JUL 23...	1520	1028	9813	109	30	7.6	4.4	286	21.2	120	--	22.9	--
SEP 17...	1345	1028	9813	271	30	9.5	5.3	150	14.6	50	--	9.8	--
01548075 Fishing Creek near Cedar Springs, PA (LAT 41 04 31N LONG 077 28 40W)													
NOV 2002 07...	1110	1028	9813	85	30	10.7	8.1	280	8.2	140	--	38.4	--
JAN 2003 09...	0930	1028	9813	313	30	11.7	7.4	240	5.7	97	--	25.5	--
MAR 13...	1200	1028	9813	159	30	11.1	7.8	281	5.0	130	--	34.8	--
MAY 28...	1200	1028	9813	145	30	11.3	8.1	233	12.1	100	--	27.9	--
JUL 24...	0945	1028	9813	77	30	9.7	7.7	313	14.6	140	--	38.8	--
SEP 24...	1000	1028	9813	1170	30	10.3	7.4	177	12.6	73	--	20.9	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd as N (00610)	Nitrate water, unfltrd as N (00620)	Nitrite water, unfltrd as N (00615)	Ortho-phosphate, water, unfltrd as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01542790 Bennett Branch Sinnemahoning Creek at Driftwood, PA (LAT 41 20 02N LONG 078 08 10W)													
NOV 2002 07...	6.6	3	--	--	64.4	152	8	<.020	.14	<.040	<.01	<.010	.31
JAN 2003 13...	4.1	3	--	--	44.1	76	6	<.020	.18	<.040	<.01	<.010	.13
MAY 12...	3.1	5	--	--	28.7	82	10	<.020	.08	<.040	<.01	<.010	.15
JUL 14...	6.0	2	--	--	66.7	168	4	<.020	.10	<.040	<.01	<.010	.09
SEP 15...	5.2	7	--	--	48.2	92	6	<.020	.05	<.040	<.01	<.010	.12
01547400 Bald Eagle Creek near Milesburg, PA (LAT 40 58 31N LONG 077 44 35W)													
NOV 2002 06...	9.1	82	--	--	28.5	222	36	<.020	1.88	<.040	.03	.040	2.6
JAN 2003 08...	15.3	114	--	--	30.7	282	4	<.020	2.40	<.040	.01	.022	2.6
MAR 12...	12.1	102	--	--	21.8	230	<2	<.020	1.99	<.040	.01	.019	2.2
MAY 28...	9.8	85	--	--	19.4	192	8	<.020	1.40	<.040	.02	.029	1.6
JUL 23...	16.1	132	--	--	25.4	284	16	<.020	2.38	<.040	.05	.048	2.6
SEP 17...	13.7	122	--	--	22.2	244	<2	<.020	2.12	<.040	.02	.030	2.5
01547980 Beech Creek at Beech Creek, PA (LAT 41 04 29N LONG 077 35 30W)													
NOV 2002 06...	10.5	1	--	--	118	220	8	<.020	.36	<.040	<.01	<.010	.54
JAN 2003 08...	5.8	2	--	--	53.4	126	2	<.020	.29	<.040	<.01	<.010	.26
MAR 13...	5.6	14	--	--	32.3	120	<2	.170	.60	<.040	.34	.314	2.0
MAY 28...	4.5	3	--	--	43.4	80	2	<.020	.14	<.040	.01	.021	.17
JUL 23...	15.2	0	--	--	143	278	<2	<.020	.21	<.040	<.01	.025	.21
SEP 17...	6.1	2	--	--	57.5	62	2	<.020	.13	<.040	<.01	.016	.23
01548075 Fishing Creek near Cedar Springs, PA (LAT 41 04 31N LONG 077 28 40W)													
NOV 2002 07...	10.3	104	--	--	16.9	208	6	.290	2.26	<.040	.01	.012	2.8
JAN 2003 09...	8.2	79	--	--	13.4	166	<2	<.020	2.19	<.040	<.01	.016	2.4
MAR 13...	10	91	--	--	13.1	210	38	.200	2.25	<.040	.09	.143	3.0
MAY 28...	8.1	82	--	--	12.3	148	<2	<.020	1.54	<.040	.02	.024	1.7
JUL 24...	11.2	116	--	--	14.5	210	12	<.020	2.48	<.040	.02	.018	2.7
SEP 24...	5.0	60	--	--	10.3	148	34	<.020	1.46	<.040	.04	.059	1.7

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd, recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd, recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd, recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd, recover-able, µg/L (01051)
01542790 Bennett Branch Sinnemahoning Creek at Driftwood, PA (LAT 41 20 02N LONG 078 08 10W)													
NOV 2002 07...	1.4	--	--	--	800	--	--	--	<10	--	650	--	<1.0
JAN 2003 13...	.8	--	--	--	500	--	--	--	<10	--	610	--	<1.0
MAY 12...	1.1	--	--	--	300	--	--	--	<10	--	290	--	<1.0
JUL 14...	.8	--	--	--	<200	--	--	--	<10	--	20	--	<1.0
SEP 15...	.9	--	--	--	<200	--	--	--	<10	--	20	--	<1.0
01547400 Bald Eagle Creek near Milesburg, PA (LAT 40 58 31N LONG 077 44 35W)													
NOV 2002 06...	3.0	--	--	--	600	--	--	--	<10	--	830	--	1.6
JAN 2003 08...	1.3	--	--	--	<200	--	--	--	<10	--	110	--	<1.0
MAR 12...	1.7	--	--	--	<200	--	--	--	<10	--	110	--	<1.0
MAY 28...	1.8	--	--	--	400	--	--	--	<10	--	500	--	<1.0
JUL 23...	2.8	--	--	--	500	--	--	--	<10	--	570	--	1.2
SEP 17...	2.2	--	--	--	<200	--	--	--	10	--	200	--	<1.0
01547980 Beech Creek at Beech Creek, PA (LAT 41 04 29N LONG 077 35 30W)													
NOV 2002 06...	1.4	--	--	--	1300	--	--	--	<10	--	310	--	<1.0
JAN 2003 08...	.7	--	--	--	1100	--	--	--	<10	--	420	--	<1.0
MAR 13...	7.3	--	--	--	7200	--	--	--	<10	--	10300	--	6.2
MAY 28...	1.1	--	--	--	800	--	--	--	<10	--	520	--	<1.0
JUL 23...	1.0	--	--	--	2000	--	--	--	<10	--	240	--	1.2
SEP 17...	1.2	--	--	--	800	--	--	--	10	--	270	--	<1.0
01548075 Fishing Creek near Cedar Springs, PA (LAT 41 04 31N LONG 077 28 40W)													
NOV 2002 07...	1.6	--	--	--	<200	--	--	--	<10	--	100	--	<1.0
JAN 2003 09...	1.4	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
MAR 13...	4.4	--	--	--	1100	--	--	--	<10	--	1030	--	1.0
MAY 28...	1.3	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
JUL 24...	1.4	--	--	--	<200	--	--	--	<10	--	110	--	<1.0
SEP 24...	4.1	--	--	--	900	--	--	--	<10	--	1010	--	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recover fltrd, -able, µg/L (01056)	Mangan- ese, water, unfltrd recover fltrd, -able, µg/L (01055)	Nickel, water, unfltrd recover fltrd, -able, µg/L (01065)	Nickel, water, unfltrd recover fltrd, -able, µg/L (01067)	Zinc, water, unfltrd recover fltrd, -able, µg/L (01090)	Zinc, water, unfltrd recover fltrd, -able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01542790	Bennett Branch Sinnemahoning Creek at Driftwood, PA (LAT 41 20 02N LONG 078 08 10W)						
NOV 2002 07...	--	520	--	<50	--	30	--
JAN 2003 13...	--	290	--	<50	--	30	--
MAY 12...	--	170	--	<50	--	20	--
JUL 14...	--	380	--	<50	--	70	--
SEP 15...	--	240	--	<50	--	10	--
01547400	Bald Eagle Creek near Milesburg, PA (LAT 40 58 31N LONG 077 44 35W)						
NOV 2002 06...	--	40	--	<50	--	10	--
JAN 2003 08...	--	<10	--	<50	--	<10	--
MAR 12...	--	<10	--	<50	--	<10	--
MAY 28...	--	30	--	<50	--	30	--
JUL 23...	--	20	--	<50	--	10	--
SEP 17...	--	10	--	<50	--	150	--
01547980	Beech Creek at Beech Creek, PA (LAT 41 04 29N LONG 077 35 30W)						
NOV 2002 06...	--	2620	--	58	--	100	--
JAN 2003 08...	--	1080	--	<50	--	30	--
MAR 13...	--	990	--	<50	--	80	--
MAY 28...	--	880	--	<50	--	80	--
JUL 23...	--	2940	--	72	--	130	--
SEP 17...	--	1220	--	<50	--	110	--
01548075	Fishing Creek near Cedar Springs, PA (LAT 41 04 31N LONG 077 28 40W)						
NOV 2002 07...	--	<10	--	<50	--	<10	--
JAN 2003 09...	--	10	--	<50	--	<10	--
MAR 13...	--	40	--	<50	--	40	--
MAY 28...	--	10	--	<50	--	<10	--
JUL 24...	--	<10	--	<50	--	160	--
SEP 24...	--	40	--	<50	--	<10	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01548085 Bald Eagle Creek at Castanea, PA (LAT 41 07 29N LONG 077 26 09W)													
NOV 2002 07...	0900	1028	9813	1030	30	10.7	7.3	326	7.7	150	--	34.9	--
JAN 2003 09...	0810	1028	9813	1550	30	12.5	6.9	216	3.8	82	--	20.8	--
MAR 13...	1325	1028	9813	1880	30	12.5	7.5	286	3.2	120	--	30.3	--
MAY 28...	1100	1028	9813	1600	30	10.3	7.5	207	13.3	85	--	21.3	--
JUL 24...	0810	1028	9813	593	30	7.8	7.7	350	20.7	150	--	37.4	--
SEP 24...	0830	1028	9813	4100	30	10.1	7.8	--	15.9	87	--	22.5	--
01549590 Little Pine Creek below Reservoir near Waterville, PA (LAT 41 21 12N LONG 077 21 20W)													
NOV 2002 07...	0945	1028	9813	135	30	13.4	7.5	115	5.8	42	12.1	11.0	3.51
JAN 2003 15...	0930	1028	9813	216	30	15.6	7.2	93	.5	35	9.18	9.2	2.95
MAR 12...	1600	1028	9813	164	30	15.9	6.7	221	.5	38	9.71	10.2	2.92
MAY 14...	0930	1028	9813	99	30	10.6	7.3	116	12.5	44	10.4	10.8	3.90
JUL 17...	0830	1028	9813	49	30	8.2	7.3	132	22.4	48	12.3	12.6	3.98
SEP 17...	0915	1028	9813	220	30	10	7.3	99	16.8	37	9.70	10.0	2.91
01553005 Muncy Creek near Muncy, PA (LAT 41 12 27N LONG 076 45 09W)													
NOV 2002 13...	0915	1028	9813	697	30	11.6	7.5	96	8.9	36	10.9	11.0	2.11
MAY 2003 08...	1000	1028	9813	159	30	10.1	7.4	86	13.9	39	11.6	12.1	2.02
JUL 24...	0745	1028	9813	187	30	8.3	7.1	113	19.8	42	12.6	12.9	2.31
SEP 03...	1000	1028	9813	860	30	9.5	7.3	98	16.3	31	10.0	9.6	1.77
01553430 Spruce Run above Spruce Run Reservoir near Mazeppa, PA (LAT 41 01 27N LONG 077 03 54W)													
OCT 2002 17...	0830	1028	9813	16	30	9.3	6.1	26	10.8	10	2.22	2.2	.99
NOV 07...	1400	1028	9813	11	30	9.7	6.7	21	7.0	8	1.58	1.6	.87
JAN 2003 09...	1415	1028	9813	20	30	11.2	6.2	18	5.8	7	1.42	1.4	.80
MAR 25...	1315	1028	9813	54	30	11.5	5.8	18	7.7	6	1.29	1.4	.60
APR 24...	1445	1028	9813	14	30	10.2	6.5	17	8.8	6	1.19	1.2	.66
MAY 29...	1300	1028	9813	21	30	10.3	6.0	21	10.3	7	1.4	1	.82
JUN 18...	1130	1028	9813	23	30	9.5	5.0	19	11.3	8	1.71	1.8	.88
JUL 24...	1200	1028	9813	5.7	30	9.4	5.7	20	14.6	7	1.47	1.5	.84
AUG 06...	0900	1028	9813	19	30	9.2	5.7	21	14.6	8	1.82	1.8	.80
SEP 24...	1230	1028	9813	55	30	11.1	5.8	20	12.1	6	1.32	1.4	.69

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01548085 Bald Eagle Creek at Castanea, PA (LAT 41 07 29N LONG 077 26 09W)													
NOV 2002 07...	14.8	90	--	--	45.0	248	14	.200	1.08	<.040	<.01	.015	1.6
JAN 2003 09...	7.3	48	--	--	29.1	192	<2	<.020	1.29	<.040	.01	.016	1.4
MAR 13...	9.7	69	--	--	26.8	416	10	.090	1.46	<.040	.04	.040	1.9
MAY 28...	7.7	55	--	--	27.2	138	16	<.020	.79	<.040	.02	.022	1.1
JUL 24...	13.1	98	--	--	43.2	282	6	<.020	1.56	<.040	.01	.018	2.0
SEP 24...	7.5	62	--	--	21.4	174	12	<.020	.84	<.040	.02	.051	1.2
01549590 Little Pine Creek below Reservoir near Waterville, PA (LAT 41 21 12N LONG 077 21 20W)													
NOV 2002 07...	3.5	17	--	--	23.7	84	<2	.630	.46	<.040	<.01	<.010	.68
JAN 2003 15...	2.9	10	--	--	19.9	70	4	<.020	.72	<.040	<.01	<.010	1.1
MAR 12...	3.1	12	--	--	20.2	56	<2	<.020	.69	<.040	<.01	<.010	.72
MAY 14...	4.0	16	--	--	28.1	80	<2	<.020	.22	<.040	.04	.022	.58
JUL 17...	4.1	20	--	--	27.1	108	6	<.020	.17	<.040	.01	.012	.47
SEP 17...	3.0	19	--	--	17.5	82	2	.020	.33	<.040	.02	.018	.60
01553005 Muncy Creek near Muncy, PA (LAT 41 12 27N LONG 076 45 09W)													
NOV 2002 13...	2.1	20	--	--	11.0	104	<2	<.020	1.15	<.040	.01	.019	1.7
MAY 2003 08...	2.1	23	--	--	10.0	78	<2	<.020	.97	<.040	.01	<.010	1.2
JUL 24...	2.4	30	--	--	9.2	100	4	<.020	1.00	<.040	.01	.016	1.2
SEP 03...	1.7	23	--	--	9.0	92	<2	<.020	.97	<.040	.02	.022	1.1
01553430 Spruce Run above Spruce Run Reservoir near Mazeppa, PA (LAT 41 01 27N LONG 077 03 54W)													
OCT 2002 17...	1.0	5	.9	<.2	6.3	334	2	.130	<.04	<.040	<.01	<.010	.28
NOV 07...	.9	5	1.0	<.2	5.1	40	2	.100	<.04	<.040	<.01	<.010	.18
JAN 2003 09...	.8	4	.7	<.2	4.6	22	<2	<.020	<.04	<.040	<.01	<.010	<.06
MAR 25...	.6	3	.6	<.2	4.7	24	<2	<.020	<.04	<.040	<.01	<.010	<.06
APR 24...	.7	5	.5	<.2	4.0	22	6	<.020	<.04	<.040	<.01	<.010	.08
MAY 29...	.8	6	<.5	<.2	4.2	20	<2	<.020	<.04	<.040	<.01	.011	<.06
JUN 18...	.9	5	.5	<.2	4.1	18	<2	<.020	<.04	<.040	<.01	.011	.37
JUL 24...	.9	5	.6	<.2	3.5	58	6	<.020	<.04	<.040	<.01	<.010	<.06
AUG 06...	.8	6	.6	<.2	4.5	32	<2	<.020	<.04	<.040	<.01	<.010	.08
SEP 24...	.7	3	.6	<.2	5.0	42	<2	<.020	<.04	<.040	<.01	<.010	.08

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01548085 Bald Eagle Creek at Castanea, PA (LAT 41 07 29N LONG 077 26 09W)													
NOV 2002 07...	2.5	--	--	--	300	--	--	--	<10	--	170	--	<1.0
JAN 2003 09...	1.6	--	--	--	500	--	--	--	<10	--	350	--	<1.0
MAR 13...	2.9	--	--	--	700	--	--	--	<10	--	630	--	<1.0
MAY 28...	1.8	--	--	--	700	--	--	--	<10	--	700	--	<1.0
JUL 24...	1.8	--	--	--	300	--	--	--	<10	--	240	--	<1.0
SEP 24...	3.2	--	--	--	700	--	--	--	<10	--	870	--	<1.0
01549590 Little Pine Creek below Reservoir near Waterville, PA (LAT 41 21 12N LONG 077 21 20W)													
NOV 2002 07...	--	.9	--	19	42	--	--	<4	<4	<20	70	<1.0	<1.0
JAN 2003 15...	--	1.2	--	25	40	--	--	<4	<4	<20	30	<1.0	<1.0
MAR 12...	--	1.8	--	20	42	--	--	<4	<4	<20	30	<1.0	<1.0
MAY 14...	--	1.4	--	<10	40	--	--	<4	<4	40	280	<1.0	<1.0
JUL 17...	--	1.5	--	<10	47	--	--	<4	<4	60	210	<1.0	<1.0
SEP 17...	--	1.2	--	12	100	--	--	<4	<4	30	240	<1.0	<1.0
01553005 Muncy Creek near Muncy, PA (LAT 41 12 27N LONG 076 45 09W)													
NOV 2002 13...	--	.9	--	25	100	--	--	<4	<4	20	140	<1.0	<1.0
MAY 2003 08...	--	1.3	--	19	37	--	--	<4	<4	<20	40	<1.0	<1.0
JUL 24...	--	.9	--	<10	48	--	--	<4	<4	20	100	<1.0	<1.0
SEP 03...	--	1.3	--	12	82	--	--	<4	<4	50	270	<1.0	<1.0
01553430 Spruce Run above Spruce Run Reservoir near Mazeppa, PA (LAT 41 01 27N LONG 077 03 54W)													
OCT 2002 17...	--	1.6	<10	95	100	<4.0	<.20	<4	<4	30	60	<1.0	<1.0
NOV 07...	--	.8	<20	45	52	<4.0	<.20	<4	<4	220	200	<1.0	<1.0
JAN 2003 09...	--	.5	<20	44	57	<4.0	<.20	<4	<4	30	30	<1.0	<1.0
MAR 25...	--	--	<10	64	90	<4.0	<.20	<4	<4	<20	30	<1.0	<1.0
APR 24...	--	.9	<20	17	28	<4.0	<.20	<4	<4	<20	<20	<1.0	5.2
MAY 29...	--	1.0	10	24	54	<4.0	<.20	<4	<4	<20	40	<1.0	<1.0
JUN 18...	--	1.0	20	92	100	<4.0	<.20	<4	<4	40	100	<1.0	<1.0
JUL 24...	--	.6	<10	39	56	<4.0	<.20	<4	<4	20	80	<1.0	<1.0
AUG 06...	--	1.0	20	78	100	<4.0	<.20	<4	<4	<20	80	<1.0	<1.0
SEP 24...	--	.9	80	73	100	<4.0	<.20	<4	<4	20	60	<1.0	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, recovery, filtrd, µg/L (01056)	Mangan- ese, water, unfiltrd, recovery, filtrd, µg/L (01055)	Nickel, water, recovery, filtrd, µg/L (01065)	Nickel, water, unfiltrd, recovery, filtrd, µg/L (01067)	Zinc, water, recovery, filtrd, µg/L (01090)	Zinc, water, unfiltrd, recovery, filtrd, µg/L (01092)	Phen- olic com- pounds, water, unfiltrd, µg/L (32730)
01548085 Bald Eagle Creek at Castanea, PA (LAT 41 07 29N LONG 077 26 09W)							
NOV 2002 07...	--	540	--	<50	--	<10	--
JAN 2003 09...	--	320	--	<50	--	20	--
MAR 13...	--	300	--	<50	--	30	--
MAY 28...	--	360	--	<50	--	40	--
JUL 24...	--	410	--	<50	--	160	--
SEP 24...	--	260	--	<50	--	20	--
01549590 Little Pine Creek below Reservoir near Waterville, PA (LAT 41 21 12N LONG 077 21 20W)							
NOV 2002 07...	20	20	<4.0	<4.0	<5.0	<5.0	--
JAN 2003 15...	40	40	4.1	4.3	6.5	6.3	--
MAR 12...	30	40	<4.0	<4.0	<5.0	5.1	--
MAY 14...	260	280	4.3	4.7	<5.0	<5.0	--
JUL 17...	50	120	<4.0	<4.0	<5.0	<5.0	--
SEP 17...	50	80	<4.0	<4.0	<5.0	<5.0	--
01553005 Muncy Creek near Muncy, PA (LAT 41 12 27N LONG 076 45 09W)							
NOV 2002 13...	4.5	7.6	<4.0	<4.0	<5.0	<5.0	--
MAY 2003 08...	4.9	6.9	<4.0	<4.0	<5.0	<5.0	--
JUL 24...	3.8	6.8	--	<4.0	30	20	--
SEP 03...	4.7	20	<4.0	<4.0	10	<5.0	--
01553430 Spruce Run above Spruce Run Reservoir near Mazeppa, PA (LAT 41 01 27N LONG 077 03 54W)							
OCT 2002 17...	7.4	10	<4.0	<4.0	5.7	6.1	<5
NOV 07...	2.8	4.2	<4.0	<4.0	<5.0	<5.0	<5
JAN 2003 09...	2.1	3.4	<4.0	<4.0	<5.0	<5.0	<5
MAR 25...	10	10	<4.0	<4.0	6.9	5.1	<5
APR 24...	2.0	3.5	<4.0	<4.0	<5.0	<5.0	<5
MAY 29...	2.3	8.0	<4.0	<4.0	<5.0	<5.0	<5
JUN 18...	4.8	10	<4.0	<4.0	<5.0	<5.0	<5
JUL 24...	2.2	7.1	<4.0	<4.0	<5.0	7.0	<5
AUG 06...	6.6	20	<4.0	<4.0	<5.0	<5.0	<5
SEP 24...	10	20	<4.0	<4.0	5.2	5.8	<5

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat un- f µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01553990 Susquehanna River above Dam at Sunbury, PA (LAT 40 51 13N LONG 076 48 08W)													
NOV 2002 21...	0900	1028	9813	47300	40	10.7	7.6	166	5.8	57	--	16.5	--
JAN 2003 14...	0930	1028	9813	E28800	40	15.1	6.8	129	.0	75	--	20.6	--
MAR 25...	0910	1028	9813	15500	40	12.7	6.5	117	5.1	39	--	10.4	--
MAY 20...	1000	1028	9813	26200	40	10.5	7.7	172	14.6	71	--	18.8	--
JUL 17...	0810	1028	9813	9020	40	7.2	8.2	285	25.4	110	--	30.7	--
SEP 25...	1030	1028	9813	55600	40	8.3	7.1	172	17.8	60	--	16.8	--
01554600 Penns Creek at Farmers Mills near Spring Mills, PA (LAT 40 51 57N LONG 077 36 35W)													
OCT 2002 16...	1345	1028	9813	25	30	10.0	7.6	379	10.8	190	--	60.3	--
NOV 05...	1730	1028	9813	18	30	9.8	7.8	415	8.2	180	--	58.6	--
JAN 2003 08...	0820	1028	9813	57	30	11.3	6.8	307	6.3	150	--	49.5	--
FEB 26...	1300	1028	9813	25	30	12.7	7.3	339	5.5	160	--	51.4	--
MAR 12...	0945	1028	9813	24	30	12.6	6.8	366	6.3	160	--	52.7	--
APR 24...	1130	1028	9813	37	30	11.3	7.8	303	9.3	140	--	46.6	--
MAY 27...	1530	1028	9813	25	30	10.7	7.8	274	12.0	140	--	44.9	--
JUN 17...	1520	1028	9813	35	30	10.3	7.0	301	12.2	160	--	48.9	--
JUL 23...	1045	1028	9813	23	30	10.9	7.7	285	12.7	200	--	65.8	--
AUG 05...	1130	1028	9813	79	30	9.9	7.3	368	13.0	180	--	59.9	--
SEP 17...	0730	1028	9813	38	30	9.1	7.3	378	11.4	190	--	63.6	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01553990 Susquehanna River above Dam at Sunbury, PA (LAT 40 51 13N LONG 076 48 08W)													
NOV 2002 21...	3.9	32	--	--	20.6	128	6	.020	1.19	<.040	.02	.028	1.6
JAN 2003 14...	5.8	36	--	--	31.1	152	6	.030	1.01	<.040	.01	.019	1.2
MAR 25...	3.2	18	--	--	16.6	84	78	.030	.73	<.040	.06	.078	1.2
MAY 20...	5.8	31	--	--	38.4	158	<2	<.020	.37	<.040	.02	.027	.54
JUL 17...	8.6	49	--	--	54.0	206	8	<.020	.57	<.040	.02	.022	.85
SEP 25...	4.3	33	--	--	22.4	64	52	<.020	.53	<.040	.04	.080	.75
01554600 Penns Creek at Farmers Mills near Spring Mills, PA (LAT 40 51 57N LONG 077 36 35W)													
OCT 2002 16...	8.5	144	8.4	<.2	24.3	262	2	.030	3.07	<.040	.04	.043	3.8
NOV 05...	9.4	168	14.3	<.2	19.0	286	<2	.020	5.00	<.040	<.01	.018	5.7
JAN 2003 08...	7.2	122	8.9	<.2	14.1	230	4	<.020	3.67	<.040	.02	.021	4.0
FEB 26...	6.9	121	16.1	<.2	13.4	262	10	.250	3.48	.040	.10	.144	4.7
MAR 12...	7.9	132	16.5	<.2	14.4	240	<2	.450	3.34	.110	.12	.217	5.2
APR 24...	6.8	123	7.8	<.2	13.7	216	2	<.020	3.01	<.040	.02	.018	3.4
MAY 27...	6.1	108	7.8	<.2	12.4	188	<2	<.020	2.30	<.040	.02	.023	2.6
JUN 17...	7.9	126	7.7	<.2	12.2	228	8	<.020	2.88	<.040	.02	.022	3.1
JUL 23...	9.1	164	10.7	<.2	14.7	262	4	<.020	4.14	<.040	.02	.018	4.4
AUG 05...	7.8	145	10.4	<.2	12.7	264	16	<.020	4.78	<.040	.06	.055	5.1
SEP 17...	7.9	156	9.4	<.2	12.5	292	8	<.020	4.39	<.040	.10	.076	4.9

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45UMF col/ 100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01553990 Susquehanna River above Dam at Sunbury, PA (LAT 40 51 13N LONG 076 48 08W)													
NOV 2002 21...	3.2	--	--	--	500	--	--	--	<10	--	860	--	<1.0
JAN 2003 14...	2.1	--	--	--	<200	--	--	--	<10	--	450	--	<1.0
MAR 25...	2.9	--	--	--	2100	--	--	--	<10	--	3080	--	2.6
MAY 20...	2.0	--	--	--	300	--	--	--	<10	--	430	--	<1.0
JUL 17...	2.6	--	--	--	<200	--	--	--	<10	--	240	--	<1.0
SEP 25...	3.9	--	--	--	1800	--	--	--	<10	--	2350	--	2.5
01554600 Penns Creek at Farmers Mills near Spring Mills, PA (LAT 40 51 57N LONG 077 36 35W)													
OCT 2002 16...	--	1.8	2200	22	200	<4.0	<.20	<4	<4	30	400	<1.0	<1.0
NOV 05...	--	1.3	220	22	92	<4.0	<.20	<4	<4	40	120	<1.0	<1.0
JAN 2003 08...	--	.9	60	19	88	<4.0	<.20	<4	<4	<20	260	<1.0	<1.0
FEB 26...	--	2.8	800	21	300	<4.0	<.20	<4	<4	30	370	<1.0	<1.0
MAR 12...	--	4.4	<20	27	100	<4.0	<.20	<4	<4	40	240	<1.0	<1.0
APR 24...	--	1.1	20	<10	100	<4.0	<.20	<4	<4	<20	140	<1.0	<1.0
MAY 27...	--	1.1	320	<10	66	<4.0	<.20	<4	<4	<20	170	<1.0	<1.0
JUN 17...	--	.8	200	<10	97	<4.0	<.20	<4	<4	30	220	<1.0	<1.0
JUL 23...	--	1.4	650	<10	77	<4.0	<.20	<4	<4	<20	140	<1.0	<1.0
AUG 05...	--	.8	3800	30	400	<4.0	<.20	<4	<4	30	780	<1.0	<1.0
SEP 17...	--	1.3	39000	<10	1000	<4.0	<.20	<4	<4	30	1170	<1.0	<1.0
01553990 Susquehanna River above Dam at Sunbury, PA (LAT 40 51 13N LONG 076 48 08W)													
NOV 2002 21...					110	--	<50	--	20	--			
JAN 2003 14...					180	--	<50	--	<10	--			
MAR 25...					230	--	<50	--	20	--			
MAY 20...					170	--	<50	--	10	--			
JUL 17...					50	--	<50	--	<10	--			
SEP 25...					220	--	<50	--	20	--			
01554600 Penns Creek at Farmers Mills near Spring Mills, PA (LAT 40 51 57N LONG 077 36 35W)													
OCT 2002 16...		30	50	<4.0	<4.0	<5.0	<5.0	<5					
NOV 05...		10	20	5.1	<4.0	<5.0	<5.0	<5					
JAN 2003 08...		20	20	<4.0	<4.0	<5.0	<5.0	<5					
FEB 26...		20	30	<4.0	<4.0	<5.0	<5.0	9					
MAR 12...		10	20	<4.0	<4.0	6.9	<5.0	<5					
APR 24...		10	20	<4.0	<4.0	<5.0	<5.0	<5					
MAY 27...		10	20	<4.0	<4.0	<5.0	<5.0	<5					
JUN 17...		10	20	<4.0	<4.0	<5.0	<5.0	<5					
JUL 23...		10	20	<4.0	<4.0	<5.0	<5.0	<5					
AUG 05...		20	40	<4.0	<4.0	<5.0	<5.0	<5					
SEP 17...		20	40	<4.0	<4.0	<5.0	<5.0	<5					

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01555210 Middle Creek near Selinsgrove, PA (LAT 40 46 29N LONG 076 52 11W)													
NOV 2002 21...	1515	1028	9813	451	30	10.3	7.7	147	6.6	65	--	18.6	--
JAN 2003 14...	1445	1028	9813	323	30	16.6	7.1	181	.2	73	--	20.7	--
MAR 25...	1550	1028	9813	665	30	11.3	7.4	116	9.7	43	--	12.3	--
MAY 29...	1600	1028	9813	389	30	10.2	7.8	143	17.2	61	--	17.8	--
JUL 17...	1250	1028	9813	93	30	7.4	8.0	227	23.5	110	--	31.3	--
SEP 23...	1130	1028	9813	4260	30	9.3	6.5	116	17.9	51	--	15.0	--
01555859 Beaverdam Branch Juniata River near Hollidaysburg, PA (LAT 40 25 50N LONG 078 21 50W)													
NOV 2002 05...	1045	1028	9813	52	30	10.4	7.8	457	8.0	160	--	41.2	--
JAN 2003 07...	1200	1028	9813	199	30	13.3	7.5	462	1.8	130	--	35.8	--
MAR 11...	1115	1028	9813	220	30	14.8	7.1	457	1.8	120	--	33.8	--
MAY 27...	1100	1028	9813	423	30	9.8	7.4	282	12.0	98	--	27.0	--
JUL 22...	1030	1028	9813	75	30	7.4	7.5	374	20.0	140	--	38.5	--
SEP 16...	1230	1028	9813	58	30	8.7	7.7	452	16.3	170	--	45.2	--
01556009 Frankstown Branch Juniata R at RR at Williamsburg, PA (LAT 40 28 19N LONG 078 11 13W)													
NOV 2002 05...	1220	1028	9813	201	30	11.7	8.1	433	7.5	160	--	40.3	--
JAN 2003 07...	1350	1028	9813	762	30	12.9	7.8	348	3.0	120	--	31.6	--
MAR 11...	1330	1028	9813	700	30	14.4	7.4	343	2.4	120	--	32.0	--
MAY 27...	1220	1028	9813	1380	30	9.6	7.5	256	12.7	100	--	27.1	--
JUL 22...	1150	1028	9813	266	30	7.9	8.1	495	20.7	200	--	52.0	--
SEP 16...	1415	1028	9813	271	30	7.9	8.0	376	18.6	160	--	40.6	--
01564515 Aughwick Creek at Aughwick Mills, PA (LAT 40 20 05N LONG 077 51 36W)													
OCT 2002 16...	1030	1028	9813	128	30	8.0	7.2	230	12.1	75	--	21.2	--
NOV 04...	1445	1028	9813	266	30	12.2	7.5	154	6.1	57	--	16.2	--
DEC 16...	1200	1028	9813	1760	30	12.3	6.7	136	4.4	43	--	11.7	--
JAN 2003 06...	1515	1028	9813	1110	30	13.0	7.4	136	3.0	43	--	11.9	--
FEB 26...	1000	1028	9813	711	30	15.2	6.7	188	.1	47	--	13.0	--
MAR 10...	1500	1028	9813	1640	30	13.6	6.9	129	2.4	37	--	10.0	--
APR 21...	1200	1028	9813	366	30	10.8	7.6	131	11.5	52	--	14.6	--
MAY 15...	1540	1028	9813	498	30	10.2	7.3	108	14.0	41	--	11.2	--
JUN 17...	1140	1028	9813	332	30	8.5	6.5	139	18.7	54	--	15.4	--
JUL 21...	1500	1028	9813	74	30	8.5	8.2	211	25.1	84	--	24.8	--
AUG 05...	0830	1028	9813	293	30	6.4	7.0	159	23.2	58	--	16.9	--
SEP 18...	1530	1028	9813	95	30	8.1	--	212	18.5	78	--	23.0	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01555210 Middle Creek near Selinsgrove, PA (LAT 40 46 29N LONG 076 52 11W)													
NOV 2002 21...	4.5	42	--	--	14.1	6	<2	.040	2.28	<.040	.02	.016	2.6
JAN 2003 14...	5.3	85	--	--	14.6	144	6	.020	2.69	<.040	.02	.024	2.9
MAR 25...	3.0	30	--	--	10.8	68	22	<.020	1.32	<.040	.03	.037	1.5
MAY 29...	4.1	47	--	--	11.1	118	8	<.020	1.05	<.040	.04	.036	1.3
JUL 17...	7.0	77	--	--	16.1	176	18	<.020	1.49	<.040	.06	.063	1.7
SEP 23...	3.4	39	--	--	7.7	110	276	.040	1.10	<.040	.09	.381	2.1
01555859 Beaverdam Branch Juniata River near Hollidaysburg, PA (LAT 40 25 50N LONG 078 21 50W)													
NOV 2002 05...	13.8	74	--	--	83.6	158	<2	<.020	2.36	<.040	.07	.123	3.2
JAN 2003 07...	10.9	42	--	--	73.9	348	12	<.020	1.82	<.200	.02	.051	2.1
MAR 11...	9.3	46	--	--	52.0	284	8	.020	1.75	<.200	.02	.052	2.0
MAY 27...	7.5	50	--	--	41.7	200	6	.020	1.08	<.040	.03	.055	1.3
JUL 22...	11.3	68	--	--	65.5	266	30	.030	2.02	<.040	.11	.236	2.5
SEP 16...	13.5	85	--	--	82.1	332	24	<.020	1.60	<.040	.08	.087	2.0
01556009 Frankstown Branch Juniata R at RR at Williamsburg, PA (LAT 40 28 19N LONG 078 11 13W)													
NOV 2002 05...	14.2	108	--	--	58.7	312	<2	.020	2.67	<.040	.04	.068	3.4
JAN 2003 07...	10.2	69	--	--	40.2	274	4	<.020	2.52	<.040	.02	.036	3.0
MAR 11...	9.4	64	--	--	33.4	226	10	<.020	2.18	<.040	.03	.034	2.4
MAY 27...	7.8	66	--	--	28.3	186	24	.030	1.39	<.040	.05	.073	1.8
JUL 22...	17.7	146	--	--	58.4	334	16	<.020	2.76	<.040	.10	.122	3.0
SEP 16...	13.3	112	--	--	39.1	274	26	<.020	1.93	<.040	.11	.130	2.3
01564515 Aughwick Creek at Aughwick Mills, PA (LAT 40 20 05N LONG 077 51 36W)													
OCT 2002 16...	5.4	50	21.1	<.2	22.8	166	<2	.030	.85	<.040	.02	.019	1.2
NOV 04...	4.1	34	12.3	<.2	16.8	128	6	<.020	1.45	<.040	.01	<.010	1.7
DEC 16...	3.3	22	14.7	<.2	13.3	90	<2	<.020	1.52	<.040	.02	.024	2.0
JAN 2003 06...	3.2	23	14.7	<.2	12.3	138	30	<.020	1.33	<.040	.02	.013	1.7
FEB 26...	3.5	23	30.8	<.2	12.5	136	6	.060	1.06	<.040	.03	.029	1.5
MAR 10...	3.0	20	17.2	<.2	10.6	110	36	.050	.85	<.040	.08	.080	1.2
APR 21...	3.8	33	11.6	<.2	11.5	76	<2	<.020	.42	<.040	.01	.014	.67
MAY 15...	3.3	28	11.9	<.2	10.9	84	10	<.020	.47	<.040	.02	.014	.93
JUN 17...	3.7	42	8.2	<.2	10.6	106	4	<.020	.43	<.040	.02	.019	.53
JUL 21...	5.3	69	12.8	<.2	13.6	142	6	<.020	.26	<.040	.02	.018	1.2
AUG 05...	3.8	46	8.9	<.2	12.4	118	12	<.020	.61	<.040	.04	.030	1.3
SEP 18...	5.1	65	16.4	<.2	12.1	146	<2	.020	.39	<.040	.01	.018	.61

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01555210 Middle Creek near Selinsgrove, PA (LAT 40 46 29N LONG 076 52 11W)													
NOV 2002 21...	2.7	--	--	--	<200	--	--	--	<10	--	220	--	<1.0
JAN 2003 14...	1.9	--	--	--	<200	--	--	--	<10	--	220	--	<1.0
MAR 25...	2.7	--	--	--	500	--	--	--	<10	--	610	--	<1.0
MAY 29...	3.0	--	--	--	500	--	--	--	<10	--	720	--	<1.0
JUL 17...	3.3	--	--	--	400	--	--	--	<10	--	640	--	<1.0
SEP 23...	7.8	--	--	--	4800	--	--	--	<10	--	8150	--	7.9
01555859 Beaverdam Branch Juniata River near Hollidaysburg, PA (LAT 40 25 50N LONG 078 21 50W)													
NOV 2002 05...	2.4	--	--	--	<200	--	--	--	<10	--	230	--	<1.0
JAN 2003 07...	1.9	--	--	--	800	--	--	--	<10	--	1370	--	<1.0
MAR 11...	1.7	--	--	--	500	--	--	--	<10	--	2020	--	<1.0
MAY 27...	2.2	--	--	--	500	--	--	--	<10	--	1110	--	1.4
JUL 22...	4.1	--	--	--	1300	--	--	--	<10	--	1750	--	4.4
SEP 16...	2.7	--	--	--	1000	--	--	--	<10	--	990	--	1.4
01556009 Frankstown Branch Juniata R at RR at Williamsburg, PA (LAT 40 28 19N LONG 078 11 13W)													
NOV 2002 05...	3.9	--	--	--	<200	--	--	--	<10	--	110	--	<1.0
JAN 2003 07...	2.8	--	--	--	300	--	--	--	<10	--	440	--	<1.0
MAR 11...	2.5	--	--	--	200	--	--	--	<10	--	250	--	<1.0
MAY 27...	3.1	--	--	--	700	--	--	--	<10	--	1220	--	2.0
JUL 22...	4.4	--	--	--	<200	--	--	--	<10	--	280	--	<1.0
SEP 16...	4.4	--	--	--	1000	--	--	--	<10	--	1290	--	1.9
01564515 Aughwick Creek at Aughwick Mills, PA (LAT 40 20 05N LONG 077 51 36W)													
OCT 2002 16...	--	1.7	260	21	99	<4.0	<.20	<4	<4	40	170	<1.0	<1.0
NOV 04...	--	1.4	140	26	76	<4.0	<.20	<4	<4	30	100	1.5	1.0
DEC 16...	--	<.2	650	41	300	<4.0	<.20	4	<4	40	450	1.8	<1.0
JAN 2003 06...	--	<.2	310	31	200	<4.0	<.20	<4	<4	60	330	<1.0	<1.0
FEB 26...	--	1.0	260	27	200	<4.0	<.20	<4	<4	40	260	<1.0	<1.0
MAR 10...	--	<.2	120	32	900	<4.0	<.20	<4	<4	40	1150	<1.0	1.1
APR 21...	--	<.2	140	26	60	<4.0	<.20	<4	<4	90	190	<1.0	<1.0
MAY 15...	--	1.3	420	<10	200	<4.0	<.20	<4	<4	90	330	<1.0	<1.0
JUN 17...	--	1.2	600	12	100	<4.0	<.20	<4	<4	220	250	<1.0	<1.0
JUL 21...	--	1.3	100	10	100	<4.0	<.20	<4	<4	70	240	<1.0	<1.0
AUG 05...	--	1.3	320	40	400	<4.0	<.20	<4	<4	60	710	<1.0	<1.0
SEP 18...	--	.8	160	<10	39	<4.0	<.20	<4	<4	110	220	<1.0	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd fltrd, -able, µg/L (01056)	Mangan- ese, water, recover µg/L (01055)	Nickel, water, unfltrd fltrd, -able, µg/L (01065)	Nickel, water, recover µg/L (01067)	Zinc, water, unfltrd fltrd, -able, µg/L (01090)	Zinc, water, recover µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01555210 Middle Creek near Selinsgrove, PA (LAT 40 46 29N LONG 076 52 11W)							
NOV 2002 21...	--	20	--	<50	--	<10	--
JAN 2003 14...	--	20	--	<50	--	<10	--
MAR 25...	--	30	--	<50	--	<10	--
MAY 29...	--	50	--	<50	--	<10	--
JUL 17...	--	50	--	<50	--	<10	--
SEP 23...	--	340	--	<50	--	40	--
01555859 Beaverdam Branch Juniata River near Hollidaysburg, PA (LAT 40 25 50N LONG 078 21 50W)							
NOV 2002 05...	--	480	--	<50	--	20	--
JAN 2003 07...	--	820	--	<50	--	60	--
MAR 11...	--	390	--	<50	--	110	--
MAY 27...	--	320	--	<50	--	20	--
JUL 22...	--	590	--	<50	--	60	--
SEP 16...	--	660	--	<50	--	10	--
01556009 Frankstown Brranch Juniata R at RR at Williamsburg, PA (LAT 40 28 19N LONG 078 11 13W)							
NOV 2002 05...	--	60	--	<50	--	<10	--
JAN 2003 07...	--	180	--	<50	--	10	--
MAR 11...	--	120	--	<50	--	50	--
MAY 27...	--	140	--	<50	--	30	--
JUL 22...	--	60	--	<50	--	200	--
SEP 16...	--	100	--	<50	--	10	--
01564515 Aughwick Creek at Aughwick Mills, PA (LAT 40 20 05N LONG 077 51 36W)							
OCT 2002 16...	10	20	<4.0	<4.0	10	10	<5
NOV 04...	6.9	8.3	<4.0	<4.0	<5.0	<5.0	<5
DEC 16...	9.2	40	<4.0	<4.0	7.3	<5.0	<5
JAN 2003 06...	10	20	4.1	<4.0	<5.0	6.0	<5
FEB 26...	20	20	<4.0	<4.0	<5.0	<5.0	<5
MAR 10...	20	70	<4.0	<4.0	<5.0	8.6	<5
APR 21...	20	20	<4.0	<4.0	<5.0	<5.0	<5
MAY 15...	20	30	<4.0	<4.0	<5.0	<5.0	<5
JUN 17...	10	20	<4.0	<4.0	<5.0	<5.0	<5
JUL 21...	20	20	<4.0	<4.0	<5.0	5.3	<5
AUG 05...	10	30	<4.0	<4.0	<5.0	<5.0	<5
SEP 18...	10	20	<4.0	<4.0	<5.0	<5.0	<5

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, unfltrd recovery, mg/L (00915)	Calcium water unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01567795 Letort Spring Run at Bonny Brook near Carlisle, PA (LAT 40 10 39N LONG 077 11 10W)													
OCT 2002													
15...	1430	1028	9813	10	30	9.9	7.7	543	11.8	280	--	84.6	--
NOV													
14...	1400	1028	9813	13	30	10.4	7.9	506	11.9	300	--	91.2	--
DEC													
12...	1400	1028	9813	14	30	10.7	7.5	531	10.3	280	--	85.3	--
JAN 2003													
28...	0930	1028	9813	20	30	10.4	7.5	540	9.0	300	--	90.0	--
FEB													
25...	1430	1028	9813	21	30	10.1	7.4	525	11.1	280	--	85.6	--
MAR													
27...	1500	1028	9813	36	30	11.2	7.5	519	13.2	300	--	90.4	--
APR													
15...	1320	1028	9813	32	30	12.5	7.4	492	14.1	290	--	87.2	--
MAY													
13...	1500	1028	9813	27	30	10.6	7.5	520	11.5	280	--	84.7	--
JUN													
19...	1300	1028	9813	35	30	11.3	7.6	540	12.8	280	--	84.1	--
JUL													
14...	1430	1028	9813	31	30	9.9	7.5	538	13.9	280	--	87.1	--
AUG													
04...	1230	1028	9813	26	30	10.6	7.5	519	13.1	290	--	87.7	--
SEP													
10...	1130	1028	9813	25	30	10.2	7.5	538	11.7	290	--	86.8	--
01570400 Conodoguinet Creek at Mouth at West Fairview, PA (LAT 40 16 17N LONG 076 54 51W)													
NOV 2002													
18...	1030	1028	9813	1840	40	10.3	7.9	325	7.8	150	--	47.5	--
JAN 2003													
15...	1050	1028	9813	725	40	13.9	7.8	415	.8	180	--	55.2	--
MAR													
06...	1100	1028	9813	970	40	10.8	7.6	453	4.7	160	--	52.3	--
MAY													
05...	1230	1028	9813	541	40	10.0	8.1	412	15.1	180	--	54.2	--
JUL													
08...	1430	1028	9813	689	40	12.0	8.4	413	26.4	220	--	69.3	--
SEP													
09...	1300	1028	9813	418	40	8.3	8.1	421	21.2	180	--	56.5	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd, mg/L as N (00610)	Nitrate water, unfltrd, mg/L as N (00620)	Nitrite water, unfltrd, mg/L as N (00615)	Ortho-phosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)
01567795 Letort Spring Run at Bonny Brook near Carlisle, PA (LAT 40 10 39N LONG 077 11 10W)													
OCT 2002													
15...	16.7	226	11.3	<.2	21.1	328	<2	.150	6.77	<.040	<.01	<.010	7.3
NOV													
14...	16.9	218	11.2	.2	20.8	66	<2	<.020	6.76	<.040	<.01	.016	6.7
DEC													
12...	15.6	222	12.2	<.2	21.4	334	10	<.020	6.48	<.040	<.01	<.010	7.0
JAN 2003													
28...	20.0	200	10.0	<.2	21.0	300	10	<.020	6.8	<.040	<.01	.011	7.3
FEB													
25...	15.7	221	12.2	<.2	20.9	388	10	<.020	6.69	<.040	<.01	.011	6.9
MAR													
27...	17.7	222	11.6	<.2	21.2	334	4	<.020	6.76	<.040	<.01	<.010	6.7
APR													
15...	16.5	221	11.4	<.2	20.6	344	<2	<.020	6.29	<.040	<.01	<.010	6.6
MAY													
13...	15.8	226	11.7	<.2	20.4	346	6	<.020	6.48	<.040	.01	.013	7.3
JUN													
19...	16.7	222	11.2	<.2	20.7	402	4	.020	6.35	<.040	<.01	.011	6.7
JUL													
14...	16.4	225	11.8	<.2	20.3	384	8	<.020	6.60	<.040	<.01	.017	6.7
AUG													
04...	16.5	226	11.9	<.2	20.7	366	10	<.020	6.74	<.040	.01	.015	6.8
SEP													
10...	16.8	226	11.9	<.2	20.9	434	6	<.020	7.12	<.040	<.01	.041	6.5
01570400 Conodoguinet Creek at Mouth at West Fairview, PA (LAT 40 16 17N LONG 076 54 51W)													
NOV 2002													
18...	8.1	98	--	--	22.2	254	54	<.020	4.05	<.040	.03	.088	5.3
JAN 2003													
15...	9.3	119	--	--	22.0	276	26	<.020	5.73	<.040	.01	.025	5.7
MAR													
06...	8.3	109	--	--	21.7	298	18	.160	3.77	<.200	.02	.062	4.5
MAY													
05...	9.9	137	--	--	20.5	266	6	<.020	3.36	<.040	.02	.027	4.1
JUL													
08...	10.3	173	--	--	24.1	338	4	<.020	4.38	<.040	.02	.026	4.6
SEP													
09...	9.8	136	--	--	22.3	308	16	.030	3.91	<.040	.04	.062	3.9

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01567795 Letort Spring Run at Bonny Brook near Carlisle, PA (LAT 40 10 39N LONG 077 11 10W)													
OCT 2002													
15...	--	.5	40	19	24	<4.0	<.20	<4	<4	<20	30	<1.0	<1.0
NOV													
14...	--	1.7	<20	21	32	<4.0	<.20	<4	<4	30	60	<1.0	<1.0
DEC													
12...	--	.8	20	18	38	<4.0	<.20	<4	<4	40	60	<1.0	<1.0
JAN 2003													
28...	--	.6	30	27	42	<4.0	<.20	<4	<4	40	100	<1.0	<1.0
FEB													
25...	--	1.0	120	15	67	<4.0	<.20	<4	<4	<20	120	<1.0	<1.0
MAR													
27...	--	.4	20	17	55	<4.0	<.20	<4	<4	<20	110	<1.0	<1.0
APR													
15...	--	.9	40	18	48	<4.0	<.20	<4	<4	<20	70	<1.0	<1.0
MAY													
13...	--	1.5	120	<10	32	<4.0	<.20	<4	<4	<20	100	<1.0	<1.0
JUN													
19...	--	.6	40	<10	46	<4.0	<.20	<4	<4	30	100	<1.0	<1.0
JUL													
14...	--	1.1	260	<10	28	<4.0	<.20	<4	<4	<20	80	<1.0	<1.0
AUG													
04...	--	.7	200	21	38	<4.0	<.20	<4	<4	<20	160	<1.0	<1.0
SEP													
10...	--	.6	40	<10	22	<4.0	<.20	<4	<4	<20	110	<1.0	<1.0
01570400 Conodoguinet Creek at Mouth at West Fairview, PA (LAT 40 16 17N LONG 076 54 51W)													
NOV 2002													
18...	3.9	--	--	--	400	--	--	--	<10	--	550	--	1.6
JAN 2003													
15...	1.6	--	--	--	<200	--	--	--	<10	--	230	--	<1.0
MAR													
06...	2.8	--	--	--	<200	--	--	--	<10	--	220	--	<1.0
MAY													
05...	2.8	--	--	--	<200	--	--	--	<10	--	130	--	<1.0
JUL													
08...	2.7	--	--	--	<200	--	--	--	<10	--	140	--	<1.0
SEP													
09...	3.7	--	--	--	<200	--	--	--	<10	--	210	--	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recover fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover fltrd, µg/L (01055)	Nickel, water, unfltrd recover fltrd, µg/L (01065)	Nickel, water, unfltrd recover fltrd, µg/L (01067)	Zinc, water, unfltrd recover fltrd, µg/L (01090)	Zinc, water, unfltrd recover fltrd, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01567795 Letort Spring Run at Bonny Brook near Carlisle, PA (LAT 40 10 39N LONG 077 11 10W)							
OCT 2002							
15...	2.4	2.8	4.4	4.5	<5.0	<5.0	<5
NOV							
14...	2.5	3.0	<4.0	<4.0	<5.0	<5.0	<5
DEC							
12...	7.0	6.6	<4.0	<4.0	<5.0	<5.0	<5
JAN 2003							
28...	2.7	4.0	<4.0	<4.0	<5.0	<5.0	<5
FEB							
25...	3.6	4.4	<4.0	<4.0	<5.0	<5.0	<5
MAR							
27...	2.1	3.2	<4.0	<4.0	<5.0	<5.0	<5
APR							
15...	2.2	3.8	<4.0	<4.0	--	--	<5
MAY							
13...	4.4	5.1	<4.0	<4.0	<5.0	<5.0	<5
JUN							
19...	4.3	5.0	4.9	5.1	<5.0	<5.0	<5
JUL							
14...	3.2	4.0	<4.0	<4.0	<5.0	<5.0	<5
AUG							
04...	4.1	4.6	<4.0	<4.0	<5.0	<5.0	<5
SEP							
10...	3.3	3.9	5.1	5.0	<5.0	<5.0	<5
01570400 Conodoguinet Creek at Mouth at West Fairview, PA (LAT 40 16 17N LONG 076 54 51W)							
NOV 2002							
18...	--	90	--	<50	--	<10	--
JAN 2003							
15...	--	20	--	<50	--	<10	--
MAR							
06...	--	20	--	<50	--	10	--
MAY							
05...	--	10	--	<50	--	140	--
JUL							
08...	--	10	--	<50	--	<10	--
SEP							
09...	--	20	--	<50	--	<10	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd as CaCO3, mg/L (00900)	Calcium water, unfltrd, recoverable, mg/L (00915)	Calcium water, unfltrd, recoverable, mg/L (00916)	Magnesium, water, unfltrd, mg/L (00925)
01571505 Yellow Breeches Creek at New Cumberland, PA (LAT 40 13 27N LONG 076 51 38W)													
NOV 2002 18...	0830	1028	9813	637	40	10.9	7.3	290	8.1	130	--	37.0	--
JAN 2003 15...	0920	1028	9813	317	40	14.3	7.8	304	1.9	130	--	36.8	--
MAR 06...	0945	1028	9813	473	40	12.0	7.2	343	5.2	140	--	40.3	--
MAY 05...	1030	1028	9813	290	40	9.8	7.7	295	14.5	130	--	34.5	--
JUL 08...	0930	1028	9813	295	40	8.5	7.7	254	20.5	130	--	36.0	--
SEP 09...	1100	1028	9813	187	40	9.2	7.7	366	18.2	160	--	43.7	--
01573610 Swatara Creek at Harrisburg Airport at Middletown (LAT 40 11 28N LONG 076 43 52W)													
NOV 2002 26...	1245	1028	9813	881	40	11.6	7.7	270	7.0	100	--	29.1	--
JAN 2003 21...	1440	1028	9813	E560	40	14.6	7.4	349	.8	140	--	40.3	--
MAR 17...	1500	1028	9813	3590	40	11.8	7.4	221	7.3	86	--	24.2	--
MAY 08...	1345	1028	9813	768	40	8.8	7.7	307	16.4	120	--	36.7	--
JUL 10...	1350	1028	9813	636	40	8.4	8.1	376	21.7	160	--	44.5	--
SEP 03...	1300	1028	9813	655	40	8.1	7.9	373	19.1	150	--	41.8	--
01573750 Conewago Creek near Arendtsville, PA (LAT 39 56 13N LONG 077 21 58W)													
OCT 2002 15...	1230	1028	9813	4.0	30	9.4	6.7	88	8.8	26	6.63	6.8	2.10
NOV 14...	1100	1028	9813	9.8	30	10.3	6.6	70	7.6	23	5.84	5.9	1.98
DEC 12...	1100	1028	9813	21	30	13.4	6.0	68	3.3	21	5.61	5.4	1.83
JAN 2003 28...	1230	1028	9813	9.5	30	14.2	6.9	61	.1	16	3.65	3.9	1.49
FEB 25...	1200	1028	9813	12	30	13.9	6.8	78	.5	21	5.06	5.2	1.79
MAR 27...	0945	1028	9813	30	30	12.0	6.2	53	6.9	20	3.60	4.0	1.4
APR 15...	0930	1028	9813	21	30	11.8	5.8	54	7.6	15	3.56	3.8	1.34
MAY 13...	1130	1028	9813	17	30	10.8	6.3	57	10.7	15	3.69	3.8	1.35
JUN 19...	1020	1028	9813	22	30	9.6	6.5	58	14.2	17	4.14	4.2	1.50
JUL 14...	1050	1028	9813	7.2	30	9.3	6.3	61	16.5	17	4.07	4.1	1.49
AUG 04...	0900	1028	9813	3.4	30	8.6	6.7	63	19.4	20	4.60	4.9	1.79
SEP 10...	0800	1028	9813	2.4	30	9.0	7.3	70	14.6	21	5.26	5.5	1.78

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recover-able, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01571505 Yellow Breeches Creek at New Cumberland, PA (LAT 40 13 27N LONG 076 51 38W)													
NOV 2002 18...	9.7	94	--	--	20.1	198	156	<.020	1.66	<.040	.07	.192	3.4
JAN 2003 15...	9.3	93	--	--	18.1	232	<2	.020	2.40	<.040	.01	.022	2.6
MAR 06...	8.6	91	--	--	17.9	310	14	<.020	2.14	<.040	.02	.033	2.3
MAY 05...	10.5	100	--	--	15.6	218	<2	<.020	1.81	<.040	.02	.027	2.3
JUL 08...	9.1	107	--	--	14.8	216	<2	<.020	2.40	<.040	.03	.032	2.6
SEP 09...	11.2	129	--	--	17.3	264	10	<.020	2.66	<.040	.03	.040	2.5
01573610 Swatara Creek at Harrisburg Airport at Middletown (LAT 40 11 28N LONG 076 43 52W)													
NOV 2002 26...	7.3	60	--	--	25.5	206	<2	<.020	5.32	<.040	.03	.038	5.5
JAN 2003 21...	9.8	81	--	--	30.0	266	2	.130	5.25	<.040	.03	.031	6.0
MAR 17...	6.2	49	--	--	16.6	168	46	.090	2.97	<.040	.06	.108	3.7
MAY 08...	8.1	81	--	--	25.5	232	10	.050	3.10	.090	.04	.044	3.7
JUL 10...	10.9	105	--	--	31.1	266	14	<.020	4.17	.080	.04	.054	4.7
SEP 03...	10.5	106	--	--	28.6	284	12	<.020	4.17	<.040	.05	.087	4.7
01573750 Conewago Creek near Arendtsville, PA (LAT 39 56 13N LONG 077 21 58W)													
OCT 2002 15...	2.2	16	7.6	<.2	9.1	60	2	.160	.76	<.040	<.01	.011	1.1
NOV 14...	2.0	12	5.9	<.2	8.7	356	<2	.060	.86	<.040	<.01	<.010	1.1
DEC 12...	1.8	11	8.2	<.2	8.0	72	4	<.020	.85	<.040	<.01	<.010	1.3
JAN 2003 28...	1.6	11	4.7	<.2	6.7	60	<2	<.020	.98	<.040	<.01	<.010	1.1
FEB 25...	1.9	10	9.2	<.2	7.6	96	2	<.020	1.07	<.040	<.01	<.010	1.4
MAR 27...	1.0	8	5.0	<.2	7.0	54	<2	<.020	.64	<.040	<.01	<.010	.69
APR 15...	1.4	13	4.9	<.2	6.8	64	<2	<.020	.66	<.040	<.01	<.010	.69
MAY 13...	1.4	13	4.8	<.2	6.3	52	2	<.020	.50	<.040	.01	.010	.79
JUN 19...	1.5	12	4.7	<.2	5.9	16000	<2	<.020	.56	<.040	<.01	.010	.60
JUL 14...	1.5	16	4.4	<.2	4.8	64	8	<.020	.60	<.040	<.01	.017	.70
AUG 04...	1.9	16	4.5	<.2	4.4	34	2	<.020	.45	<.040	.01	.020	.54
SEP 10...	1.8	19	5.0	<.2	4.5	88	2	<.020	.52	<.040	<.01	<.010	.68

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01571505 Yellow Breeches Creek at New Cumberland, PA (LAT 40 13 27N LONG 076 51 38W)													
NOV 2002 18...	4.6	--	--	--	3600	--	--	--	<10	--	3730	--	5.6
JAN 2003 15...	1.5	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
MAR 06...	2.1	--	--	--	300	--	--	--	<10	--	350	--	<1.0
MAY 05...	2.0	--	--	--	<200	--	--	--	<10	--	1100	--	<1.0
JUL 08...	1.9	--	--	--	200	--	--	--	<10	--	310	--	<1.0
SEP 09...	2.1	--	--	--	<200	--	--	--	<10	--	230	--	<1.0
01573610 Swatara Creek at Harrisburg Airport at Middletown (LAT 40 11 28N LONG 076 43 52W)													
NOV 2002 26...	2.0	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
JAN 2003 21...	1.3	--	--	--	<200	--	--	--	<10	--	180	--	<1.0
MAR 17...	3.2	--	--	--	1300	--	--	--	<10	--	1490	--	3.4
MAY 08...	2.7	--	--	--	400	--	--	--	<10	--	420	--	<1.0
JUL 10...	3.1	--	--	--	300	--	--	--	<10	--	450	--	<1.0
SEP 03...	2.8	--	--	--	200	--	--	--	10	--	340	--	<1.0
01573750 Conewago Creek near Arendtsville, PA (LAT 39 56 13N LONG 077 21 58W)													
OCT 2002 15...	--	1.0	40	44	59	<4.0	<.20	<4	<4	90	140	<1.0	<1.0
NOV 14...	--	1.5	20	59	74	<4.0	<.20	<4	<4	80	110	<1.0	<1.0
DEC 12...	--	.8	140	82	100	<4.0	<.20	<4	<4	90	150	<1.0	<1.0
JAN 2003 28...	--	1.0	20	38	53	<4.0	<.20	<4	<4	40	90	<1.0	<1.0
FEB 25...	--	1.8	200	48	68	<4.0	<.20	<4	<4	40	70	<1.0	<1.0
MAR 27...	--	.6	10	58	104	<4.0	<.20	<4	<4	30	80	<1.0	<1.0
APR 15...	--	1.2	<10	51	73	<4.0	<.20	<4	<4	40	70	<1.0	<1.0
MAY 13...	--	1.4	40	38	63	<4.0	20	<4	<4	60	110	<1.0	<1.0
JUN 19...	--	.6	40	33	89	<4.0	<.20	<4	<4	80	1900	<1.0	<1.0
JUL 14...	--	.8	<20	27	54	<4.0	<.20	<4	<4	80	160	<1.0	<1.0
AUG 04...	--	1.1	60	41	67	<4.0	<.20	<4	<4	110	190	<1.0	<1.0
SEP 10...	--	.6	20	18	34	<4.0	<.20	<4	<4	120	190	<1.0	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, fltrd, -able, µg/L (01056)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Nickel, water, fltrd, -able, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, fltrd, -able, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01571505 Yellow Breeches Creek at New Cumberland, PA (LAT 40 13 27N LONG 076 51 38W)							
NOV 2002 18...	--	190	--	<50	--	20	--
JAN 2003 15...	--	20	--	<50	--	<10	--
MAR 06...	--	30	--	<50	--	20	--
MAY 05...	--	30	--	<50	--	90	--
JUL 08...	--	20	--	<50	--	<10	--
SEP 09...	--	20	--	<50	--	10	--
01573610 Swatara Creek at Harrisburg Airport at Middletown (LAT 40 11 28N LONG 076 43 52W)							
NOV 2002 26...	--	40	--	<50	--	<10	--
JAN 2003 21...	--	60	--	<50	--	<10	--
MAR 17...	--	120	--	<50	--	10	--
MAY 08...	--	40	--	<50	--	<10	--
JUL 10...	--	50	--	<50	--	<10	--
SEP 03...	--	40	--	<50	--	200	--
01573750 Conewago Creek near Arendtsville, PA (LAT 39 56 13N LONG 077 21 58W)							
OCT 2002 15...	10	10	<4.0	<4.0	5.1	<5.0	6
NOV 14...	6.9	8.5	<4.0	<4.0	6.8	10	<5
DEC 12...	10	20	<4.0	<4.0	7.8	10	<5
JAN 2003 28...	6.2	8.2	<4.0	<4.0	<5.0	5.3	<5
FEB 25...	7.9	9.1	<4.0	<4.0	5.0	6.3	<5
MAR 27...	6.0	10	<4.0	<4.0	5.2	10	<5
APR 15...	6.9	9.0	<4.0	<4.0	--	--	<5
MAY 13...	10	10	<4.0	<4.0	<5.0	7.2	<5
JUN 19...	8.2	10	<4.0	<4.0	<5.0	27	<5
JUL 14...	7.3	10	<4.0	<4.0	<5.0	<5.0	<5
AUG 04...	8.0	10	<4.0	<4.0	<5.0	<5.0	<5
SEP 10...	8.6	10	<4.0	<4.0	--	--	<5

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
01575900 Chickies Creek near Marietta, PA (LAT 40 03 46N LONG 076 30 57W)													
NOV 2002 26...	1130	1028	9813	159	30	11.9	7.9	517	7.4	230	--	61.9	--
JAN 2003 21...	1320	1028	9813	140	30	15.1	7.8	573	1.4	260	--	71.3	--
MAR 17...	1310	1028	9813	436	30	11.2	7.8	370	9.8	160	--	42.8	--
MAY 08...	1230	1028	9813	180	30	8.8	7.6	491	15.1	240	--	63.7	--
JUL 10...	1145	1028	9813	116	30	7.9	7.9	539	19.9	240	--	65.4	--
SEP 03...	1100	1028	9813	254	30	8.0	7.7	387	19.2	150	--	42.4	--
01576003 Susquehanna River at Columbia, PA (LAT 40 01 42N LONG 076 31 05W)													
NOV 2002 13...	1015	1028	9813	27300	40	9.7	8.2	244	11.1	100	--	26.9	--
JAN 2003 30...	1345	1028	9813	E16000	40	14.9	7.3	304	.5	110	--	30.0	--
MAR 26...	1100	1028	9813	173200	40	11.4	7.2	121	7.2	41	--	11.2	--
MAY 21...	1010	1028	9813	46300	40	9.3	7.7	187	16.1	72	--	19.6	--
JUL 15...	1240	1028	9813	20200	40	8.7	8.8	279	27.0	110	--	29.2	--
SEP 30...	1030	1028	9813	84500	40	8.9	7.2	174	16.7	75	--	19.8	--
01576787 Pequea Creek at Martic Forge, PA (LAT 39 54 21N LONG 076 19 43W)													
NOV 2002 19...	1300	1028	9813	217	30	10.6	7.9	410	6.8	190	--	47.9	--
JAN 2003 23...	1330	1028	9813	150	30	16.0	7.9	566	.1	270	--	66.9	--
MAR 24...	1330	1028	9813	304	30	11.9	8.1	461	11.9	210	--	53.5	--
MAY 12...	1510	1028	9813	200	30	9.8	8.0	350	17.0	230	--	56.0	--
JUL 28...	1145	1028	9813	153	30	7.8	8.2	496	23.1	240	--	56.7	--
SEP 11...	1200	1028	9813	117	30	9.0	8.3	426	18.1	240	--	57.1	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia, water, unfltrd, mg/L as N (00610)	Nitrate, water, unfltrd, mg/L as N (00620)	Nitrite, water, unfltrd, mg/L as N (00615)	Ortho-phosphate, water, unfltrd, mg/L as P (70507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)
01575900 Chickies Creek near Marietta, PA (LAT 40 03 46N LONG 076 30 57W)													
NOV 2002 26...	17.4	134	--	--	33.8	390	<2	.020	13.0	<.040	.05	.077	13
JAN 2003 21...	20.3	150	--	--	30.5	436	2	.100	15.1	<.040	.02	.020	16
MAR 17...	12.4	95	--	--	22.4	280	30	.160	8.44	.110	.09	.123	9.1
MAY 08...	18.4	143	--	--	24.9	330	16	.070	10.1	.110	.04	.071	11
JUL 10...	18.5	160	--	--	26.5	340	14	<.020	12.1	<.040	.06	.062	12
SEP 03...	11.6	114	--	--	21.0	274	64	.080	6.56	.040	.27	.355	7.6
01576003 Susquehanna River at Columbia, PA (LAT 40 01 42N LONG 076 31 05W)													
NOV 2002 13...	8.5	50	--	--	42.9	124	<2	<.020	1.12	<.040	.01	.024	1.8
JAN 2003 30...	8.4	63	--	--	46.0	234	10	.040	1.95	<.040	<.01	.013	2.4
MAR 26...	3.2	20	--	--	16.1	106	70	<.020	.83	<.040	.01	.077	1.1
MAY 21...	5.5	42	--	--	27.3	136	26	<.020	.82	<.040	.02	.038	1.2
JUL 15...	8.2	64	--	--	41.4	188	2	<.020	.90	<.040	.03	.030	1.3
SEP 30...	6.1	46	--	--	22.9	298	56	<.020	1.01	<.040	.05	.078	1.1
01576787 Pequea Creek at Martic Forge, PA (LAT 39 54 21N LONG 076 19 43W)													
NOV 2002 19...	17.1	130	--	--	33.3	314	36	.170	6.37	.070	.32	.432	7.2
JAN 2003 23...	25.9	172	--	--	35.5	342	18	.070	11.9	<.040	.02	.035	12
MAR 24...	19.4	139	--	--	30.2	356	<2	<.020	8.69	<.040	.05	.061	8.9
MAY 12...	22.4	152	--	--	28.5	662	12	.030	7.76	.110	.05	.075	8.5
JUL 28...	23.5	164	--	--	31.7	328	14	<.020	8.86	<.040	.07	.119	9.4
SEP 11...	23.4	170	--	--	30.3	416	<2	<.020	9.34	<.040	.10	.123	8.6

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01575900 Chickies Creek near Marietta, PA (LAT 40 03 46N LONG 076 30 57W)													
NOV 2002 26...	2.5	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
JAN 2003 21...	1.4	--	--	--	<200	--	--	--	<10	--	170	--	<1.0
MAR 17...	3.4	--	--	--	900	--	--	--	<10	--	1580	--	2.0
MAY 08...	2.7	--	--	--	500	--	--	--	<10	--	560	--	1.2
JUL 10...	2.5	--	--	--	200	--	--	--	<10	--	310	--	<1.0
SEP 03...	7.1	--	--	--	2700	--	--	--	10	--	2960	--	5.4
01576003 Susquehanna River at Columbia, PA (LAT 40 01 42N LONG 076 31 05W)													
NOV 2002 13...	2.3	--	--	--	<200	--	--	--	<10	--	320	--	<1.0
JAN 2003 30...	1.7	--	--	--	<200	--	--	--	<10	--	210	--	<1.0
MAR 26...	2.9	--	--	--	2000	--	--	--	<10	--	3100	--	2.7
MAY 21...	2.3	--	--	--	500	--	--	--	<10	--	800	--	<1.0
JUL 15...	3.5	--	--	--	<200	--	--	--	<10	--	290	--	<1.0
SEP 30...	3.0	--	--	--	1600	--	--	--	<10	--	2050	--	2.9
01576787 Pequea Creek at Martic Forge, PA (LAT 39 54 21N LONG 076 19 43W)													
NOV 2002 19...	6.2	--	--	--	1500	--	--	--	<10	--	2010	--	1.7
JAN 2003 23...	1.7	--	--	--	<200	--	--	--	<10	--	260	--	<1.0
MAR 24...	2.2	--	--	--	200	--	--	--	<10	--	370	--	<1.0
MAY 12...	2.5	--	--	--	<200	--	--	--	<10	--	360	--	<1.0
JUL 28...	2.3	--	--	--	400	--	--	--	<10	--	600	--	<1.0
SEP 11...	2.3	--	--	--	<200	--	--	--	<10	--	270	--	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recover fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover fltrd, µg/L (01055)	Nickel, water, unfltrd recover fltrd, µg/L (01065)	Nickel, water, unfltrd recover fltrd, µg/L (01067)	Zinc, water, unfltrd recover fltrd, µg/L (01090)	Zinc, water, unfltrd recover fltrd, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01575900	Chickies Creek near Marietta, PA (LAT 40 03 46N LONG 076 30 57W)						
NOV 2002 26...	--	30	--	<50	--	<10	--
JAN 2003 21...	--	40	--	<50	--	20	--
MAR 17...	--	70	--	<50	--	10	--
MAY 08...	--	90	--	<50	--	<10	--
JUL 10...	--	30	--	<50	--	<10	--
SEP 03...	--	130	--	<50	--	210	--
01576003	Susquehanna River at Columbia, PA (LAT 40 01 42N LONG 076 31 05W)						
NOV 2002 13...	--	<10	--	<50	--	<10	--
JAN 2003 30...	--	100	--	<50	--	10	--
MAR 26...	--	230	--	<50	--	40	--
MAY 21...	--	130	--	<50	--	20	--
JUL 15...	--	80	--	<50	--	30	--
SEP 30...	--	200	--	<50	--	100	--
01576787	Pequea Creek at Martic Forge, PA (LAT 39 54 21N LONG 076 19 43W)						
NOV 2002 19...	--	90	--	<50	--	<10	--
JAN 2003 23...	--	40	--	<50	--	<10	--
MAR 24...	--	30	--	<50	--	50	--
MAY 12...	--	50	--	<50	--	10	--
JUL 28...	--	30	--	<50	--	<10	--
SEP 11...	--	40	--	<50	--	<10	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, unfltrd, recoverable, mg/L (00915)	Calcium water, unfltrd, recoverable, mg/L (00916)	Magnesium, water, unfltrd, mg/L (00925)
01577180 Rambo Run at Meadestown near Stewartstown, PA (LAT 39 49 21N LONG 076 31 59W)													
OCT 2002													
15...	0900	1028	9813	4.2	30	9.9	7.0	141	8.6	48	--	10.7	--
NOV													
19	1015	1028	9813	18	30	11.5	7.0	129	6.9	47	--	10.7	--
JAN 2003													
23...	1120	1028	9813	12	30	14.8	6.4	137	.1	49	--	10.0	--
FEB													
25...	0900	1028	9813	29	30	13.6	6.8	131	1.4	39	--	9.0	--
MAR													
24...	1050	1028	9813	26	30	11.7	6.5	110	9.3	37	--	8.0	--
APR													
17...	1145	1028	9813	17	30	10.6	6.5	120	10.4	45	--	9.5	--
MAY													
12...	1230	1028	9813	14	30	9.7	6.4	89	14.4	40	--	8.4	--
JUN													
24...	1230	1028	9813	26	30	9.2	6.9	121	16.3	45	--	9.8	--
JUL													
28...	1000	1028	9813	14	30	9.0	7.1	135	18.0	43	--	8.9	--
AUG													
07...	1000	1028	9813	14	30	9.0	7.0	135	17.3	45	--	9.5	--
SEP													
11...	1030	1028	9813	9.3	30	9.4	7.3	108	14.3	45	--	9.2	--
01613500 Licking Creek near Sylvan, PA (LAT 39 43 23N LONG 078 03 38W)													
NOV 2002													
04...	1220	--	9813	127	30	12.2	6.9	170	6.6	76	--	19.3	--
JAN 2003													
06...	1230	1028	9813	476	30	13.3	7.2	150	3.4	62	--	15.4	--
MAR													
10...	1200	1028	9813	946	30	13.4	6.8	112	2.9	45	--	11.1	--
MAY													
15...	1310	1028	9813	308	30	9.6	7.5	140	14.0	70	--	17.1	--
JUL													
21...	1230	1028	9813	39.4	30	7.5	8.1	378	22.8	180	--	45.5	--
SEP													
18...	1330	1028	9813	59.1	30	8.8	8.0	263	17.4	120	--	31.3	--
01614500 Conococheague Creek at Fairview, MD (LAT 39 42 59N LONG 077 49 29W)													
NOV 2002													
04...	1020	1028	9813	500	40	11.3	7.5	408	7.6	189	--	55.5	--
JAN 2003													
06...	0930	1028	9813	1550	40	12.7	7.5	343	4.5	156	--	47.2	--
MAR													
10...	0935	1028	9813	2900	40	12.7	6.7	261	3.3	119	--	35.3	--
MAY													
15...	1045	1028	9813	876	40	9.7	7.7	305	14.2	158	--	46.4	--
JUL													
21...	1100	1028	9813	277	40	8.9	8.2	493	21.5	240	--	71.2	--
SEP													
18...	1015	1028	9813	303	40	8.6	8.0	455	16.7	210	--	63.0	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat flt mg/L (00515)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia water, unfltrd as N, mg/L (00610)	Nitrate water, unfltrd as N, mg/L (00620)	Nitrite water, unfltrd as N, mg/L (00615)	Ortho-phosphate, water, unfltrd as P, mg/L (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)
01577180 Rambo Run at Meadestown near Stewartstown, PA (LAT 39 49 21N LONG 076 31 59W)													
OCT 2002 15...	5.2	22	12.3	<.2	5.3	88	<2	.100	4.84	<.040	<.01	.016	5.4
NOV 19...	4.9	20	11.2	<.2	7.4	92	12	<.020	4.88	<.040	<.01	<.010	5.3
JAN 2003 23...	5.9	13	12.7	<.2	3.8	100	8	<.020	7.19	<.040	<.01	<.010	7.3
FEB 25...	4.1	17	14.0	<.2	6.1	136	18	.240	3.94	<.040	.07	.120	5.0
MAR 24...	4.1	13	10.2	<.2	4.5	110	2	<.020	4.59	<.040	.01	.016	4.9
APR 17...	5.1	18	11.2	<.2	4.0	88	14	<.020	5.08	<.040	<.01	<.010	5.1
MAY 12...	4.6	17	11.4	<.2	3.4	122	<2	<.020	4.84	<.040	.01	.022	5.2
JUN 24...	4.9	16	10.7	<.2	4.1	122	18	<.020	5.02	<.040	.02	.018	5.5
JUL 28...	5.1	17	12.1	<.2	2.8	126	2	<.020	5.95	<.040	.01	.012	6.3
AUG 07...	5.2	21	12.1	<.2	3.3	122	4	<.020	5.12	<.040	.01	.016	5.6
SEP 11...	5.3	17	12.6	<.2	2.5	170	4	<.020	5.90	<.040	.01	.014	6.5
01613500 Licking Creek near Sylvan, PA (LAT 39 43 23N LONG 078 03 38W)													
NOV 2002 04...	6.7	52	--	--	13.7	150	4	<.020	1.95	<.040	.01	.017	2.1
JAN 2003 06...	5.7	40	--	--	11.3	222	6	<.020	1.90	<.040	.02	.017	2.0
MAR 10...	4.2	27	--	--	10.3	80	64	.040	1.22	<.040	.08	.081	1.5
MAY 15...	6.6	52	--	--	10.2	98	10	<.020	1.16	<.040	.02	.018	1.6
JUL 21...	17.3	158	--	--	13.6	224	10	.020	2.47	<.040	.04	.046	2.6
SEP 18...	11.1	106	--	--	11.4	164	4	<.020	1.65	<.040	.02	.022	1.9
01614500 Conococheague Creek at Fairview, MD (LAT 39 42 59N LONG 077 49 29W)													
NOV 2002 04...	12.2	134	--	--	25.9	308	14	<.020	7.52	<.040	.03	.038	7.6
JAN 2003 06...	9.2	103	--	--	18.6	144	20	<.020	6.09	<.040	.03	.041	6.4
MAR 10...	7.5	79	--	--	14.4	200	80	.150	3.65	<.040	.13	.170	4.4
MAY 15...	10.1	117	--	--	16.0	242	20	<.020	3.91	<.040	.03	.058	4.7
JUL 21...	15.1	184	--	--	19.4	338	<2	<.020	5.78	<.040	.04	.051	5.7
SEP 18...	12.7	175	--	--	19.6	312	4	<.020	4.58	<.040	.06	.078	4.9

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45uMF col/100 mL (31616)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)
01577180 Rambo Run at Meadestown near Stewartstown, PA (LAT 39 49 21N LONG 076 31 59W)													
OCT 2002 15...	--	.8	240	24	76	<4.0	<.20	<4	<4	30	170	<1.0	<1.0
NOV 19	--	3.8	90	24	76	<4.0	<.20	<4	<4	<20	120	<1.0	<1.0
JAN 2003 23...	--	1.0	10	--	--	<4.0	<.20	<4	<4	40	140	<1.0	<1.0
FEB 25...	--	2.8	660	34	100	<4.0	<.20	<4	<4	60	450	<1.0	<1.0
MAR 24...	--	--	<20	27	84	<4.0	<.20	<4	<4	30	210	<1.0	<1.0
APR 17...	--	.3	<20	26	90	<4.0	<.20	<4	<4	20	230	<1.0	<1.0
MAY 12...	--	1.7	40	<10	69	<4.0	<.20	<4	<4	20	200	<1.0	<1.0
JUN 24...	--	1.0	220	<10	200	<4.0	<.20	<4	<4	20	340	<1.0	<1.0
JUL 28...	--	.9	120	22	97	<4.0	<.20	<4	<4	<20	230	<1.0	<1.0
AUG 07...	--	.9	280	<10	100	<4.0	<.20	<4	<4	20	270	<1.0	<1.0
SEP 11...	--	.6	100	<10	31	<4.0	<.20	<4	<4	<20	160	<1.0	<1.0
01613500 Licking Creek near Sylvan, PA (LAT 39 43 23N LONG 078 03 38W)													
NOV 2002 04...	2.4	--	--	--	<200	--	--	--	<10	--	140	--	1.5
JAN 2003 06...	1.7	--	--	--	200	--	--	--	<10	--	340	--	<1.0
MAR 10...	2.8	--	--	--	1300	--	--	--	<10	--	1950	--	1.6
MAY 15...	1.8	--	--	--	300	--	--	--	<10	--	380	--	<1.0
JUL 21...	2.5	--	--	--	<200	--	--	--	<10	--	180	--	<1.0
SEP 18...	2.5	--	--	--	<200	--	--	--	<10	--	190	--	<1.0
01614500 Conococheague Creek at Fairview, MD (LAT 39 42 59N LONG 077 49 29W)													
NOV 2002 04...	3.0	--	--	--	<200	--	--	--	<10	--	180	--	2.7
JAN 2003 06...	2.0	--	--	--	500	--	--	--	<10	--	710	--	<1.0
MAR 10...	3.4	--	--	--	2100	--	--	--	<10	--	3200	--	2.3
MAY 15...	2.2	--	--	--	600	--	--	--	<10	--	730	--	<1.0
JUL 21...	2.2	--	--	--	<200	--	--	--	<10	--	250	--	<1.0
SEP 18...	2.7	--	--	--	<200	--	--	--	<10	--	170	--	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, unfltrd recover fltrd, -able, µg/L (01056)	Mangan- ese, water, unfltrd recover fltrd, -able, µg/L (01055)	Nickel, water, unfltrd recover fltrd, -able, µg/L (01065)	Nickel, water, unfltrd recover fltrd, -able, µg/L (01067)	Zinc, water, unfltrd recover fltrd, -able, µg/L (01090)	Zinc, water, unfltrd recover fltrd, -able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
01577180 Rambo Run at Meadestown near Stewartstown, PA (LAT 39 49 21N LONG 076 31 59W)							
OCT 2002							
15...	20	20	<4.0	<4.0	6.9	5.6	<5
NOV							
19...	10	10	<4.0	<4.0	<5.0	<5.0	<5
JAN 2003							
23...	20	10	<4.0	<4.0	<5.0	<5.0	<5
FEB							
25...	20	30	<4.0	<4.0	<5.0	6.6	<5
MAR							
24...	10	10	<4.0	<4.0	<5.0	<5.0	<5
APR							
17...	7.6	10	<4.0	<4.0	7.5	<5.0	<5
MAY							
12...	10	20	<4.0	<4.0	<5.0	<5.0	<5
JUN							
24...	20	30	<4.0	<4.0	<5.0	<5.0	<5
JUL							
28...	6.6	10	<4.0	<4.0	<5.0	<5.0	<5
AUG							
07...	9.3	20	<4.0	<4.0	<5.0	<5.0	<5
SEP							
11...	8.4	10	<4.0	<4.0	<5.0	<5.0	<5
01613500 Licking Creek near Sylvan, PA (LAT 39 43 23N LONG 078 03 38W)							
NOV 2002							
04...	--	<10	--	<50	--	<10	--
JAN 2003							
06...	--	20	--	<50	--	<10	--
MAR							
10...	--	90	--	<50	--	10	--
MAY							
15...	--	30	--	<50	--	70	--
JUL							
21...	--	30	--	<50	--	<10	--
SEP							
18...	--	20	--	<50	--	<10	--
01614500 Conococheague Creek at Fairview, MD (LAT 39 42 59N LONG 077 49 29W)							
NOV 2002							
12...	--	20	--	<50	--	<10	--
JAN 2003							
22...	--	40	--	<50	--	<10	--
MAR							
11...	--	130	--	<50	--	20	--
MAY							
27...	--	40	--	<50	--	160	--
JUL							
24...	--	20	--	<50	--	<10	--
SEP							
25...	--	10	--	<50	--	40	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Sam- pling depth, meters (00098)	Trans- parency Secchi disc, meters (00078)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Hard- ness, water, unfltrd recovery, mg/L as CaCO3 (00900)	Calcium water, unfltrd recovery, mg/L (00916)	Magnes- ium, water, unfltrd recovery, mg/L (00927)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)
01534380 Crystel Lake near Dandaff, PA (LAT 41 38 08N LONG 075 31 55W)													
AUG 2003													
05...	1450	1028	9813	1.0	4.8	8.2	7.5	123	24.1	27	9.2	1.0	21
05...	1515	1028	9813	21.0	4.8	4.4	6.3	121	6.6	28	9.5	1.0	22
01541340 Glendale Lake, PA (LAT 40 39 00N LONG 078 32 00W)													
JUL 2003													
30...	1145	1028	9813	1.0	2.9	8.8	8.4	107	24.8	38	10.1	3.2	21
30...	1200	1028	9813	10.0	2.9	0.4	6.9	124	13.3	40	10.7	3.3	31
01543896 George B. Stevenson Lake near First Fork, PA (LAT 41 24 35N LONG 078 01 15W)													
JUL 2002													
30...	1320	1028	9813	1.0	2.1	9.0	7.7	70	22.3	26	7.1	2.0	20
30...	1330	1028	9813	7.0	2.1	3.1	6.6	78	22.7	27	7.3	2.1	22
JUN 2003													
23...	1400	1028	9813	1.0	3.7	10.3	6.9	57	17.6	21	5.8	1.7	12
23...	1430	1028	9813	8.0	3.7	8.6	6.9	60	12.7	21	5.8	1.7	13
015448000 Kettle Creek Lake at Kettle Creek Dam, PA (LAT 41 21 37N LONG 077 55 27W)													
JUL 2002													
30...	1045	1028	9813	1.0	3.0	8.2	7.7	61	26.7	24	6.9	1.7	18
30...	1100	1028	9813	8.0	3.0	3.2	6.6	66	22.8	25	7.1	1.7	22
JUN 2003													
23...	1000	1028	9813	1.0	2.2	10.4	6.1	49	15.6	19	5.4	1.4	12
23...	1030	1028	9813	9.0	2.2	5.0	6.5	80	12.8	19	5.4	1.4	12
01552070 Rose Valley Lake near Bodines, PA (LAT 41 23 12N LONG 076 59 54W)													
JUL 2002													
29...	0945	1028	9813	1.0	1.8	7.8	7.6	60	24.4	22	6.8	1.2	15
29...	1015	1028	9813	4.0	1.8	.8	6.7	77	24.4	23	7.0	1.2	15
JUN 2003													
24...	1330	1028	9813	1.0	3.5	8.8	7.4	53	22.7	19	5.9	1.1	12
46...	1400	1028	9813	4.0	3.5	3.8	6.7	57	18.1	20	6.1	1.2	13
01553650 Lake Chulliaqueque near White Hall, PA (LAT 41 06 08N LONG 076 39 41W)													
JUL 2002													
29...	1315	1028	9813	1.0	1.6	9.7	9.3	158	26.8	62	17.2	4.6	32
29...	1330	1028	9813	10.0	1.6	.4	7.0	202	11.4	66	18.6	4.8	70
JUN 2002													
24...	1000	1028	9813	1.0	3.8	9.6	6.9	135	21.8	54	15.6	3.7	30
24...	1030	1028	9813	10.0	3.8	.2	7.0	173	10.4	61	17.1	4.3	53
01555124 Faylor Lake at Beaver Springs, PA (LAT 40 45 47N LONG 077 12 51W)													
JUL 2002													
31...	1010	1028	9813	1.0	.8	6.5	8.9	182	27.0	77	20.4	6.2	74
31...	1015	1028	9813	2.0	.8	1.0	7.4	225	23.6	85	25.2	5.4	84
JUN 2003													
25...	0900	1028	9813	1.0	1.0	12.4	8.7	140	23.5	55	16.0	3.7	46
25...	0930	1028	9813	2.0	1.0	3.0	7.3	149	15.4	55	15.9	3.7	45

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Alum- inum, water, fltrd, µg/L (01106)	Alum- inum, water, recover -able, µg/L (01105)	Copper, water, fltrd, µg/L (01040)	Copper, water, recover -able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, recover -able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)
01534380 Crystel Lake near Dandaff, PA (LAT 41 38 08N LONG 075 31 55W)													
AUG 2003													
05...	7.0	2	<.02	<.01	.21	3.0	11	21	<4	<4	<20	80	<1.0
05...	7.0	<2	<.02	<.01	.50	2.7	<10	18	<4	<4	<20	120	<1.0
01541340 Glendale Lake, PA (LAT 40 39 00N LONG 078 32 00W)													
JUL 2003													
30...	15.1	10	<.02	.01	.52	2.9	24	35	<4	<4	<20	50	<1.0
30...	13.8	10	.42	.01	.74	3.0	19	100	<4	<4	310	840	<1.0
01543896 George B. Stevenson Lake near First Fork, PA (LAT 41 24 35N LONG 078 01 15W)													
JUL 2002													
30...	7.6	6	<.02	.03	.39	2.5	22	44	<4	<4	20	190	<1.0
30...	7.5	14	.02	.04	.45	2.0	18	88	<4	<4	100	650	<1.0
JUN 2003													
23...	8.2	<2	<.02	.01	.28	1.4	23	23	<4	<4	70	170	<1.0
23...	8.0	<2	<.02	.01	.31	1.5	<10	28	<4	<4	90	240	<1.0
01544800 Kettle Creek Lake at Kettle Creek Dam, PA (LAT 41 21 37N LONG 077 55 27W)													
JUL 2002													
30...	7.1	4	<.02	.02	.22	1.8	18	23	<4	<4	40	140	<1.0
30...	6.7	<2	.23	.05	.48	2.0	18	46	<4	100	250	720	<1.0
JUN 2003													
23...	7.4	<2	<.02	.02	.40	1.4	<10	25	<4	<4	60	130	<1.0
23...	7.1	4	.03	.02	.33	1.7	<10	36	<4	<4	70	210	<1.0
01552070 Rose Valley Lake near Bodines, PA (LAT 41 23 12N LONG 076 59 54W)													
SEP 2002													
17...	8.4	2	<.02	.03	.34	3.6	19	20	<4	<4	30	180	<1.0
17...	8.2	<2	<.02	.02	.36	3.5	20	22	<4	<4	50	390	<1.0
AUG 2003													
26...	7.6	<2	<.02	.01	.29	2.8	<10	<10	<4	<4	50	100	<1.0
26...	7.5	<2	.04	.01	.32	2.9	<10	<10	<4	<4	60	120	<1.0
01553650 Lake Chulliaqueque near White Hall, PA (LAT 41 06 08N LONG 076 39 41W)													
AUG 2002													
24...	28.7	16	<.02	.03	2.1	5.8	--	23	--	<4	--	4400	--
24...	10.7	10	1.7	.03	.42	4.3	--	50	--	<4	--	30	--
JUN 2003													
24...	21.7	<2	<.02	.02	.77	3.0	16	38	<4	<4	30	90	<1.0
24...	16.0	8	1.2	.04	1.6	4.3	<10	160	<4	<4	3900	4300	<1.0
01555124 Faylor Lake at Beaver Springs, PA (LAT 40 45 47N LONG 077 12 51W)													
JUL 2002													
31...	8.2	12	<.02	.08	.68	5.1	28	84	<4	<4	30	560	<1.0
31...	7.7	20	.26	.11	.88	5.0	22	210	<4	<4	100	1100	<1.0
JUN 2003													
25...	9.0	8	<.02	.03	1.7	4.8	13	120	<4	<4	160	390	<1.0
25...	9.0	2	<.02	.03	2.1	4.8	14	140	<4	<4	160	420	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Zinc, water, recover fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
01534380 Crystel Lake near Dandaff, PA (LAT 41 38 08N LONG 075 31 55W)					
AUG 2003					
05...	<1.0	<2	10	<5.0	<5.0
05...	<1.0	<2	200	<5.0	<5.0
01541340 Glendale Lake, PA (LAT 40 39 00N LONG 078 32 00W)					
JUL 2003					
30...	<1.0	4	36	<5.0	<5.0
30...	<1.0	2000	2300	<5.0	<5.0
01543896 George B. Stevenson Lake near First Fork, PA (LAT 41 24 35N LONG 078 01 15W)					
JUL 2002					
30...	<1.0	<2	33	<5.0	<5.0
30...	<1.0	100	170	<5.0	<5.0
JUN 2003					
23...	<1.0	23	26	<5.0	<5.0
23...	<1.0	36	39	<5.0	<5.0
01544800 Kettle Creek Lake at Kettle Creek Dam, PA (LAT 10 21 37N LONG 077 55 27W)					
JUL 2002					
30...	<1.0	6	22	<5.0	<5.0
30...	3.5	170	240	<5.0	<5.0
JUN 2003					
23...	<1.0	17	28	6.5	<5.0
23...	<1.0	32	40	<5.0	<5.0
01552070 Rose Valley Lake near Bodines, PA (LAT 41 23 12N LONG 076 59 54W)					
SEP 2002					
17...	<1.0	<2	72	<5.0	<5.0
17...	<1.0	<2	140	<5.0	<5.0
AUG 2003					
26...	<1.0	8	32	<5.0	<5.0
26...	<1.0	41	67	<5.0	6.2
01553650 Lake Chulliaqueque near White Hall, PA (LAT 41 06 08N LONG 076 39 41W)					
AUG 2002					
27...	<1.0	--	2	--	<5.0
27...	<1.0	--	4400	--	<5.0
JUN 2003					
24...	<1.0	<2	8	<5.0	<5.0
24...	<1.0	2600	2600	<5.0	<5.0
01555124 Faylor Lake at Beaver Springs, PA (LAT 40 45 47N LONG 077 12 51W)					
AUG 2002					
28...	<1.0	3	210	<5.0	13
28...	<1.0	1400	1500	<5.0	<5.0
JUN 2003					
25...	<1.0	6	40	<5.0	<5.0
25...	<1.0	6	40	<5.0	5.3

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Sampling depth, meters (00098)	Transparency Secchi disc, meters (00078)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium, water, unfltrd recoverable, mg/L (00916)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)
01555142 Walker Lake at Troxelville, PA (LAT 40 47 48N LONG 077 11 47W)													
JUL 2002													
31...	1200	1028	9813	1.0	.5	10.1	9.1	136	27.4	55	15.8	3.8	46
31...	1210	1028	9813	8.0	.5	1.1	6.7	162	13.7	53	14.7	3.9	56
JUN 2003													
25...	1230	1028	9813	1.0	1.8	11.3	8.1	107	20.5	42	12.5	2.7	33
25...	1300	1028	9813	7.0	1.8	.1	6.8	124	11.5	45	13.3	2.8	40
01564950 Laurel Creek Reservoir near Milroy, PA (LAT 40 43 48N LONG 077 37 45W)													
JUL 2002													
15...	1015	1028	9813	1.0	6.7	8.7	7.1	44	22.2	14	3.4	1.4	9
15...	1030	1028	9813	28.0	6.7	9.2	5.7	167	25.0	17	4.2	1.6	20
JUN 2003													
30...	1100	1028	9813	1.0	5.0	9.9	7.0	62	21.4	13	3.0	1.3	7
30...	1130	1028	9813	29.0	5.0	1.7	6.1	110	5.4	17	4.1	1.7	6
01569200 Letterkenney Reservoir near Roxbury, PA (LAT 40 06 52N LONG 077 41 18W)													
AUG 2002													
07...	1012	1028	9813	1.0	5.5	7.6	7.7	237	27.4	42	12.5	2.5	36
07...	1020	1028	9813	7.0	5.5	.0	6.5	237	19.8	40	12.0	2.4	36
JUL 2003													
21...	1304	1028	9813	1.0	3.8	8.5	7.7	--	25.6	28	8.1	1.9	26
21...	1313	1028	9813	8.0	3.8	4.6	6.2	--	14.7	18	5.0	1.4	17
01569765 Opossum Lake near Plainfield, PA (LAT 40 13 32N LONG 077 16 32W)													
AUG 2002													
05...	1050	1028	9813	1.0	1.8	8.6	9.2	375	29.5	38	7.7	4.6	32
05...	1100	1028	9813	6.0	1.8	.0	5.4	516	11.2	54	12.2	5.8	72
JUL 2003													
21...	1038	1028	9813	1.0	1.7	11.8	9.2	--	26.6	35	7.3	4.2	31
21...	1051	1028	9813	6.0	1.7	.2	4.7	--	9.7	41	9.0	4.6	49
01603700 Lake Koon near Cooks Mills, PA (LAT 39 45 52N LONG 78 39 54W)													
AUG 2002													
06...	1055	1028	9813	1.0	3.8	9.0	8.6	321	26.8	66	20.8	3.5	48
06...	1105	1028	9813	13.0	3.8	--	6.6	--	--	79	25.1	3.9	56
JUL 2003													
28...	1157	1028	9813	1.0	5.2	7.6	8.0	168	25.2	83	26.2	4.2	68
28...	1205	1028	9813	14.0	5.2	.5	6.4	145	4.8	75	23.5	4.1	66
01603800 Lake Gordon near Cooks Mills, PA (LAT 39 44 52N LONG 078 40 34W)													
AUG 2002													
06...	1255	1028	9813	1.0	3.5	8.0	7.6	317	24.8	77	24.7	3.8	56
06...	1310	1028	9813	13.0	3.5	6.5	7.2	315	21.0	78	24.8	3.8	56
JUL 2003													
28...	1337	1028	9813	1.0	2.9	7.8	7.7	163	24.8	78	24.7	3.9	65
28...	1339	1028	9813	15.0	2.9	6.4	7.5	170	24.1	79	25.0	4.1	66

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Sulfate water, fltrd, mg/L (00945)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Alum- inum, water, fltrd, µg/L (01106)	Alum- inum, water, recover -able, µg/L (01105)	Copper, water, fltrd, µg/L (01040)	Copper, water, recover -able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, recover -able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)
01555142 Walker Lake at Troxelville, PA (LAT 40 47 48N LONG 077 11 47W)													
JUL 2002													
31...	11.6	8	<.02	.03	.78	5.3	48	310	<4	<4	<20	300	<1.0
31...	6.6	12	1.2	.07	.80	5.4	33	450	<4	<4	4400	3400	<1.0
JUN 2003													
25...	8.5	6	<.02	.02	1.31	4.6	<10	200	<4	<4	100	330	<1.0
25...	8.8	20	.72	.06	1.35	4.7	22	490	<4	<4	120	1700	<1.0
01564950 Laurel Creek Reservoir near Milroy, PA (LAT 40 43 48N LONG 077 37 45W)													
JUL 2002													
15...	6.5	6	<.02	<.01	.14	1.7	32	48	<4	<4	20	40	<1.0
15...	6.6	<2	.03	.01	.35	1.4	22	38	<4	<4	35	120	<1.0
JUN 2003													
30...	6.5	<2	<.02	.02	.10	1.4	42	52	<4	<4	20	30	<1.0
30...	6.7	<2	.03	.02	.16	1.3	28	61	<4	<4	50	170	<1.0
01569200 Letterkenney Reservoir near Roxbury, PA (LAT 40 06 52N LONG 077 41 18W)													
AUG 2002													
07..	4.4	<2	<.02	.01	.17	2.8	11	12	<4	<4	60	100	<1.0
07...	4.4	2	<.02	<.01	.18	2.8	<10	13	<4	<4	30	340	<1.0
JUL 2003													
21...	5.1	<2	<.02	.01	.26	2.5	28	35	<4	<4	91	150	<1.0
21...	5.7	<2	<.19	.01	.53	2.9	44	71	<4	<4	270	460	1.0
01569765 Opossum Lake near Plainfield, PA (LAT 40 13 32N LONG 077 16 32W)													
AUG 2002													
05..	10.1	<2	<.02	.02	.45	5.0	<10	14	<4	<4	50	170	<1.0
05...	7.7	<2	3.6	.14	2.41	6.8	<10	18	<4	<4	4600	5800	<1.0
JUL 2003													
21...	8.8	6	<.02	.02	.63	4.6	19	22	<4	<4	110	230	<1.0
21...	7.0	8	.86	.03	1.24	4.4	20	48	<4	<4	3700	3300	<1.0
01603700 Lake Koon near Cooks Mills, PA (LAT 39 45 52N LONG 078 39 54W)													
AUG 2002													
06...	13.0	<2	<.02	<.01	.34	3.7	46	57	<4	<4	30	60	<1.0
06...	15.9	<2	.12	.02	.67	3.5	37	40	<4	<4	190	610	<1.0
JUL 2003													
28...	11.3	8	<.02	<.01	.55	3.5	39	24	<4	<4	60	40	<1.0
28...	34.2	8	.74	.04	.96	4.6	19	25	<4	<4	3800	2700	<1.0
01603800 Lake Gordon near Cooks Mills, PA (LAT 39 44 52N LONG 078 40 34W)													
AUG 2002													
06...	14.5	<2	<.02	.01	.47	3.1	<10	<10	<4	<4	20	60	<1.0
06...	14.7	2	.05	.02	.54	3.2	<10	17	<4	<4	50	200	<1.0
JUL 2003													
28...	11.1	2	<.02	.02	.48	3.4	<10	21	<4	<4	<20	70	<1.0
28...	11.1	<2	<.02	.01	.46	3.1	<10	11	<4	<4	<20	70	<1.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
MISCELLANEOUS LAKE ANALYSES

Date	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, unfltrd recover -able, µg/L (01056)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Zinc, water, unfltrd recover -able, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
01555142 Walker Lake at Troxelville, PA (LAT 40 47 48N LONG 077 11 47W)					
JUL 2002					
31...	<1.0	6.9	30	<5.0	<5.0
31...	<1.0	1200	1100	<5.0	<5.0
JUN 2003					
25...	<1.0	<2.0	20	<5.0	<5.0
25...	<1.0	600	660	<5.0	<5.0
01564950 Laurel Creek Reservoir near Milroy, PA (LAT 40 43 48N LONG 077 37 45W)					
JUL 2002					
15...	<1.0	26	35	<5.0	<5.0
15...	1.4	55	71	<5.0	<5.0
JUN 2003					
30...	<1.0	22	23	<5.0	<5.0
30...	<1.0	92	100	5.3	5.0
01569200 Letterkenney Reservoir near Roxbury, PA (LAT 40 06 52 N LONG 077 41 18W)					
AUG 2002					
07...	<1.0	<2.0	16	<5.0	<5.0
07...	<1.0	640	350	<5.0	<5.0
JUL 2003					
21...	<1.0	3.3	21	<5.0	<5.0
21...	<1.0	740	830	<5.0	<5.0
01569765 Opossum Lake near Plainfield, PA (LAT 40 13 32N LONG 077 16 32W)					
AUG 2002					
05...	<1.0	<2.0	35	<5.0	<5.0
05...	<1.0	6500	6600	<5.0	<5.0
JUL 2003					
21...	<1.0	5.2	50	<5.0	<5.0
21...	<1.0	3300	3300	<5.0	<5.0
01603700 Lake Koon near Cooks Mills, PA (LAT 39 45 52N LONG 078 39 54W)					
AUG 2002					
06...	<1.0	3.8	15	<5.0	5.1
06...	<1.0	440	520	<5.0	<5.0
JUL 2003					
28...	<1.0	3.9	10	<5.0	<5.0
28...	<1.0	1800	2000	<5.0	<5.0
01603800 Lake Gordon near Cooks Mills, PA (LAT 39 44 52N LONG 078 40 34W)					
AUG 2002					
06...	<1.0	7.9	76	<5.0	<5.0
06...	<1.0	62	310	<5.0	19
JUL 2003					
28...	<1.0	2.3	99	<5.0	<5.0
28...	<1.0	18	170	<5.0	<5.0

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. A dash (--) indicates there were no observations of the organism in the sample. Samples represent counts per 100 (approximate) subsamples.

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01503000	01531000	01531490	01532950	01534090	01537700	01538600
Date	9/5/02	8/9/02	8/7/02	9/4/02	8/22/02	8/21/02	8/21/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Platyhelminthes							
Turbellaria (FLATWORMS)							
Tricladida							
Dugesiidae							
<u>Dugesia</u> sp	24	--	--	1	--	--	--
Planariidae							
Nematoda (NEMATODES)	--	--	--	1	--	--	--
Mollusca							
Gastropoda (SNAILS)							
Basommatophora							
Ancylidae							
<u>Ferrissia</u> sp	--	--	--	--	--	--	--
Hydrobiidae	1	--	--	--	--	--	--
Lymnaeidae							
<u>Stagnicola</u> sp	--	--	--	--	1	--	--
Physidae							
<u>Aplexa</u> sp	1	--	--	--	--	--	--
Pleuroceridae							
<u>Leptoxis carinata</u>	4	--	--	--	--	--	--
Bivalvia (CLAMS)							
Veneroida							
Corbiculidae							
<u>Corbicula fluminea</u>	--	1	--	--	--	--	--
Sphaeriidae							
<u>Musculum</u> sp	3	--	--	--	--	--	--
<u>Pisidium</u> sp	--	--	--	--	5	--	--
<u>Sphaerium</u> sp	--	1	--	--	1	62	--
Annelida							
Hirudinea (LEECHES)							
Arhynchobdellida							
Erpobdellidae							
<u>Erpobdella</u> sp	--	--	--	--	--	--	--
Oligochaeta (AQUATIC EARTHWORMS)	16	1	--	16	--	--	--
Lumbriculida							
Lumbriculidae							
Tubificida							
Enchytraeidae							
Naididae							
Arthropoda							
Acariformes							
Hydrachnidia (WATER MITES)							
Crustacea							
Amphipoda (SCUDS)							
Gammaridae							
<u>Gammarus</u> sp	--	--	--	--	--	1	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

015400021	01542790	01547400	01547980	01548075	01548085	01549590	Station Number
8/19/02	8/14/02	8/14/02	8/14/02	8/15/02	8/15/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
							Platyhelminthes
							Turbellaria (FLATWORMS)
							Tricladida
							Dugesiidae
--	--	--	--	--	--	--	<u>Dugesia</u> sp
--	--	1	--	9	8	--	Planariidae
--	--	--	--	--	--	--	Nematoda (NEMATODES)
							Mollusca
--	--	--	--	--	--	1	Gastropoda (SNAILS)
							Basommatophora
							Ancylidae
--	--	--	--	--	1	--	<u>Ferrissia</u> sp
--	--	--	--	--	--	--	Hydrobiidae
							Lymnaeidae
--	--	--	--	--	--	--	<u>Stagnicola</u> sp
							Physidae
--	--	--	--	--	--	--	<u>Aplexa</u> sp
							Pleuroceridae
--	--	--	--	--	--	--	<u>Leptoxis carinata</u>
							Bivalvia (CLAMS)
							Veneroida
							Corbiculidae
--	--	--	--	--	--	--	<u>Corbicula fluminea</u>
							Sphaeriidae
--	--	--	--	--	--	--	<u>Musiculum</u> sp
--	--	--	--	--	--	--	<u>Pisidium</u> sp
--	--	--	--	--	--	3	<u>Sphaerium</u> sp
							Annelida
							Hirudinea (LEECHES)
							Arhynchobdellida
							Erpobdellidae
1	--	--	--	--	--	--	<u>Erpobdella</u> sp
--	1	--	--	--	--	7	Oligochaeta (AQUATIC EARTHWORMS)
							Lumbriculida
1	--	1	2	--	--	--	Lumbriculidae
							Tubificida
--	--	--	53	1	2	--	Enchytraeidae
--	--	--	--	7	17	--	Naididae
							Arthropoda
							Acariformes
3	--	--	1	2	4	--	Hydrachnidia (WATER MITES)
							Crustacea
							Amphipoda (SCUDS)
							Gammaridae
--	--	3	--	75	--	--	<u>Gammarus</u> sp

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01503000	01531000	01531490	01532950	01534090	01537700	01538600
Date	9/5/02	8/9/02	8/7/02	9/4/02	8/22/02	8/21/02	8/21/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Crustacea							
Isopoda (AQUATIC SOWBUGS)							
Asellidae							
<u>Caecidotea</u> sp	--	--	--	--	--	1	--
<u>Lirceus</u> sp	--	--	--	--	--	--	--
Decapoda							
Cambaridae (CRAYFISH)	--	--	--	--	--	--	--
Insecta							
Ephemeroptera (MAYFLIES)							
Baetidae							
<u>Acentrella</u> sp	--	--	1	--	1	1	--
<u>Acerpenna</u> sp	--	--	--	1	--	--	--
<u>Baetis</u> sp	9	21	6	2	--	3	--
<u>Heterocloeon</u> sp	1	--	--	--	--	--	--
<u>Plauditus</u> sp	--	--	--	--	--	--	--
<u>Procloeon</u> sp	--	--	--	1	--	--	--
Caenidae							
<u>Caenis</u> sp	2	2	18	7	2	5	--
Ephemerellidae							
<u>Attenella</u> sp	--	--	--	--	--	--	--
<u>Drunella</u> sp	--	--	--	--	--	--	--
<u>Ephemerella</u> sp	--	1	--	--	--	--	--
<u>Serratella</u> sp	1	9	--	4	4	--	--
Heptageniidae							
<u>Epeorus</u> sp	1	--	--	--	--	--	--
<u>Heptagenia</u> sp	--	--	--	--	--	--	--
<u>Leucrocuta</u> sp	2	1	44	26	--	--	--
<u>Stenacron</u> sp	--	--	--	--	--	--	--
<u>Stenonema</u> sp	1	14	40	11	7	3	--
Isonychiidae							
<u>Isonychia</u> sp	--	7	4	30	12	5	--
Leptophlebiidae							
<u>Habrophlebiodes</u> sp	--	--	--	--	11	5	--
<u>Paraleptophlebia</u> sp	--	--	--	2	--	--	--
Potamanthidae							
<u>Anthopotamus</u> sp	5	2	--	--	--	--	--
Tricorythidae							
<u>Tricorythodes</u> sp	--	--	--	1	4	5	--
Odonata (DRAGONFLIES AND DAMSELFLIES)							
Coenagrionidae							
<u>Argia</u> sp	--	--	--	--	1	--	--
<u>Enallagma</u> sp	--	--	1	--	--	--	--
Gomphidae							
<u>Gomphus</u> sp	--	--	--	1	--	--	--
Plecoptera (STONEFLIES)							
Perlidae							
<u>Acroneuria</u> sp	--	--	2	1	--	--	--
<u>Agnatina</u> sp	--	--	--	--	4	1	--
<u>Neoperla</u> sp	--	--	--	--	1	--	--
<u>Paragnetina</u> sp	--	--	1	--	--	--	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

015400021	01542790	01547400	01547980	01548075	01548085	01549590	Station Number
8/19/02	8/14/02	8/14/02	8/14/02	8/15/02	8/15/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
							Crustacea
							Isopoda (AQUATIC SOWBUGS)
							Asellidae
--	--	2	--	--	4	--	<u>Caecidotea</u> sp
--	--	5	--	--	--	--	<u>Lirceus</u> sp
							Decapoda
--	--	--	--	--	--	1	Cambaridae (CRAYFISH)
							Insecta
							Ephemeroptera (MAYFLIES)
							Baetidae
1	--	--	--	--	1	--	<u>Acentrella</u> sp
--	--	--	--	--	2	--	<u>Acerpenna</u> sp
--	--	--	--	--	--	--	<u>Baetis</u> sp
--	--	37	--	33	7	--	<u>Heterocloeon</u> sp
--	--	--	--	--	--	--	<u>Plauditus</u> sp
--	--	--	--	--	20	--	<u>Procloeon</u> sp
							Caenidae
--	--	9	--	--	--	--	<u>Caenis</u> sp
							Ephemerellidae
--	--	--	--	1	--	--	<u>Attenella</u> sp
--	--	--	--	1	--	--	<u>Drunella</u> sp
--	--	--	--	--	--	--	<u>Ephemerella</u> sp
4	--	--	--	--	--	--	<u>Serratella</u> sp
1	--	--	--	--	--	--	Heptageniidae
--	--	--	--	--	--	--	<u>Epeorus</u> sp
--	--	1	--	--	--	--	<u>Heptagenia</u> sp
3	--	6	--	--	--	--	<u>Leucrocuta</u> sp
--	--	--	--	--	1	--	<u>Stenacron</u> sp
3	1	8	--	1	8	37	<u>Stenonema</u> sp
							Isonychiidae
6	--	1	--	--	--	38	<u>Isonychia</u> sp
--	--	--	--	2	--	--	Leptophlebiidae
--	--	--	--	--	--	--	<u>Habrophlebiodes</u> sp
--	--	--	--	--	--	--	<u>Paraleptophlebia</u> sp
							Potamanthidae
--	--	--	--	--	--	--	<u>Anthopotamus</u> sp
							Tricorythidae
1	--	--	--	--	1	--	<u>Tricorythodes</u> sp
							Odonata (DRAGONFLIES AND DAMSELFLIES)
							Coenagrionidae
--	--	--	--	--	--	3	<u>Argia</u> sp
--	--	--	--	--	--	--	<u>Enallagma</u> sp
--	--	--	--	--	--	1	Gomphidae
							Plecoptera (STONEFLIES)
							Perlidae
--	--	--	--	--	--	6	<u>Acroneuria</u> sp
--	--	--	--	--	--	--	<u>Agnatina</u> sp
--	--	--	--	--	--	--	<u>Neoperla</u> sp
1	--	--	--	--	--	--	<u>Paragnetina</u> sp

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01503000	01531000	01531490	01532950	01534090	01537700	01538600
Date	9/5/02	8/9/02	8/7/02	9/4/02	8/22/02	8/21/02	8/21/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Megaloptera							
Corydalidae (FISHFLIES AND DOBSONFLIES)							
<u>Corydalus</u> sp	--	--	--	7	3	--	4
<u>Nigronia</u> sp	--	--	--	--	--	--	1
Sialidae (ALDERFLIES)							
<u>Sialis</u> sp	--	--	1	1	--	1	--
Trichoptera (CADDISFLIES)							
Brachycentridae							
<u>Brachycentrus</u> sp	--	--	--	--	--	--	--
<u>Micrasema</u> sp	--	--	--	--	--	--	--
Glossosomatidae							
<u>Protophila</u> sp	--	2	--	--	--	--	--
Helicopsychidae							
<u>Helicopsyche</u> sp	--	--	1	--	--	--	--
Hydropsychidae							
<u>Cheumatopsyche</u> sp	1	11	2	19	20	29	--
<u>Hydropsyche</u> sp	3	11	7	4	2	--	8
<u>Macrostemum</u> sp	4	2	--	1	11	5	--
<u>Potamyia</u> sp	--	--	--	--	1	--	--
Hydroptilidae							
<u>Hydroptila</u> sp	--	--	3	--	--	--	--
<u>Leucotrichia</u> sp	--	--	7	4	--	--	--
Leptoceridae							
<u>Ceraclea</u> sp	2	--	--	--	--	--	--
Philopotamidae							
<u>Chimarra</u> sp	3	6	2	22	14	18	--
<u>Dolophilodes</u> sp	1	--	--	--	--	--	--
Uenoidae							
<u>Neophylax</u> sp	--	--	--	1	--	--	--
Coleoptera (BEETLES)							
Elmidae (RIFFLE BEETLES)							
<u>Optioservus</u> sp	11	2	--	13	--	1	--
<u>Oulimnius</u> sp	--	--	--	--	--	--	--
<u>Promoresia</u> sp	--	--	--	--	--	--	--
<u>Stenelmis</u> sp	40	2	37	11	61	25	--
Gyrinidae							
<u>Dineutus</u> sp	--	--	--	--	--	--	1
Psephenidae (WATER PENNIES)							
<u>Psephenus</u> sp	--	--	5	15	--	--	--
Diptera (TRUE FLIES)							
Chironomidae (MIDGES)							
	13	33	23	44	4	19	101
Empididae (DANCE FLIES)							
<u>Hemerodromia</u> sp	--	--	--	--	--	--	4
Simuliidae (BLACK FLIES)							
<u>Simulium</u> sp	--	23	--	1	--	1	--
Tabanidae							
	--	--	--	1	--	--	--
Tipulidae (CRANE FLIES)							
<u>Antocha</u> sp	--	--	1	--	--	--	--
Total Organisms	149	152	206	250	172	197	119

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

015400021	01542790	01547400	01547980	01548075	01548085	01549590	Station Number
8/19/02	8/14/02	8/14/02	8/14/02	8/15/02	8/15/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
							Megaloptera
						2	Corydalidae (FISHFLIES AND DOBSO)
--	--	--	--	--	--	--	<u>Corydalis</u> sp
--	--	--	--	--	1	--	<u>Nigronia</u> sp
							Sialidae (ALDERFLIES)
--	--	--	2	--	--	--	<u>Sialis</u> sp
							Trichoptera (CADDISFLIES)
							Brachycentridae
--	--	--	--	7	1	--	<u>Brachycentrus</u> sp
--	--	--	--	3	--	--	<u>Micrasema</u> sp
							Glossosomatidae
--	--	--	--	--	--	--	<u>Protophila</u> sp
							Helicopsychidae
--	--	--	--	--	--	--	<u>Helicopsyche</u> sp
2	--	--	--	--	--	--	Hydropsychidae
24	4	12	1	8	65	11	<u>Cheumatopsyche</u> sp
8	8	13	1	7	38	--	<u>Hydropsyche</u> sp
--	1	--	--	--	--	--	<u>Macrostemum</u> sp
--	--	--	--	--	--	--	<u>Potamyia</u> sp
							Hydroptilidae
1	--	--	--	--	23	--	<u>Hydroptila</u> sp
--	--	--	--	--	--	--	<u>Leucotrichia</u> sp
							Leptoceridae
--	--	--	--	--	--	--	<u>Ceraclea</u> sp
							Philopotamidae
15	5	--	--	--	--	9	<u>Chimarra</u> sp
--	1	--	--	--	--	--	<u>Dolophilodes</u> sp
							Uenoidae
--	--	--	--	--	--	--	<u>Neophylax</u> sp
							Coleoptera (BEETLES)
							Elmidae (RIFFLE BEETLES)
8	--	3	--	19	2	--	<u>Optioservus</u> sp
1	--	--	--	1	--	--	<u>Oulimnius</u> sp
8	--	--	--	--	--	--	<u>Promoresia</u> sp
11	1	3	1	--	1	--	<u>Stenelmis</u> sp
							Gyrinidae
--	1	--	--	--	--	--	<u>Dineutus</u> sp
							Psephenidae (WATER PENNIES)
1	--	--	--	--	--	--	<u>Psephenus</u> sp
							Diptera (TRUE FLIES)
12	13	37	30	72	143	23	Chironomidae (MIDGES)
							Empididae (DANCE FLIES)
--	--	--	8	--	2	--	<u>Hemerodromia</u> sp
							Simuliidae (BLACK FLIES)
--	--	4	--	10	2	--	<u>Simulium</u> sp
--	--	--	--	--	--	--	Tabanidae
							Tipulidae (CRANE FLIES)
--	--	2	--	2	--	--	<u>Antocha</u> sp
116	36	152	99	261	354	142	Total Organisms

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01553005	01553990	01555210	01555859	01556009	01570400	01571505
Date	8/8/02	8/20/02	8/20/02	8/13/02	8/13/02	8/22/02	8/22/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Platyhelminthes							
Turbellaria (FLATWORMS)							
Tricladida							
Planariidae	--	2	--	--	4	3	1
Nematoda (NEMATODES)	--	--	--	--	1	--	--
Mollusca							
Gastropoda (SNAILS)							
Basommatophora							
Ancyliidae							
<u>Ferrissia</u> sp	1	--	--	--	--	--	--
Physidae							
<u>Physa</u> sp	--	--	--	--	--	--	--
Planorbidae							
<u>Planorbella</u> sp	--	--	--	--	--	--	--
Pleuroceridae							
<u>Leptoxis carinata</u>	--	4	--	--	--	2	--
Bivalvia (CLAMS)							
Veneroidea							
Corbiculidae							
<u>Corbicula fluminea</u>	--	1	--	--	4	7	--
Sphaeriidae							
<u>Sphaerium</u> sp	--	19	--	--	--	2	--
Annelida							
Hirudinea (LEECHES)							
Arhynchobdellida							
Erpobdellidae							
<u>Erpobdella punctata</u>	--	--	--	--	--	--	--
Oligochaeta (AQUATIC EARTHWORMS)	2	--	--	--	--	--	--
Lumbricina							
Lumbriculida							
Lumbriculidae	--	--	--	--	--	--	2
Tubificida							
Naididae	--	--	--	--	--	--	--
Tubificidae	--	--	--	--	--	28	1
Arthropoda							
Acariformes							
Hydrachnidia (WATER MITES)	--	--	--	--	--	--	1
Crustacea							
Amphipoda (SCUDS)							
Crangonyctidae							
<u>Crangonyx</u> sp	--	--	1	--	--	--	--
Gammaridae							
<u>Gammarus</u> sp	--	--	--	--	--	43	6
Isopoda (AQUATIC SOWBUGS)							
Asellidae							
<u>Caecidotea</u> sp	--	--	--	--	7	--	--
Decapoda							
Cambaridae (CRAYFISH)							
<u>Orconectes</u> sp	--	--	--	--	1	1	--

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

01573610	01575900	01576003	01576787	01613500	01614500	Station Number
8/27/02	8/27/02	8/28/02	8/26/02	8/12/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
						Platyhelminthes
						Turbellaria (FLATWORMS)
						Tricladida
9	2	3	--	--	--	Planariidae
--	--	--	--	--	--	Nematoda (NEMATODES)
						Mollusca
						Gastropoda (SNAILS)
						Basommatophora
						Ancylidae
--	3	1	--	3	--	<u>Ferrissia</u> sp
						Physidae
5	--	--	--	--	--	<u>Physa</u> sp
						Planorbidae
1	--	--	--	--	--	<u>Planorbella</u> sp
						Pleuroceridae
1	--	--	--	--	--	<u>Leptoxis carinata</u>
						Bivalvia (CLAMS)
						Veneroidea
						Corbiculidae
--	1	--	1	3	1	<u>Corbicula fluminea</u>
1	--	--	--	--	--	Sphaeriidae
--	--	--	1	--	1	<u>Sphaerium</u> sp
						Annelida
						Hirudinea (LEECHES)
						Arhynchobdellida
						Erpobdellidae
--	--	1	--	--	--	<u>Erpobdella punctata</u>
--	--	--	--	--	--	Oligochaeta (AQUATIC EARTHWORMS)
--	--	--	--	--	--	Lumbricina
						Lumbriculida
--	--	--	--	--	--	Lumbriculidae
						Tubificida
--	--	1	1	1	--	Naididae
--	--	--	1	1	--	Tubificidae
						Arthropoda
						Acariformes
1	--	--	1	1	--	Hydrachnidia (WATER MITES)
						Crustacea
						Amphipoda (SCUDS)
						Crangonyctidae
--	--	--	--	--	--	<u>Crangonyx</u> sp
						Gammaridae
30	--	--	--	--	--	<u>Gammarus</u> sp
						Isopoda (AQUATIC SOWBUGS)
						Asellidae
--	--	--	--	--	--	<u>Caecidotea</u> sp
						Decapoda
						Cambaridae (CRAYFISH)
--	--	--	--	--	--	<u>Orconectes</u> sp

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01553005	01553990	01555210	01555859	01556009	01570400	01571505
Date	8/8/02	8/20/02	8/20/02	8/13/02	8/13/02	8/22/02	8/22/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Insecta							
Ephemeroptera (MAYFLIES)							
Baetidae	--	--	--	--	--	--	--
<u>Baetis</u> sp	6	2	22	--	15	26	14
<u>Heterocloeon</u> sp	--	--	--	--	--	--	--
<u>Procloeon</u> sp	--	--	--	--	--	2	--
Caenidae							
<u>Caenis</u> sp	--	4	2	--	2	9	2
Ephemerellidae							
<u>Serratella</u> sp	5	--	12	--	40	--	--
Heptageniidae							
<u>Leucrocuta</u> sp	38	1	6	--	21	2	--
<u>Stenacron</u> sp	--	--	--	--	--	2	--
<u>Stenonema</u> sp	25	2	29	--	20	9	9
Isonychiidae							
<u>Isonychia</u> sp	36	31	10	--	7	2	2
Potamanthidae							
<u>Anthopotamus</u> sp	--	1	--	--	--	--	--
Tricorythidae							
<u>Tricorythodes</u> sp	--	7	--	--	--	15	2
Odonata (DRAGONFLIES AND DAMSELFLIES)							
Coenagrionidae							
<u>Argia</u> sp	--	--	--	--	1	2	--
Plecoptera (STONEFLIES)							
Leuctridae							
<u>Leuctra</u> sp	1	--	--	--	--	--	--
Perlidae							
<u>Acroneuria</u> sp	3	--	--	--	--	--	--
<u>Agnatina</u> sp	1	2	--	--	--	--	--
Megaloptera							
Corydalidae (FISHFLIES AND DOBSONFLIES)							
<u>Chauliodes</u> sp	--	--	--	--	--	--	--
<u>Corydalus</u> sp	--	--	1	--	--	--	--
Trichoptera (CADDISFLIES)							
Glossosomatidae							
<u>Protoptila</u> sp	--	2	--	--	--	--	--
Helicopsychidae							
<u>Helicopsyche</u> sp	--	--	--	--	--	--	--
Hydropsychidae							
<u>Cheumatopsyche</u> sp	5	36	8	27	1	--	5
<u>Hydropsyche</u> sp	6	2	7	11	--	--	1
<u>Macrostemum</u> sp	--	9	--	--	--	--	--
Hydroptilidae							
<u>Hydroptila</u> sp	--	--	--	2	--	--	7
<u>Leucotrichia</u> sp	--	--	--	--	2	--	--
Limnephilidae							
<u>Pycnopsyche</u> sp	--	--	--	--	--	--	--
Philopotamidae							
<u>Chimarra</u> sp	5	41	8	--	10	5	1

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

01573610	01575900	01576003	01576787	01613500	01614500	Station Number
8/27/02	8/27/02	8/28/02	8/26/02	8/12/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
Insecta						
Ephemeroptera (MAYFLIES)						
Baetidae						
2	--	--	--	--	--	<u>Baetis</u> sp
8	8	10	13	1	21	<u>Heterocloeon</u> sp
--	--	3	--	--	--	<u>Procloeon</u> sp
--	--	1	--	--	--	
Caenidae						
--	31	4	2	3	12	<u>Caenis</u> sp
Ephemerellidae						
--	1	--	--	--	4	<u>Serratella</u> sp
Heptageniidae						
7	--	--	--	--	8	
2	--	2	3	1	5	<u>Leucrocuta</u> sp
--	--	1	--	--	--	<u>Stenacron</u> sp
17	5	12	12	3	5	<u>Stenonema</u> sp
Isonychiidae						
4	--	--	2	2	4	<u>Isonychia</u> sp
Potamanthidae						
6	--	4	1	--	7	<u>Anthopotamus</u> sp
Tricorythidae						
15	--	1	4	--	12	<u>Tricorythodes</u> sp
Odonata (DRAGONFLIES AND DAMSELFLIES)						
Coenagrionidae						
--	--	14	1	--	--	<u>Argia</u> sp
Plecoptera (STONEFLIES)						
Leuctridae						
--	--	--	--	--	--	<u>Leuctra</u> sp
Perlidae						
--	--	--	--	--	--	<u>Acroneuria</u> sp
--	--	1	--	--	--	<u>Agnetina</u> sp
Megaloptera						
Corydalidae (FISHFLIES AND DOBSONFLIES)						
--	--	--	--	1	--	<u>Chauliodes</u> sp
--	--	--	7	1	--	<u>Corydalis</u> sp
Trichoptera (CADDISFLIES)						
Glossosomatidae						
--	--	--	--	--	--	<u>Protoptila</u> sp
Helicopsychidae						
1	--	--	1	--	--	<u>Helicopsyche</u> sp
Hydropsychidae						
--	--	--	--	--	15	
13	3	--	2	14	19	<u>Cheumatopsyche</u> sp
2	1	3	--	1	--	<u>Hydropsyche</u> sp
--	--	--	--	--	--	<u>Macrostemum</u> sp
Hydroptilidae						
12	--	--	3	--	10	<u>Hydroptila</u> sp
--	--	--	--	--	--	<u>Leucotrichia</u> sp
Limnephilidae						
--	1	--	--	--	--	<u>Pycnopsyche</u> sp
Philopotamidae						
8	--	11	1	13	--	<u>Chimarra</u> sp

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01553005	01553990	01555210	01555859	01556009	01570400	01571505
Date	8/8/02	8/20/02	8/20/02	8/13/02	8/13/02	8/22/02	8/22/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)							
Rhyacophilidae							
<u>Rhyacophila</u> sp	--	--	--	1	--	--	--
Lepidoptera (MOTHS AND BUTTERFLIES)							
Pyralidae							
<u>Petrophila</u> sp	--	--	--	--	--	--	--
Coleoptera (BEETLES)							
Elmidae (RIFFLE BEETLES)							
<u>Microcylloepus</u> sp	--	--	--	--	--	--	--
<u>Optioservus</u> sp	1	1	9	--	8	--	15
<u>Stenelmis</u> sp	3	21	24	2	30	14	12
Gyrinidae							
<u>Dineutus</u> sp	2	--	--	--	--	--	--
Psephenidae (WATER PENNIES)							
<u>Psephenus</u> sp	3	--	7	--	14	--	--
Diptera (TRUE FLIES)							
Chironomidae (MIDGES)							
Chironomidae	20	8	1	29	9	15	13
Empididae (DANCE FLIES)							
<u>Hemerodromia</u> sp	--	--	--	4	--	--	--
Simuliidae (BLACK FLIES)							
<u>Simulium</u> sp	--	--	1	--	--	--	--
Tipulidae (CRANE FLIES)							
<u>Antocha</u> sp	--	--	--	1	--	--	--
<u>Hexatoma</u> sp	1	--	--	--	--	--	--
Total Organisms	164	196	148	92	208	189	95

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

01573610	01575900	01576003	01576787	01613500	01614500	Station Number
8/27/02	8/27/02	8/28/02	8/26/02	8/12/02	8/12/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
						Trichoptera (CADDISFLIES)
						Rhyacophilidae
--	--	--	--	--	--	<u>Rhyacophila</u> sp
--	--	--	--	--	2	Lepidoptera (MOTHS AND BUTTERFLIES)
						Pyralidae
1	--	1	1	--	--	<u>Petrophila</u> sp
						Coleoptera (BEETLES)
						Elmidae (RIFFLE BEETLES)
--	--	--	--	--	1	<u>Microcyloopus</u> sp
36	4	1	2	22	18	<u>Optioservus</u> sp
62	29	11	56	16	17	<u>Stenelmis</u> sp
						Gyrinidae
--	--	--	--	--	--	<u>Dineutus</u> sp
						Psephenidae (WATER PENNIES)
4	8	6	4	3	3	<u>Psephenus</u> sp
1	--	--	--	--	--	Diptera (TRUE FLIES)
50	12	5	33	4	113	Chironomidae (MIDGES)
						Empididae (DANCE FLIES)
--	--	1	--	--	--	<u>Hemerodromia</u> sp
						Simuliidae (BLACK FLIES)
--	--	--	--	--	--	<u>Simulium</u> sp
						Tipulidae (CRANE FLIES)
--	1	--	--	--	--	<u>Antocha</u> sp
--	--	--	--	--	--	<u>Hexatoma</u> sp
299	110	98	153	94	278	Total Organisms

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
PENNSYLVANIA WATER-QUALITY NETWORK**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using rapid bioassessment protocols for benthic macroinvertebrates using a D-Frame net with a mesh size of 500 µm. A dash (-) indicates there were no observations of the organism in the sample. Samples represent counts per 200 (approximate) subsamples.

Station Number	01533610	01539350	01553430	01554600	01564515	01567795	01573750	01577180
Date	3/29/02	4/2/02	4/11/02	4/11/02	4/10/02	4/17/02	4/17/02	4/12/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Platyhelminthes								
Turbellaria (FLATWORMS)								
Tricladida								
Planariidae	--	1	--	--	--	--	--	--
Mollusca								
Gastropoda (SNAILS)								
Basommatophora								
Ancyliidae								
<u>Ferrissia</u> sp	--	--	--	--	1	--	--	--
Lymnaeidae								
<u>Fossaria</u> sp	--	--	--	--	--	1	--	--
Physidae								
<u>Physa</u> sp	--	--	--	--	--	5	--	--
Planorbidae								
<u>Planorbella</u> sp	--	--	--	--	--	--	1	--
Bivalvia (CLAMS)								
Veneroidea								
Corbiculidae								
<u>Corbicula fluminea</u>	--	--	--	--	3	--	--	--
Sphaeriidae								
<u>Sphaerium</u> sp	--	--	--	4	3	--	--	--
Annelida								
Oligochaeta (AQUATIC EARTHWORMS)								
Lumbricina	--	--	--	--	1	--	--	--
Tubificida								
Naididae	--	1	2	--	--	--	1	1
Tubificidae	--	--	--	--	--	6	1	--
Arthropoda								
Acariformes								
Hydrachnidia (WATER MITES)	--	--	7	1	--	3	--	--
Crustacea								
Amphipoda (SCUDS)								
Gammaridae								
<u>Gammarus</u> sp	--	--	--	6	--	94	--	--
Isopoda (AQUATIC SOWBUGS)								
Asellidae								
<u>Lirceus</u> sp	--	--	--	--	--	24	--	--
Insecta								
Ephemeroptera (MAYFLIES)								
Baetidae								
<u>Acentrella</u> sp	--	1	--	--	--	--	--	5
<u>Baetis</u> sp	2	1	2	11	1	7	--	1
Caenidae								
<u>Caenis</u> sp	--	--	--	--	1	--	--	--
Ephemerellidae								
<u>Drunella</u> sp	6	13	--	14	--	1	11	68
<u>Ephemerella</u> sp	11	10	34	6	1	8	51	34
<u>Eurylophella</u> sp	1	--	1	--	1	--	1	--
<u>Serratella</u> sp	--	12	--	--	19	--	7	--

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BIOLOGICAL DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
BENTHIC MACROINVERTEBRATES

Station Number	01533610	015539350	01553430	01554600	01564515	01567795	01573750	01577180
Date	3/29/02	4/2/02	4/11/02	4/11/02	4/10/02	4/17/02	4/17/02	4/12/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Ephemeroptera (MAYFLIES)								
Ephemeriidae								
<u>Ephemer</u> sp	--	2	--	--	--	--	--	--
Heptageniidae								
<u>Cinygmula</u> sp	20	2	1	--	--	--	--	--
<u>Epeorus</u> sp	39	6	7	--	--	--	18	10
<u>Leucrocuta</u> sp	1	5	1	--	--	--	--	--
<u>Rhithrogena</u> sp	3	--	--	--	--	--	--	--
<u>Stenacron</u> sp	--	--	--	--	1	--	--	--
<u>Stenonema</u> sp	--	2	7	2	16	--	16	5
Isonychiidae								
<u>Isonychia</u> sp	--	3	--	--	2	--	7	3
Leptophlebiidae								
<u>Paraleptophlebia</u> sp	9	9	6	--	--	--	9	1
Odonata								
Coenagrionidae								
<u>Argia</u> sp	--	--	--	--	1	--	--	--
Gomphidae								
<u>Lanthus</u> sp	--	1	1	--	--	--	--	--
Plecoptera (STONEFLIES)								
Chloroperlidae								
<u>Sweltsa</u> sp	4	--	1	--	--	--	--	--
Leuctridae								
<u>Leuctra</u> sp	6	--	--	--	--	--	1	1
Nemouridae								
<u>Amphinemura</u> sp	1	--	8	--	--	--	1	3
Perlidae								
<u>Acroneuria</u> sp	1	3	1	--	2	--	11	1
<u>Agnetina</u> sp	6	1	--	--	2	--	1	--
<u>Perlesta</u> sp	--	--	--	--	3	--	--	--
Perlodidae								
<u>Isoperla</u> sp	2	1	3	--	--	--	--	4
<u>Remenus</u> sp	--	--	--	--	--	--	2	--
Pteronarcyidae								
<u>Pteronarcys</u> sp	--	--	2	--	--	--	--	--
Taeniopterygidae								
<u>Taenionema</u> sp	6	1	--	--	--	--	--	--
Megaloptera								
Corydalidae								
<u>Nigronia</u> sp	--	2	1	--	--	--	2	2
Trichoptera (CADDISFLIES)								
Brachycentridae								
<u>Micrasema</u> sp	--	--	--	4	1	--	3	--
Glossosomatidae								
<u>Agapetus</u> sp	--	--	--	3	--	--	--	--
Helicopsychidae								
<u>Helicopsyche</u> sp	--	--	--	--	1	--	--	--
Hydropsychidae								
<u>Cheumatopsyche</u> sp	3	14	6	6	14	1	7	5
<u>Diplectrona</u> sp	--	--	9	--	--	--	--	1
<u>Hydropsyche</u> sp	3	6	4	20	5	--	--	14
Hydroptilidae								
<u>Hydroptila</u> sp	--	--	1	--	--	--	--	--
<u>Leucotrichia</u> sp	--	--	--	--	1	--	--	--

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Station Number	01533610	01539350	01553430	01554600	01564515	01567795	01573750	01577180
Date	3/29/02	4/2/02	4/11/02	4/11/02	4/10/02	4/17/02	4/17/02	4/12/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)								
Lepidostomatidae								
<u>Lepidostoma</u> sp	--	--	1	--	1	--	2	--
Leptoceridae								
<u>Ceraclea</u> sp	--	1	--	--	--	--	--	--
Limnephilidae								
<u>Pycnopsyche</u> sp	--	--	--	--	1	--	--	--
Odontoceridae								
<u>Psilotreta</u> sp	4	--	--	--	--	--	--	--
Philopotamidae								
<u>Chimarra</u> sp	--	23	--	--	27	--	--	--
<u>Dolophilodes</u> sp	1	1	3	--	--	--	--	4
Rhyacophilidae								
<u>Rhyacophila</u> sp	3	1	5	1	--	--	2	3
Uenoidae								
<u>Neophylax</u> sp	4	4	--	8	--	--	1	--
Coleoptera (BEETLES)								
Dryopidae								
<u>Helichus</u> sp	--	--	--	--	--	--	1	--
Elmidae (RIPPLE BEETLES)								
<u>Optioservus</u> sp	1	5	--	56	14	13	--	5
<u>Oulimnius</u> sp	1	--	11	--	--	--	30	--
<u>Promoresia</u> sp	--	--	25	--	4	--	12	8
<u>Stenelmis</u> sp	--	--	--	--	63	--	--	--
Psephenidae (WATER PENNIES)								
<u>Psephenus</u> sp	--	1	--	--	9	--	--	--
Diptera (TRUE FLIES)								
Ceratopogonidae (BITING MIDGES)								
	--	--	1	--	2	--	--	--
Chironomidae (MIDGES)								
	16	33	73	54	29	45	78	20
Empididae (DANCE FLIES)								
<u>Chelifera</u> sp	1	2	1	1	--	--	3	--
<u>Hemerodromia</u> sp	--	4	1	--	4	--	--	--
Simuliidae (BLACK FLIES)								
<u>Prosimulium</u> sp	4	10	24	--	1	--	7	--
<u>Simulium</u> sp	--	--	--	--	--	--	--	3
Tipulidae (CRANE FLIES)								
<u>Antocha</u> sp	3	3	--	--	--	--	1	9
<u>Dicranota</u> sp	--	--	1	--	--	--	--	--
<u>Hexatoma</u> sp	10	2	--	2	--	--	--	--
<u>Limnophila</u> sp	--	--	--	1	--	--	--	--
<u>Tipula</u> sp	--	--	1	--	1	--	--	--
Total Organisms	172	207	252	202	236	208	280	311