

**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, and 26 reference stream sites, and 27 lakes distributed across the Commonwealth. This report contains only those sites in the Ohio or St. Lawrence River basins. The locations of these sites can be found in figures 4-5. Other data for the WQN can be found in the annual Water Data Reports PA-03-1 and PA-03-2.

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 macroinvertebrates 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 five years; and then a different set of 15-20 lakes is sampled for five 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 Ohio or St. Lawrence River basins. The locations of these sites can be found in figures 4-5.

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)
^a 03010500	807	Allegheny River at Eldred, PA	41°57'48"	78°23'11"	550
03010956	858	Tunungwant Creek at Bradford, PA	41°57'44"	78°37'30"	138
03012600	866	Allegheny River at Warren, PA	41°49'28"	79°07'09"	2,223
^a 03015000	832	Conewango Creek at Russell, PA	41°56'17"	79°08'00"	816
^a 03015500	831	Brokenstraw Creek at Youngsville, PA	41°51'09"	79°19'03"	321
^a 03016000	805	Allegheny River at West Hickory, PA	41°34'15"	79°24'29"	3,660
03017500	830	Tionesta Creek at Lynch, PA	41°36'07"	79°03'01"	233
03017800	871	Minister Creek at Truemans, PA	41°37'16"	79°09'11"	10.2
03020449	873	West Branch Caldwell Creek near Grand Valley, PA	41°41'40"	79°34'16"	18.1
^a 03020500	868	Oil Creek at Rouseville, PA	41°28'54"	79°41'44"	300
03022000	869	French Creek at Venango, PA	41°46'19"	80°06'29"	597
^a 03023100	846	French Creek at Meadville, PA	41°37'57"	80°09'35"	788
03025490	845	French Creek at Franklin, PA	41°24'06"	79°49'54"	1,237
03026175	867	Allegheny River at Kennerdell, PA	41°15'51"	79°50'29"	6,266
^a 03029500	822	Clarion River at Cooksburg, PA	41°19'50"	79°12'33"	807
03030852	843	Clarion River at Callensburg, PA	41°07'47"	79°33'18"	1,163
^a 03031500	803	Allegheny River at Parker, PA	41°06'02"	79°40'53"	7,671
03031505	875	Silver Creek at Walley Mill near North Washington, PA	41°02'39"	79°46'36"	5.50
^a 03032500	820	Redbank Creek at St. Charles, PA	40°59'40"	79°23'40"	528
^a 03034000	861	Mahoning Creek at Punxsutawney, PA	40°56'21"	79°00'31"	158
^a 03036500	802	Allegheny River at Kittanning, PA	40°49'13"	79°31'54"	8,973
03039815	870	Clear Shade Creek above Confluence near Cairnbrook, PA	40°08'54"	78°49'03"	32.1
03044000	810	Conemaugh River at Tunnelton, PA	40°27'16"	79°23'28"	1,358
03049652	801	Allegheny River at Hulton Bridge at Oakmont, PA	40°31'39"	79°50'51"	11,577
03063000	725	Monongahela River at Lock and Dam 8 at Point Marion, PA	39°43'37"	79°54'42"	2,720
03071700	727	Cheat River at Point Marion, PA	39°44'31"	79°53'59"	1,422
^a 03072000	714	Dunkard Creek at Shannopin, PA	39°45'33"	79°58'15"	229
03072850	731	South Fork Ten Mile Creek near Rogersville, PA	39°53'00"	80°18'59"	18.7
^a 03075070	702	Monongahela River at Elizabeth, PA	40°15'44"	79°54'05"	5,340
03077500	709	Youghiogheny River at Youghiogheny River Dam, PA	39°48'19"	79°21'52"	436
03078020	726	Casselman River near Salisbury, PA	39°43'56"	79°06'03"	70.8
03079448	730	Kooser Run at Kooser State Park near Bakersville, PA	40°03'37"	79°13'41"	2.60
^a 03083500	706	Youghiogheny River at Sutersville, PA	40°14'24"	79°48'24"	1,715
^a 03085000	701	Monongahela River at Braddock, PA	40°23'28"	79°51'30"	7,337
^a 03086000	901	Ohio River at Sewickley, PA	40°32'57"	80°12'21"	19,500
03099600	915	Mahoning River at North Edinburg, PA	41°01'06"	80°26'27"	1,099
^a 03101500	911	Shenango River at Pymatuning Dam, PA	41°29'53"	80°27'37"	167
^a 03102500	913	Little Shenango River at Greenville, PA	41°25'19"	80°22'35"	104
03103500	910	Shenango River at Sharpsville, PA	41°15'58"	80°28'22"	584

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PENNSYLVANIA WATER-QUALITY NETWORK**

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

Station number	WQN No.	Location	Latitude	Longitude	Drainage area (mi ²)
03104500	909	Shenango River at New Castle, PA	41°00'00"	80°21'21"	792
^a 03105500	906	Beaver River at Wampum, PA	40°53'19"	80°20'14"	2,235
03105810	917	Connoquenessing Creek at Renfrew, PA	40°48'21"	79°57'55"	137
^a 03106000	907	Connoquenessing Creek near Zelienople, PA	40°49'01"	80°14'33"	356
^a 03106500	922	Slippery Rock Creek at Wurtemburg, PA	40°53'02"	80°14'02"	398
^a 03107500	905	Beaver River at Beaver Falls, PA	40°45'48"	80°18'55"	3,106
^a 03108000	903	Raccoon Creek at Moffatts Mill, PA	40°37'40"	80°20'16"	178
03109670	901	Ohio River at mile 44.5 at Newell, WV	40°37'10"	80°35'24"	22,784
04212945	643	Conneaut Creek near Cherry Hill, PA	41°55'04"	80°28'09"	149
04213273	641	Twelvemile Creek near Moorheadville, PA	42°12'15"	79°54'46"	12.5

^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)
03021545	L811	Union City Reservoir near Union City, PA	41°54'54"	79°48'55"	2.15
03023012	L810W	Tamarack Lake West near Meadville, PA	41°36'45"	80°07'02"	2.11
03023373	L810E	Tamarack Lake East near Meadville, PA	41°34'47"	80°04'39"	2.11
03024228	L809	Sugar Lake near Bradletown, PA	41°33'59"	79°56'36"	21.8
^a 03042260	L808	Yellow Creek Lake near Brush Valley, PA	40°35'27"	79°03'11"	52.5
03048375	L807	Beaver Run Reservoir near Perryville, PA	40°30'44"	79°33'09"	42.7
03079050	L701	High Point Lake at Savage, PA	39°46'54"	79°13'36"	2.87
03111004	L903	Cross Creek Lake near Avella, PA	40°46'54"	80°25'14"	11.1

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

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
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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)
03010956 Tunungwant Creek at Bradford, PA (LAT 41 57 44N LONG 078 37 30W)													
NOV 2002 25...	1315	1028	9813	169	40	13.6	7.3	260	4.2	56	--	16.8	--
MAR 2003 31...	1145	1028	9813	316	40	13.6	7.3	154	3.3	34	--	9.8	--
MAY 21...	1045	1028	9813	257	40	11.3	7.5	184	10.6	40	--	11.6	--
JUL 30...	0800	1028	9813	316	40	9.5	7.3	149	13.7	35	--	10.0	--
SEP 24...	1330	1028	9813	117	40	11.7	8.3	216	16.2	50	--	15.0	--
03012600 Allegheny River at Warren, PA (LAT 41 49 28N LONG 079 07 09W)													
NOV 2002 18...	1130	1028	9813	4700	40	12.2	7.6	143	8.1	49	--	14.6	--
JAN 2003 28...	1015	1028	9813	2550	40	12.5	7.3	152	.0	42	--	12.1	--
MAR 25...	1015	1028	9813	24800	40	14.8	7.3	121	2.4	35	--	10.1	--
MAY 19...	1100	1028	9813	8600	40	12.9	7.9	103	10.6	30	--	8.6	--
JUL 21...	1030	1028	9813	4500	40	9.7	7.5	121	17.9	36	--	9.8	--
SEP 22...	1215	1028	9813	4000	40	9.7	7.4	107	19.7	34	--	10.1	--
03017500 Tionesta Creek at Lynch, PA (LAT 41 36 07N LONG 079 03 01W)													
NOV 2002 25...	1130	1028	9813	306	40	12.9	7.2	69	3.8	20	5.27	5.3	1.72
MAR 2003 31...	1000	1028	9813	504	40	13.4	7.3	56	2.7	16	3.83	4.0	1.38
MAY 21...	1400	1028	9813	797	40	11.0	7.0	57	11.6	17	4.05	4.3	1.36
JUL 29...	1015	1028	9813	885	40	9.8	6.9	48	14.2	15	3.72	3.8	1.28
SEP 23...	1500	1028	9813	625	40	9.6	7.2	64	16.1	18	4.93	4.7	1.62
03017800 Minister Creek at Trumans, PA (LAT 41 37 16N LONG 079 09 11W)													
OCT 2002 17...	1400	1028	9813	3.9	30	11.0	7.7	39	8.7	12	2.70	2.9	1.13
NOV 25...	1000	1028	9813	12	30	12.5	7.3	34	4.3	11	2.47	2.5	1.10
MAR 2003 27...	1430	1028	9813	20	30	11.6	6.4	30	8.2	9	2.04	2.1	.93
APR 16...	1330	1028	9813	19	30	10.5	7.0	31	12.3	10	--	2.2	--
MAY 21...	1230	1028	9813	49	30	11.2	6.9	28	9.3	9	1.93	2.0	.84
JUN 12...	1345	1028	9831	26	30	9.9	6.9	30	12.7	10	2.08	2.1	1.02
JUL 30...	1200	1028	9813	19	30	10.3	6.5	29	13.0	9	2.13	2.1	1.03
AUG 27...	1045	1028	9813	13	30	9.4	6.7	34	16.5	10	2.25	2.3	.98
SEP 24...	1130	1028	9813	9.4	30	10.3	7.3	33	11.7	10	2.23	2.3	.99

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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)
03010956 Tunungwant Creek at Bradford, PA (LAT 41 57 44N LONG 078 37 30W)													
NOV 2002 25...	3.5	28	--	<.2	11.0	166	10	<.020	.30	<.040	.01	<.010	.39
MAR 2003 31...	2.3	21	--	<.2	9.4	106	10	<.020	.36	<.040	<.01	.011	.58
MAY 21...	2.7	28	--	<.2	7.7	140	10	<.020	.14	<.040	.02	.016	.40
JUL 30...	2.5	23	--	<.2	8.0	82	10	<.020	.27	<.040	.01	.013	.33
SEP 24...	3.1	38	--	<.2	7.6	168	8	<.020	.05	<.040	.01	.017	.16
03012600 Allegheny River at Warren, PA (LAT 41 49 28N LONG 079 07 09W)													
NOV 2002 18...	3.0	38	--	--	10.0	114	4	<.020	.27	<.040	.01	.010	.82
JAN 2003 28...	2.8	27	--	--	10.3	118	2	<.020	.52	<.040	.01	.014	1.5
MAR 25...	2.3	20	--	--	9.1	102	4	<.020	.58	<.040	.05	.031	.76
MAY 19...	2.1	21	--	--	8.6	76	2	<.020	.46	<.040	.01	.012	.62
JUL 21...	2.7	24	--	--	8.2	90	90	<.020	.28	<.040	.07	.082	.84
SEP 22...	2.2	28	--	--	7.9	68	<2	<.020	.21	<.040	<.01	.014	.49
03017500 Tionesta Creek at Lynch, PA (LAT 41 36 07N LONG 079 03 01W)													
NOV 2002 25...	1.7	11	--	--	9.5	106	<2	<.020	.34	<.040	<.01	<.010	.66
MAR 2003 31...	1.4	8	--	--	9.6	84	28	<.020	.34	<.040	.01	.013	.37
MAY 21...	1.5	11	--	--	7.6	64	24	<.020	.18	<.040	.03	.026	.46
JUL 29...	1.3	10	--	--	8.1	50	8	<.020	.24	<.040	.02	.024	.35
SEP 23...	1.5	13	--	--	6.8	66	28	<.020	.16	<.040	.03	.042	.42
03017800 Minister Creek at Trumans, PA (LAT 41 37 16N LONG 079 09 11W)													
OCT 2002 17...	1.2	8	1.6	<.2	6.9	8	14	.150	<.04	<.040	<.01	<.010	.22
NOV 25...	1.1	5	1.5	<.2	7.8	28	2	<.020	.25	<.040	<.01	<.010	.37
MAR 2003 27...	.9	3	1.1	<.2	7.8	28	<2	<.020	.25	<.040	<.01	<.010	.25
APR 16...	1.0	3	1.2	<.2	7.5	36	<2	<.020	.21	<.040	<.01	<.010	.30
MAY 21...	.9	5	.8	<.2	7.0	48	8	<.020	.09	<.040	<.01	.010	.18
JUN 12...	1.1	5	.9	<.2	7.3	24	<2	<.020	.15	<.040	.01	.012	.24
JUL 30...	1.0	3	.9	<.2	7.2	22	20	<.020	.18	<.040	<.01	.011	.42
AUG 27...	1.0	6	1.1	<.2	6.9	32	<2	<.020	.16	<.040	<.01	.012	.23
SEP 24...	1.0	5	1.2	<.2	6.6	58	<2	.030	.10	<.040	<.01	<.010	.12

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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 0.45µMF 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)
03010956 Tunungwant Creek at Bradford, PA (LAT 41 57 44N LONG 078 37 30W)													
NOV 2002 25...	2.1	--	--	--	<200	--	--	--	<10	--	410	--	<1.0
MAR 2003 31...	1.5	--	--	--	<200	--	--	--	<10	--	280	--	<1.0
MAY 21...	2.9	--	--	--	500	--	--	--	<10	--	1020	--	<1.0
JUL 30...	2.1	--	--	--	<200	--	--	--	<10	--	450	--	<1.0
SEP 24...	3.1	--	--	--	<200	--	--	--	<10	--	550	--	<1.0
03012600 Allegheny River at Warren, PA (LAT 41 49 28N LONG 079 07 09W)													
NOV 2002 18...	2.0	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
JAN 2003 28...	2.0	--	--	--	<200	--	--	--	<10	--	190	--	<1.0
MAR 25...	1.9	--	--	--	500	--	--	--	<10	--	730	--	<1.0
MAY 19...	1.7	--	--	--	<200	--	--	--	<10	--	60	--	<1.0
JUL 21...	4.0	--	--	--	3800	--	--	--	<10	--	5650	--	5.8
SEP 22...	3.0	--	--	--	<200	--	--	--	<10	--	170	--	<1.0
03017500 Tionesta Creek at Lynch, PA (LAT 41 36 07N LONG 079 03 01W)													
NOV 2002 25...	--	.6	--	32	78	--	--	<4	<4	60	240	<1.0	<1.0
MAR 2003 31...	--	<.2	--	50	100	--	--	<4	<4	70	260	<1.0	<1.0
MAY 21...	--	1.4	--	38	700	--	--	<4	<4	60	1580	<1.0	1.9
JUL 29...	--	.9	--	51	300	--	--	<4	<4	120	770	<1.0	<1.0
SEP 23...	--	1.1	--	--	--	--	--	<4	<4	1710	140	1.4	<1.0
03017800 Minister Creek at Trumans, PA (LAT 41 37 16N LONG 079 09 11W)													
OCT 2002 17...	--	1.6	<20	32	56	<4.0	<.20	<4	<4	110	200	2.5	<1.0
NOV 25...	--	.2	<20	57	74	<4.0	<.20	<4	<4	30	60	<1.0	<1.0
MAR 2003 27...	--	.7	<20	103	200	<4.0	<.20	<4	<4	30	120	<1.0	<1.0
APR 16...	--	.8	<20	54	100	<4.0	<.20	<4	<4	<20	80	<1.0	<1.0
MAY 21...	--	.9	20	107	300	<4.0	<.20	<4	<4	90	200	<1.0	<1.0
JUN 12...	--	1.2	<20	50	200	<4.0	<.20	<4	40	30	230	<1.0	4.6
JUL 30...	--	.3	60	48	100	<4.0	<.20	<4	<4	40	110	<1.0	<1.0
AUG 27...	--	.9	80	26	37	<4.0	<.20	<4	<4	50	120	<1.0	<1.0
SEP 24...	--	1.1	60	42	63	<4.0	<.20	<4	<4	50	110	<1.0	<1.0

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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)
03010956 Tunungwant Creek at Bradford, PA (LAT 41 57 44N LONG 078 37 30W)							
NOV 2002 25...	--	110	--	<50	--	<10	5
MAR 2003 31...	--	80	--	<50	--	<10	<5
MAY 21...	--	130	--	<50	--	10	<5
JUL 30...	--	100	--	<50	--	40	<5
SEP 24...	--	80	--	<50	--	<10	<5
03012600 Allegheny River at Warren, PA (LAT 41 49 28N LONG 079 07 09W)							
NOV 2002 18...	--	50	--	<50	--	<10	--
JAN 2003 28...	--	20	--	<50	--	<10	--
MAR 25...	--	80	--	<50	--	240	--
MAY 19...	--	20	--	<50	--	30	--
JUL 21...	--	410	--	<50	--	30	--
SEP 22...	--	50	--	<50	--	<10	--
03017500 Tionesta Creek at Lynch, PA (LAT 41 36 07N LONG 079 03 01W)							
NOV 2002 25...	30	40	<4.0	<4.0	<5.0	<5.0	--
MAR 2003 31...	40	40	<4.0	<4.0	6.5	8.6	--
MAY 21...	40	130	<4.0	<4.0	<5.0	10	--
JUL 29...	40	80	<4.0	<4.0	7.5	10	--
SEP 23...	--	--	<4.0	<4.0	--	--	--
03017800 Minister Creek at Trumans, PA (LAT 41 37 16N LONG 079 09 11W)							
OCT 2002 17...	10	20	<4.0	<4.0	<5.0	<5.0	<5
NOV 25...	20	20	<4.0	<4.0	10	20	<5
MAR 2003 27...	40	50	<4.0	4.0	20	20	<5
APR 16...	20	30	<4.0	<4.0	10	20	<5
MAY 21...	40	70	<4.0	<4.0	20	20	<5
JUN 12...	20	40	<4.0	<4.0	10	10	<5
JUL 30...	30	40	<4.0	<4.0	10	10	<5
AUG 27...	10	10	<4.0	<4.0	<5.0	<5.0	<5
SEP 24...	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 un- f 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 water unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
03020449 West Branch Caldwell Creek near Grand Valley, PA (LAT 41 41 40N LONG 079 34 16W)													
OCT 2002													
17...	1115	1028	9813	8.0	30	11.1	7.7	123	8.2	34	--	9.2	--
NOV													
26...	0945	1028	9813	7.9	30	13.4	7.5	82	2.8	25	--	6.8	--
MAR 2003													
27...	1145	1028	9813	47	30	12.3	7.1	65	5.9	20	--	5.4	--
APR													
16...	1100	1028	9813	40	30	10.8	7.4	69	10.9	23	--	6.1	--
MAY													
20...	1000	1028	9813	25	30	10.8	7.3	69	11.8	23	--	6.1	--
JUN													
12...	1145	1028	9813	22	30	9.4	6.2	82	14.8	27	--	7.2	--
JUL													
30...	0930	1028	9813	21	30	9.9	7.3	72	13.6	25	--	6.4	--
AUG													
27...	1300	1028	9813	11	30	9.1	7.2	95	18.8	30	--	8.3	--
SEP													
24...	0815	1028	9813	25	30	10.3	7.2	77	11.4	23	--	6.3	--
03022000 French Creek at Venango, PA (LAT 41 46 35N LONG 080 06 30W)													
OCT 2002													
21...	1030	1028	9813	951	40	10.5	7.7	301	9.9	120	--	36.3	--
NOV													
18...	1030	1028	9813	1600	40	11.6	7.4	218	5.0	96	--	28.8	--
DEC													
16...	1000	1028	9813	2440	40	13.8	7.7	191	1.2	68	--	20.5	--
JAN 2003													
13...	1030	1028	9813	1180	40	14.7	7.5	253	.0	94	--	28.7	--
MAR													
17...	1045	1028	9813	4540	40	13.8	7.3	159	1.4	63	--	18.1	--
APR													
14...	1400	1028	9813	1720	40	12.3	7.6	209	8.4	77	--	23.2	--
JUN													
05...	1115	1028	9813	868	40	10.2	7.9	238	14.0	100	--	31.1	--
JUL													
30...	0810	1028	9813	4810	40	6.7	7.1	189	--	81	--	24.6	--
AUG													
27...	0825	1028	9813	783	40	10.2	7.2	254	--	100	--	30.7	--
SEP													
24...	0825	1028	9813	1560	40	8.2	7.4	206	15.5	85	--	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)
03020449 West Branch Caldwell Creek near Grand Valley, PA (LAT 41 41 40N LONG 079 34 16W)													
OCT 2002 17...	2.7	30	13.0	<.2	8.7	90	4	.170	<.04	<.040	<.01	.015	.38
NOV 26...	2.0	15	7.2	<.2	9.4	68	<2	<.020	.38	<.040	<.01	.011	.35
MAR 2003 27...	1.7	11	5.9	<.2	8.8	48	4	<.020	.42	<.040	.01	.011	.58
APR 16...	1.9	14	4.6	<.2	8.7	68	<2	<.020	.38	<.040	.01	.024	.48
MAY 20...	2.0	17	4.4	<.2	8.2	62	<2	<.020	.29	<.040	.01	.013	.38
JUN 12...	2.2	22	6.1	<.2	7.2	58	<2	<.020	.25	<.040	.01	.019	.44
JUL 30...	2.1	15	5.0	<.2	8.1	34	10	<.020	.48	<.040	.02	.015	.56
AUG 27...	2.3	24	7.1	<.2	7.1	82	2	<.020	.31	<.040	.01	.019	.52
SEP 24...	1.8	16	5.5	<.2	7.5	82	<2	<.020	.24	<.040	.02	.016	.39
03022000 French Creek at Venango, PA (LAT 41 46 35N LONG 080 06 30W)													
OCT 2002 21...	7.0	90	17.3	<.2	21.9	204	32	.040	.67	<.040	.03	.058	1.4
NOV 18...	5.9	70	18.0	<.2	19.9	138	14	<.020	.70	<.040	.03	.030	1.4
DEC 16...	4.2	--	17.8	<.2	14.6	--	--	.040	.89	<.040	.04	.042	1.4
JAN 2003 13...	5.4	67	24.1	<.2	15.4	152	8	<.020	1.09	<.040	.02	.021	1.2
MAR 17...	4.4	36	16.0	<.2	10.0	92	340	.080	.96	<.040	.07	.188	4.0
APR 14...	4.5	58	18.9	<.2	11.5	130	22	.030	.86	<.040	.02	.021	1.1
JUN 05...	5.7	83	16.4	<.2	9.9	166	8	<.020	.54	<.040	.02	.040	.92
JUL 30...	4.8	67	11.1	<.2	8.2	136	40	<.020	.62	<.040	.04	.067	1.1
AUG 27...	6.3	87	15.4	<.2	10.7	170	38	.050	.68	<.040	.05	.070	1.1
SEP 24...	5.3	73	12.8	<.2	9.1	198	10	.020	.49	<.040	.06	.071	.82

**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 0.45µMF 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)
03020449 West Branch Caldwell Creek near Grand Valley, PA (LAT 41 41 40N LONG 079 34 16W)													
OCT 2002 17...	--	2.2	240	17	86	<4.0	<.20	<4	<4	200	620	<1.0	<1.0
NOV 26...	--	2.2	--	37	77	<4.0	<.20	<4	<4	150	270	<1.0	<1.0
MAR 2003 27...	--	.8	<20	37	100	<4.0	<.20	<4	<4	90	310	<1.0	<1.0
APR 16...	--	1.3	<20	29	97	<4.0	<.20	<4	<4	60	250	<1.0	<1.0
MAY 20...	--	.8	<20	--	--	<4.0	<.20	<4	<4	--	--	<1.0	<1.0
JUN 12...	--	1.6	180	10	100	<4.0	<.20	<4	<4	120	650	<1.0	<1.0
JUL 30...	--	.6	100	20	100	<4.0	<.20	<4	<4	220	450	<1.0	<1.0
AUG 27...	--	.8	260	29	100	<4.0	<.20	<4	<4	180	680	<1.0	<1.0
SEP 24...	--	1.2	400	19	200	<4.0	<.20	<4	<4	230	660	<1.0	<1.0
03022000 French Creek at Venango, PA (LAT 41 46 35N LONG 080 06 30W)													
OCT 2002 21...	--	.2	2600	30	500	<4.0	<.20	<4	<4	60	1020	<1.0	<1.0
NOV 18...	--	.9	220	31	300	<4.0	<.20	<4	<4	90	660	<1.0	<1.0
DEC 16...	--	<.2	550	32	500	<4.0	<.20	<4	<4	70	1270	<1.0	1.1
JAN 2003 13...	--	1.0	20	26	100	<4.0	<.20	<4	<4	100	420	<1.0	<1.0
MAR 17...	--	.6	1000	28	3100	<4.0	<.20	5	7	60	7900	<1.0	5.3
APR 14...	--	<.2	<20	27	400	<4.0	<.20	<4	<4	80	940	<1.0	<1.0
JUN 05...	--	1.8	--	25	200	<4.0	<.20	<4	<4	130	880	<1.0	<1.0
JUL 30...	--	1.6	620	12	800	<4.0	<.20	6	<4	80	1730	<1.0	1.4
AUG 27...	--	1.9	13000	16	700	<4.0	<.20	<4	<4	160	1410	<1.0	1.3
SEP 24...	--	1.8	3300	17	700	<4.0	<.20	<4	<4	200	1620	<1.0	1.2

**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 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)
03020449 West Branch Caldwell Creek near Grand Valley, PA (LAT 41 41 40N LONG 079 34 16W)							
OCT 2002							
17...	20	30	<4.0	<4.0	<5.0	<5.0	<5
NOV							
26...	30	30	<4.0	<4.0	<5.0	<5.0	<5
DEC							
17...	--	--	--	--	--	--	--
MAR 2003							
27...	10	20	<4.0	<4.0	<5.0	<5.0	<5
APR							
16...	10	20	<4.0	<4.0	<5.0	<5.0	<5
MAY							
20...	10	10	<4.0	<4.0	<5.0	<5.0	<5
JUN							
12...	10	30	<4.0	<4.0	<5.0	<5.0	<5
JUL							
30...	20	20	<4.0	<4.0	<5.0	5.5	<5
AUG							
27...	10	20	<4.0	<4.0	<5.0	<5.0	<5
SEP							
24...	20	30	<4.0	<4.0	<5.0	<5.0	<5
03022000 French Creek at Venango, PA (LAT 41 46 35N LONG 080 06 30W)							
OCT 2002							
21...	30	100	<4.0	<4.0	6.3	6.9	<5
NOV							
18...	30	60	<4.0	<4.0	--	--	<5
DEC							
16...	30	80	<4.0	<4.0	10	20	<5
JAN 2003							
13...	50	60	<4.0	<4.0	8.2	5.6	<5
MAR							
17...	30	280	<4.0	7.9	9.5	30	<5
APR							
14...	30	60	<4.0	<4.0	<5.0	<5.0	--
JUN							
05...	50	90	<4.0	<4.0	<5.0	<5.0	<5
JUL							
30...	10	100	<4.0	<4.0	<5.0	5.4	<5
AUG							
27...	50	120	<4.0	<4.0	<5.0	5.6	<5
SEP							
24...	10	70	<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 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 unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
03025490 French Creek at Franklin, PA (LAT 41 24 06N LONG 079 49 54W)													
JAN 2003													
15...	1130	1028	9813	2380	40	15.3	7.7	253	.1	96	--	28.7	--
MAR													
19...	1130	1028	9813	8205	40	17.1	7.5	85	6.0	49	--	14.4	--
JUN													
09...	1405	1028	9813	1730	40	10.5	8.2	214	18.5	84	--	25.9	--
JUL													
16...	1415	1028	9813	505	40	11.2	8.6	277	--	120	--	34.2	--
SEP													
16...	1355	1028	9813	658	40	12.0	8.4	280	19.0	110	--	33.8	--
03026175 Allegheny River at Kennerdell, PA (LAT 41 15 51N LONG 079 50 29W)													
NOV 2002													
20...	1300	1028	9813	12800	40	11.2	7.8	169	6.5	64	--	19.1	--
JAN 2003													
15...	1300	1028	9813	10900	40	14.6	7.7	110	.7	65	--	19.1	--
MAR													
19...	1300	1028	9813	35700	40	17.4	7.5	113	6.0	37	--	10.4	--
JUN													
11...	0820	1028	9813	10800	40	9.1	8.0	155	17.0	52	--	15.4	--
JUL													
16...	0830	1028	9813	3400	40	7.6	8.2	194	--	67	--	20.5	--
SEP													
17...	1430	1028	9813	4500	40	10.6	8.2	163	20.0	55	--	16.6	--
03030852 Clarion River at Callensburg, PA (LAT 41 07 47N LONG 079 33 16W)													
NOV 2002													
20...	1430	1028	9813	2950	40	10.9	7.3	263	7.1	83	--	20.2	--
JAN 2003													
16...	0800	1028	9813	3940	40	13.8	7.5	179	.8	56	--	13.5	--
MAR													
19...	1445	1028	9813	11300	40	18.6	6.4	110	5.9	32	--	8.1	--
JUN													
10...	0805	1028	9813	720	40	10.7	7.6	205	14.0	70	--	17.0	--
JUL													
15...	1420	1028	9813	152	40	8.2	6.6	408	--	150	--	34.3	--
SEP													
17...	0755	1028	9813	301	40	8.5	7.1	188	16.5	62	--	14.8	--
03031505 Silver Creek at Walley Mill near North Washington PA (LAT 41 02 39N LONG 079 46 36W)													
OCT 2002													
22...	1130	1028	9813	.98	30	12.1	7.5	266	5.6	81	--	22.3	--
NOV													
21...	0930	1028	9813	--	30	11.9	7.5	202	3.9	68	--	17.9	--
JAN 2003													
16...	1000	1028	9813	2.9	30	14.4	7.7	203	.1	67	--	17.5	--
MAR													
20...	1030	1028	9813	17	30	21.4	7.2	140	5.8	42	--	10.5	--
APR													
15...	1030	1028	9813	8.7	30	12.5	7.5	152	8.1	50	--	13.0	--
JUN													
10...	1240	1028	9813	12	30	10.3	7.5	153	13.5	48	--	12.2	--
SEP													
17...	1200	1028	9813	3.6	30	10.6	7.4	155	13.5	50	--	13.6	--

**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)
03025490 French Creek at Franklin, PA (LAT 41 24 06N LONG 079 49 54W)													
JAN 2003 15...	5.8	61	--	--	17.2	116	2	.040	1.05	<.040	.02	.027	1.2
MAR 19...	3.2	31	--	--	10.8	1360	80	.040	.84	<.040	.06	.082	1.3
JUN 09...	4.7	67	--	--	11.2	166	12	<.020	.48	<.040	.02	.035	.87
JUL 16...	7.3	96	--	--	12.2	206	20	<.020	.28	<.040	.02	.015	.60
SEP 16...	7.0	91	--	--	12.8	192	4	<.020	.56	<.040	.02	.019	.86
03026175 Allegheny River at Kennerdell, PA (LAT 41 15 51N LONG 079 50 29W)													
NOV 2002 20...	4.0	46	--	--	14.8	136	22	<.020	.49	<.040	.02	.024	1.1
JAN 2003 15...	4.1	42	--	--	13.3	144	<2	.040	.66	<.040	.01	.022	.82
MAR 19...	2.5	20	--	--	10.3	76	80	.030	.65	<.040	.04	.081	1.1
JUN 11...	3.2	39	--	--	9.9	94	8	<.020	.37	<.040	.01	.024	.66
JUL 16...	3.9	52	--	--	11.3	120	6	<.020	.23	<.040	.01	.015	.48
SEP 17...	3.3	41	--	--	9.8	110	<2	<.020	.31	<.040	<.01	.024	.70
03030852 Clarion River at Callensburg, PA (LAT 41 07 47N LONG 079 33 16W)													
NOV 2002 20...	8.0	22	--	--	84.1	210	10	.060	.42	<.040	.02	.022	.89
JAN 2003 16...	5.3	8	--	--	51.1	168	<2	.060	.39	<.040	<.01	<.010	.48
MAR 19...	2.9	5	--	--	27.5	1360	22	.020	.41	<.040	.02	.024	.55
JUN 10...	6.7	11	--	--	66.2	188	<2	.030	.44	<.040	<.01	.016	.72
JUL 15...	16.4	5	--	--	155	314	<2	.030	.39	<.040	<.01	.020	.50
SEP 17...	6.0	10	--	--	56.5	158	<2	.030	.19	<.040	<.01	.016	.40
03031505 Silver Creek at Walley Mill near North Washington PA (LAT 41 02 39N LONG 079 46 36W)													
OCT 2002 22...	6.0	44	28.7	<.2	30.0	90	10	.100	--	<.040	<.01	<.010	.52
NOV 21...	5.6	--	25.7	<.2	27.5	106	<2	<.020	3.05	<.040	<.01	<.010	3.2
JAN 2003 16...	5.8	17	20.7	<.2	32.6	280	<2	.020	2.40	<.040	<.01	<.010	2.6
MAR 20...	3.9	11	13.7	<.2	23.1	136	2	<.020	1.53	<.040	<.01	<.010	1.6
APR 15...	4.2	15	14.3	<.2	25.4	104	<2	<.020	1.25	<.040	<.01	<.010	1.2
JUN 10...	4.3	19	15.6	<.2	22.5	126	10	<.020	1.25	<.040	.01	.016	1.4
SEP 17...	4.0	22	14.0	<.2	22.5	122	<2	<.020	1.12	<.040	<.01	<.013	1.3

**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 0.45µMF 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)
03025490 French Creek at Franklin, PA (LAT 41 24 06N LONG 079 49 54W)													
JAN 2003 15...	2.8	--	--	--	<200	--	--	--	<10	--	380	--	<1.0
MAR 19...	3.8	--	--	--	2200	--	--	--	<10	--	3110	--	3.3
JUN 09...	4.2	--	--	--	200	--	--	--	<10	--	620	--	<1.0
JUL 16...	4.7	--	--	--	<200	--	--	--	<10	--	240	--	<1.0
SEP 16...	3.8	--	--	--	<200	--	--	--	10	--	270	--	<1.0
03026175 Allegheny River at Kennerdell, PA (LAT 41 15 51N LONG 079 50 29W)													
NOV 2002 20...	3.8	--	--	--	400	--	--	--	<10	--	820	--	3.4
JAN 2003 15...	2.7	--	--	--	<200	--	--	--	<10	--	320	--	<1.0
MAR 19...	2.9	--	--	--	2100	--	--	--	<10	--	3030	--	3.4
JUN 11...	3.1	--	--	--	300	--	--	--	<10	--	600	--	<1.0
JUL 16...	3.4	--	--	--	<200	--	--	--	<10	--	140	--	<1.0
SEP 17...	3.2	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
03030852 Clarion River at Callensburg, PA (LAT 41 07 47N LONG 079 33 16W)													
NOV 2002 20...	3.1	--	--	--	500	--	--	--	<10	--	1100	--	<1.0
JAN 2003 16...	1.6	--	--	--	300	--	--	--	<10	--	570	--	<1.0
MAR 19...	2.2	--	--	--	700	--	--	--	<10	--	1190	--	1.4
JUN 10...	1.8	--	--	--	200	--	--	--	<10	--	390	--	<1.0
JUL 15...	1.3	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
SEP 17...	2.1	--	--	--	<200	--	--	--	<10	--	320	--	<1.0
03031505 Silver Creek at Walley Mill near North Washington PA (LAT 41 02 39N LONG 079 46 36W)													
OCT 2002 22...	--	.7	240	20	59	<4.0	<.20	<4	<4	100	340	<1.0	<1.0
NOV 21...	--	1.0	540	25	42	<4.0	<.20	<4	<4	50	130	<1.0	<1.0
JAN 2003 16...	--	.5	<10	28	44	<4.0	<.20	<4	<4	60	120	<1.0	<1.0
MAR 20...	--	.5	20	34	100	<4.0	<.20	7	<4	30	220	<1.0	<1.0
APR 15...	--	1.2	80	22	47	<4.0	<.20	<4	<4	20	90	<1.0	<1.0
JUN 10...	--	1.1	160	<10	62	<4.0	<.20	<4	<4	20	220	<1.0	<1.0
SEP 17...	--	.7	100	<10	41	<4.0	<.20	<4	<4	80	180	<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 filtrd, -able, µg/L (01056)	Mangan- ese, water, recover filtrd, -able, µg/L (01055)	Nickel, water, unfltrd filtrd, -able, µg/L (01065)	Nickel, water, unfltrd filtrd, -able, µg/L (01067)	Zinc, water, unfltrd filtrd, -able, µg/L (01090)	Zinc, water, unfltrd filtrd, -able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd filtrd, -able, µg/L (32730)
03025490 French Creek at Franklin, PA (LAT 41 24 06N LONG 079 49 54W)							
JAN 2003							
15...	--	40	--	<50	--	<10	--
MAR							
19...	--	140	--	<50	--	20	--
JUN							
09...	--	40	--	<50	--	<10	--
JUL							
16...	--	30	--	<50	--	140	--
SEP							
16...	--	30	--	<50	--	140	--
03026175 Allegheny River at Kennerdell, PA (LAT 41 15 51N LONG 079 50 29W)							
NOV 2002							
20...	--	120	--	<50	--	20	--
JAN 2003							
15...	--	30	--	<50	--	10	--
MAR							
19...	--	210	--	<50	--	20	--
JUN							
11...	--	50	--	<50	--	70	--
JUL							
16...	--	40	--	<50	--	<10	--
SEP							
17...	--	40	--	<50	--	20	--
03030852 Clarion River at Callensburg, PA (LAT 41 07 47N LONG 079 33 16W)							
NOV 2002							
20...	--	880	--	<50	--	40	--
JAN 2003							
16...	--	580	--	<50	--	40	--
MAR							
19...	--	560	--	<50	--	40	--
JUN							
10...	--	800	--	<50	--	10	--
JUL							
15...	--	1890	--	<50	--	40	--
SEP							
17...	--	750	--	<50	--	20	--
03031505 Silver Creek at Walley Mill near North Washington PA (LAT 41 02 39N LONG 079 46 36W)							
OCT 2002							
22...	100	120	<4.0	<4.0	7.1	8.3	<5
NOV							
21...	50	60	<4.0	<4.0	10	10	<5
JAN 2003							
16...	50	50	<4.0	<4.0	7.4	7.1	<5
MAR							
20...	20	30	<4.0	<4.0	8.5	7.8	<5
APR							
15...	30	40	<4.0	<4.0	7.9	5.7	--
JUN							
10...	40	50	<4.0	<4.0	<5.0	<5.0	<5
SEP							
17...	40	50	<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, water, 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)
03039815 Clear Shade Creek above Confluence near Cairnbrook, PA (LAT 40 08 54N LONG 078 49 03W)													
OCT 2002													
17...	1230	1028	9813	37	40	10.9	6.8	67	9.7	22	7.06	6.8	1.30
NOV													
13...	1300	1028	9813	67	40	12.2	6.4	51	7.2	16	4.07	4.8	.90
DEC													
10...	1100	1028	9813	--	40	15.2	8.6	5	.1	16	4.13	4.5	.97
MAR 2003													
24...	1400	1028	9813	--	40	10.8	5.7	39	7.7	11	3.07	3.1	.73
APR													
30...	1300	1028	9813	37	40	10.5	7.0	56	9.7	15	4.48	4.6	.84
JUN													
19...	1305	1028	9813	78	40	11.7	7.7	38	15.0	12	3.31	3.3	.73
JUL													
22...	0000	1028	9813	21	40	8.6	6.7	61	--	23	7.20	7.1	1.35
AUG													
06...	1235	1028	9813	25	40	9.0	6.6	52	--	18	5.67	5.3	1.12
SEP													
29...	1115	1028	9813	127	40	9.9	5.9	36	11.0	11	3.08	3.1	.70
03044000 Conemaugh River at Tunnelton, PA (LAT 40 27 16N LONG 079 23 28W)													
NOV 2002													
07...	0915	1028	9813	925	40	10.8	7.2	810	7.0	250	--	68.0	--
JAN 2003													
09...	0900	1028	9813	6160	40	15.8	7.7	322	2.4	100	--	26.3	--
MAR													
12...	0900	1028	9813	7220	40	13.2	7.1	351	2.1	99	--	25.9	--
MAY													
29...	1015	1028	9813	2000	40	9.9	7.8	363	16.0	120	--	34.2	--
JUL													
22...	1330	1028	9813	1380	40	7.2	6.6	586	--	220	--	58.3	--
SEP													
18...	1230	1028	9813	915	40	9.2	7.4	686	20.0	230	--	61.9	--
03049652 Allegheny River at Hulton Bridge at Oakmont, PA (LAT 40 31 39N LONG 079 50 51W)													
NOV 2002													
04...	1100	1028	9813	6430	40	11.4	7.7	430	9.1	150	--	41.9	--
JUN 2003													
12...	0950	1028	9813	27400	40	9.6	7.5	236	19.0	80	--	21.0	--
JUL													
09...	1100	1028	9813	8000	40	8.8	7.4	333	--	115	--	31.2	--
SEP													
08...	1245	1028	9813	18700	40	8.7	7.3	218	21.0	73	--	19.4	--
03063000 Monongahela River at Lock & Dam 8, at Point Marion, PA (LAT 39 43 37N LONG 079 54 42W)													
NOV 2002													
06...	1100	1028	9813	2940	40	11.0	7.6	283	10.7	100	--	31.0	--
JAN 2003													
07...	1130	1028	9813	21600	40	18.0	7.7	191	4.6	75	--	20.8	--
MAR													
04...	1130	1028	9813	24800	40	14.4	7.7	236	3.0	88	--	25.5	--
MAY													
06...	1030	1028	9813	11500	40	10.6	7.3	378	16.5	140	--	40.2	--
JUL													
14...	1430	1028	9813	13000	40	9.7	6.8	253	--	110	--	30.2	--
SEP													
10...	1115	1028	9813	4000	40	9.7	7.5	181	21.5	66	--	19.3	--

**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)
03039815 Clear Shade Creek above Confluence near Cairnbrook, PA (LAT 40 08 54N LONG 078 49 03W)													
OCT 2002 17...	1.3	--	4.2	<.2	15.3	48	<2	.250	.16	<.040	<.01	<.010	.48
NOV 13...	1.1	--	3.8	<.2	11.3	332	<2	<.020	.22	<.040	<.01	.020	.64
DEC 10...	1.1	4	3.2	<.2	10.3	56	6	<.020	.33	<.040	<.01	<.010	.58
MAR 2003 24...	.8	--	2.9	<.2	7.7	20	6	<.020	.37	<.040	<.01	<.010	.66
APR 30...	.9	7	4.9	<.2	7.8	56	6	<.020	.30	<.040	<.01	<.010	.38
JUN 19...	.8	5	2.4	<.2	7.4	44	<2	<.020	.18	<.040	<.01	<.010	.26
JUL 22...	1.3	9	3.4	<.2	11.2	40	2	<.020	.24	<.040	<.01	<.010	.28
AUG 06...	1.1	8	4.0	<.2	8.1	52	<2	<.020	.25	<.040	<.01	<.010	.29
SEP 29...	.7	3	2.1	<.2	7.9	6	2	<.020	.21	<.040	<.01	<.010	2.5
03044000 Conemaugh River at Tunnelton, PA (LAT 40 27 16N LONG 079 23 28W)													
NOV 2002 07...	20.5	17	--	--	210	556	2	.200	1.34	<.200	<.01	<.010	2.0
JAN 2003 09...	9.3	11	--	--	88.7	254	<2	.070	1.54	<.040	<.01	<.010	1.8
MAR 12...	8.3	13	--	--	76.5	230	2	.100	1.59	<.040	<.01	.012	2.0
MAY 29...	9.3	12	--	--	103	280	8	.110	.74	<.040	.01	.016	.98
JUL 22...	18.5	16	--	--	198	432	14	.270	.76	<.040	.01	.012	1.2
SEP 18...	18.9	10	--	--	211	562	<2	.120	.86	<.200	<.01	.011	1.1
03049652 Allegheny River at Hulton Bridge at Oakmont, PA (LAT 40 31 39N LONG 079 50 51W)													
NOV 2002 04...	10.6	50	--	<.2	102	292	12	.050	.64	<.040	.01	.016	1.0
JUN 2003 12...	6.6	28	--	<.2	54.5	184	<2	.030	.61	<.040	.02	.021	.86
JUL 09...	9.1	38	--	<.2	78.4	226	12	<.020	.46	<.040	.02	.025	.69
SEP 08...	6.0	27	--	<.2	46.0	120	60	.040	.65	<.040	.02	.027	.64
03063000 Monongahela River at Lock & Dam 8, at Point Marion, PA (LAT 39 43 37N LONG 079 54 42W)													
NOV 2002 06...	6.7	36	--	--	82.1	182	<2	.060	.67	<.040	.02	.024	1.1
JAN 2003 07...	5.5	23	--	--	50.6	162	4	.050	.74	<.040	.04	.040	1.0
MAR 04...	5.9	28	--	--	62.5	150	38	.040	.81	<.040	.04	.030	1.0
MAY 06...	9.9	46	--	--	118	274	<2	.070	.42	<.040	.02	.023	.73
JUL 14...	7.3	41	--	--	69.7	196	52	.040	.45	.040	.07	.057	.80
SEP 10...	4.4	29	--	--	46.2	158	14	.050	.52	<.040	.02	.029	.47

**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 0.45µMF 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)
03039815 Clear Shade Creek above Confluence near Cairnbrook, PA (LAT 40 08 54N LONG 078 49 03W)													
OCT 2002 17...	--	2.0	380	289	400	<4.0	<.20	<4	<4	110	300	3.1	3.9
NOV 13...	--	1.0	10	176	400	<4.0	<.20	<4	<4	40	210	<1.0	<1.0
DEC 10...	--	1.4	<20	59	200	<4.0	<.20	<4	<4	30	80	<1.0	<1.0
MAR 2003 24...	--	--	<20	171	300	<4.0	<.20	<4	<4	30	90	<1.0	<1.0
APR 30...	--	.9	40	67	200	<4.0	<.20	<4	<4	20	70	<1.0	<1.0
JUN 19...	--	.7	<20	134	300	<4.0	<.20	<4	<4	80	230	<1.0	<1.0
JUL 22...	--	.8	190	37	100	<4.0	<.20	<4	<4	40	160	<1.0	<1.0
AUG 06...	--	.9	80	54	100	<4.0	<.20	<4	<4	70	250	<1.0	<1.0
SEP 29...	--	.9	80	180	300	<4.0	.20	<4	<4	100	190	<1.0	<1.0
03044000 Conemaugh River at Tunnelton, PA (LAT 40 27 16N LONG 079 23 28W)													
NOV 2002 07...	1.9	--	--	--	<200	--	--	--	<10	--	760	--	<1.0
JAN 2003 09...	1.5	--	--	--	<200	--	--	--	<10	--	1110	--	<1.0
MAR 12...	1.5	--	--	--	500	--	--	--	<10	--	1510	--	1.3
MAY 29...	1.4	--	--	--	500	--	--	--	<10	--	1100	--	<1.0
JUL 22...	1.8	--	--	--	400	--	--	--	<10	--	1560	--	<1.0
SEP 18...	1.3	--	--	--	<200	--	--	--	<10	--	350	--	<1.0
03049652 Allegheny River at Hulton Bridge at Oakmont, PA (LAT 40 31 39N LONG 079 50 51W)													
NOV 2002 04...	2.6	--	--	--	<200	--	--	--	<10	--	360	--	<1.0
JUN 2003 12...	2.2	--	--	--	500	--	--	--	<10	--	960	--	<1.0
JUL 09...	2.2	--	--	--	300	--	--	--	<10	--	430	--	<1.0
SEP 08...	3.5	--	--	--	400	--	--	--	<10	--	890	--	<1.0
03063000 Monongahela River at Lock & Dam 8, at Point Marion, PA (LAT 39 43 37N LONG 079 54 42W)													
NOV 2002 06...	1.9	--	--	--	200	--	--	--	<10	--	550	--	<1.0
JAN 2003 07...	1.8	--	--	--	1500	--	--	--	<10	--	2100	--	2.3
MAR 04...	1.7	--	--	--	1200	--	--	--	<10	--	1600	--	1.6
MAY 06...	1.8	--	--	--	500	--	--	--	<10	--	770	--	<1.0
JUL 14...	2.7	--	--	--	1600	--	--	--	20	--	2520	--	3.1
SEP 10...	2.7	--	--	--	400	--	--	--	<10	--	1010	--	1.3

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PENNSYLVANIA WATER-QUALITY NETWORK**

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

MISCELLANEOUS STATION ANALYSES

Date	Mangan- ese, water, recovery, fltrd, µg/L (01056)	Mangan- ese, water, unfltrd, recovery, fltrd, µg/L (01055)	Nickel, water, recovery, fltrd, µg/L (01065)	Nickel, water, unfltrd, recovery, fltrd, µg/L (01067)	Zinc, water, recovery, fltrd, µg/L (01090)	Zinc, water, unfltrd, recovery, fltrd, µg/L (01092)	Phen- olic com- pounds, water, unfltrd, µg/L (32730)
03039815 Clear Shade Creek above Confluence near Cairnbrook, PA (LAT 40 08 54N LONG 078 49 03W)							
OCT 2002							
17...	90	120	<4.0	4.3	20	30	<5
NOV							
13...	70	100	<4.0	<4.0	30	30	<5
DEC							
10...	60	70	<4.0	<4.0	30	20	<5
MAR 2003							
24...	60	90	<4.0	<4.0	10	20	<5
APR							
30...	40	50	<4.0	<4.0	6.7	9.3	<5
JUN							
19...	70	80	<4.0	<4.0	10	10	<5
JUL							
22...	10	20	<4.0	<4.0	<5.0	<5.0	<5
AUG							
06...	20	20	<4.0	<4.0	<5.0	<5.0	<5
SEP							
29...	80	90	<4.0	<4.0	20	10	<5
03044000 Conemaugh River at Tunnelton, PA (LAT 40 27 16N LONG 079 23 28W)							
NOV 2002							
07...	--	880	--	<50	--	50	--
JAN 2003							
09...	--	500	--	<50	--	40	--
MAR							
12...	--	440	--	<50	--	40	--
MAY							
29...	--	590	--	<50	--	40	--
JUL							
22...	--	970	--	<50	--	240	--
SEP							
18...	--	760	--	<50	--	40	--
03049652 Allegheny River at Hulton Bridge at Oakmont, PA (LAT 40 31 39N LONG 079 50 51W)							
NOV 2002							
04...	--	220	--	<50	--	<10	<5
JUN 2003							
12...	--	260	--	<50	--	100	<5
JUL							
09...	--	160	--	<50	--	<10	<5
SEP							
08...	--	220	--	<50	--	100	<5
03063000 Monongahela River at Lock & Dam 8, at Point Marion, PA (LAT 39 43 37N LONG 079 54 42W)							
NOV 2002							
06...	--	110	--	<50	--	<10	--
JAN 2003							
07...	--	250	--	<50	--	60	--
MAR							
04...	--	180	--	<50	--	40	--
MAY							
06...	--	170	--	<50	--	30	--
JUL							
14...	--	180	--	<50	--	160	--
SEP							
10...	--	140	--	<50	--	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 unfltrd recover- able, mg/L (00916)	Magnes- ium, water, fltrd, mg/L (00925)
03071700 Cheat River at Point Marion, PA (LAT 39 44 31N LONG 079 53 59W)													
NOV 2002 06...	1000	1028	9813	8000	40	10.8	7.9	89	8.8	34	--	10.0	--
JAN 2003 07...	1030	1028	9813	8000	40	13.4	8.0	100	3.6	35	--	9.7	--
MAR 04...	1030	1028	9813	8000	40	12.8	8.2	126	3.8	39	--	10.8	--
MAY 06...	0930	1028	9813	9700	40	9.0	7.0	126	16.1	46	--	13.2	--
JUL 14...	1525	1028	9813	8000	40	9.0	6.6	91	--	37	--	10.4	--
SEP 10...	0955	1028	9813	2000	40	8.1	7.3	109	19.5	41	--	11.8	--
03072850 South Fork Tenmile Creek near Rogersville, PA (LAT 39 53 00N LONG 080 18 59W)													
OCT 2002 31...	0900	1028	9813	9.7	40	10.5	7.5	313	7.7	120	--	39.4	--
NOV 06...	1245	1028	9813	9.4	40	9.6	7.6	326	8.0	130	--	41.2	--
DEC 09...	1130	1028	9813	--	40	15.2	7.4	344	.4	120	--	37.3	--
JAN 2003 07...	1300	1028	9813	30	40	15.7	7.8	256	.8	110	--	33.7	--
MAR 04...	1330	1028	9813	53	40	13.2	7.7	230	3.3	92	--	30.3	--
APR 23...	0930	1028	9813	9.2	40	12.6	7.9	286	9.1	110	--	35.8	--
MAY 06...	1300	1028	9813	8.5	40	8.7	7.7	307	14.5	120	--	38.2	--
JUL 14...	0900	1028	9813	7.3	40	7.7	7.0	332	--	140	--	44.6	--
AUG 13...	0950	1028	9813	5.5	40	7.6	7.2	356	--	140	--	44.5	--
SEP 10...	1400	1028	9813	4.7	40	9.2	7.8	377	20.5	140	--	45.1	--
03077500 Youghiogheny River at Youghiogheny River Dam, PA (LAT 39 48 19N LONG 079 21 52W)													
NOV 2002 14...	1030	1028	9813	440	40	10.2	7.1	114	9.2	38	--	11.3	--
JAN 2003 30...	1030	1028	9813	395	40	14.6	7.2	123	2.4	33	--	9.5	--
MAR 25...	1230	1028	9813	3400	40	13.0	7.2	136	3.6	31	--	9.1	--
JUN 03...	1100	1028	9813	2160	40	11.0	7.8	99	11.0	28	--	8.2	--
JUL 21...	1240	1028	9813	1020	40	7.7	6.6	91	--	28	--	8.4	--
SEP 11...	0815	1028	9813	710	40	8.0	7.1	92	19.0	28	--	8.4	--

**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 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)
03071700 Cheat River at Point Marion, PA (LAT 39 44 31N LONG 079 53 59W)													
NOV 2002 06...	2.1	14	--	--	20.2	52	4	<.020	.43	<.040	.01	<.010	.68
JAN 2003 07...	2.5	11	--	--	25.5	96	8	.030	.58	<.040	.01	<.010	.71
MAR 04...	2.9	5	--	--	33.8	32	<2	.070	.67	<.040	<.01	<.010	.77
MAY 06...	3.2	9	--	--	37.7	70	10	.230	.33	<.040	<.01	<.010	.68
JUL 14...	2.6	11	--	--	24.4	78	6	.050	.34	<.040	.04	.021	.58
SEP 10...	2.8	14	--	--	28.4	106	14	.060	.41	<.040	.03	.018	.68
03072850 South Fork Tenmile Creek near Rogersville, PA (LAT 39 53 00N LONG 080 18 59W)													
OCT 2002 31...	6.1	88	13.3	<.2	37.8	210	<2	<.020	1.22	<.040	.04	.046	1.6
NOV 06...	6.2	--	16.5	<.2	35.8	116	16	.100	.57	<.040	.06	.052	1.0
DEC 09...	6.5	--	24.2	<.2	35.8	198	6	<.020	.63	<.040	.02	.016	1.1
JAN 2003 07...	5.3	65	13.9	<.2	31.8	172	<2	<.020	1.35	<.040	.02	.024	1.6
MAR 04...	3.8	--	11.7	<.2	29.4	152	12	<.020	1.47	<.040	.03	.032	1.6
APR 23...	5.8	95	13.2	<.2	32.1	160	18	<.020	.10	<.040	.02	.017	.36
MAY 06...	5.9	99	16.9	<.2	30.3	194	20	.050	.22	<.040	.04	.039	.63
JUL 14...	7.4	116	16.2	<.2	28.4	232	18	<.020	.28	<.040	.05	.047	.57
AUG 13...	6.9	122	16.1	<.2	29.9	236	12	<.020	.18	<.040	.05	.047	.38
SEP 10...	7.7	132	17.8	<.2	33.1	270	<2	<.020	.06	<.040	.03	.042	.39
03077500 Youghiogheny River at Youghiogheny River Dam, PA (LAT 39 48 19N LONG 079 21 52W)													
NOV 2002 14...	2.3	18	--	--	15.6	82	<2	.060	.65	<.040	.01	<.010	1.1
JAN 2003 30...	2.1	12	--	--	14.1	136	10	<.020	.91	<.040	.01	.011	1.1
MAR 25...	2.1	12	--	--	13.2	90	<2	.040	1.01	<.040	.01	.019	1.2
JUN 03...	1.8	14	--	--	12.6	80	<2	.020	.62	<.040	<.01	.013	.91
JUL 21...	1.8	14	--	--	11.6	60	4	.020	.62	<.040	.01	.016	.72
SEP 11...	1.8	17	--	--	11.4	98	<2	.030	.55	<.040	.01	.015	.57

**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 0.45µMF 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)
03071700 Cheat River at Point Marion, PA (LAT 39 44 31N LONG 079 53 59W)													
NOV 2002 06...	3.0	--	--	--	400	--	--	--	<10	--	360	--	<1.0
JAN 2003 07...	2.1	--	--	--	600	--	--	--	<10	--	570	--	<1.0
MAR 04...	.9	--	--	--	300	--	--	--	<10	--	480	--	<1.0
MAY 06...	1.1	--	--	--	300	--	--	--	<10	--	340	--	<1.0
JUL 14...	3.5	--	--	--	900	--	--	--	<10	--	970	--	<1.0
SEP 10...	3.7	--	--	--	700	--	--	--	<10	--	950	--	<1.0
03072850 South Fork Tenmile Creek near Rogersville, PA (LAT 39 53 00N LONG 080 18 59W)													
OCT 2002 31...	--	1.7	1900	31	37	<4.0	<.20	<4	<4	60	520	<1.0	<1.0
NOV 06...	--	3.2	5700	23	400	<4.0	<.20	<4	<4	40	720	<1.0	<1.0
DEC 09...	--	2.0	330	22	98	<4.0	<.20	<4	<4	20	280	<1.0	<1.0
JAN 2003 07...	--	1.3	260	25	300	<4.0	<.20	<4	<4	20	450	<1.0	<1.0
MAR 04...	--	1.4	160	24	200	<4.0	<.20	6	<4	30	530	<1.0	<1.0
APR 23...	--	1.3	2000	20	100	<4.0	<.20	<4	<4	60	250	<1.0	<1.0
MAY 06...	--	1.5	3900	30	700	<4.0	<.20	<4	<4	20	750	<1.0	<1.0
JUL 14...	--	1.2	1700	<10	300	<4.0	<.20	<4	<4	<20	700	<1.0	<1.0
AUG 13...	--	1.7	680	<10	200	<4.0	<.20	<4	<4	<20	580	<1.0	<1.0
SEP 10...	--	1.1	--	<10	200	<4.0	<.20	<4	<4	<20	460	<1.0	<1.0
03077500 Youghiogheny River at Youghiogheny River Dam, PA (LAT 39 48 19N LONG 079 21 52W)													
NOV 2002 14...	2.5	--	--	--	<200	--	--	--	<10	--	280	--	<1.0
JAN 2003 30...	2.0	--	--	--	<200	--	--	--	<10	--	190	--	<1.0
MAR 25...	1.6	--	--	--	200	--	--	--	<10	--	270	--	<1.0
JUN 03...	2.0	--	--	--	<200	--	--	--	<10	--	110	--	<1.0
JUL 21...	2.4	--	--	--	<200	--	--	--	<10	--	160	--	<1.0
SEP 11...	3.2	--	--	--	<200	--	--	--	<10	--	260	--	<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)
03071700 Cheat River at Point Marion, PA (LAT 39 44 31N LONG 079 53 59W)							
NOV 2002 06...	--	90	--	<50	--	10	--
JAN 2003 07...	--	130	--	<50	--	20	--
MAR 04...	--	160	--	<50	--	20	--
MAY 06...	--	200	--	<50	--	20	--
JUL 14...	--	120	--	<50	--	60	--
SEP 10...	--	120	--	<50	--	10	--
03072850 South Fork Tenmile Creek near Rogersville, PA (LAT 39 53 00N LONG 080 18 59W)							
OCT 2002 31...	30	30	<4.0	<4.0	7.9	7.1	<5
NOV 06...	40	60	<4.0	<4.0	10	<5.0	<5
DEC 09...	60	70	<4.0	<4.0	30	20	<5
JAN 2003 07...	40	60	<4.0	<4.0	8.3	8.0	<5
MAR 04...	30	40	<4.0	<4.0	8.9	6.6	<5
APR 23...	60	60	<4.0	<4.0	<5.0	<5.0	--
MAY 06...	130	150	<4.0	<4.0	<5.0	<5.0	<5
JUL 14...	50	70	<4.0	<4.0	<5.0	<5.0	<5
AUG 13...	60	80	<4.0	<4.0	5.1	<5.0	<5
SEP 10...	50	70	<4.0	<4.0	<5.0	<5.0	<5
03077500 Youghiogheny River at Youghiogheny River Dam, PA (LAT 39 48 19N LONG 079 21 52W)							
NOV 2002 14...	--	120	--	<50	--	<10	--
JAN 2003 30...	--	70	--	<50	--	10	--
MAR 25...	--	90	--	<50	--	550	--
JUN 03...	--	60	--	<50	--	<10	--
JUL 21...	--	150	--	<50	--	<10	--
SEP 11...	--	350	--	<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, wat unfiltered, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, unfltrd water, mg/L as CaCO3 (00900)	Calcium unfltrd water, recoverable, mg/L (00915)	Calcium unfltrd recoverable, mg/L (00916)	Magnesium, unfltrd water, mg/L (00925)
03078020 Casselman River near Salisbury, PA (LAT 39 43 56N LONG 079 06 03W)													
NOV 2002													
14...	0900	1028	9813	805	40	11.7	7.2	146	5.4	49	--	14.0	3.07
MAR 2003													
25...	1030	1028	9813	1300	40	12.0	6.1	130	6.1	35	9.3	9.8	2.32
JUN													
03...	1345	1028	9813	1300	40	10.6	7.6	124	11.0	39	10.6	10.8	2.68
JUL													
21...	1415	1028	9813	172	40	10.1	7.7	190	--	61	17.5	17.7	3.89
SEP													
11...	1030	1028	9813	223	40	10.8	7.4	159	14.0	50	13.8	14.4	3.23
03079448 Kooser Run at Kooser State Park near Bakersville, PA (LAT 40 03 37N LONG 079 13 41W)													
OCT 2002													
17...	0930	1028	9813	5.5	30	10.5	7.6	288	9.4	79	26.5	28.3	1.93
NOV													
13...	1000	1028	9813	5.5	30	11.8	7.7	247	6.9	82	26.5	29.5	1.96
DEC													
10...	0900	1028	9813	--	30	13.5	8.4	278	1.5	71	22.7	25.1	1.79
MAR 2003													
24...	1030	1028	9813	19.6	30	11.5	7.4	261	6.3	61	19.7	21.7	1.49
APR													
30...	0930	1028	9813	285	30	10.7	7.8	245	9.1	68	22.0	24.3	1.57
JUN													
19...	0915	1028	9813	7.3	30	10.0	7.6	228	13.0	72	24.3	25.6	1.71
JUL													
21...	1000	1028	9813	2.3	30	9.2	7.5	253	--	81	28.7	28.9	2.07
AUG													
06...	0000	1028	9813	29	30	9.4	6.9	242	--	78	26.9	27.5	2.18
SEP													
11...	1245	1028	9813	2.3	30	10.0	7.8	262	14.0	78	27.8	28.2	1.89
03099600 Mahoning River at North Edinburg, PA (LAT 41 01 06N LONG 080 26 27W)													
NOV 2002													
12...	1130	1028	9813	980	40	9.6	7.5	596	11.8	180	--	53.8	--
JAN 2003													
13...	1300	1028	9813	1050	40	15.2	7.4	751	1.0	200	--	55.3	--
MAR													
11...	1300	1028	9813	2850	40	14.4	7.3	538	2.3	120	--	34.8	--
MAY													
27...	0945	1028	9813	2500	40	8.9	7.4	492	16.5	140	--	40.0	--
JUL													
10...	0950	1028	9813	5070	40	12.6	7.3	354	--	110	--	30.0	--
SEP													
15...	1005	1028	9813	550	40	6.2	7.1	570	23.0	170	--	46.7	--

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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 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)
03078020 Casselman River near Salisbury, PA (LAT 39 43 56N LONG 079 06 03W)													
NOV 2002 14...	3.4	16	--	--	24.9	110	<2	<.020	1.14	<.040	.01	.016	1.5
MAR 2003 25...	2.5	9	--	--	19.9	110	<2	<.020	.76	<.040	.01	.013	.91
JUN 03...	2.8	17	--	--	19.8	582	18	.020	.80	<.040	.05	.077	1.1
JUL 21...	4.0	20	--	--	33.3	140	2	<.020	.38	<.040	.01	.014	.48
SEP 11...	3.4	20	--	--	25.0	134	<2	<.020	.35	<.040	.01	.013	.51
03079448 Kooser Run at Kooser State Park near Bakersville, PA (LAT 40 03 37N LONG 079 13 41W)													
OCT 2002 17...	1.9	52	39.3	<.2	14.9	176	6	.070	1.59	<.040	<.01	<.010	2.0
NOV 13...	2.1	--	29.0	<.2	17.2	762	<2	<.020	2.48	<.040	<.01	.011	3.3
DEC 10...	2.0	--	42.2	<.2	13.3	--	2	<.020	1.46	<.040	<.01	<.010	1.8
MAR 2003 24...	1.6	--	48.4	<.2	12.3	104	8	<.020	1.51	<.040	.01	.013	1.8
APR 30...	1.7	38	40.2	<.2	12.1	186	10	<.020	1.22	<.040	<.01	<.010	1.4
JUN 19...	1.8	42	30.7	<.2	13.5	154	<2	<.020	1.59	<.040	.01	.013	1.9
JUL 21...	2.1	45	33.1	<.2	15.0	186	8	<.020	1.99	<.040	<.01	<.010	1.8
AUG 06...	2.1	46	34.4	<.2	12.8	156	2	<.020	1.28	<.040	<.01	<.010	1.3
SEP 11...	1.9	46	35.6	<.2	14.9	208	<2	<.020	1.86	<.040	.01	<.010	1.9
03099600 Mahoning River at North Edinburg, PA (LAT 41 01 06N LONG 080 26 27W)													
NOV 2002 12...	11.1	96	--	.4	77.1	416	14	.180	1.94	<.040	.13	.195	3.1
JAN 2003 13...	15.0	95	--	.3	84.7	496	16	.130	1.80	<.200	.06	.094	2.5
MAR 11...	8.9	58	--	<.2	54.6	368	38	.190	1.43	<.200	.10	.144	2.4
MAY 27...	10.6	75	--	.2	55.6	332	20	.070	1.23	<.200	.06	.096	2.1
JUL 10...	7.9	63	--	<.2	39.9	234	62	.070	.77	<.040	.13	.180	1.6
SEP 15...	12.1	100	--	.3	71.8	410	<2	.100	1.76	.070	.10	.129	1.9

**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 0.45µMF 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)
03078020 Casselman River near Salisbury, PA (LAT 39 43 56N LONG 079 06 03W)													
NOV 2002 14...	--	1.7	--	80	300	--	--	<4	<4	50	320	<1.0	<1.0
MAR 2003 25...	--	--	--	79	300	--	--	<4	<4	350	410	<1.0	<1.0
JUN 03...	--	1.2	--	48	800	--	--	<4	<4	40	1210	<1.0	1.2
JUL 21...	--	1.1	--	285	400	--	--	<4	<4	100	360	<1.0	<1.0
SEP 11...	--	.8	--	100	200	--	--	<4	<4	200	270	<1.0	<1.0
03079448 Kooser Run at Kooser State Park near Bakersville, PA (LAT 40 03 37N LONG 079 13 41W)													
OCT 2002 17...	--	1.9	140	30	73	<4.0	<.20	<4	<4	30	140	2.6	2.9
NOV 13...	--	1.3	<20	32	63	<4.0	<.20	<4	<4	20	90	<1.0	<1.0
DEC 10...	--	1.4	20	22	26	<4.0	<.20	<4	<4	<20	20	<1.0	<1.0
MAR 2003 24...	--	--	<20	36	100	<4.0	<.20	<4	<4	20	140	<1.0	<1.0
APR 30...	--	1.0	<20	19	50	<4.0	<.20	<4	<4	<20	70	<1.0	<1.0
JUN 19...	--	.8	40	18	100	<4.0	<.20	<4	<4	<20	210	<1.0	<1.0
JUL 21...	--	.9	40	12	72	<4.0	<.20	<4	<4	<20	80	<1.0	<1.0
AUG 06...	--	1.2	40	24	100	<4.0	<.20	<4	<4	<20	240	<1.0	<1.0
SEP 11...	--	.5	20	--	--	<4.0	<.20	<4	<4	--	--	<1.0	<1.0
03099600 Mahoning River at North Edinburg, PA (LAT 41 01 06N LONG 080 26 27W)													
NOV 2002 12...	7.2	--	--	--	300	--	--	--	<10	--	800	--	2.9
JAN 2003 13...	6.4	--	--	--	300	--	--	--	<10	--	570	--	4.7
MAR 11...	7.0	--	--	--	1700	--	--	--	<10	--	3040	--	5.7
MAY 27...	7.3	--	--	--	700	--	--	--	<10	--	1930	--	4.0
JUL 10...	10.0	--	--	--	2500	--	--	--	10	--	5010	--	10
SEP 15...	7.4	--	--	--	<200	--	--	--	<10	--	410	--	1.3

**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 fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Nickel, water, recovery fltrd, µg/L (01065)	Nickel, water, unfltrd recover- able, µg/L (01067)	Zinc, water, recovery fltrd, µg/L (01090)	Zinc, water, unfltrd recover- able, µg/L (01092)	Phen- olic com- pounds, water, unfltrd µg/L (32730)
03078020 Casselman River near Salisbury, PA (LAT 39 43 56N LONG 079 06 03W)							
NOV 2002							
14...	60	80	<4.0	<4.0	20	10	--
MAR 2003							
25...	80	100	4.1	4.8	10	20	--
JUN							
03...	70	130	<4.0	5.3	70	100	--
JUL							
21...	70	80	<4.0	4.0	<5.0	7.2	--
SEP							
11...	40	50	<4.0	<4.0	<5.0	<5.0	--
03079448 Kooser Run at Kooser State Park near Bakersville, PA (LAT 40 03 37N LONG 079 13 41W)							
OCT 2002							
17...	10	20	<4.0	<4.0	6.6	<5.0	<5
NOV							
13...	8.0	10	<4.0	<4.0	8.5	5.5	<5
DEC							
10...	7.2	8.3	<4.0	<4.0	20	20	<5
MAR 2003							
24...	10	20	<4.0	<4.0	<5.0	7.7	<5
APR							
30...	6.9	20	<4.0	<4.0	<5.0	<5.0	<5
JUN							
19...	10	30	<4.0	<4.0	<5.0	<5.0	<5
JUL							
21...	6.7	20	<4.0	<4.0	<5.0	<5.0	<5
AUG							
06...	10	20	<4.0	<4.0	<5.0	<5.0	<5
SEP							
11...	6.7	10	<4.0	<4.0	<5.0	<5.0	<5
03099600 Mahoning River at North Edinburg, PA (LAT 41 01 06N LONG 080 26 27W)							
NOV 2002							
12...	--	120	--	<50	--	20	<5
JAN 2003							
13...	--	100	--	<50	--	<10	--
MAR							
11...	--	260	--	<50	--	90	<5
MAY							
27...	--	140	--	<50	--	40	<5
JUL							
10...	--	290	--	<50	--	40	<5
SEP							
15...	--	90	--	<50	--	10	<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 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, unfiltered water, μ S/cm 25 degC (00095)	Temperature, unfiltered water, deg C (00010)	Hardness, unfiltered water, mg/L as CaCO3 (00900)	Calcium unfiltered water, recoverable, mg/L (00915)	Calcium unfiltered water, recoverable, mg/L (00916)	Magnesium, unfiltered water, mg/L (00925)
03103500 Shenango River at Sharpsville, PA (LAT 41 15 58N LONG 080 28 22W)													
NOV 2002													
19...	1130	1028	9813	340	40	10.6	7.8	219	7.1	96	--	28.1	--
JAN 2003													
14...	0945	1028	9813	715	40	14.8	7.8	275	.8	90	--	25.3	--
MAR													
18...	1145	1028	9813	1660	40	14.7	7.2	235	2.6	71	--	20.5	--
JUN													
04...	1040	1028	9813	1330	40	9.8	7.8	221	16.5	83	--	24.5	--
JUL													
29...	0905	1028	9813	2240	40	8.9	7.0	160	--	57	--	16.5	--
SEP													
23...	1015	1028	9813	840	40	8.4	6.7	213	20.5	84	--	24.8	--
03104500 Shenango River at New Castle, PA (LAT 41 00 00N LONG 080 21 21W)													
NOV 2002													
12...	1030	1028	9813	392	40	8.7	7.5	388	11.1	120	--	37.0	--
JAN 2003													
13...	1200	1028	9813	968	40	15.5	7.4	366	.8	110	--	31.1	--
MAR													
11...	1130	1028	9813	1730	40	14.1	7.3	535	.8	140	--	43.5	--
MAY													
27...	1150	1028	9813	2270	40	8.5	7.6	269	17.0	91	--	26.5	--
JUL													
10...	1220	1028	9813	941	40	7.2	7.5	319	--	110	--	31.3	--
SEP													
15...	1200	1028	9813	368	40	7.2	7.3	363	21.0	130	--	36.3	--
03105810 Connoquenessing Creek at Renfrew, PA (LAT 40 48 21N LONG 079 57 55W)													
NOV 2002													
21...	1100	1028	9813	80.1	40	11.3	7.3	803	5.5	270	--	89.9	--
JAN 2003													
16...	1130	1028	9813	82.4	40	14.3	7.3	725	.2	220	--	66.4	--
MAR													
20...	1230	1028	9813	333	40	18.2	7.0	460	7.3	110	--	32.0	--
JUN													
09...	0915	1028	9813	215	40	9.4	7.5	532	16.5	160	--	49.0	--
JUL													
24...	0935	1028	9813	439	40	9.1	7.3	417	--	120	--	36.3	--
SEP													
16...	0915	1028	9813	99	40	8.8	7.3	623	16.0	200	--	60.7	--
03109670 Ohio River at Mile 44.5 at Newell, WV (LAT 40 37 10N LONG 080 35 24W)													
NOV 2002													
05...	0930	1028	9813	18500	40	10.6	7.6	452	10.3	120	--	33.6	--
MAR 2003													
05...	0945	1028	9813	57600	40	15.4	7.7	362	3.8	92	--	25.7	--
MAY													
19...	1045	1028	9813	51400	40	10.7	7.0	251	16.0	86	--	24.4	--
JUL													
07...	1115	1028	9813	16300	40	8.6	7.5	390	--	130	--	35.7	--
SEP													
04...	0930	1028	9813	98600	40	8.8	6.8	289	22.0	110	--	29.6	--

**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)
03103500 Shenango River at Sharpsville, PA (LAT 41 15 58N LONG 080 28 22W)													
NOV 2002 19...	6.3	72	--	<.2	20.7	170	12	.080	.11	<.040	.02	.037	1.1
JAN 2003 14...	6.5	43	--	<.2	27.8	208	8	.080	2.35	<.040	.03	.039	3.0
MAR 18...	4.8	40	--	<.2	20.8	56	8	.050	<.04	<.040	.03	.038	2.2
JUN 04...	5.2	57	--	<.2	16.8	160	16	.130	.54	.040	.04	.048	1.6
JUL 29...	3.7	44	--	<.2	12.4	128	10	.100	.47	<.040	.04	.057	1.1
SEP 23...	5.4	66	--	<.2	14.5	138	18	.160	.08	<.040	.04	.051	.72
03104500 Shenango River at New Castle, PA (LAT 41 00 00N LONG 080 21 21W)													
NOV 2002 12...	7.5	76	--	.2	39.6	10660	20	.100	.95	<.040	.16	.219	3.0
JAN 2003 13...	7.4	52	--	<.2	36.6	270	4	.180	2.24	<.040	.04	.071	3.0
MAR 11...	8.0	65	--	<.2	41.7	352	6	.090	1.69	<.200	.04	.057	2.5
MAY 27...	6.1	63	--	<.2	23.7	182	22	.080	.47	<.040	.04	.098	1.2
JUL 10...	7.0	76	--	<.2	28.2	246	56	.070	.89	<.200	.10	.210	1.6
SEP 15...	8.7	82	--	<.2	35.8	256	8	.030	.95	<.040	.07	.099	1.1
03105810 Connoquenessing Creek at Renfrew, PA (LAT 40 48 21N LONG 079 57 55W)													
NOV 2002 21...	12.0	64	--	--	110	280	<2	.040	3.07	<.200	.04	.064	3.4
JAN 2003 16...	12.0	44	--	--	99.9	566	6	.130	3.33	<.200	.05	.072	3.8
MAR 20...	7.4	28	--	--	50.3	346	16	.120	1.88	<.200	.02	.030	2.2
JUN 09...	9.6	55	--	--	63.2	390	26	.030	1.46	<.200	.06	.103	2.0
JUL 24...	7.5	54	--	--	44.4	318	32	<.020	1.48	<.040	.06	.120	2.1
SEP 16...	10.9	66	--	--	69.8	550	6	.040	1.90	<.200	.06	.070	2.4
03109670 Ohio River at Mile 44.5 at Newell, WV (LAT 40 37 10N LONG 080 35 24W)													
NOV 2002 05...	9.6	48	--	--	115	294	2	.070	.96	<.040	.02	.032	1.6
MAR 2003 05...	6.8	34	--	--	55.1	240	22	.090	1.15	<.040	.04	.041	1.4
MAY 19...	6.1	35	--	--	50.7	174	<2	<.020	.64	<.040	.04	.050	.99
JUL 07...	9.8	52	--	--	79.8	266	14	.030	.72	<.200	.02	.043	1.1
SEP 04...	7.8	44	--	--	58.8	198	124	.280	.67	<.040	.05	.141	1.1

**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	Organic carbon, water, unfltrd mg/L (00680)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coli-form, M-FC 0.45µMF 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)
03103500 Shenango River at Sharpsville, PA (LAT 41 15 58N LONG 080 28 22W)													
NOV 2002 19...	5.4	--	--	--	<200	--	--	--	<10	--	320	--	2.2
JAN 2003 14...	6.2	--	--	--	400	--	--	--	<10	--	600	--	<1.0
MAR 18...	5.1	--	--	--	500	--	--	--	<10	--	640	--	<1.0
JUN 04...	7.6	--	--	--	600	--	--	--	<10	--	890	--	<1.0
JUL 29...	7.7	--	--	--	600	--	--	--	<10	--	900	--	1.0
SEP 23...	6.4	--	--	--	400	--	--	--	<10	--	750	--	<1.0
03104500 Shenango River at New Castle, PA (LAT 41 00 00N LONG 080 21 21W)													
NOV 2002 12...	7.0	--	--	--	500	--	--	--	<10	--	1850	--	4.8
JAN 2003 13...	5.3	--	--	--	400	--	--	--	<10	--	930	--	16.1
MAR 11...	4.5	--	--	--	400	--	--	--	<10	--	740	--	13.3
MAY 27...	7.1	--	--	--	900	--	--	--	<10	--	1920	--	2.9
JUL 10...	7.3	--	--	--	1900	--	--	--	<10	--	3370	--	6.2
SEP 15...	5.9	--	--	--	300	--	--	--	<10	--	1000	--	1.6
03105810 Connoquenessing Creek at Renfrew, PA (LAT 40 48 21N LONG 079 57 55W)													
NOV 2002 21...	2.9	--	--	--	<200	--	--	--	<10	--	380	--	<1.0
JAN 2003 16...	2.5	--	--	--	<200	--	--	--	<10	--	400	--	<1.0
MAR 20...	2.1	--	--	--	300	--	--	--	<10	--	530	--	4.6
JUN 09...	3.2	--	--	--	900	--	--	--	<10	--	1750	--	2.5
JUL 24...	3.4	--	--	--	1800	--	--	--	10	--	2820	--	4.4
SEP 16...	3.5	--	--	--	200	--	--	--	<10	--	680	--	1.0
03109670 Ohio River at Mile 44.5 at Newell, WV (LAT 40 37 10N LONG 080 35 24W)													
NOV 2002 05...	2.6	--	--	--	<200	--	--	--	<10	--	280	--	1.1
MAR 2003 05...	2.2	--	--	--	800	--	--	--	<10	--	1370	--	1.5
MAY 19...	2.7	--	--	--	1100	--	--	--	<10	--	1640	--	2.1
JUL 07...	2.9	--	--	--	200	--	--	--	<10	--	370	--	<1.0
SEP 04...	3.8	--	--	--	3000	--	--	--	20	--	5310	--	8.3

**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)
03103500 Shenango River at Sharpsville, PA (LAT 41 15 58N LONG 080 28 22W)							
NOV 2002							
19...	--	80	--	<50	--	<10	<5
JAN 2003							
14...	--	70	--	<50	--	<10	<5
MAR							
18...	--	70	--	<50	--	<10	<5
JUN							
04...	--	120	--	<50	--	420	<5
JUL							
29...	--	120	--	<50	--	<10	<5
SEP							
23...	--	120	--	<50	--	<10	<5
03104500 Shenango River at New Castle, PA (LAT 41 00 00N LONG 080 21 21W)							
NOV 2002							
12...	--	160	--	<50	--	40	<5
JAN 2003							
13...	--	90	--	<50	--	30	<5
MAR							
11...	--	70	--	<50	--	80	<5
MAY							
27...	--	130	--	<50	--	40	<5
JUL							
10...	--	220	--	<50	--	60	<5
SEP							
15...	--	160	--	<50	--	20	<5
03105810 Connoquenessing Creek at Renfrew, PA (LAT 40 48 21N LONG 079 57 55W)							
NOV 2002							
21...	--	90	--	<50	--	30	--
JAN 2003							
16...	--	160	--	<50	--	20	--
MAR							
20...	--	100	--	<50	--	10	--
JUN							
09...	--	150	--	<50	--	200	--
JUL							
24...	--	200	--	<50	--	20	--
SEP							
16...	--	90	--	<50	--	250	--
03109670 Ohio River at Mile 44.5 at Newell, WV (LAT 40 37 10N LONG 080 35 24W)							
NOV 2002							
05...	--	60	--	<50	--	<10	--
MAR 2003							
05...	--	220	--	<50	--	90	--
MAY							
19...	--	180	--	<50	--	20	<5
JUL							
07...	--	90	--	<50	--	30	--
SEP							
04...	--	530	--	<50	--	180	--

**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, mg/L (00915)	Calcium unfltrd recoverable, mg/L (00916)	Magnesium, water, unfltrd, mg/L (00925)
04212945 Conneaut Creek at Cherry Hill, PA (LAT 41 55 04N LONG 080 28 09W)													
NOV 2002 18...	1215	1028	9813	483	40	11.7	7.5	267	4.5	110	--	31.7	--
MAR 2003 17...	1230	1028	9813	2000	40	13.7	7.2	99	1.6	50	--	12.4	--
JUN 04...	1610	1028	9813	110	40	10.8	7.9	194	15.5	81	--	24.0	--
SEP 24...	1345	1028	9813	285	40	8.7	7.3	168	16.0	69	--	19.3	--
04213273 Twelvemile Creek near Moorheadville, PA (LAT 42 12 15N LONG 079 54 46W)													
OCT 2002 21...	1300	1028	9813	164	30	11.5	7.8	413	9.5	120	--	35.5	--
NOV 18...	1400	1028	9813	350	30	12.6	7.7	224	4.8	78	--	23.1	--
DEC 16...	1230	1028	9813	359	30	16.5	8.0	333	1.2	81	--	24.3	--
MAR 2003 17...	1430	1028	9813	350	30	14.0	7.3	217	4.6	55	--	15.5	--
APR 14...	1400	1028	9813	14.9	30	12.2	8.5	343	11.2	100	--	30.8	--
JUN 05...	0820	1028	9813	10.6	30	11.4	8.1	364	13.0	120	--	37.9	--
JUL 30...	1055	1028	9813	7.8	30	10.1	7.9	339	--	110	--	34.3	--
AUG 27...	1110	1028	9813	3.8	30	13.8	8.5	412	--	150	--	43.9	--
SEP 24...	1100	1028	9813	9.4	30	10.2	7.7	269	14.0	82	--	24.5	--
Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, unfltrd, mg/L (00940)	Fluoride, water, unfltrd, mg/L (00951)	Sulfate water, unfltrd, mg/L (00945)	Residue on evap. at 105degC wat fltr mg/L (00515)	Residue total at 105 deg. C, suspended, 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)	Orthophosphate, water, unfltrd, mg/L as P (00507)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, water, unfltrd, mg/L (00600)
04212945 Conneaut Creek at Cherry Hill, PA (LAT 41 55 04N LONG 080 28 09W)													
NOV 2002 18...	8.3	64	--	--	34.3	256	20	.020	1.91	<.040	.05	.053	3.2
MAR 2003 17...	4.7	21	--	--	10.7	6	270	.030	.62	<.040	.11	.196	1.2
JUN 04...	5.1	56	--	--	16.1	158	4	.040	.68	<.040	.03	.037	1.2
SEP 24...	5.1	47	--	--	14.5	182	4	.030	.53	<.040	.10	.127	1.2
04213273 Twelvemile Creek near Moorheadville, PA (LAT 42 12 15N LONG 079 54 46W)													
OCT 2002 21...	6.9	54	43.1	<.2	52.7	286	<2	.080	2.02	<.040	<.01	<.010	2.5
NOV 18...	4.9	36	29.4	<.2	30.8	174	20	<.020	1.40	<.040	.02	.012	2.1
DEC 16...	4.8	--	58.6	<.2	27.8	182	10	<.020	1.48	<.200	<.01	.025	1.8
MAR 2003 17...	4.0	20	40.2	<.2	14.8	198	326	<.020	1.08	<.040	.07	.082	1.6
APR 14...	5.9	49	44.9	<.2	33.9	270	<2	<.020	1.95	<.040	<.01	<.010	2.0
JUN 05...	6.7	68	43.2	<.2	35.1	274	4	.050	1.92	<.040	<.01	.016	7.5
JUL 30...	6.4	69	40.1	<.2	32.1	220	4	<.020	1.55	<.040	.01	.010	1.7
AUG 27...	8.8	84	44.5	<.2	41.6	310	8	<.020	2.10	<.040	<.01	.020	2.7
SEP 24...	5.0	60	30.9	<.2	21.9	172	10	<.020	.74	<.040	.01	.011	.82

**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 col/100 mL (31616)	Alum-inum, water, fltrd, -able, 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, unfltrd recover, -able, µg/L (01046)	Iron, water, unfltrd recover, -able, µg/L (01045)	Lead, water, unfltrd recover, -able, µg/L (01049)	Lead, water, unfltrd recover, -able, µg/L (01051)
04212945 Conneaut Creek at Cherry Hill, PA (LAT 41 55 04N LONG 080 28 09W)													
NOV 2002 18...	6.4	--	--	--	900	--	--	--	<10	--	1290	--	2.7
MAR 2003 17...	4.9	--	--	--	7200	--	--	--	<10	--	13600	--	6.7
JUN 04...	6.8	--	--	--	300	--	--	--	<10	--	910	--	<1.0
SEP 24...	11.2	--	--	--	1500	--	--	--	<10	--	2350	--	1.5
04213273 Twelvemile Creek near Moorheadville, PA (LAT 42 12 15N LONG 079 54 46W)													
OCT 2002 21...	--	<.2	920	36	55	<4.0	<.20	<4	<4	<20	70	<1.0	<1.0
NOV 18...	--	.5	100	37	200	<4.0	<.20	<4	<4	30	280	<1.0	<1.0
DEC 16...	--	.5	160	39	100	<4.0	<.20	<4	<4	20	160	<1.0	<1.0
MAR 2003 17...	--	<.2	90	36	3300	<4.0	<.20	<4	5	50	7370	<1.0	4.0
APR 14...	--	<.2	60	31	56	<4.0	<.20	<4	<4	30	80	<1.0	<1.0
JUN 05...	--	1.6	--	20	92	<4.0	<.20	<4	<4	<20	190	<1.0	<1.0
JUL 30...	--	.9	200	<10	26	<4.0	<.20	<4	<4	<20	60	<1.0	<1.0
AUG 27...	--	1.3	180	<10	26	<4.0	<.20	<4	<4	20	90	<1.0	<1.0
SEP 24...	--	1.2	220	18	39	<4.0	<.20	<4	<4	80	120	<1.0	<1.0

Date	Mangan-ese, water, fltrd, µg/L (01056)	Mangan-ese, water, unfltrd recover, -able, µg/L (01055)	Nickel, water, unfltrd recover, -able, µg/L (01065)	Nickel, water, unfltrd recover, -able, µg/L (01067)	Zinc, water, unfltrd recover, -able, µg/L (01090)	Zinc, water, unfltrd recover, -able, µg/L (01092)	Phen-olic com-pounds, water, unfltrd µg/L (32730)
04212945 Conneaut Creek at Cherry Hill, PA (LAT 41 55 04N LONG 080 28 09W)							
NOV 2002 18...	--	70	--	<50	--	<10	--
MAR 2003 17...	--	230	--	<50	--	40	--
JUN 04...	--	40	--	<50	--	30	--
SEP 24...	--	60	--	<50	--	80	--
04213273 Twelvemile Creek near Moorheadville, PA (LAT 42 12 15N LONG 079 54 46W)							
OCT 2002 21...	5.2	6.7	<4.0	<4.0	5.7	<5.0	<5
NOV 18...	6.3	10	<4.0	<4.0	10	9.4	<5
DEC 16...	8.7	10	<4.0	<4.0	10	100	<5
MAR 2003 17...	20	120	<4.0	7.3	<5.0	30	<5
APR 14...	8.2	10	<4.0	<4.0	<5.0	<5.0	--
JUN 05...	7.3	20	<4.0	<4.0	<5.0	<5.0	<5
JUL 30...	4.0	6.1	<4.0	<4.0	<5.0	<5.0	<5
AUG 27...	5.3	10	<4.0	<4.0	<5.0	<5.0	<5
SEP 24...	5.3	7.3	<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 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 std units (00400)	Specific conductance, wat unfltrd μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd CaCO3 mg/L as (00900)	Calcium, unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd recover-able, mg/L (00927)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)
03021545 Union City Reservoir near Union City, PA (LAT 41 54 54N LONG 079 48 55W)													
AUG 2003													
06...	0820	1028	9813	1.0	1.7	4.9	7.6	200	22.0	103	30.3	6.6	83
06...	0830	1028	9813	6.0	1.7	2.8	7.3	217	21.2	110	32.3	7.2	92
03023012 Tamarack Lake West near Meadville, PA (LAT 41 34 37N LONG 080 04 39W)													
AUG 2003													
05...	1320	1028	9813	1.0	.3	8.9	8.4	124	24.4	43	12.0	3.1	22
05...	1340	1028	9813	3.0	.3	1.0	7.1	137	22.7	45	12.5	3.3	28
03023373 Tamarack Lake East near Meadville, PA (LAT 41 36 45N LONG 080 07 02W)													
AUG 2003													
05...	1140	1028	9813	1.0	.7	6.1	7.3	123	23.5	40	11.1	2.9	23
05...	1200	1028	9813	3.0	.7	0.1	6.8	127	22.7	44	12.2	3.3	34
03024228 Sugar Lake near Bradyletown, PA (LAT 41 33 59N LONG 079 56 36W)													
AUG 2003													
05...	1610	1028	9813	1.0	1.1	7.5	7.5	129	23.1	57	16.9	3.6	45
05...	1620	1028	9813	3.0	1.1	0.4	6.8	158	18.7	52	15.1	3.5	44
03042260 Yellow Creek Lake near Bush Valley, PA (LAT 40 35 27N LONG 079 03 11W)													
JUL 2003													
29...	1035	1028	9813	1.0	1.8	9.8	8.1	159	23.3	59	16.2	4.6	27
29...	1110	1028	9813	7.0	1.8	0.5	6.9	174	15.3	60	16.7	4.5	39
03079050 High Point Lake at Savage, PA (LAT 39 46 54N LONG 079 13 36W)													
JUL 2003													
28...	1120	1028	9813	1.0	3.1	6.6	7.5	77	22.3	31	10.3	1.2	23
28...	1150	1028	9813	5.0	3.1	5.4	7.1	77	22.2	31	10.3	1.2	24
Date		Residue total at 105 Sulfate water, fltrd, mg/L (00945)	Ammonia water, unfltrd mg/L as N (00530)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd, μ g/L (01106)	Aluminum, water, unfltrd recover-able, μ g/L (01105)	Copper, water, unfltrd, μ g/L (01040)	Copper, water, unfltrd recover-able, μ g/L (01042)	Iron, water, unfltrd, μ g/L (01046)	Iron, water, unfltrd recover-able, μ g/L (01045)	Lead, water, unfltrd, μ g/L (01049)
03021545 Union City Reservoir near Union City, PA (LAT 41 54 54N LONG 079 48 55W)													
AUG 2003													
13...	6.3	4	.08	.02	.66	9.4	<10	22	<4	<4	210	490	<1.0
13...	6.7	2	.15	.03	1.0	9.4	14	35	<4	<4	360	730	<1.0
03023012 Tamarack Lake West near Meadville, PA (LAT 41 34 47N LONG 080 04 39W)													
AUG 2003													
05...	11.2	36	<.02	.14	2.1	11.8	22	110	<4	<4	120	1200	<1.0
05...	10.7	14	.30	.06	.59	9.6	21	110	<4	<4	130	1000	<1.0
03023373 Tamarack Lake East near Meadville, PA (LAT 41 36 45N LONG 080 07 02W)													
AUG 2003													
05...	11.0	12	<.02	.05	.96	9.6	19	93	<4	<4	70	840	<1.0
05...	9.1	2	.06	.04	1.4	8.9	21	57	<4	<4	1300	1600	<1.0
03024228 Sugar Lake near Bradyletown, PA (LAT 41 33 59N LONG 079 56 36W)													
AUG 2003													
05...	5.7	6	<.02	.06	.64	9.4	12	27	<4	<4	130	730	<1.0
05...	6.4	6	.34	.04	1.1	9.9	20	76	<4	<4	230	720	<1.0
03042260 Yellow Creek Lake near Bush Valley, PA (LAT 40 35 27N LONG 079 03 11W)													
JUL 2003													
29...	31.0	8	<.02	.02	.86	2.7	36	90	<4	<4	<20	110	<1.0
29...	28.1	8	.31	.01	.52	2.2	40	100	<4	<4	150	410	<1.0
03079050 High Point Lake at Savage, PA (LAT 39 46 54N LONG 079 13 36W)													
JUL 2003													
28...	7.2	8	.05	.02	.32	2.4	18	26	<4	<4	30	110	<1.0
28...	7.1	2	.07	.01	.32	2.3	19	29	<4	<4	27	140	<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)
003021545	Union City Reservoir near Union City, PA (LAT 41 54 54N LONG 079 48 55W)				
AUG 2003					
13...	<1.0	140	310	<5.0	<5.0
13...	<1.0	420	610	<5.0	6.4
03023012	Tamarack Lake West near Meadville, PA (LAT 41 34 47N LONG 080 04 39W)				
AUG 2003					
05...	<1.0	3	120	<5.0	<5.0
05...	<1.0	1200	1400	<5.0	<5.0
03023373	Tamarack Lake East near Meadville, PA (LAT 41 36 45N LONG 080 07 02W)				
AUG 2003					
05...	<1.0	5	140	<5.0	<5.0
05...	<1.0	2800	2800	<5.0	<5.0
003024228	Sugar Lake near Bradletown, PA (LAT 41 33 59N LONG 079 56 36W)				
AUG 2003					
05...	<1.0	18	250	<5.0	<5.0
05...	<1.0	1600	2000	<5.0	<5.0
03042260	Yellow Creek Lake near Bush Valley, PA (LAT 40 35 27N LONG 079 03 11W)				
JUL 2003					
29...	<1.0	<2	50	<5.0	5.3
29...	<1.0	2800	3200	5.2	<5.0
03079050	High Point Lake at Savage, PA (LAT 39 46 54N LONG 079 13 16W)				
JUL 2003					
28...	<1.0	49	110	14	9.8
28...	<1.0	78	160	11	7.3

**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 (*) indicates that samples were collected using a multiplate sampler that was deployed for 5 weeks. 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	03010956	03012600	03017500	03025490	03026175	03030852
Date	8/22/02	8/20/02	8/22/02	9/24/02	9/24/02	9/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Platyhelminthes						
Turbellaria (FLATWORMS)						
Tricladida						
Planariidae	--	--	--	1	--	--
Nematoda (NEMATODES)	1	--	--	--	--	--
Mollusca						
Gastropoda (SNAILS)						
Basommatophora						
Ancylidae						
<u>Ferrissia</u> sp	--	15	5	--	--	--
Hydrobiidae						
<u>Amnicola</u> sp	--	21	--	--	1	--
Physidae						
<u>Physa</u> sp	--	--	--	--	1	--
Planorbidae						
<u>Planorbella</u> sp	--	--	--	--	--	--
Pleuroceridae						
<u>Elimia</u> sp	--	1	--	1	--	--
<u>Leptoxis carinata</u>	--	--	--	--	9	--
Bivalvia (CLAMS)						
Veneroida						
Corbiculidae						
<u>Corbicula fluminea</u>	--	--	--	--	--	--
Sphaeriidae						
<u>Pisidium</u> sp	--	1	--	--	--	--
<u>Sphaerium</u> sp	--	4	2	--	2	--
Annelida						
Hirudinea (LEECHES)						
Hirudinea	14	--	7	--	--	--
Oligochaeta (AQUATIC EARTHWORMS)						
Oligochaeta	34	6	5	--	--	--
Lumbriculida						
Lumbriculidae	--	--	--	12	2	--
Tubificida						
Enchytraeidae	--	--	--	--	--	--
Naididae	--	--	--	--	--	--
Tubificidae	--	--	--	--	--	--
Arthropoda						
Acariformes						
Hydrachnidia (WATER MITES)	9	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

03044000	03049652*	0306300*	03071700*	03077500	03078020	Station Number
9/21/02	9/27/02	9/26/02	9/26/02	9/19/02	9/19/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
						Platyhelminthes
						Turbellaria (FLATWORMS)
						Tricladida
--	7	14	--	--	--	Planariidae
--	--	--	--	1	--	Nematoda (NEMATODES)
						Mollusca
						Gastropoda (SNAILS)
						Basommatophora
						Ancylidae
--	--	--	1	--	7	<u>Ferrissia</u> sp
						Hydrobiidae
--	--	--	--	--	--	<u>Amnicola</u> sp
						Physidae
--	--	2	2	--	--	<u>Physa</u> sp
						Planorbidae
--	1	2	1	--	--	<u>Planorbella</u> sp
						Pleuroceridae
--	5	--	--	--	--	<u>Elimia</u> sp
--	--	--	--	--	--	<u>Leptoxis carinata</u>
						Bivalvia (CLAMS)
						Veneroida
						Corbiculidae
3	--	1	--	--	--	<u>Corbicula fluminea</u>
--	--	2	--	--	--	Sphaeriidae
--	--	--	--	--	--	<u>Pisidium</u> sp
--	1	--	3	--	--	<u>Sphaerium</u> sp
						Annelida
--	--	--	--	--	--	Hirudinea (LEECHES)
--	--	--	--	--	--	Oligochaeta (AQUATIC EARTHWORMS)
						Lumbriculida
--	--	--	--	--	--	Lumbriculidae
						Tubificida
--	--	--	--	1	--	Enchytraeidae
--	5	12	7	19	--	Naididae
--	--	--	--	--	--	Tubificidae
						Arthropoda
						Acariformes
--	--	1	--	--	--	Hydrachnidia (WATER MITES)

**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	03010956	03012600	03017500	03025490	03026175	03030852
Date	8/22/02	8/20/02	8/22/02	9/24/02	9/24/02	9/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Crustacea						
Cladocera	--	--	--	--	--	--
Amphipoda (SCUDS)						
Crangonyctidae						
<u>Crangonyx</u> sp	--	--	--	--	--	--
Gammaridae						
<u>Gammarus</u> sp	--	2	--	--	--	--
Isopoda (AQUATIC SOWBUGS)						
Asellidae						
<u>Caecidotea</u> sp	--	--	--	--	--	--
Copepoda	--	--	--	--	--	--
Insecta						
Ephemeroptera (MAYFLIES)						
Baetidae						
<u>Acentrella</u> sp	1	--	--	18	--	--
<u>Baetis</u> sp	3	1	--	5	2	--
<u>Heterocloeon</u> sp	--	--	--	1	2	--
<u>Plauditus</u> sp	--	--	--	--	--	6
<u>Procloeon</u> sp	1	--	--	--	--	--
Caenidae						
<u>Caenis</u> sp	--	3	--	--	--	--
Ephemerellidae						
<u>Serratella</u> sp	--	3	--	12	6	--
Heptageniidae						
<u>Stenacron</u> sp	--	--	--	--	1	--
<u>Stenonema</u> sp	--	57	5	6	11	--
Isonychiidae						
<u>Isonychia</u> sp	--	5	6	11	22	1
Potamanthidae						
<u>Anthopotamus</u> sp	--	--	--	1	--	--
Tricorythidae						
<u>Tricorythodes</u> sp	--	--	--	3	--	--
Odonata (DRAGONFLIES AND DAMSELFLIES)						
Coenagrionidae						
<u>Argia</u> sp	--	--	--	--	--	--
Gomphidae						
<u>Dromogomphus</u> sp	--	--	--	--	--	--
<u>Ophiogomphus</u> sp	--	--	6	--	--	--
Libellulidae						
Plecoptera (STONEFLIES)						
Perlidae						
<u>Acroneuria</u> sp	--	--	1	--	--	--
<u>Paragnetina</u> sp	--	--	--	--	--	--
Megaloptera						
Corydalidae (FISHFLIES AND DOBSONFLIES)						
<u>Corydalis</u> sp	--	--	--	--	--	4

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

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

03044000	03049652*	0306300*	03071700*	03077500	03078020	Station Number
9/21/02	9/27/02	9/26/02	9/26/02	9/19/02	9/19/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
--	341	28	--	--	--	Crustacea
						Cladocera
						Amphipoda (SCUDS)
						Crangonyctidae
--	--	--	4	2	--	<u>Crangonyx</u> sp
						Gammaridae
--	--	--	--	--	--	<u>Gammarus</u> sp
						Isopoda (AQUATIC SOWBUGS)
						Asellidae
--	--	--	--	11	--	<u>Caecidotea</u> sp
--	6	--	--	--	--	Copepoda
						Insecta
						Ephemeroptera (MAYFLIES)
						Baetidae
--	--	--	--	--	--	<u>Acentrella</u> sp
--	--	--	--	--	--	<u>Baetis</u> sp
--	--	--	--	--	--	<u>Heterocloeon</u> sp
--	--	--	--	--	1	<u>Plauditus</u> sp
--	--	--	--	--	--	<u>Procloeon</u> sp
						Caenidae
--	--	--	--	--	--	<u>Caenis</u> sp
						Ephemerellidae
--	--	--	--	--	--	<u>Serratella</u> sp
--	4	--	1	--	--	Heptageniidae
--	--	2	--	--	1	<u>Stenacron</u> sp
--	--	--	--	--	19	<u>Stenonema</u> sp
						Isonychiidae
--	--	--	--	--	7	<u>Isonychia</u> sp
						Potamanthidae
--	--	--	--	--	--	<u>Anthopotamus</u> sp
						Tricorythidae
--	1	--	--	--	--	<u>Tricorythodes</u> sp
						Odonata (DRAGONFLIES AND DAMSELFLIES)
						Coenagrionidae
--	--	--	2	--	--	<u>Argia</u> sp
						Gomphidae
--	--	--	--	--	1	<u>Dromogomphus</u> sp
--	--	--	--	--	--	<u>Ophiogomphus</u> sp
--	--	--	1	--	--	Libellulidae
						Plecoptera (STONEFLIES)
						Perlidae
--	--	--	--	--	--	<u>Acroneuria</u> sp
--	--	--	--	--	1	<u>Paragnetina</u> sp
						Megaloptera
						Corydalidae (FISHFLIES AND DOBSONFLIES)
--	--	--	--	--	--	<u>Corydalus</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	03010956	03012600	03017500	03025490	03026175	03030852
Date	8/22/02	8/20/02	8/22/02	9/24/02	9/24/02	9/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)						
Brachycentridae						
<u>Brachycentrus</u> sp	--	--	7	1	7	--
Glossosomatidae						
<u>Protophila</u> sp	--	--	--	--	2	--
Helicopsychidae						
<u>Helicopsyche</u> sp	--	--	--	2	--	--
Hydropsychidae						
<u>Cheumatopsyche</u> sp	3	10	1	25	11	3
<u>Hydropsyche</u> sp	2	11	2	41	32	71
<u>Macrostemum</u> sp	--	10	13	3	9	12
Hydroptilidae						
<u>Hydroptila</u> sp	--	--	--	--	--	--
Leptoceridae						
<u>Oecetis</u> sp	--	--	--	--	--	--
Philopotamidae						
<u>Chimarra</u> sp	--	1	1	--	--	--
Polycentropodidae						
<u>Neureclipsis</u> sp	--	--	--	--	--	1
<u>Polycentropus</u> sp	--	--	--	--	--	--
Elmidae (RIFFLE BEETLES)						
<u>Dubiraphia</u> sp	--	1	--	--	--	--
<u>Optioservus</u> sp	--	2	8	10	--	2
<u>Stenelmis</u> sp	--	2	--	12	2	--
Psephenidae (WATER PENNIES)						
<u>Psephenus</u> sp	2	2	2	--	--	--
Diptera (TRUE FLIES)						
Chironomidae (MIDGES)						
Chironomidae (MIDGES)	141	2	42	45	33	3
Empididae (DANCE FLIES)						
Empididae (DANCE FLIES)	--	--	1	--	--	--
Simuliidae (BLACK FLIES)						
<u>Simulium</u> sp	--	--	--	1	--	--
Tipulidae (CRANE FLIES)						
<u>Antocha</u> sp	--	--	1	--	--	--
Total Organisms	211	161	116	211	155	103

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

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

03044000	03049652*	0306300*	03071700*	03077500	03078020	Station Number
9/21/02	9/27/02	9/26/02	9/26/02	9/19/02	9/19/02	Date
Count	Count	Count	Count	Count	Count	Benthic Macroinvertebrate
						Trichoptera (CADDISFLIES)
						Brachycentridae
--	--	--	--	--	--	<u>Brachycentrus</u> sp
						Glossosomatidae
--	--	--	--	--	--	<u>Protoptila</u> sp
						Helicopsychidae
--	--	--	--	--	--	<u>Helicopsyche</u> sp
						Hydropsychidae
91	--	--	--	2	33	<u>Cheumatopsyche</u> sp
22	--	--	--	--	32	<u>Hydropsyche</u> sp
--	--	--	--	--	--	<u>Macrostemum</u> sp
						Hydroptilidae
--	2	3	--	2	--	<u>Hydroptila</u> sp
						Leptoceridae
1	1	1	6	--	--	<u>Oecetis</u> sp
						Philopotamidae
--	--	--	--	--	2	<u>Chimarra</u> sp
						Polycentropodidae
1	9	14	--	--	--	<u>Neureclipsis</u> sp
--	--	--	6	--	--	<u>Polycentropus</u> sp
						Coleoptera (BEETLES)
						Elmidae (RIFFLE BEETLES)
--	--	--	--	--	--	<u>Dubiraphia</u> sp
--	--	--	--	--	5	<u>Optioservus</u> sp
1	--	--	--	--	2	<u>Stenelmis</u> sp
						Psephenidae (WATER PENNIES)
--	--	--	--	--	--	<u>Psephenus</u> sp
						Diptera (TRUE FLIES)
1	160	191	18	23	6	Chironomidae (MIDGES)
						Simuliidae (BLACK FLIES)
1	--	--	--	69	1	<u>Simulium</u> sp
						Tipulidae (CRANE FLIES)
--	--	--	--	--	1	<u>Antocha</u> sp
121	543	274	52	130	119	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	03099600	03103500	03104500	03105810	03109670*	04212945
Date	9/25/02	9/25/02	9/23/02	9/13/02	9/25/02	9/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Platyhelminthes						
Turbellaria (FLATWORMS)						
Tricladida						
Planariidae	4	6	1	--	26	7
Mollusca						
Gastropoda (SNAILS)						
Basommatophora						
Ancyliidae						
<u>Ferrissia</u> sp	--	2	1	--	6	--
Hydrobiidae	--	--	--	--	6	--
<u>Amnicola</u> sp	2	--	--	--	10	--
Physidae						
<u>Physsa</u> sp	--	1	--	--	6	--
Planorbidae						
<u>Planorbella</u> sp	--	--	--	--	7	--
Bivalvia (CLAMS)						
Veneroidea						
Corbiculidae						
<u>Corbicula fluminea</u>	2	1	9	--	3	--
Dreissenidae						
<u>Dreissena polymorpha</u>	--	--	--	--	34	--
Sphaeriidae						
<u>Pisidium</u> sp	--	--	--	--	--	2
<u>Sphaerium</u> sp	--	--	1	--	--	--
Annelida						
Oligochaeta (AQUATIC EARTHWORMS)						
Tubificida						
Naididae	18	2	--	--	1	--
Tubificidae	1	4	1	--	--	1
Arthropoda						
Crustacea						
Cladocera						
	--	--	--	--	261	---
Amphipoda (SCUDS)						
Gammaridae						
<u>Gammarus</u> sp	16	9	--	--	15	--
Isopoda (AQUATIC SOWBUGS)						
Asellidae						
<u>Caecidotea</u> sp	1	--	--	--	--	--
Copepoda						
	--	--	--	--	8	--

**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	03099600	03103500	03104500	03105810	03109670*	04212945
Date	9/25/02	9/25/02	9/23/02	9/13/02	9/25/02	9/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Insecta						
Ephemeroptera (MAYFLIES)						
Baetidae						
<u>Baetis</u> sp	2	--	--	--	--	1
Caenidae						
<u>Caenis</u> sp	--	--	--	--	1	--
Ephemerellidae						
<u>Serratella</u> sp	--	--	--	--	--	5
Heptageniidae						
<u>Stenacron</u> sp	--	--	--	--	3	--
<u>Stenonema</u> sp	--	--	6	--	--	2
Isonychiidae						
<u>Isonychia</u> sp	--	--	--	--	--	1
Tricorythidae						
<u>Tricorythodes</u> sp	1	--	1	--	--	--
Plecoptera (STONEFLIES)						
Perlidae						
<u>Agnatina</u> sp	--	--	--	--	--	2
Trichoptera (CADDISFLIES)						
Helicopsychidae						
<u>Helicopsyche</u> sp	--	--	--	--	--	4
Hydropsychidae						
<u>Cheumatopsyche</u> sp	7	36	31	56	--	24
<u>Hydropsyche</u> sp	1	22	43	71	--	6
<u>Macrostemum</u> sp	--	--	--	1	--	--
Philopotamidae						
<u>Chimarra</u> sp	--	--	--	--	--	23
Polycentropodidae						
<u>Neureclipsis</u> sp	--	3	--	--	--	--
Coleoptera (BEETLES)						
Elmidae (RIFFLE BEETLES)						
<u>Optioservus</u> sp	--	--	--	1	--	3
<u>Stenelmis</u> sp	4	2	14	8	2	22
Psephenidae (WATER PENNIES)						
<u>Psephenus</u> sp	--	--	--	--	--	2
Diptera (TRUE FLIES)						
Chironomidae (MIDGES)						
<u>Hemerodromia</u> sp	--	5	--	--	3	--
Simuliidae (BLACK FLIES)						
<u>Simulium</u> sp	--	1	3	--	--	--
Total Organisms	87	176	113	141	513	119

**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	03017800	03020449	03022000	03031505	03039815	03072850	03079448	04213273
Date	3/25/02	3/27/02	5/24/02	5/8/02	5/3/02	4/17/02	5/2/02	5/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Ephemeroptera (MAYFLIES)								
Ephemeridae								
<u>Ephemera</u> sp	--	1	--	4	1	--	2	--
Heptageniidae								
<u>Cinnygmula</u> sp	--	3	--	--	--	--	--	1
<u>Epeorus</u> sp	5	8	--	--	6	--	1	24
<u>Leucrocuta</u> sp	--	--	--	--	--	--	--	8
<u>Stenacron</u> sp	--	4	--	--	--	--	--	--
<u>Stenonema</u> sp	--	6	10	--	6	5	--	--
Isonychiidae								
<u>Isonychia</u> sp	--	1	--	1	--	--	--	--
Leptophlebiidae								
<u>Paraleptophlebia</u> sp	--	13	--	--	--	--	--	27
Potamanthidae								
<u>Anthopotamus</u> sp	--	--	4	--	--	--	--	--
Siphonuridae								
<u>Ameletus</u> sp	--	--	--	--	--	1	--	--
Odonata								
Coenagrionidae								
<u>Argia</u> sp	--	--	1	--	--	--	--	--
Gomphidae								
<u>Lanthus</u> sp	--	--	--	--	1	--	--	--
Plecoptera (STONEFLIES)								
Capniidae								
<u>Paracapnia</u> sp	--	1	--	--	1	2	--	--
Chloroperlidae								
<u>Haploperla</u> sp	--	--	--	1	--	--	--	--
<u>Sweltsa</u> sp	--	--	--	--	--	--	--	2
Leuctridae								
<u>Leuctra</u> sp	--	2	--	2	2	1	9	--
Nemouridae								
<u>Amphinemura</u> sp	--	--	--	26	9	3	27	1
Perlidae								
<u>Acroneuria</u> sp	1	1	--	--	4	--	4	--
<u>Agnatina</u> sp	--	1	--	--	--	--	--	--
<u>Perlesta</u> sp	--	--	8	--	--	2	--	--
Perlodidae								
<u>Isoperla</u> sp	2	5	--	6	3	--	3	--
Pteronarcyidae								
<u>Pteronarcys</u> sp	1	--	--	--	--	--	--	--
Taeniopterygidae								
<u>Taenionema</u> sp	1	--	--	--	--	--	--	--
Megaloptera								
Corydalidae								
<u>Nigronia</u> sp	1	2	--	--	--	1	1	--
Sialidae (ALDERFLIES)								
<u>Sialis</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

Station Number	03017800	03020449	03022000	03031505	03039815	03072850	03079448	04213273
Date	3/25/02	3/27/02	5/24/02	5/8/02	5/3/02	4/17/02	5/2/02	5/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)								
Brachycentridae								
<u>Micrasema</u> sp	--	--	--	--	--	--	1	--
Glossosomatidae								
<u>Agapetus</u> sp	--	--	--	7	--	--	--	--
<u>Glossosoma</u> sp	--	--	1	--	--	--	--	--
Hydropsychidae								
<u>Cheumatopsyche</u> sp	1	1	--	3	--	4	--	--
<u>Diplectrona</u> sp	1	--	--	3	--	--	7	--
<u>Hydropsyche</u> sp	1	4	--	1	11	2	--	1
<u>Macrostemum</u> sp	--	--	2	--	--	--	--	--
Hydroptilidae								
<u>Hydroptila</u> sp	--	1	--	--	--	--	--	--
<u>Ochrotrichia</u> sp	--	1	--	--	--	--	--	--
<u>Stactobiella</u> sp	--	--	--	--	--	--	1	--
Lepidostomatidae								
<u>Lepidostoma</u> sp	--	--	--	1	1	--	1	--
Leptoceridae								
<u>Nectopsyche</u> sp	--	--	--	--	--	2	--	--
Limnephilidae								
<u>Hydatophylax</u> sp	--	--	--	--	--	1	--	--
Philopotamidae								
<u>Chimarra</u> sp	--	--	--	--	--	--	1	--
<u>Dolophilodes</u> sp	1	1	--	2	1	--	--	7
<u>Wormaldia</u> sp	--	--	1	--	--	--	--	--
Polycentropodidae								
<u>Nyctiophylax</u> sp	--	--	--	--	1	--	--	--
<u>Polycentropus</u> sp	--	1	--	--	2	--	1	2
Rhyacophilidae								
<u>Rhyacophila</u> sp	3	1	--	5	3	1	20	1
Uenoidae								
<u>Neophylax</u> sp	1	2	--	--	1	--	2	--
Coleoptera (BEETLES)								
Elmidae (RIFFLE BEETLES)								
<u>Dubiraphia</u> sp	--	--	--	--	--	1	--	--
<u>Macronychus</u> sp	--	--	1	--	--	--	--	--
<u>Optioservus</u> sp	--	7	4	14	1	3	24	1
<u>Oulimnius</u> sp	1	--	--	1	12	--	16	--
<u>Promoresia</u> sp	--	--	--	1	43	--	6	--
<u>Stenelmis</u> sp	--	--	35	--	--	65	--	1
Psephenidae (WATER PENNIES)								
<u>Psephenus</u> sp	--	--	20	--	--	--	--	6

**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	03017800	03020449	03022000	03031505	03039815	03072850	03079448	04213273
Date	3/25/02	3/27/02	5/24/02	5/8/02	5/3/02	4/17/02	5/2/02	5/24/02
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count	Count	Count
Diptera (TRUE FLIES)								
Athericidae								
<u>Atherix</u> sp	--	1	--	--	--	--	--	--
Ceratopogonidae (BITING MIDGES)								
<u>Probezzia</u> sp	--	--	--	--	2	1	--	--
Chironomidae (MIDGES)	6	38	8	31	18	84	29	16
Empididae (DANCE FLIES)								
<u>Chelifera</u> sp	--	--	--	2	--	--	9	--
<u>Hemerodromia</u> sp	--	--	1	--	1	4	--	--
Simuliidae (BLACK FLIES)								
<u>Prosimulium</u> sp	4	63	--	--	3	20	1	--
<u>Simulium</u> sp	--	--	7	13	--	30	4	1
Tabanidae								
<u>Chrysops</u> sp	--	--	--	--	1	--	--	--
Tipulidae (CRANE FLIES)								
<u>Antocha</u> sp	--	2	--	1	--	--	11	--
<u>Dicranota</u> sp	--	--	--	1	6	--	2	--
<u>Hexatoma</u> sp	4	5	--	1	6	--	--	--
<u>Limnophila</u> sp	--	--	--	--	1	--	--	--
<u>Tipula</u> sp	--	--	--	--	--	1	--	1
Total Organisms	36	222	199	217	152	248	220	121