

JUNIATA RIVER BASIN

01159795 BOBS CREEK NEAR PAVIA, PA (National Water-Quality Assessment Station)

LOCATION.--Lat 40°16'21", long 78°35'55", Bedford County, Hydrologic Unit 02050303, on left bank 0.7 mi upstream from highway bridge on SR 869, 0.8 mi upstream from Wallacks Branch, and 1.3 mi northwest of Pavia at Blue Knob State Park.

DRAINAGE AREA.--16.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1993 to September 1994, April 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,510 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and those above 200 ft³/s, which are poor.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	Unknown	Unknown	*a9.16				
Apr. 5	0215	251	8.83	Apr. 9	2045	*415	9.11

a Ice jam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.5	1.5	e1.5	e45	14	e42	34	5.2	2.3	4.3	.77
2	1.8	1.5	1.5	e1.4	e34	13	e39	30	6.6	2.2	2.1	.74
3	1.7	1.5	1.4	e1.3	48	26	e76	27	16	2.5	1.4	.70
4	3.0	1.4	1.4	e1.4	49	52	e90	24	6.9	2.1	1.1	.70
5	2.1	1.4	1.4	e1.5	e45	51	e109	21	5.8	1.9	1.0	.79
6	1.5	1.4	1.4	e1.4	e47	50	e91	19	5.3	1.8	1.0	.99
7	1.2	1.5	1.3	e1.4	e40	e35	e80	18	5.0	1.7	.86	.78
8	9.7	1.5	1.4	e1.4	45	e31	74	17	4.9	1.5	1.2	2.8
9	2.0	1.5	1.7	e1.6	40	e24	133	15	4.3	1.5	1.6	2.0
10	1.4	2.1	1.4	e1.8	38	e21	238	13	4.0	2.1	1.1	1.7
11	1.1	3.4	1.3	e2.0	35	e19	165	12	3.9	2.0	.94	1.4
12	.87	2.7	1.2	e2.2	37	e17	166	11	3.6	1.6	.87	1.3
13	.77	2.1	1.1	e2.5	37	e17	142	10	3.4	1.5	.88	1.3
14	.77	1.8	1.0	e2.7	35	e17	104	10	3.3	1.3	2.4	1.5
15	.77	1.8	1.0	e3.0	33	e19	80	9.4	3.5	1.3	1.5	1.4
16	.77	1.6	.99	e3.3	30	20	72	8.7	2.9	1.2	1.3	2.6
17	.78	1.5	1.1	e4.0	30	29	60	8.4	8.2	1.1	1.1	3.5
18	.84	1.5	1.2	e4.7	27	92	56	8.2	6.4	2.6	.87	1.9
19	1.5	1.4	1.1	e5.2	24	101	51	8.1	3.7	1.5	.86	1.5
20	1.4	1.4	1.2	e6.2	22	82	60	7.3	3.1	1.4	.86	1.5
21	1.3	1.4	1.4	e7.4	20	89	58	6.9	2.9	1.2	1.0	2.0
22	1.4	1.4	2.4	e8.6	e18	94	123	6.7	2.9	1.4	.98	1.7
23	1.3	1.4	7.5	e22	e16	83	148	12	2.6	1.4	.86	1.4
24	1.3	1.4	3.4	e70	e15	75	142	11	2.6	1.6	.86	1.3
25	1.3	1.4	e2.7	e125	14	71	111	10	2.3	1.9	1.1	1.3
26	1.3	1.8	e2.1	78	13	68	84	8.0	2.2	1.4	4.7	1.2
27	1.3	1.6	e1.7	56	11	e56	67	7.0	2.2	1.2	2.9	1.2
28	1.4	1.4	e1.5	92	16	e53	55	6.3	4.3	1.1	1.9	1.4
29	2.3	1.3	e1.5	103	---	e50	47	6.0	3.7	1.5	1.5	1.6
30	1.8	1.3	e1.6	77	---	e47	40	5.7	3.2	1.5	1.0	18
31	1.5	---	e1.5	58	---	e44	---	5.5	---	1.1	.85	---
TOTAL	52.57	48.9	52.89	747.5	864	1460	2803	396.2	134.9	50.4	44.89	76.90
MEAN	1.70	1.63	1.71	24.1	30.9	47.1	93.4	12.8	4.50	1.63	1.45	2.56
MAX	9.7	3.4	7.5	125	49	101	238	34	16	2.6	4.7	18
MIN	.77	1.3	.99	1.3	11	13	39	5.5	2.2	1.1	.85	.70
CFSM	.10	.10	.10	1.45	1.86	2.84	5.63	.77	.27	.10	.09	.15
IN.	.12	.11	.12	1.68	1.94	3.27	6.28	.89	.30	.11	.10	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

	MEAN	71.3	26.5	25.0	42.8	88.4	104	48.7	14.1	3.48	9.09	3.71
(WY)	MAX	5.98	143	45.3	42.0	48.9	136	159	73.5	37.9	4.68	35.1
1994	1998	1994	1998	1994	1994	1994	1998	1998	1997	1994	1994	5.70
MIN	1.70	1.63	1.71	9.03	30.9	47.1	61.0	12.8	4.22	1.63	1.41	2.08
(WY)	1999	1999	1999	1994	1999	1999	1998	1999	1998	1999	1998	1998

e Estimated.

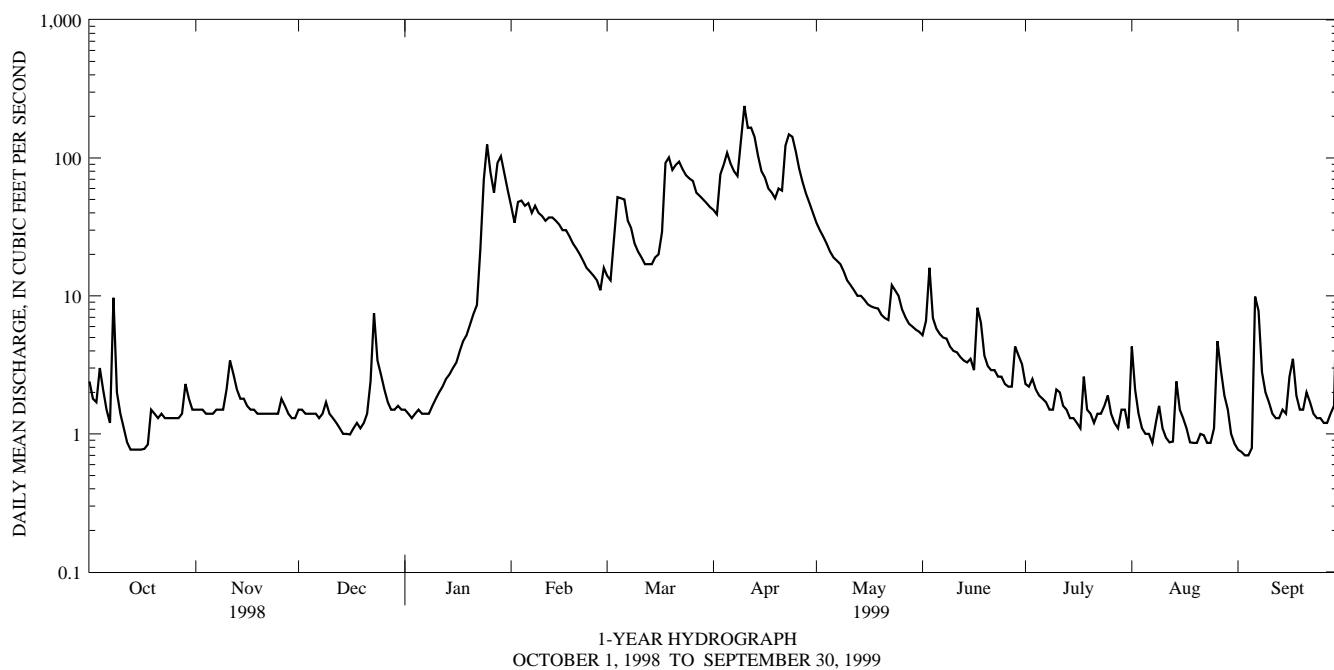
JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1993 - 1999
ANNUAL TOTAL	9825.53	6732.15	
ANNUAL MEAN	26.9	18.4	
HIGHEST ANNUAL MEAN			
LOWEST ANNUAL MEAN			
HIGHEST DAILY MEAN	254	May 9	35.5
LOWEST DAILY MEAN	.76	Sep 6	46.6
ANNUAL SEVEN-DAY MINIMUM	.80	Oct 12	1994
INSTANTANEOUS PEAK FLOW		b415	18.4
INSTANTANEOUS PEAK STAGE		c9.11	1999
INSTANTANEOUS LOW FLOW		.69	Nov 8 1997
ANNUAL RUNOFF (CFSM)	1.62	Apr 10	1820
ANNUAL RUNOFF (INCHES)	22.02	Sep 3	Nov 8 1997
10 PERCENT EXCEEDS	84	Aug 30	Sep 3 1999
50 PERCENT EXCEEDS	3.6		Aug 30 1999
90 PERCENT EXCEEDS	1.1		

b From rating curve extended above 200 ft³/s.

c Maximum gage height, 9.16 ft, Jan. 24 (backwater from ice).



JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued (National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD: April 1993 to August 1995. April 1997 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1993 to September 1995.

WATER TEMPERATURE: December 1993 to September 1995. April 1997 to current year.

INSTRUMENTATION.--Daily record measured and collected with in-situ probes and electronic data logger.

REMARKS.--From October 1998 to March 1999, water-quality samples were collected monthly for nutrients, major ions, and suspended sediment, and from April to September 1999, samples were collected monthly for pesticides, nutrients, major ions, and suspended sediment. Habitat characterization and ecological samples for invertebrates, algae, moss, fish-community, chlorophyl-a, chlorophyl-b, and periphyton biomass were collected June 7-8. Ecological data shown in this report include fish community, chlorophyl-a, chlorophyl-b, and periphyton biomass (ash weight and total dry weight).

Quality-control data for sequentially-collected replicate samples using natural water are shown for June 9, 1999 at 1041 (pesticides), July 6, 1999 at 1041(nutrients and major ions), and September 7, 1999 at 1041 (sediment).

The remark code "E" indicates an estimated value with uncertain accuracy and precision for the analyte. Some values for "*dissolved*" parameters exceed values for the corresponding "*total*" parameter. These results are within the limits of analytical precision and methods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 94 microsiemens, Feb. 28, 1995; minimum, 51 microsiemens, Aug. 17, 1994.

WATER TEMPERATURE: Maximum, 23.0°C, July 5, 6, 31, 1999; minimum, 0.0°C, many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.0°C, July 5, 6, 31; minimum, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	COLLECTING AGENCY SAMPLE (CODE NUMBER) (00027)	AGENCY LYZING SAMPLE (CODE NUMBER) (00028)	PROJECT NUMBER (00029)	PURPOSE SITE VISIT, (CODE) (50280)	SAMPLE PURPOSE CODE (71999)	SAMPLER TYPE (CODE) (84164)	SAMPLING METHOD, CODES (82398)	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CUBIC FEET PER SECOND (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)
OCT 08...	1110	1028	80020	20703	1001	15.00	3045	10	4.9	67	7.2	16.6
NOV 05...	1100	1028	80020	20703	1001	15.00	3045	10	1.5	75	7.8	2.0
DEC 02...	1020	1028	80020	20703	1001	15.00	8010	10	1.7	75	7.4	4.5
JAN 06...	1030	1028	80020	20703	1001	15.00	8010	70	1.3	80	7.7	-10.1
FEB 02...	1050	1028	80020	20703	1001	15.00	3045	10	E34	84	7.3	2.2
MAR 03...	1000	1028	80020	20703	1001	15.00	3045	10	12	83	7.9	3.7
APR 06...	1050	1028	80020	20703	1001	15.00	3045	30	E91	65	7.1	10.9
MAY 05...	1030	1028	80020	20703	1001	15.00	3045	10	21	68	7.4	20.2
JUN 07...	1310	1028	80020	20703	1099	15.00	--	--	--	--	--	--
09...	1040	1028	80020	20703	1001	15.00	3045	10	4.2	77	7.2	23.8
09...	1041	1028	80020	20703	1098	15.00	3045	10	--	--	--	--
JUL 06...	1040	1028	80020	20703	1001	15.00	8010	10	1.8	81	7.5	24.3
06...	1041	1028	80020	20703	1098	15.00	8010	10	1.8	--	--	--
AUG 03...	1040	1028	80020	20703	1001	15.00	8010	10	1.3	82	7.4	18.5
SEP 07...	1040	1028	80020	20703	1001	15.00	3045	10	6.9	90	7.4	19.5
07...	1041	1028	80020	20703	1098	15.00	3045	10	--	--	--	--

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NO ₂ +N _O 3 (MG/L) (00613)	NITRO- GEN, AMMONIA (MG/L) (00631)	NITRO- GEN, AMMONIA (MG/L) (00608)	NITRO- GEN, ORGANIC (MG/L) (71846)	NITRO- GEN, AM- MONIA + ORGANIC (MG/L) (00607)	NITRO- GEN, AM- MONIA + ORGANIC (MG/L) (00625)	NITRO- GEN, TOTAL DIS. (MG/L) (00623)	NITRO- GEN, TOTAL DIS. (MG/L) (00600)	NITRO- GEN, PHOS- PHORUS (MG/L) (00602)	
OCT 08...	.06	.61	<.010	.453	<.020	--	--	.33	.13	.78	.58	.056
NOV 05...	.05	.15	<.010	<.050	<.020	--	--	<.10	<.10	--	--	<.050
DEC 02...	.08	.28	<.010	.112	<.020	--	--	<.10	<.10	--	--	.013
JAN 06...	.05	.14	<.010	.612	<.020	--	--	<.10	.28	--	.89	.007
FEB 02...	.07	6.58	<.010	1.12	<.020	--	--	.11	E.10	1.2	--	.011
MAR 03...	.07	1.59	<.010	.821	<.020	--	--	E.06	<.10	--	--	.007
APR 06...	.05	14.6	<.010	.888	<.020	--	--	E.08	E.10	--	--	.017
MAY 05...	.05	2.06	<.010	.729	.043	.06	.07	E.07	.12	--	.85	.010
JUN 07...	--	--	--	--	--	--	--	--	--	--	--	--
09...	.08	.59	<.010	.711	<.020	--	--	.10	.11	.81	.82	.021
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 06...	.08	.27	<.010	.604	<.020	--	--	E.09	<.10	--	--	.028
06...	--	--	<.010	.565	<.020	--	--	E.09	E.10	--	--	.028
AUG 03...	.07	.17	<.010	.516	<.020	--	--	E.08	<.10	--	--	.022
SEP 07...	.07	.93	<.010	.636	<.020	--	--	.13	.17	.76	.81	.030
07...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	PHOS- PHORUS (MG/L) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (AS P) (00660)	IRON, DIS- SOLVED (MG/L) (01046)	MANGA- NESE, DIS- SOLVED (μG/L) (AS FE)	STRON- TIUM, DIS- SOLVED (μG/L) (AS MN)	SEDI- MENT, DIS- SOLVED (μG/L) (AS SR)	SEDI- MENT, DIS- SOLVED (μG/L) (80154)	SEDI- MENT, CHARGE, PENDED (T/DAY) (80155)	SED. SUSP. (062 MM (70331)	ACETO- SIEVE CHLOR, DIAM. WATER FLTRD RECI (49260) (46342)	ALA- CHLOR, WATER, DISS, REC, (μG/L) (46342)
OCT 08...	.019	.016	.05	26	14	25	7	.09	53	--	--	--
NOV 05...	<.050	<.010	--	E5.7	<3.0	30	5	.02	43	--	--	--
DEC 02...	.013	.010	.03	<10	E3.3	31	3	.01	62	--	--	--
JAN 06...	.011	<.010	--	<10	<3.0	32	1	.00	75	--	--	--
FEB 02...	.010	.010	.03	<10	E2.7	26	2	.26	60	--	--	--
MAR 03...	.005	<.010	--	<10	E2.2	29	1	.03	75	--	--	--
APR 06...	.009	<.010	--	<10	E2.7	21	4	1.5	86	<.0020	<.002	
MAY 05...	.007	.015	.05	E5.3	E1.8	25	3	.17	67	<.0020	<.002	
JUN 07...	--	--	--	--	--	--	--	--	--	--	--	--
09...	.018	.024	.07	E5.5	4.1	29	3	.03	67	<.0020	<.002	
09...	--	--	--	--	--	--	--	--	--	<.0020	<.002	
JUL 06...	.024	.026	.08	<10	6.2	32	3	.01	63	<.0020	<.002	
06...	.024	.027	.08	<10	7.8	32	--	--	--	--	--	--
AUG 03...	.018	.014	.04	E5.4	7.0	32	5	.02	79	<.0020	<.002	
SEP 07...	.020	.015	.05	E7.9	5.0	35	4	.07	69	<.0020	<.002	
07...	--	--	--	--	--	--	8	--	60	--	--	

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TRI- FLUR- ALIN WAT FLT 0.7 μ GF, REC (μ G/L) (82661)	DIAZ- INON D10 SRG WAT FLT 0.7 μ GF, REC PERCENT (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 μ GF, REC PERCENT (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 μ GF, REC PERCENT (91065)	QUALITY ASSUR- ANCE REP- LICATE TYPE (CODE)	PERI- PHYTON DATA INDICA- TOR CODE	CHLOR-A PERI- PHYTON BIOMASS ASH DRY WEIGHT G/SQ M	PERI- PHYTON TOTAL CHROMO- GRAPHIC WEIGHT G/SQ M	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M ²) (70957)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M ²) (70958)
OCT 08...	--	--	--	--	--	1	--	--	--	--
NOV 05...	--	--	--	--	--	1	--	--	--	--
DEC 02...	--	--	--	--	--	1	--	--	--	--
JAN 06...	--	--	--	--	--	1	--	--	--	--
FEB 02...	--	--	--	--	--	1	--	--	--	--
MAR 03...	--	--	--	--	--	1	--	--	--	--
APR 06...	<.0020	107	107	101	--	10	--	--	--	--
MAY 05...	<.0020	92.3	109	86.0	--	10	--	--	--	--
JUN 07...	--	--	--	--	--	309.6	316.6	3.00	.840	
09...	<.0020	101	--	88.5	20.00	100	--	--	--	--
09...	<.0020	101	--	87.5	20.00	--	--	--	--	--
JUL 06...	<.0020	113	--	97.8	20.00	30	--	--	--	--
06...	--	--	--	--	20.00	--	--	--	--	--
AUG 03...	<.0020	100	--	102	--	1	--	--	--	--
SEP 07...	<.0020	113	--	102	20.00	30	--	--	--	--
07...	--	--	--	--	20.00	--	--	--	--	--

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

REMARKS.--The following analyses are quality control samples processed during the 1999 water year and are defined in the explanation of records section entitled, "Water Quality-Control Data". Explanation of column headings and abbreviations--NUT&ION: nutrient and major ion; PEST: pesticide.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

	LIN-URON	METHYL AZIN-	METHYL PARA-	METRI-	MOL-	NAPROP-	PEB-					
	WATER	MALA- PHOS	THION	BUZIN	INATE	AMIDE	ULATE					
	FLTRD	FLTRD	WAT FLT	WAT FLT	SENCOR	WATER	WATER					
DATE	LINDANE DIS- SOLVED (μ G/L) (39341)	0.7 μ DIS- GF, REC (μ G/L) (82666)	MALA- DIS- GF, REC (μ G/L) (39532)	PHOS WAT FLT REC (μ G/L) (82686)	THION WAT FLT REC (μ G/L) (82667)	METO- LACHLOR WATER DISSOLV (μ G/L) (39415)	BUZIN WATER DISSOLV GF, REC (μ G/L) (82630)	INATE WATER DISSOLV GF, REC (μ G/L) (82671)	MOL- P, P' DDE DISSOLV GF, REC (μ G/L) (82684)	NAPROP- PARA- THION, DIS- SOLVED (μ G/L) (39542)	PEB- ULATE WATER FILTRD GF, REC (μ G/L) (82669)	
APR 06...	<.004	<.0020	<.005	<.0010	<.0060	<.002	<.004	<.0040	<.0030	<.0060	<.004	<.0040
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PENDI- METH- ALIN WAT FLT 0.7 μ GF, REC (μ G/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 μ GF, REC (μ G/L) (82687)	PHORATE WATER FLTRD 0.7 μ REC (μ G/L) (82664)	PRO- AMIDE METON, WATER, DISS, REC (μ G/L) (04037)	PRON- CHLOR, WATER, DISS, REC (μ G/L) (82676)	PROP- PANIL WATER FLTRD 0.7 μ REC (μ G/L) (04024)	PRO- PARGITE WATER FLTRD 0.7 μ REC (μ G/L) (82679)	PRO- SI- TEBU- THIURON WATER FLTRD 0.7 μ REC (μ G/L) (04035)	TER- BACIL WATER FLTRD 0.7 μ REC (μ G/L) (82670)			
APR 06...	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	<.0050	<.0100	<.0070	
MAY 05...	--	--	--	--	--	--	--	--	--	--	--	
DATE	TER- BUFOS WATER FLTRD 0.7 μ GF, REC (μ G/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 μ GF, REC (μ G/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 μ REC (μ G/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 μ REC (μ G/L) (82661)	DAZ- INON D10 SRG WAT FLT 0.7 μ REC (μ G/L) (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 μ REC PERCENT (μ G/L) (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 μ REC PERCENT (μ G/L) (91065)	BLANK, TYPE OF SOLU- TION (CODE)	BLANK, TYPE OF SOLU- TION (CODE)	REF- ERENCE MA- TERIAL/ SPIKE SOURCE (CODE)		
APR 06...	<.0130	<.0020	<.0010	<.0020	108	115	98.2	40.00	10.00	100.00	98002	
MAY 05...	--	--	--	--	--	--	--	10.00	80.00	100.00	98274	

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

REMARKS.--Concentrations of pesticides and herbicides in replicate and spiked replicate from Bobs Creek near Pavia, Pa., June 9, 1999 and calculated recoveries, in percent; "<" = less than; less-than values were set equal to zero for calculations; E = estimated value.

QUALITY-CONTROL DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Parameter code	Constituent	Concentration, in micrograms per liter				Recovery in percent [(B-A)/C] x 100	
		Laboratory results		Calculated concentration in replicate 2 ^a C			
		Replicate 1 (not spiked) (06/09/99 @ 1041)	Replicate 2 (spiked) (06/09/99 @ 1042)				
49260	Acetochlor	<0.002	0.130	.110		118	
46342	Alachlor	<0.002	0.133	.110		121	
34253	Alpha BHC	<0.002	0.112	.110		102	
39632	Atrazine	0.025	0.145	.110		109	
82673	Benfluralin	<0.002	0.087	.110		79	
04028	Butylate	<0.002	0.112	.110		102	
82680	Carbaryl	<0.003	E0.160	.110		146	
82674	Carbofuran	<0.003	E0.154	.110		140	
38933	Chlorpyrifos	<0.004	0.110	.110		100	
04041	Cyanazine	<0.004	0.109	.110		99	
82682	DCPA	<0.002	0.111	.110		101	
04040	Desethyl Atrazine	E0.010	E0.057	.110		43	
39572	Diazinon	<0.002	0.121	.110		110	
39381	Dieledrin	<0.001	0.131	.110		119	
82660	2,6-Diethyl Aniline	<0.003	0.106	.110		96	
82677	Disulfoton	<0.017	0.084	.110		76	
82668	EPTC	<0.002	0.110	.110		100	
82663	Ethalfluralin	<0.004	0.096	.110		87	
82672	Ethoprop	<0.003	0.128	.110		116	
04095	Fonofos	<0.003	0.118	.110		107	
39341	Lindane	<0.004	0.103	.110		94	
82666	Linuron	<0.002	0.166	.110		151	
39532	Malathion	<0.005	0.112	.110		102	
82686	Methyl Azinphos	<0.001	E0.153	.110		139	
82667	Methyl Parathion	<0.006	0.123	.110		112	
39415	Metolachlor	<0.002	0.124	.110		113	
82630	Metribuzin	<0.004	0.094	.110		85	
82671	Molinate	<0.004	0.119	.110		108	
82684	Napropamide	<0.003	0.130	.110		118	
34653	P, P' DDE	<0.006	0.067	.110		61	
39542	Parathion	<0.004	0.109	.110		99	
82669	Pebulate	<0.004	0.116	.110		105	
82683	Pendimethalin	<0.004	0.098	.110		89	
82687	Permethrin	<0.005	0.068	.110		62	
82664	Phorate	<0.002	0.074	.110		67	
04037	Prometon	E0.003	0.122	.110		108	
82676	Pronamide	<0.003	0.119	.110		108	
04024	Propachlor	<0.007	0.124	.110		113	
82679	Propanil	<0.004	0.135	.110		123	
82685	Propargite	<0.013	0.126	.110		115	
04035	Simazine	E0.004	0.133	.110		117	
82670	Tebuthiuron	<0.010	0.148	.110		134	
82665	Terbacil	<0.007	E0.159	.110		145	
82675	Terbufos	<0.013	0.095	.110		86	
82681	Thiobencarb	<0.002	0.133	.110		121	
82678	Triallate	<0.001	0.123	.110		112	
82661	Trifluralin	<0.002	0.093	.110		85	
				Mean recovery	105		
				Standard deviation	23		
				Median recovery	108		

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter multiplied times the amount of spike added, in milliliters, divided by the spiked sample volume, in liters.

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

ECOLOGICAL SURVEY OF FIXED SITES--FISH SPECIES TAXONOMIC LIST

REMARKS.--A fish-community survey was conducted at Bobs Creek near Pavia, Pa. (01559795) on June 8, 1999. Fish were collected by electrofishing using a pulsed-DC current. Two electrofishing passes were conducted in an upstream pattern covering the 208-meter reach. Fish were identified, sorted by species, measured for total and standard length, weighed, and checked for external anomalies. Additional information can be obtained from the U.S. Geological Survey, Lemoyne, Pa.

Explanation of table--Fish family names are in uppercase; scientific names are in italics; and common names are in parentheses. Common names follow those of the American Fisheries Society (1991).

FISH SPECIES AND NUMBER, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

SPECIES NAME	NUMBER OF FISH
CYPRINIDAE (carp and minnows)	
<i>Exoglossum maxillingua</i> (cutlips minnow)	3
<i>Rhinichthys atratulus</i> (blacknose dace)	589
<i>Rhinichthys cataractae</i> (longnose dace)	178
<i>Semotilus atromaculatus</i> (creek chub)	4
CATASTOMIDAE (suckers)	
<i>Catostomus commersoni</i> (white sucker)	11
SALMONIDAE (trouts)	
<i>Salmo trutta</i> (brown trout)	59
<i>Salvelinus fontinalis</i> (brook trout)	77
COTTIDAE (sculpins)	
<i>Cottus spp.</i> (sculpin)	1,279

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.5	13.5	15.0	9.5	7.0	8.0	8.5	6.5	7.5	.0	.0	.0
2	13.5	9.5	11.0	9.5	7.5	8.5	7.0	4.0	5.5	.0	.0	.0
3	11.5	10.0	10.5	8.5	5.5	7.0	8.0	4.5	6.0	.0	.0	.0
4	11.0	10.5	10.5	7.5	5.0	6.0	10.0	8.0	9.5	.0	.0	.0
5	12.0	11.0	11.0	5.0	3.0	4.0	11.0	9.5	10.0	.0	.0	.0
6	12.5	12.0	12.5	5.5	4.5	5.0	12.0	9.5	10.5	.0	.0	.0
7	13.5	12.5	13.0	6.0	5.0	5.5	11.5	9.5	10.5	.0	.0	.0
8	14.0	13.5	14.0	6.5	5.0	5.5	10.5	8.5	9.5	.0	.0	.0
9	13.5	12.5	13.0	7.0	5.5	6.0	8.5	5.5	7.0	.0	.0	.0
10	13.5	12.0	12.5	7.5	5.5	6.0	5.5	3.0	4.5	.0	.0	.0
11	13.5	11.5	12.5	8.5	6.5	7.5	5.0	3.5	4.0	.0	.0	.0
12	13.0	10.5	12.0	7.0	4.5	5.5	4.0	2.5	3.0	.0	.0	.0
13	13.0	10.0	11.5	19.0	4.0	5.0	5.0	3.5	4.0	.0	.0	.0
14	12.5	10.5	11.0	8.0	5.0	6.0	4.5	2.0	3.0	.0	.0	.0
15	12.5	10.0	11.0	8.0	6.5	7.5	3.5	.5	2.0	.0	.0	.0
16	11.5	8.5	10.0	7.5	4.5	6.0	3.5	.5	2.0	.0	.0	.0
17	12.0	9.0	10.0	7.0	5.5	6.5	3.5	2.5	3.0	.0	.0	.0
18	14.0	10.0	11.5	8.0	6.0	7.0	3.0	1.0	2.0	.0	.0	.0
19	14.0	12.0	13.0	6.5	4.0	5.5	3.0	1.0	1.5	.0	.0	.0
20	12.5	9.5	11.0	7.0	6.5	7.0	4.5	3.0	3.5	.5	.0	.5
21	10.5	8.0	9.5	7.0	4.5	5.5	6.0	4.5	5.0	1.0	.5	.5
22	9.5	8.0	8.5	5.5	3.0	4.0	6.5	1.0	4.5	1.0	.5	1.0
23	10.0	7.0	8.0	7.5	2.5	4.0	1.0	.0	.0	1.0	.0	.5
24	10.5	7.0	8.5	7.5	5.0	6.5	.5	.0	.0	4.0	.0	2.0
25	11.0	7.0	8.5	5.5	3.0	4.5	.0	.0	.0	4.5	4.0	4.0
26	11.5	8.5	10.0	7.5	5.0	5.5	.0	.0	.0	5.0	4.0	4.0
27	11.5	8.5	10.0	6.5	5.0	5.5	.0	.0	.0	4.5	2.5	3.5
28	13.0	9.5	10.5	7.0	3.0	4.5	.0	.0	.0	6.0	4.5	5.0
29	12.0	10.0	11.0	8.0	4.0	6.0	.5	.0	.0	5.0	4.0	4.5
30	10.0	7.0	8.5	9.0	6.0	7.5	.5	.0	.0	5.0	3.5	4.0
31	10.0	7.0	8.5	---	---	---	.0	.0	.0	4.0	2.0	3.0
MONTH	16.5	7.0	10.9	19.0	2.5	5.9	12.0	.0	3.8	6.0	.0	1.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	1.5	2.0	2.5	1.5	2.0	8.0	6.5	7.0	13.5	7.5	10.5
2	4.0	3.0	3.5	3.5	.5	1.5	9.0	7.0	8.0	14.0	8.0	11.0
3	5.0	3.5	4.0	3.5	2.0	2.5	11.0	7.0	8.5	12.5	8.0	10.5
4	5.0	3.5	4.0	3.0	.0	.5	10.5	8.5	9.5	14.5	9.5	11.5
5	4.5	2.5	3.5	2.5	.0	1.0	9.5	6.5	8.0	15.0	10.0	12.5
6	5.5	3.5	4.0	2.0	.0	1.5	9.0	6.5	7.5	14.0	11.5	12.5
7	4.5	3.0	3.5	2.0	.0	1.0	11.0	7.0	8.5	16.0	12.0	13.0
8	3.5	3.0	3.5	.5	.0	.0	13.0	6.5	9.0	15.0	13.0	14.0
9	4.5	2.5	3.0	.5	.0	.0	11.0	7.5	9.0	14.0	12.0	12.5
10	5.0	3.0	4.0	2.0	.0	.5	10.0	6.5	8.0	15.0	9.5	12.0
11	5.0	2.5	3.5	2.5	.0	1.0	8.5	6.5	7.0	15.5	10.5	13.0
12	4.5	3.5	4.0	3.0	.0	1.0	8.5	6.5	7.0	17.0	11.5	14.0
13	3.5	1.5	2.0	3.0	.0	1.0	9.5	5.0	7.0	16.0	11.5	13.0
14	2.0	.0	1.0	2.5	.0	1.0	10.5	5.0	7.5	12.5	10.5	11.0
15	3.5	.0	1.5	3.0	.0	1.0	8.5	6.0	7.0	14.0	9.0	11.5
16	5.0	2.0	3.0	4.0	.0	1.5	9.5	7.0	8.0	13.5	9.5	11.5
17	5.0	3.5	4.0	6.5	2.0	3.5	8.0	6.0	7.0	15.0	10.5	12.5
18	4.5	3.5	3.5	5.5	3.5	4.0	8.0	6.0	6.5	14.5	12.5	13.5
19	3.5	2.0	3.0	4.5	3.0	3.5	9.0	5.5	7.0	14.5	13.0	13.5
20	3.0	1.0	2.0	6.0	2.5	4.0	8.0	6.0	6.5	14.5	10.5	12.5
21	1.5	.0	.5	5.0	3.5	4.0	7.5	5.0	6.0	15.0	10.5	12.5
22	1.0	.0	.0	4.5	2.5	3.5	12.5	7.0	9.0	14.5	11.0	13.0
23	.0	.0	.0	5.5	2.5	3.5	11.0	8.5	9.0	14.5	13.5	13.5
24	.0	.0	.0	6.5	4.0	4.5	10.5	6.0	8.0	13.5	12.0	13.0
25	.5	.0	.0	5.5	3.5	4.5	11.0	5.5	8.0	12.5	10.5	11.5
26	2.0	.0	1.0	6.5	2.5	4.0	12.0	6.0	8.5	11.5	10.0	11.0
27	1.5	.0	1.0	7.0	3.0	4.5	12.0	7.0	9.0	13.5	10.0	12.0
28	2.5	1.5	2.0	8.0	3.5	5.5	12.0	7.5	9.5	14.0	10.5	12.0
29	--	--	--	8.5	4.0	6.0	12.0	7.0	9.5	15.5	11.0	13.5
30	--	--	--	8.5	4.0	6.0	13.0	7.0	9.5	16.5	12.5	14.5
31	--	--	--	9.5	4.5	6.5	--	--	--	17.0	13.5	15.0
MONTH	5.5	.0	2.4	9.5	.0	2.7	13.0	5.0	8.0	17.0	7.5	12.5

JUNIATA RIVER BASIN

01559795 BOBS CREEK NEAR PAVIA, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1998 TO SEPTEMBER 1999