ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT

Good Hope Mill Dam was removed over a 3-day period beginning November 2, 2001 to eliminate safety concerns, provide for resident and migratory fish passage, and improve habitat for native fish. The deteriorated, obsolete, condition of the dam made removal a more cost effective option to mitigate safety and ecological concerns than rebuilding or retrofitting the structure to meet current safety and environmental regulations.

The dam was located on the Conodoguinet Creek at the former Good Hope Mill, approximately 13.5 miles upstream of the confluence of Conodoguinet Creek and the Susquehanna River. It was a run of the river, 6-foot high, 220-foot wide concrete and log crib structure constructed on bedrock over 100 years ago to provide waterpower to the former mill. Drainage area at the dam site is 492 square miles and the mean annual flow is 619 cubic feet per second based on 72 years of daily streamflow recorded at Hogestown gage (USGS station number 01570000). Under normal flow conditions the dam impounded a 1-mile reach and held approximately 52 acre-feet of water, all of which was contained within the channel.

The implications of small dam removal on channel characteristics, water quality, macroinvertebrates, and fish are not well understood because of the small number of dam removals that have been studied. Comprehensive studies that document the effects of dam removal are just beginning to be published and most past research has focused on larger dams or on the response of a single variable (such as macroinvertebrates). This limited knowledge base underscores the need for additional study to develop understanding of response to removal in order to better predict the outcome.

To address this need the U.S. Geological Survey (USGS) has partnered with the Conodoguinet Creek Watershed Association (CCWA), The Pennsylvania Fish and Boat Commission (PFBC), and The Pennsylvania State University to study the short-term effects of removing Good Hope Mill Dam on channel characteristics, water quality, macroinvertebrates, and fish.

USGS collected data to characterize geomorphologic, water quality, and macroinvertebrate community conditions before, during, and shortly after removal. USGS also sampled bed sediment upstream of the dam prior to removal to address concerns over metals and other potentially harmful constituents sometimes associated with accumulated sediment. The Pennsylvania State University collected fish community data before and after removal. Data presented in this report include bed sediment, water quality, and macroinvertebrate data collected by USGS.

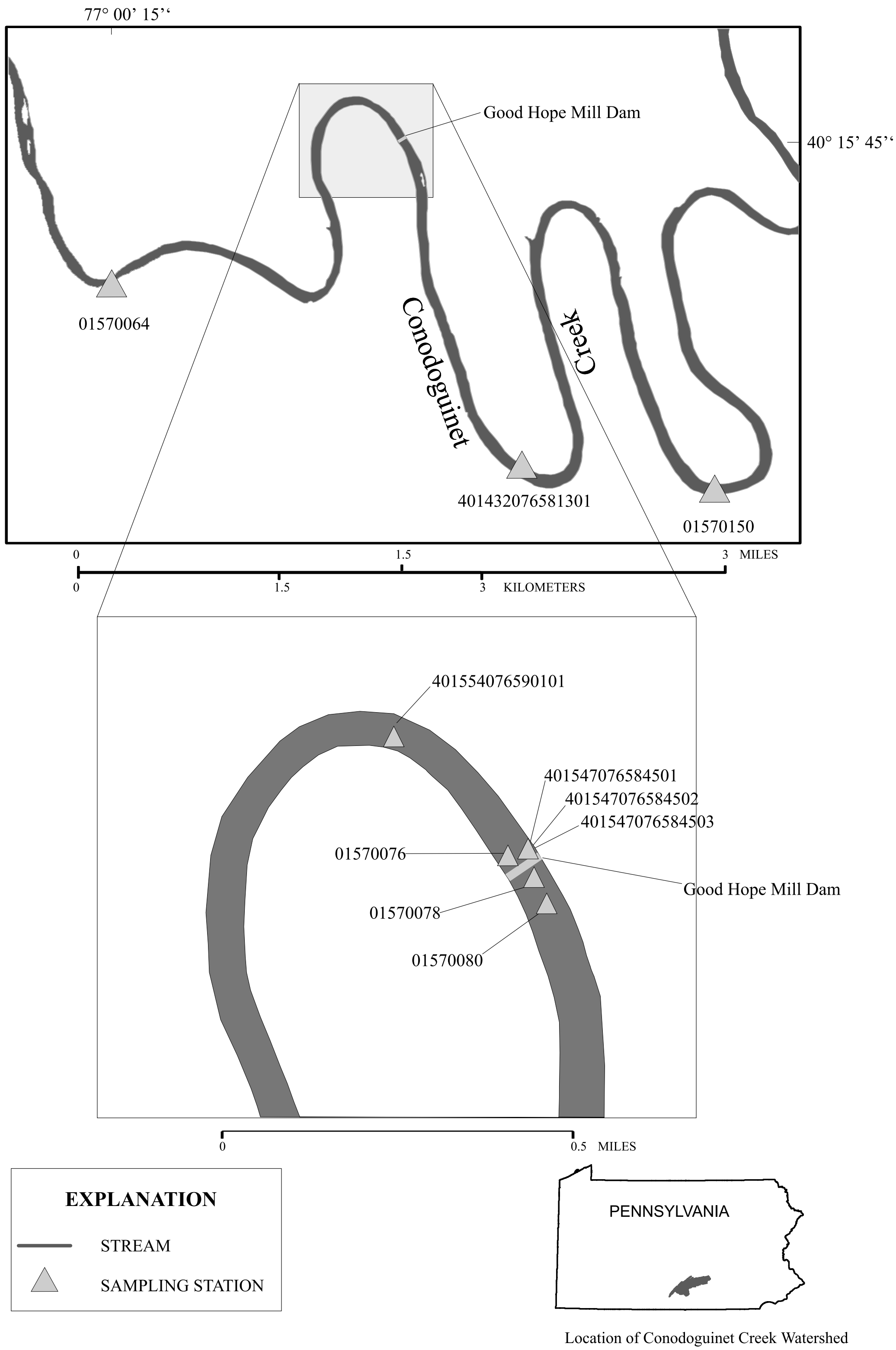
Bed sediments behind the dam were minimal. As a result, isolated depositional features with fine sediment were selected for sampling (Figure 10). Coring tubes were inserted into the bed sediment to the point of refusal and composited at each site. Multiple cores were collected at each site to provide enough sediment to analyze for Metals, PCBs, Semi-Volatile Organic Compounds, and Pesticides. Only Metals, PCBs, and Pesticide data are included in this report due to extended holding times at the lab which likely compromised the quality of results for Semi-Volatile Organic Compounds.

Water-quality constituents including specific conductance (µS/cm), pH, turbidity (NTU), dissolved oxygen (mg/L), and temperature (˚C) were measured at Stations 01570064, 01570076, and 01570078 on a continuous basis (15-minute intervals). In addition to continuous monitoring, discrete samples for nutrients and suspended sediment were collected at Stations 01570064, 01570076, 01570078, and 01570150. Cross-sectional sampling of field parameters was conducted on various occasions.

Benthic macroinvertebrates were sampled at 01570064, 01570076, 01570078, and 01570150. Stations 01570064, 01570078, and 01570150 are at free-flowing natural riffles conducive to kick sampling before and after removal. Because Station 01570076 was impounded prior to dam removal, mid-channel locations were inaccessible by wading and there was insufficient sediment to warrant capture of benthic organisms via bed sediment. Instead habitat such as downed trees and rocks near the dam and periphery of the channel was selectively jab sampled. Following dam removal, Station 01570076 converted to a free-flowing riffle and was kick sampled in the same manner as the other free-flowing sites. Macroinvertebrates were identified to the lowest possible taxa at the USGS biology lab in New Cumberland, Pennsylvania.

For additional information, contact Jeff Chaplin at the U.S. Geological Survey, 215 Limekiln Road, New Cumberland, PA 17070; 717-730-6957 (email: jchaplin@usgs.gov).

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued



Base features from Pennsylvania Department of Transportation 1:24,000-scale digital data

Figure 10.--Locations of sites sampled for the Good Hope Mill Dam project.

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA

LOCATION.--Lat 40°15’11", long 77°00’15", Cumberland County, Hydrologic unit 02050305, 16 mi upstream of confluence with Susquehanna River.

DRAINAGE AREA.--486 mi^2.

PERIOD OF RECORD.--October 2001 to current year (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1, 2001 to current year (discontinued).
pH: August 30, 2001 to current year (discontinued).
WATER TEMPERATURE: August 31, 2001 to current year (discontinued).
DISSOLVED OXYGEN: August 31, 2001 to current year (discontinued).
TURBIDITY: August 30, 2001 to current year (discontinued).

INSTRUMENTATION.--Yellow Springs Instruments 6600 multi-parameter sonde (in-situ system).

REMARKS.--Daily specific conductance records rated fair except for periods Aug. 30 to Oct. 15 and Nov. 8, 9, which are poor. Daily pH records rated good. Daily water temperature record rated fair. Daily dissolved oxygen record rated poor. Daily turbidity records rated good except for period Oct. 30 to Nov. 8, which is fair.

All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	Sample type	DISCHARGE, IN CUBIC FEET PER SECOND (00060)	TURBIDITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 2001													
25...	1430	1028	80020	9	E63	1.9	19.5	203	8.4	570	17.4	<.04	.30
25...	1431	1028	80020	5	E63	1.9	19.5	203	8.4	570	17.4	<.04	.28

Date	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
OCT 2001						
25...	.27	3.78	.008	.020	<.02	.031
25...	.28	3.88	.009	.021	<.02	.034

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TURBIDITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
OCT 2001								
25...	1432	5.9	19.9	195	8.1	639	14.3	20
25...	1433	2.8	18.1	177	8.0	642	14.4	30
25...	1434	2.9	17.3	174	8.1	618	15.7	40
25...	1435	1.7	18.3	194	8.4	565	18.1	50
25...	1436	1.2	19.2	205	8.4	534	18.6	60
25...	1437	.8	20.1	218	8.5	528	19.1	70
25...	1438	.0	20.9	226	8.5	522	19.2	80
25...	1439	.0	21.8	238	8.6	516	19.5	90

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

REMARKS.--Definition of terms used: Total Number - the total number of aquatic invertebrates collected at a site; Total EPT Taxa - total number of distinct taxa within the orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). These orders of insects are generally considered to be pollution sensitive; % Contribution of Dominant Taxa - total number of organisms is an indication of community balance at the lowest taxonomic level possible (usually genus or species). A community that proves dominated by relatively few taxa would include environmental stress. This metric can include the single most dominant taxa, three most dominant, or five most dominant taxa "dominants in common" (DIC). Other definitions can be found on pages 22-33.

	Sept. 18, 2001	Nov. 20, 2001	Nov. 25, 2002
PLATYHELMINTHES	--	--	--
TURBELLARIA	--	--	--
TRICLADIDA	--	--	--
Planariidae	--	--	12
ANNELIDA	--	--	--
OLIGOCHAETA (aquatic earthworms)	--	--	--
TUBIFICIDA	--	--	--
Enchytraeidae	--	--	--
Tubificidae	--	--	--
Aulodrilus pleuriseta	--	--	2
Spirosperma nikolskyi	--	--	--
Tubificidae w/o capilliform setae	--	--	15
LUMBRICINA	--	--	--
MOLLUSCA	--	--	--
GASTROPODA (snails)	--	--	--
MESOGASTROPODA	--	--	--
Hydrobiidae	--	--	2
Amnicola	--	--	--
Pleuroceridae	--	--	--
Goniobasis	--	--	--
Leptoxis carinata	--	--	2
BASOMMATOPHORA	--	--	--
Ancylidae (limpets)	--	--	--
Ferrissia	2	--	7
Planorbidae	--	--	--
Gyraulus	--	--	1
Planorbella	--	--	--
Lymnaeidae	--	--	--
Fossaria	--	--	--
Physidae	--	--	--
Physella	--	--	--
BIVALVIA (clams and mussels)	--	--	--
VENEROIDA	--	--	--
Corbiculidae	--	--	--
Corbicula fluminea	1	1	2
Sphaeriidae (fingernail clams)	--	--	1
Pisidium	--	--	2
CHELICERATA	--	--	--
ARACHNIDA	--	--	--
HYDRACHNIDIA (water mites)	--	--	2
ARTHROPODA	--	--	--
CRUSTACEA	--	--	--
OSTRACODA	--	--	--
MALACOSTRACA	--	--	--
ISOPODA (sow bugs)	--	--	--
Asellidae	--	--	--
Lirceus	--	--	105
AMPHIPODA (scuds)	--	--	--
Crangonyctidae	--	--	--
Crangonyx	--	--	--
Gammaridae	--	--	--
Gammarus	--	5	34
Hyalellidae	--	--	--
Hyalella azteca	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

	Sept. 18, 2001	Nov. 20, 2001	Nov. 25, 2002
INSECTA	--	--	--
EPHEMEROPTERA (mayflies)	--	--	--
PISCIFORMA	--	--	--
Baetidae	--	--	--
Acentrella	5	1	--
Acerpenna	5	--	--
Baetis	14	20	1
Baetis (2-tailed)	--	--	--
SETISURA	--	--	--
Heptageniidae	2	--	1
Heptagenia	1	--	--
Leucrocuta	--	--	--
Stenacron	1	--	--
Stenonema	6	14	2
Isonychiidae	--	--	--
Isonychia	7	12	1
FUCATERGALIA	--	--	--
Leptophlebiidae	--	--	--
Leptophlebia	--	--	--
Paraleptophlebia	--	--	--
Ephemeridae	--	--	--
Hexagenia	--	--	--
Potamanthidae	--	--	--
Anthopotamus	1	8	--
Caenidae	--	--	--
Caenis	1	--	--
Ephemerellidae	--	--	--
Ephemerella	--	6	--
Serratella	--	6	--
Leptohyphidae	--	--	--
Tricorythodes	--	--	--
ODONATA (dragonflies and damselflies)	--	--	--
ZYGOPTERA	--	--	--
Coenagrionidae	--	--	--
Argia	2	3	1
Enallagma	--	--	--
HEMIPTERA (true bugs)	--	--	--
Corixidae	--	--	--
PLECOPTERA (stoneflies)	--	--	--
EUHOLOGNATHA	--	--	--
Taeniopterygidae	--	--	--
Taeniopteryx	--	4	1
SYSTELLAGNATHA	--	--	--
Perlidae	--	--	--
Agnetina	--	1	--
Paragnetina	1	--	--
COLEOPTERA (beetles)	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

	Sept. 18, 2001	Nov. 20, 2001	Nov. 25, 2002
POLYPHAGA	--	--	--
Hydrophilidae (water scavenger beetles)	--	--	--
Berosus	--	--	--
Psephenidae (water pennies)	--	--	--
Psephenus	1	--	--
Elmidae (riffle beetles)	--	--	--
Dubiraphia	--	1	--
Macronychus	--	--	--
Optioservus	9	17	2
Promoresia	--	--	--
Stenelmis	19	9	--
Scirtidae	--	1	--
MEGALOPTERA (dobsonflies and fishflies)	--	--	--
Corydalidae	--	--	--
Corydalus	--	--	--
Sialidae	--	--	--
Sialis	--	--	--
TRICHOPTERA (caddisflies)	--	--	--
SPICIPALPIA	--	--	--
Hydroptilidae	--	--	--
Hydroptila	--	--	--
Leucotrichia	--	--	--
Glossosomatidae	2	--	--
Glossosoma	--	1	--
ANNULIPALPIA	--	--	--
Philopotamidae	--	--	--
Chimarra	22	2	--
Hydropsychidae	--	--	--
Cheumatopsyche	35	41	1
Hydropsyche	51	42	4
Hydropsyche bifida gr.	12	4	--
INTEGRIPALPIA	--	--	--
Leptoceridae	--	--	--
Oecetis	--	--	--
Helicopsychidae	--	--	--
Helicopsyche	--	--	1
LEPIDOPTERA (aquatic moths)	--	--	--
Pyralidae	--	--	--
Petrophila	6	--	--
DIPTERA (true flies)	--	--	--
Ceratopogonidae (biting midges)	--	--	--
Probezzia	--	--	--
Chironomidae (non-biting midges)	--	--	--
Tanypodinae	1	--	--
Pentaneurini	--	--	--
Ablabesmyia	--	--	--
Ablabesmyia mallochi	--	--	--
Conchapelopia	--	--	1
Pentaneura	--	1	--
Thienemannimyia gr.	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

	Sept. 18, 2001	Nov. 20, 2001	Nov. 25, 2002
Procladini	--	--	--
Procladius	--	--	--
Tanypodini	--	--	--
Tanypus	--	--	--
Orthocladiinae	--	--	--
Corynoneurini	--	--	--
Corynoneura	--	--	--
Orthocladiini	--	--	--
Cricotopus/Orthocladius	--	--	--
Cricotopus	--	--	--
Cricotopus bicinctus	--	2	--
Cricotopus trifascia	--	--	1
Cricotopus vierrensis	--	--	--
Eukiefferiella	--	1	3
Eukiefferiella brevicalcar gr.	--	--	--
Nanocladius	--	--	--
Orthocladius	--	--	3
Thiennemaniella	--	1	--
Tvetenia	--	--	--
Tvetenia bavarica gr.	--	--	--
Tvetenia vitracies gr.	--	1	--
Chironominae	--	--	--
Chironomini	--	--	--
Chironomus	--	--	--
Cryptochironomus	--	--	--
Dicrotendipes	--	--	1
Microtendipes pedellus gr.	--	--	--
Paratendipes	--	--	--
Phaenopsectra	--	--	1
Polypedilum	1	--	--
Polypedilum flavum	--	3	--
Polypedilum scalaenum gr.	--	--	--
Pseudochironomini	--	--	--
Pseudochironomus	--	--	--
Tanytarsini	--	--	--
Cladotanytarsus	--	--	--
Rheotanytarsus	--	2	--
Tanytarsus	1	1	--
Simuliidae (black flies)	--	--	--
Simulium	--	1	--
TOTAL TAXA	26	30	29
TOTAL NUMBER	209	212	212
TOTAL EPT TAXA	16	14	8
PERCENT EPT TAXA	61	47	27
HBI	4.49	4.29	7.18
PERCENT DOMINANT TAXA (single)	24	20	49

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	431	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	439	---	---
6	---	---	---	---	---	---	---	---	---	436	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	468	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	487	---	---
11	---	---	---	---	---	---	---	---	---	489	---	---
12	---	---	---	---	---	---	---	---	---	506	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	483	---	---
15	---	---	---	---	---	---	---	---	---	505	---	---
16	---	---	---	---	---	---	---	---	---	487	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	489	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	449	---	---
26	---	---	---	---	---	---	---	---	---	447	---	---
27	---	---	---	---	---	---	---	---	---	489	---	---
28	---	---	---	---	---	---	---	---	---	497	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	506	---	---

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR **OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	---	---	---	551	513	533	527	512	518	597	561	573
2	471	---	---	540	513	530	528	505	515	610	596	602
3	---	---	---	540	515	532	525	507	516	597	561	579
4	---	---	---	541	515	532	523	452	498	590	575	582
5	483	---	---	545	520	535	527	440	492	586	577	581
6	503	---	---	546	515	534	517	495	511	583	575	580
7	506	---	---	542	523	536	525	504	515	611	560	572
8	517	---	---	550	---	---	523	505	516	591	556	573
9	523	---	---	530	---	---	514	500	509	589	549	564
10	537	---	---	568	511	540	525	483	503	---	---	---
11	526	---	---	558	522	546	519	486	500	---	---	---
12	---	---	---	560	509	542	514	497	507	---	---	---
13	506	---	---	559	489	531	509	500	506	---	---	---
14	484	---	---	544	480	522	513	499	504	---	---	---
15	511	---	---	538	487	519	517	501	512	---	---	---
16	521	496	506	535	423	491	511	487	497	---	---	---
17	528	499	514	523	432	483	516	483	501	---	---	---
18	542	516	530	532	490	513	493	479	486	---	---	---
19	525	492	510	550	466	513	492	465	479	---	---	---
20	521	491	512	538	496	523	495	478	488	---	---	---
21	522	484	510	542	506	529	503	492	499	---	---	---
22	526	490	513	548	509	533	510	488	499	---	---	---
23	529	493	518	542	504	529	505	483	496	---	---	---
24	528	475	511	537	517	527	497	483	494	---	---	---
25	533	498	519	519	480	508	505	495	502	---	---	---
26	544	527	537	507	493	500	507	496	502	---	---	---
27	557	542	549	502	461	483	515	497	506	---	---	---
28	559	534	552	518	498	509	526	506	515	---	---	---
29	561	532	550	516	504	513	549	521	531	---	---	---
30	553	510	536	521	512	517	576	538	555	---	---	---
31	550	527	538	---	---	---	581	531	558	---	---	---
MONTH	561	475	525	568	423	522	581	440	507	611	549	578

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	8.7	7.6	8.0
2	---	---	---	---	---	---	---	---	---	8.7	7.7	8.0
3	---	---	---	---	---	---	---	---	---	8.7	7.8	8.1
4	---	---	---	---	---	---	---	---	---	8.7	7.7	8.1
5	---	---	---	---	---	---	---	---	---	8.7	7.7	8.0
6	---	---	---	---	---	---	---	---	---	8.8	7.7	8.0
7	---	---	---	---	---	---	---	---	---	8.8	7.7	8.0
8	---	---	---	---	---	---	---	---	---	8.8	7.7	8.0
9	---	---	---	---	---	---	---	---	---	8.8	7.7	8.0
10	---	---	---	---	---	---	---	---	---	8.6	7.7	8.0
11	---	---	---	---	---	---	---	---	---	8.7	7.8	8.0
12	---	---	---	---	---	---	---	---	---	8.7	7.8	8.0
13	---	---	---	---	---	---	---	---	---	8.7	7.8	8.0
14	---	---	---	---	---	---	---	---	---	8.7	7.8	8.0
15	---	---	---	---	---	---	---	---	---	8.7	7.9	8.1
16	---	---	---	---	---	---	---	---	---	8.7	7.9	8.1
17	---	---	---	---	---	---	---	---	---	8.7	7.9	8.0
18	---	---	---	---	---	---	---	---	---	8.7	7.8	8.0
19	---	---	---	---	---	---	---	---	---	8.6	7.8	8.1
20	---	---	---	---	---	---	---	---	---	8.2	7.7	7.8
21	---	---	---	---	---	---	---	---	---	8.6	7.8	7.9
22	---	---	---	---	---	---	---	---	---	8.6	7.8	7.9
23	---	---	---	---	---	---	---	---	---	8.6	7.7	8.0
24	---	---	---	---	---	---	---	---	---	8.2	7.7	7.9
25	---	---	---	---	---	---	---	---	---	8.3	7.7	7.9
26	---	---	---	---	---	---	---	---	---	8.7	7.8	8.1
27	---	---	---	---	---	---	---	---	---	8.5	7.9	8.1
28	---	---	---	---	---	---	---	---	---	8.6	8.0	8.2
29	---	---	---	---	---	---	---	---	---	8.5	8.0	8.1
30	---	---	---	---	---	---	---	---	---	8.6	7.9	8.1
31	---	---	---	---	---	---	8.6	7.7	8.0	---	---	---
MAX	---	---	---	---	---	---	---	---	---	8.8	8.0	8.2
MIN	---	---	---	---	---	---	---	---	---	8.2	7.6	7.8

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR **OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	8.6	7.9	8.0	8.6	8.1	8.2	8.3	7.8	8.1	8.0	7.9	7.9
2	8.6	7.9	8.0	8.5	8.0	8.2	8.4	7.9	8.2	7.9	7.8	7.9
3	8.6	7.8	8.0	8.5	7.8	8.0	8.3	8.0	8.2	7.9	7.8	7.9
4	8.6	7.8	8.0	8.4	7.9	8.0	8.4	8.0	8.2	7.9	7.8	7.9
5	8.6	7.8	8.0	8.4	7.9	8.1	8.4	8.0	8.2	7.9	7.8	7.9
6	8.6	7.8	8.0	8.5	8.0	8.2	8.3	7.9	8.1	7.9	7.8	7.8
7	8.6	7.9	8.1	8.5	8.0	8.2	8.3	7.8	8.1	7.8	7.8	7.8
8	8.5	8.0	8.1	8.4	7.9	8.1	8.1	7.9	8.0	7.9	7.8	7.8
9	8.5	8.0	8.1	8.4	7.9	8.1	8.3	7.9	8.2	7.9	7.8	7.8
10	8.5	8.0	8.1	8.4	8.0	8.1	8.3	8.0	8.2	---	---	---
11	8.5	7.9	8.0	8.4	8.0	8.2	8.3	8.0	8.2	---	---	---
12	8.5	7.9	8.0	8.4	8.0	8.2	8.3	8.0	8.2	---	---	---
13	8.5	7.9	7.9	8.4	8.0	8.2	8.2	7.9	8.1	---	---	---
14	8.3	7.8	7.9	8.4	8.1	8.2	8.0	7.9	7.9	---	---	---
15	8.5	7.8	8.0	8.4	8.0	8.2	8.3	7.9	8.2	---	---	---
16	---	---	---	8.4	8.0	8.1	8.3	7.9	8.2	---	---	---
17	8.4	7.9	8.1	8.4	7.9	8.1	8.2	8.0	8.1	---	---	---
18	8.4	8.0	8.1	8.4	8.0	8.1	8.3	7.9	8.2	---	---	---
19	8.5	8.0	8.1	8.5	8.0	8.2	8.3	7.9	8.2	---	---	---
20	8.5	8.0	8.1	8.4	8.0	8.2	8.2	7.9	8.1	---	---	---
21	8.5	8.0	8.0	8.4	8.0	8.2	8.2	7.9	8.1	---	---	---
22	8.5	7.9	8.0	8.4	8.1	8.2	8.2	7.9	8.1	---	---	---
23	8.5	7.9	8.0	8.5	8.1	8.2	8.2	7.9	8.1	---	---	---
24	8.5	7.9	8.0	8.3	8.0	8.1	8.2	7.9	8.1	---	---	---
25	8.5	7.8	8.0	8.1	7.8	7.9	8.1	7.9	8.1	---	---	---
26	8.5	7.9	8.1	8.3	7.8	8.0	8.1	7.9	8.1	---	---	---
27	8.5	8.0	8.2	8.2	7.8	8.0	8.1	8.0	8.0	---	---	---
28	8.5	8.1	8.2	8.2	7.9	8.0	8.1	7.9	8.0	---	---	---
29	8.5	8.1	8.2	8.0	7.8	7.9	8.0	7.9	8.0	---	---	---
30	8.6	8.1	8.2	8.0	7.8	7.9	8.0	7.8	7.9	---	---	---
31	8.5	8.1	8.2	---	---	---	8.0	7.8	7.9	---	---	---
MAX	8.6	8.1	8.2	8.6	8.1	8.2	8.4	8.0	8.2	8.0	7.9	7.9
MIN	8.3	7.8	7.9	8.0	7.8	7.9	8.0	7.8	7.9	7.8	7.8	7.8

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	29.0	23.5	25.5
2	---	---	---	---	---	---	---	---	---	27.0	20.5	23.0
3	---	---	---	---	---	---	---	---	---	25.5	19.5	22.5
4	---	---	---	---	---	---	---	---	---	27.0	22.0	24.0
5	---	---	---	---	---	---	---	---	---	27.5	21.0	23.5
6	---	---	---	---	---	---	---	---	---	27.0	19.0	22.5
7	---	---	---	---	---	---	---	---	---	27.5	19.5	23.0
8	---	---	---	---	---	---	---	---	---	28.0	21.5	24.0
9	---	---	---	---	---	---	---	---	---	27.0	22.0	24.5
10	---	---	---	---	---	---	---	---	---	26.0	22.5	24.5
11	---	---	---	---	---	---	---	---	---	26.5	20.0	23.0
12	---	---	---	---	---	---	---	---	---	26.5	19.5	22.5
13	---	---	---	---	---	---	---	---	---	27.0	19.5	22.5
14	---	---	---	---	---	---	---	---	---	23.0	18.5	21.0
15	---	---	---	---	---	---	---	---	---	22.0	16.0	18.5
16	---	---	---	---	---	---	---	---	---	22.5	15.5	18.5
17	---	---	---	---	---	---	---	---	---	23.5	16.0	19.0
18	---	---	---	---	---	---	---	---	---	23.0	17.5	20.0
19	---	---	---	---	---	---	---	---	---	22.5	18.0	20.0
20	---	---	---	---	---	---	---	---	---	20.0	19.5	20.0
21	---	---	---	---	---	---	---	---	---	24.0	19.0	21.0
22	---	---	---	---	---	---	---	---	---	24.5	19.5	21.5
23	---	---	---	---	---	---	---	---	---	25.0	19.0	21.5
24	---	---	---	---	---	---	---	---	---	21.0	20.0	20.5
25	---	---	---	---	---	---	---	---	---	20.0	16.5	19.0
26	---	---	---	---	---	---	---	---	---	19.5	14.5	16.5
27	---	---	---	---	---	---	---	---	---	17.5	15.0	16.0
28	---	---	---	---	---	---	---	---	---	17.0	13.0	15.0
29	---	---	---	---	---	---	---	---	---	19.0	14.0	16.0
30	---	---	---	---	---	---	---	---	---	17.5	13.5	15.5
31	---	---	---	---	---	---	28.5	23.0	25.5	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	29.0	13.0	20.8

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR **OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	19.5	13.5	16.0	13.0	8.5	10.5	14.5	10.5	12.0	0.5	0.0	0.0
2	21.0	14.5	17.0	15.0	10.5	13.0	11.0	8.0	9.5	0.5	0.0	0.0
3	22.0	16.0	18.5	17.0	12.5	14.5	10.0	6.0	7.5	0.5	0.0	0.0
4	22.5	16.5	19.5	15.5	10.5	12.5	10.0	6.0	8.0	0.5	0.0	0.0
5	22.0	16.5	19.0	13.0	8.0	10.5	12.0	8.5	10.0	0.0	0.0	0.0
6	19.5	15.0	18.0	11.5	6.5	8.5	11.0	9.0	10.0	0.0	0.0	0.0
7	16.0	12.0	14.0	12.5	7.5	9.5	12.0	9.0	10.5	0.0	0.0	0.0
8	15.5	10.0	12.0	14.0	8.5	10.5	9.0	7.0	7.5	0.0	0.0	0.0
9	15.0	8.5	11.5	13.0	8.0	10.0	8.5	5.5	7.0	0.0	0.0	0.0
10	16.0	9.5	12.5	11.5	6.5	9.0	7.0	4.0	5.5	---	---	---
11	18.5	11.5	14.5	11.5	6.5	8.5	8.5	5.5	6.5	---	---	---
12	17.5	13.5	15.5	10.0	5.0	7.0	6.5	4.5	5.5	---	---	---
13	21.0	15.0	18.0	9.5	4.5	6.5	7.5	6.5	7.0	---	---	---
14	18.5	17.5	18.0	9.5	4.5	6.5	9.0	7.5	8.0	---	---	---
15	19.5	15.0	17.0	11.0	6.5	8.5	8.5	5.5	7.0	---	---	---
16	15.5	13.0	14.5	12.5	7.0	9.5	6.0	4.5	5.0	---	---	---
17	14.0	10.5	12.5	12.5	8.0	10.0	6.5	5.5	6.0	---	---	---
18	14.5	9.0	11.5	9.5	7.0	8.0	8.0	6.0	7.0	---	---	---
19	14.5	9.0	11.5	10.0	6.5	8.0	8.0	5.0	6.0	---	---	---
20	17.0	11.0	13.0	8.5	5.5	7.5	6.0	3.0	4.5	---	---	---
21	17.5	11.0	14.0	8.0	4.0	5.5	4.5	2.5	3.0	---	---	---
22	18.0	12.5	15.0	7.5	3.5	5.0	4.5	1.5	3.0	---	---	---
23	17.5	13.5	15.5	8.5	3.5	5.5	4.0	1.5	3.0	---	---	---
24	20.5	15.0	17.5	8.5	5.5	7.0	4.5	2.0	3.0	---	---	---
25	19.5	14.0	17.0	11.0	8.5	10.0	3.5	0.5	1.5	---	---	---
26	14.0	9.0	11.5	13.0	9.5	11.0	3.0	0.0	1.0	---	---	---
27	10.5	8.5	9.0	10.0	9.0	9.5	0.5	0.0	0.0	---	---	---
28	12.0	6.5	8.5	11.0	10.0	10.5	0.5	0.0	0.0	---	---	---
29	12.0	6.0	8.5	11.5	10.5	11.0	1.0	0.0	0.0	---	---	---
30	13.5	8.5	10.5	13.0	11.5	12.5	0.5	0.0	0.0	---	---	---
31	11.5	9.0	10.0	---	---	---	0.5	0.0	0.0	---	---	---
MONTH	22.5	6.0	14.2	17.0	3.5	9.2	14.5	0.0	5.3	0.5	0.0	0.0

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR **OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	14.8	4.2	8.6
2	---	---	---	---	---	---	---	---	---	16.0	5.4	9.5
3	---	---	---	---	---	---	---	---	---	16.0	5.9	10.0
4	---	---	---	---	---	---	---	---	---	15.7	5.4	9.5
5	---	---	---	---	---	---	---	---	---	15.8	5.2	9.3
6	---	---	---	---	---	---	---	---	---	15.5	5.8	9.5
7	---	---	---	---	---	---	---	---	---	15.9	5.7	9.6
8	---	---	---	---	---	---	---	---	---	15.6	5.2	9.3
9	---	---	---	---	---	---	---	---	---	15.3	5.1	9.0
10	---	---	---	---	---	---	---	---	---	13.2	4.6	8.2
11	---	---	---	---	---	---	---	---	---	15.5	5.6	9.4
12	---	---	---	---	---	---	---	---	---	15.9	6.0	9.7
13	---	---	---	---	---	---	---	---	---	16.0	5.8	9.8
14	---	---	---	---	---	---	---	---	---	15.7	5.8	9.7
15	---	---	---	---	---	---	---	---	---	16.8	7.6	11.1
16	---	---	---	---	---	---	---	---	---	16.3	7.8	11.0
17	---	---	---	---	---	---	---	---	---	16.3	7.4	10.8
18	---	---	---	---	---	---	---	---	---	16.6	7.1	10.8
19	---	---	---	---	---	---	---	---	---	15.9	6.8	10.7
20	---	---	---	---	---	---	---	---	---	9.6	6.1	7.5
21	---	---	---	---	---	---	---	---	---	15.3	6.2	9.5
22	---	---	---	---	---	---	---	---	---	15.4	5.6	9.4
23	---	---	---	---	---	---	---	---	---	15.5	5.4	9.1
24	---	---	---	---	---	---	---	---	---	9.5	4.9	6.5
25	---	---	---	---	---	---	---	---	---	10.1	5.2	7.0
26	---	---	---	---	---	---	---	---	---	13.2	6.6	9.0
27	---	---	---	---	---	---	---	---	---	13.9	6.5	9.3
28	---	---	---	---	---	---	---	---	---	14.7	6.8	10.3
29	---	---	---	---	---	---	---	---	---	15.2	8.0	10.7
30	---	---	---	---	---	---	---	---	---	15.4	7.9	10.7
31	---	---	---	---	---	---	15.2	5.1	8.6	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	16.8	4.2	9.5

OXYGEN, DISSOLVED (MG/L), WATER YEAR **OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	15.3	8.0	10.7	16.0	10.3	12.4	13.8	9.7	11.4	---	---	---
2	15.0	7.4	10.3	15.0	9.0	11.4	14.2	10.8	12.5	---	---	---
3	14.8	6.8	9.8	14.8	8.1	10.6	17.9	12.1	14.5	---	---	---
4	14.6	6.4	9.4	15.0	8.8	11.1	17.4	14.2	15.6	---	---	---
5	14.6	6.4	9.4	15.0	9.4	11.8	16.6	13.1	14.6	---	---	---
6	14.0	6.0	9.1	15.4	10.9	12.7	15.7	12.3	13.6	---	---	---
7	14.8	7.6	10.5	15.2	10.9	12.4	15.3	11.4	13.3	---	---	---
8	15.3	9.2	11.4	13.6	8.8	11.2	14.2	12.2	13.0	---	---	---
9	15.4	9.8	11.8	13.6	8.8	10.8	14.1	11.8	12.8	---	---	---
10	15.4	9.2	11.7	13.6	9.6	11.3	14.2	10.7	12.7	---	---	---
11	14.9	8.2	10.9	13.8	9.6	11.5	14.4	12.3	13.4	---	---	---
12	14.2	7.8	10.1	14.2	10.6	12.2	14.2	12.1	13.3	---	---	---
13	14.0	6.8	9.6	14.6	11.2	12.5	14.1	12.3	13.1	---	---	---
14	10.7	6.3	7.9	14.6	11.0	12.6	13.3	12.3	12.7	---	---	---
15	14.0	6.7	9.4	14.0	10.6	11.9	14.4	12.0	13.1	---	---	---
16	---	---	---	14.2	10.1	11.7	13.9	11.9	13.0	---	---	---
17	13.5	8.2	10.5	14.2	9.4	11.5	13.6	12.1	12.8	---	---	---
18	14.5	9.9	11.5	13.9	9.7	11.6	14.1	12.2	13.0	---	---	---
19	14.9	9.9	11.7	14.7	10.7	12.2	14.2	12.0	13.0	---	---	---
20	14.8	9.3	11.3	14.0	9.9	12.0	13.1	11.9	12.4	---	---	---
21	14.9	8.8	10.9	14.8	11.2	12.9	13.7	11.6	12.6	---	---	---
22	14.6	8.2	10.4	14.9	11.9	13.3	14.0	11.6	12.9	---	---	---
23	14.5	7.8	10.1	15.1	12.1	13.4	---	---	---	---	---	---
24	14.0	7.0	9.6	13.6	11.0	12.3	---	---	---	---	---	---
25	13.6	6.3	9.0	11.3	9.4	10.4	---	---	---	---	---	---
26	14.0	7.6	10.4	13.4	9.1	11.0	---	---	---	---	---	---
27	14.4	9.9	11.7	12.9	9.9	11.2	---	---	---	---	---	---
28	15.3	10.9	12.5	13.4	10.2	11.5	---	---	---	---	---	---
29	15.5	11.2	12.9	11.7	10.1	10.6	---	---	---	---	---	---
30	15.7	10.7	12.5	11.5	9.8	10.4	---	---	---	---	---	---
31	15.3	10.4	12.2	---	---	---	---	---	---	---	---	---
MONTH	15.7	6.0	10.6	16.0	8.1	11.7	17.9	9.7	13.2	---	---	---

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570064 -- Conodoguinet Cr US of Lambs Gap Rd Brg nr Hogestown, PA--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR **OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	7.9	1.7	3.8
2	---	---	---	---	---	---	---	---	---	4.7	1.5	2.3
3	---	---	---	---	---	---	---	---	---	6.8	1.5	2.3
4	---	---	---	---	---	---	---	---	---	4.6	1.5	2.0
5	---	---	---	---	---	---	---	---	---	3.7	1.5	2.0
6	---	---	---	---	---	---	---	---	---	4.1	1.2	2.0
7	---	---	---	---	---	---	---	---	---	3.6	1.2	1.7
8	---	---	---	---	---	---	---	---	---	2.9	1.2	1.6
9	---	---	---	---	---	---	---	---	---	3.4	1.1	1.6
10	---	---	---	---	---	---	---	---	---	2.5	1.2	1.5
11	---	---	---	---	---	---	---	---	---	4.0	1.2	1.6
12	---	---	---	---	---	---	---	---	---	2.8	1.1	1.6
13	---	---	---	---	---	---	---	---	---	3.3	1.0	1.6
14	---	---	---	---	---	---	---	---	---	2.3	1.2	1.6
15	---	---	---	---	---	---	---	---	---	2.0	1.0	1.5
16	---	---	---	---	---	---	---	---	---	4.3	1.0	1.4
17	---	---	---	---	---	---	---	---	---	2.4	0.9	1.4
18	---	---	---	---	---	---	---	---	---	2.3	0.9	1.4
19	---	---	---	---	---	---	---	---	---	3.1	0.9	1.3
20	---	---	---	---	---	---	---	---	---	3.0	1.1	1.5
21	---	---	---	---	---	---	---	---	---	3.6	1.0	1.8
22	---	---	---	---	---	---	---	---	---	6.7	0.9	1.5
23	---	---	---	---	---	---	---	---	---	4.4	0.9	1.4
24	---	---	---	---	---	---	---	---	---	10.4	0.9	2.7
25	---	---	---	---	---	---	---	---	---	21.9	5.4	11.5
26	---	---	---	---	---	---	---	---	---	7.4	2.3	3.7
27	---	---	---	---	---	---	---	---	---	3.3	1.3	2.0
28	---	---	---	---	---	---	---	---	---	3.2	1.0	1.7
29	---	---	---	---	---	---	---	---	---	2.5	1.0	1.4
30	---	---	---	---	---	---	---	---	---	3.2	0.9	1.3
31	---	---	---	---	---	---	12.2	1.6	3.0	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	21.9	0.9	2.2

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR **OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	2.3	0.8	1.2	2.2	0.7	1.0	9.6	1.2	2.8	36.9	1.2	2.6
2	5.0	0.7	1.1	2.9	0.5	1.0	12.0	1.1	2.1	7.7	1.5	2.5
3	5.3	0.7	1.3	2.1	0.6	1.0	6.7	0.9	1.8	2.8	1.3	1.8
4	4.1	0.7	1.1	12.7	0.6	1.4	3.4	0.9	1.4	8.4	1.3	2.0
5	6.8	0.7	1.3	2.5	0.8	1.5	3.0	0.9	1.1	2.8	1.2	1.6
6	2.1	0.9	1.2	2.8	0.7	1.7	5.3	0.9	1.5	5.1	1.2	1.9
7	2.8	0.9	1.2	5.7	0.6	1.5	13.9	0.9	1.5	4.1	1.2	2.0
8	3.6	0.7	1.1	---	---	---	4.4	0.9	1.3	8.2	1.5	3.2
9	3.6	0.7	1.2	---	---	---	3.1	1.2	1.9	5.9	1.4	2.2
10	6.3	0.7	1.3	---	---	---	3.6	1.3	1.7	---	---	---
11	2.1	0.6	1.1	---	---	---	2.9	1.2	1.5	---	---	---
12	2.4	0.7	1.2	---	---	---	4.7	1.1	1.6	---	---	---
13	2.6	0.8	1.2	---	---	---	2.0	1.0	1.3	---	---	---
14	2.3	0.9	1.2	---	---	---	5.4	1.2	1.9	---	---	---
15	5.3	0.8	1.5	---	---	---	13.1	1.5	2.9	---	---	---
16	---	---	---	---	---	---	4.0	1.5	2.1	---	---	---
17	7.8	1.0	2.1	1.7	0.7	1.0	8.3	1.4	1.9	---	---	---
18	5.4	0.9	1.9	7.0	0.8	1.3	4.2	1.7	2.1	---	---	---
19	5.8	0.8	1.3	6.2	0.8	1.2	11.5	1.6	2.3	---	---	---
20	4.0	0.7	1.2	4.5	0.7	1.0	6.0	1.6	2.3	---	---	---
21	2.2	0.7	1.2	3.6	0.8	1.2	5.7	1.6	2.1	---	---	---
22	5.8	0.6	1.2	9.6	0.8	1.1	2.9	1.4	1.7	---	---	---
23	3.2	0.7	1.3	4.3	0.8	1.1	3.7	1.2	1.6	---	---	---
24	25.5	0.7	1.8	3.4	0.7	1.1	2.5	1.2	1.5	---	---	---
25	10.0	0.9	2.1	17.9	1.0	3.5	2.9	1.2	1.5	---	---	---
26	9.1	0.9	2.1	11.5	2.3	4.5	2.5	1.2	1.5	---	---	---
27	16.1	1.2	3.9	7.4	2.0	3.1	3.6	1.2	1.7	---	---	---
28	15.3	0.9	2.2	19.2	1.5	2.9	10.8	1.0	2.6	---	---	---
29	5.6	0.9	1.6	11.0	1.1	2.1	10.3	1.1	2.9	---	---	---
30	2.6	0.7	1.1	15.5	1.1	2.8	28.3	1.0	3.8	---	---	---
31	2.3	0.8	1.1	---	---	---	7.1	1.2	2.0	---	---	---
MONTH	25.5	0.6	1.5	19.2	0.5	1.8	28.3	0.9	1.9	36.9	1.2	2.2

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA

LOCATION.--Lat 40°15’46", long 76°58’46", Cumberland County, Hydrologic unit 02050305, 13.6 mi upstream of confluence with Susquehanna River.

DRAINAGE AREA.--488 mi^2.

PERIOD OF RECORD.--October 2001 to current year (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 7, 2001 to current year (discontinued).
pH: September 7, 2001 to current year (discontinued).
WATER TEMPERATURE: September 7, 2001 to current year (discontinued).
DISSOLVED OXYGEN: September 7, 2001 to current year (discontinued).
TURBIDITY: September 20, 2001 to current year (discontinued).

INSTRUMENTATION.--Yellow Springs Instruments 6600 multi-parameter sonde (in-situ system).

REMARKS.--Daily specific conductance records rated good except for periods Nov. 16-21 and Dec. 3-8, which are poor. Daily pH records rated good. Daily water temperature record rated good except for periods Nov. 16-21 and Dec. 3-8, which are poor. Daily dissolved oxygen record rated fair. Daily turbidity records rated good.

All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	Sample type	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 2001 1													
25...	1330	1028	80020	9	E63	8.3	11.2	117	7.8	563	17.5	<.04	.31
NOV													
02...	0800	1028	80020	9	E70	5.8	12.0	111	8.2	553	11.7	<.04	.27
02...	1230	1028	80020	9	E160	7.6	9.9	93	8.0	557	12.5	E.04	.28
05...	1100	1028	80020	9	E71	3.9	11.8	93	8.0	557	12.5	<.04	.28

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT							
25...	.35	3.62	.013	.018	<.02	.117	--
NOV							
02...	.38	3.67	E.006	.016	<.02	.022	4.1
02...	.43	3.75	.009	.018	<.02	.035	10
05...	.31	3.71	.008	.016	<.02	.022	1.9

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES

EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
OCT 2001								
19...	1201	16	10.4	96	7.9	566	11.2	0
19...	1202	12	10.6	97	7.9	565	11.2	10
19...	1203	10	10.5	96	8.0	566	11.3	20
19...	1204	8.1	10.1	92	8.0	565	11.2	30
19...	1205	6.7	9.8	89	8.0	566	11.0	40
19...	1206	6.2	9.2	84	7.9	566	11.0	50
19...	1207	4.5	9.4	86	7.9	568	11.0	60
19...	1208	5.9	9.2	84	7.9	567	11.0	70
19...	1209	5.3	9.3	84	7.9	567	11.0	80
19...	1210	4.1	9.2	84	7.9	569	11.0	90
19...	1211	4.4	9.2	83	7.9	569	10.9	100
19...	1212	4.5	9.2	83	7.9	568	10.9	110
19...	1213	6.0	9.2	83	7.9	567	10.9	120
19...	1214	6.2	9.1	82	7.9	565	10.9	130
19...	1215	7.9	9.1	82	7.9	564	10.8	140
19...	1216	5.6	9.1	82	7.9	559	10.8	150
19...	1217	6.3	9.2	82	8.0	559	10.7	160
19...	1218	6.3	9.2	83	8.0	556	10.7	170
19...	1219	4.0	9.1	82	8.0	556	10.7	180
19...	1220	5.7	9.0	82	8.0	558	10.8	190
19...	1221	3.7	9.1	82	8.0	557	10.8	200
19...	1222	4.7	9.2	82	8.0	554	10.7	210
19...	1223	5.0	9.3	84	8.0	555	10.8	220
19...	1224	4.6	9.5	86	8.0	558	10.8	230
19...	1225	4.6	9.5	86	8.0	559	11.0	238
25...	1331	10	12.6	133	7.9	560	17.8	50
25...	1332	10	12.2	129	7.9	562	17.5	75
25...	1333	8.9	11.3	119	7.9	563	17.6	100
25...	1334	6.6	10.8	113	7.8	564	17.5	125
25...	1335	6.7	10.6	111	7.8	565	17.4	150
25...	1336	7.6	10.6	110	7.8	564	17.4	175
25...	1337	6.7	10.8	113	7.8	563	17.4	200
25...	1338	9.6	10.7	111	7.8	562	17.4	225
NOV								
02...	0801	5.7	13.1	120	8.2	541	11.7	25
02...	0802	6.0	13.4	124	8.3	538	11.8	50
02...	0803	6.6	12.7	117	8.2	543	11.8	75
02...	0804	5.1	12.3	114	8.2	554	11.8	100
02...	0805	4.9	11.9	110	8.2	547	11.7	125
02...	0806	6.0	11.5	106	8.2	542	11.7	150
02...	0807	5.8	11.3	104	8.1	557	11.6	175
02...	0808	5.0	11.1	102	8.1	565	11.6	200
02...	0809	6.3	11.1	102	8.1	569	11.6	225
02...	0810	6.7	12.0	111	8.1	575	11.7	250
02...	1231	5.0	10.0	96	7.8	558	13.3	50
02...	1232	7.2	10.2	96	8.0	545	12.6	70
02...	1233	5.1	10.2	96	8.1	543	12.5	90
02...	1234	5.0	10.2	95	8.1	541	12.3	110
02...	1235	5.5	10.1	94	8.1	542	12.3	130
02...	1236	5.0	10.0	94	8.1	545	12.3	150
02...	1237	12	9.8	92	8.0	555	12.3	170
02...	1238	11	9.7	91	8.0	566	12.3	190
02...	1239	7.3	9.5	88	7.9	581	12.3	210
02...	1240	13	9.0	85	7.7	597	12.4	230
05...	1101	2.5	11.9	106	8.1	580	10.0	20
05...	1102	1.5	11.9	106	8.1	572	10.3	40
05...	1103	7.8	11.8	107	8.1	566	10.6	60
05...	1104	1.2	11.7	107	8.2	556	11.3	80
05...	1105	2.6	11.6	106	8.2	549	11.3	100
05...	1106	3.2	11.6	106	8.2	547	11.4	120
05...	1107	5.2	11.6	107	8.2	545	11.7	140
05...	1108	5.7	11.8	110	8.2	542	12.0	160
05...	1109	5.2	11.9	112	8.2	546	12.3	180

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

REMARKS.--Definition of terms used: Total Number - the total number of aquatic invertebrates collected at a site; Total EPT Taxa - total number of distinct taxa within the orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). These orders of insects are generally considered to be pollution sensitive; % Contribution of Dominant Taxa - total number of organisms is an indication of community balance at the lowest taxonomic level possible (usually genus or species). A community that proves dominated by relatively few taxa would include environmental stress. This metric can include the single most dominant taxa, three most dominant, or five most dominant taxa "dominants in common" (DIC). Other definitions can be found on pages 22-33.

	Sept. 19, 2001	Nov. 19, 2001	Nov. 25, 2002
PLATYHELMINTHES	--	--	--
TURBELLARIA	--	--	--
TRICLADIDA	--	--	--
Planariidae	--	--	3
ANNELIDA	--	--	--
OLIGOCHAETA (aquatic earthworms)	--	--	--
TUBIFICIDA	--	--	--
Enchytraeidae	--	2	--
Tubificidae	--	--	--
Aulodrilus pleuriseta	--	--	7
Spirosperma nikolskyi	--	2	--
Tubificidae w/o capilliform setae	--	--	10
LUMBRICINA	--	--	--
MOLLUSCA	--	--	--
GASTROPODA (snails)	--	--	--
MESOGASTROPODA	--	--	--
Hydrobiidae	--	--	--
Amnicola	--	--	2
Pleuroceridae	--	--	--
Goniobasis	--	--	--
Leptoxis carinata	--	1	--
BASOMMATOPHORA	--	--	--
Ancylidae (limpets)	--	--	--
Ferrissia	--	1	8
Planorbidae	--	--	--
Gyraulus	--	1	--
Planorbella	--	--	1
Lymnaeidae	--	--	--
Fossaria	--	--	2
Physidae	--	--	--
Physella	--	--	--
BIVALVIA (clams and mussels)	--	--	--
VENEROIDA	--	--	--
Corbiculidae	--	--	--
Corbicula fluminea	--	6	14
Sphaeriidae (fingernail clams)	--	--	--
Pisidium	--	1	1
CHELICERATA	--	--	--
ARACHNIDA	--	--	--
HYDRACHNIDIA (water mites)	--	--	3
ARTHROPODA	--	--	--
CRUSTACEA	--	--	--
OSTRACODA	--	--	1
MALACOSTRACA	--	--	--
ISOPODA (sow bugs)	--	--	--
Asellidae	--	--	--
Lirceus	--	--	--
AMPHIPODA (scuds)	--	--	--
Crangonyctidae	--	--	--
Crangonyx	2	--	--
Gammaridae	--	--	--
Gammarus	34	9	58
Hyalellidae	--	--	--
Hyalella azteca	6	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

	Sept. 19, 2001	Nov. 19, 2001	Nov. 25, 2002
INSECTA	--	--	--
EPHEMEROPTERA (mayflies)	--	--	--
PISCIFORMA	--	--	--
Baetidae	1	--	--
Acentrella	--	--	--
Acerpenna	--	--	--
Baetis	--	--	--
Baetis (2-tailed)	--	--	--
SETISURA	--	--	--
Heptageniidae	1	--	--
Heptagenia	--	--	--
Leucrocuta	--	--	--
Stenacron	--	--	1
Stenonema	--	--	9
Isonychiidae	--	--	--
Isonychia	--	--	--
FUCATERGALIA	--	--	--
Leptophlebiidae	--	--	--
Leptophlebia	--	--	--
Paraleptophlebia	--	--	--
Ephemeridae	--	--	--
Hexagenia	--	2	--
Potamanthidae	--	--	--
Anthopotamus	--	--	3
Caenidae	--	--	--
Caenis	1	146	36
Ephemerellidae	--	--	--
Ephemerella	--	--	--
Serratella	--	--	1
Leptohyphidae	--	--	--
Tricorythodes	--	--	--
ODONATA (dragonflies and damselflies)	--	--	--
ZYGOPTERA	--	--	--
Coenagrionidae	--	--	--
Argia	1	--	1
Enallagma	7	--	--
HEMIPTERA (true bugs)	--	--	--
Corixidae	1	--	--
PLECOPTERA (stoneflies)	--	--	--
EUHOLOGNATHA	--	--	--
Taeniopterygidae	--	--	--
Taeniopteryx	--	--	--
SYSTELLAGNATHA	--	--	--
Perlidae	--	--	--
Agnetina	--	--	--
Paragnetina	--	--	--
COLEOPTERA (beetles)	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

	Sept. 19, 2001	Nov. 19, 2001	Nov. 25, 2002
POLYPHAGA	--	--	--
Hydrophilidae (water scavenger beetles)	--	--	--
Berosus	1	--	1
Psephenidae (water pennies)	--	--	--
Psephenus	--	--	--
Elmidae (riffle beetles)	--	--	--
Dubiraphia	5	30	27
Macronychus	2	1	--
Optioservus	--	2	2
Promoresia	4	--	2
Stenelmis	1	1	8
Scirtidae	--	--	--
MEGALOPTERA (dobsonflies and fishflies)	--	--	--
Corydalidae	--	--	--
Corydalus	--	1	--
Sialidae	--	--	--
Sialis	--	--	--
TRICHOPTERA (caddisflies)	--	--	--
SPICIPALPIA	--	--	--
Hydroptilidae	--	--	--
Hydroptila	--	--	--
Leucotrichia	--	--	--
Glossosomatidae	--	--	--
Glossosoma	--	--	--
ANNULIPALPIA	--	--	--
Philopotamidae	--	--	--
Chimarra	--	--	--
Hydropsychidae	--	--	--
Cheumatopsyche	--	--	5
Hydropsyche	3	--	14
Hydropsyche bifida gr.	--	--	1
INTEGRIPALPIA	--	--	--
Leptoceridae	--	--	--
Oecetis	--	--	2
Helicopsychidae	--	--	--
Helicopsyche	--	--	1
LEPIDOPTERA (aquatic moths)	--	--	--
Pyralidae	--	--	--
Petrophila	--	--	3
DIPTERA (true flies)	--	--	--
Ceratopogonidae (biting midges)	1	--	--
Probezzia	--	--	--
Chironomidae (non-biting midges)	--	--	--
Tanypodinae	--	--	--
Pentaneurini	--	--	--
Ablabesmyia	1	--	--
Ablabesmyia mallochi	7	--	--
Conchapelopia	--	--	--
Pentaneura	--	--	--
Thiennemannimyia gr.	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

	Sept. 19, 2001	Nov. 19, 2001	Nov. 25, 2002
Procladini	--	--	--
Procladius	4	1	--
Tanypodini	--	--	--
Tanypus	1	--	--
Orthocladiinae	--	--	--
Corynoneurini	--	--	--
Corynoneura	2	--	--
Orthocladiini	--	--	--
Cricotopus/Orthocladius	1	--	1
Cricotopus	--	--	--
Cricotopus bicinctus	2	--	--
Cricotopus trifascia	--	--	--
Cricotopus vierrensis	--	--	--
Eukiefferiella	--	--	--
Eukiefferiella brevicalcar gr.	--	--	--
Nanocladius	1	--	--
Orthocladius	--	--	6
Thiennemaniella	--	--	--
Tvetenia	--	--	--
Tvetenia bavarica gr.	--	--	--
Tvetenia vitracies gr.	--	--	--
Chironominae	--	--	--
Chironomini	--	--	--
Chironomus	1	1	--
Cryptochironomus	--	--	--
Dicrotendipes	9	5	1
Microtendipes pedellus gr.	--	--	1
Paratendipes	--	--	1
Phaenopsectra	--	--	--
Polypedilum	9	--	--
Polypedilum flavum	--	--	--
Polypedilum scalaenum gr.	--	--	2
Pseudochironomini	--	--	--
Pseudochironomus	--	--	--
Tanytarsini	--	--	--
Cladotanytarsus	--	6	2
Rheotanytarsus	1	--	--
Tanytarsus	22	2	--
Simuliidae (black flies)	--	--	--
Simulium	--	--	--
TOTAL TAXA	29	20	36
TOTAL NUMBER	132	221	241
TOTAL EPT TAXA	4	2	10
PERCENT EPT TAXA	14	10	28
HBI	6.37	6.10	5.82
PERCENT DOMINANT TAXA (single)	26	66	24

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	502	457	479
8	---	---	---	---	---	---	---	---	---	507	454	482
9	---	---	---	---	---	---	---	---	---	521	464	492
10	---	---	---	---	---	---	---	---	---	529	468	502
11	---	---	---	---	---	---	---	---	---	525	475	501
12	---	---	---	---	---	---	---	---	---	522	470	496
13	---	---	---	---	---	---	---	---	---	537	475	508
14	---	---	---	---	---	---	---	---	---	524	485	508
15	---	---	---	---	---	---	---	---	---	525	480	505
16	---	---	---	---	---	---	---	---	---	519	481	499
17	---	---	---	---	---	---	---	---	---	532	485	509
18	---	---	---	---	---	---	---	---	---	526	482	505
19	---	---	---	---	---	---	---	---	---	522	465	497
20	---	---	---	---	---	---	---	---	---	516	466	490
21	---	---	---	---	---	---	---	---	---	509	486	497
22	---	---	---	---	---	---	---	---	---	526	476	503
23	---	---	---	---	---	---	---	---	---	513	457	487
24	---	---	---	---	---	---	---	---	---	510	440	479
25	---	---	---	---	---	---	---	---	---	475	387	439
26	---	---	---	---	---	---	---	---	---	477	391	443
27	---	---	---	---	---	---	---	---	---	484	394	446
28	---	---	---	---	---	---	---	---	---	508	480	497
29	---	---	---	---	---	---	---	---	---	507	487	498
30	---	---	---	---	---	---	---	---	---	513	480	501
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	537	387	490

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	519	486	504	606	561	583	589	543	565	600	566	586
2	517	481	502	610	573	591	591	540	571	622	596	610
3	516	480	496	612	562	595	585	540	563	625	588	605
4	507	465	488	615	559	594	597	513	560	---	---	---
5	508	467	490	617	570	596	582	471	532	621	583	603
6	522	468	498	622	573	598	549	506	527	607	573	592
7	528	482	505	609	568	590	563	507	539	---	---	---
8	534	483	508	608	531	575	584	528	556	---	---	---
9	537	500	520	---	---	---	577	539	559	---	---	---
10	544	503	524	---	---	---	577	546	561	---	---	---
11	540	508	524	---	---	---	553	525	542	---	---	---
12	534	510	522	---	---	---	558	524	544	---	---	---
13	537	506	522	---	---	---	555	529	544	---	---	---
14	543	506	527	---	---	---	561	514	543	---	---	---
15	543	514	535	---	---	---	563	541	553	---	---	---
16	554	526	540	---	---	---	565	527	547	---	---	---
17	565	523	544	530	438	485	549	525	540	---	---	---
18	573	525	554	545	480	515	541	525	532	---	---	---
19	567	542	560	575	474	529	546	526	536	---	---	---
20	569	540	554	555	511	531	542	530	536	---	---	---
21	570	546	558	595	542	569	555	528	542	---	---	---
22	566	540	555	604	530	571	560	531	549	---	---	---
23	574	545	561	589	502	556	554	527	543	---	---	---
24	572	552	561	585	546	567	560	529	543	---	---	---
25	569	547	557	567	460	533	565	533	551	---	---	---
26	574	544	559	559	533	548	573	537	554	---	---	---
27	593	553	572	551	506	530	571	544	558	---	---	---
28	611	574	590	544	515	534	566	529	549	---	---	---
29	609	571	588	555	541	547	572	534	553	---	---	---
30	606	572	589	571	532	550	596	555	570	---	---	---
31	590	552	569	---	---	---	614	565	580	---	---	---

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
8	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
9	---	---	---	---	---	---	---	---	---	8.5	7.6	8.1
10	---	---	---	---	---	---	---	---	---	8.4	7.6	8.0
11	---	---	---	---	---	---	---	---	---	8.4	7.7	8.0
12	---	---	---	---	---	---	---	---	---	8.5	7.7	8.1
13	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
14	---	---	---	---	---	---	---	---	---	8.5	7.7	8.1
15	---	---	---	---	---	---	---	---	---	8.6	7.9	8.2
16	---	---	---	---	---	---	---	---	---	8.5	7.9	8.3
17	---	---	---	---	---	---	---	---	---	8.5	7.8	8.2
18	---	---	---	---	---	---	---	---	---	8.5	7.8	8.2
19	---	---	---	---	---	---	---	---	---	8.6	7.8	8.3
20	---	---	---	---	---	---	---	---	---	8.5	7.6	7.8
21	---	---	---	---	---	---	---	---	---	8.3	7.6	7.8
22	---	---	---	---	---	---	---	---	---	8.3	7.7	8.1
23	---	---	---	---	---	---	---	---	---	8.4	7.7	8.1
24	---	---	---	---	---	---	---	---	---	8.4	7.6	7.8
25	---	---	---	---	---	---	---	---	---	8.0	7.6	7.7
26	---	---	---	---	---	---	---	---	---	8.4	7.8	7.9
27	---	---	---	---	---	---	---	---	---	8.4	7.8	8.0
28	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
29	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
30	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	8.6	7.9	8.3
MIN	---	---	---	---	---	---	---	---	---	8.0	7.6	7.7

PH, WATER, WHOLE, FIELD, STANDARD UNITS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	8.5	7.9	8.2	8.4	8.0	8.1	8.3	7.7	7.9	8.2	8.0	8.0
2	8.4	7.9	8.1	8.4	7.8	8.1	8.5	7.9	8.1	8.2	8.0	8.0
3	8.4	7.8	8.1	8.5	7.8	8.0	8.5	8.0	8.2	8.2	8.0	8.0
4	8.4	7.8	8.0	8.6	7.9	8.1	8.6	8.0	8.2	8.2	8.0	8.0
5	8.4	7.8	8.0	8.6	7.9	8.2	8.5	7.9	8.0	8.2	8.0	8.0
6	8.4	7.8	7.9	8.6	8.0	8.2	8.3	7.8	7.9	8.2	8.0	8.0
7	8.4	7.9	8.1	8.6	8.0	8.2	8.5	7.8	8.0	---	---	---
8	8.5	8.0	8.2	8.5	7.9	8.1	8.4	7.8	8.0	---	---	---
9	8.5	8.0	8.2	---	---	---	8.4	7.8	8.0	---	---	---
10	8.5	8.0	8.1	---	---	---	8.4	7.9	8.1	---	---	---
11	8.5	7.9	8.1	---	---	---	8.4	7.9	8.0	---	---	---
12	8.4	7.9	8.1	---	---	---	8.4	7.9	8.0	---	---	---
13	8.4	7.9	8.1	---	---	---	8.3	7.8	7.9	---	---	---
14	8.4	7.8	7.9	---	---	---	7.9	7.7	7.8	---	---	---
15	8.2	7.8	7.9	---	---	---	8.3	7.7	8.1	---	---	---
16	8.3	7.9	8.0	---	---	---	8.4	8.0	8.1	---	---	---
17	8.4	7.9	8.1	---	---	---	8.3	7.9	8.1	---	---	---
18	8.5	8.1	8.2	---	---	---	8.3	7.9	8.0	---	---	---
19	8.4	8.1	8.2	---	---	---	8.3	8.0	8.1	---	---	---
20	8.5	8.0	8.2	---	---	---	8.5	8.0	8.3	---	---	---
21	8.4	8.0	8.2	---	---	---	8.4	8.0	8.3	---	---	---
22	8.4	8.0	8.2	8.5	8.1	8.2	8.4	8.0	8.1	---	---	---
23	8.4	7.9	8.0	8.4	8.0	8.2	8.3	8.0	8.0	---	---	---
24	8.3	7.9	8.1	8.2	7.7	7.9	8.3	7.9	8.0	---	---	---
25	8.3	7.9	8.0	7.8	7.5	7.7	8.3	8.0	8.1	---	---	---
26	8.4	8.0	8.1	8.0	7.5	7.7	8.3	8.0	8.1	---	---	---
27	8.5	8.1	8.2	8.2	7.7	7.8	8.4	7.9	8.0	---	---	---
28	8.5	8.1	8.2	8.2	7.8	7.8	8.3	8.0	8.1	---	---	---
29	8.6	8.2	8.3	8.0	7.8	7.8	8.3	8.0	8.1	---	---	---
30	8.5	8.0	8.2	8.0	7.7	7.8	8.3	8.0	8.1	---	---	---
31	8.5	8.0	8.2	---	---	---	8.2	8.0	8.1	---	---	---
MAX	8.6	8.2	8.3	8.6	8.1	8.2	8.6	8.0	8.3	8.2	8.0	8.0
MIN	8.2	7.8	7.9	7.8	7.5	7.7	7.9	7.7	7.8	8.2	8.0	8.0

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	24.0	20.5	22.5
8	---	---	---	---	---	---	---	---	---	25.0	22.0	23.5
9	---	---	---	---	---	---	---	---	---	25.0	22.0	24.0
10	---	---	---	---	---	---	---	---	---	25.0	23.0	24.0
11	---	---	---	---	---	---	---	---	---	23.5	21.0	22.0
12	---	---	---	---	---	---	---	---	---	23.0	20.5	22.0
13	---	---	---	---	---	---	---	---	---	23.5	20.5	22.0
14	---	---	---	---	---	---	---	---	---	23.5	20.0	21.0
15	---	---	---	---	---	---	---	---	---	20.0	17.5	18.5
16	---	---	---	---	---	---	---	---	---	19.5	17.0	18.0
17	---	---	---	---	---	---	---	---	---	20.0	17.0	18.5
18	---	---	---	---	---	---	---	---	---	20.5	18.0	19.5
19	---	---	---	---	---	---	---	---	---	21.0	19.0	20.0
20	---	---	---	---	---	---	---	---	---	20.5	19.0	19.5
21	---	---	---	---	---	---	---	---	---	21.0	19.0	20.0
22	---	---	---	---	---	---	---	---	---	21.5	20.0	21.0
23	---	---	---	---	---	---	---	---	---	21.5	20.0	21.0
24	---	---	---	---	---	---	---	---	---	21.5	20.0	20.5
25	---	---	---	---	---	---	---	---	---	20.0	17.5	18.5
26	---	---	---	---	---	---	---	---	---	17.5	15.0	16.0
27	---	---	---	---	---	---	---	---	---	17.0	15.5	16.0
28	---	---	---	---	---	---	---	---	---	16.0	14.0	15.0
29	---	---	---	---	---	---	---	---	---	16.0	14.5	15.0
30	---	---	---	---	---	---	---	---	---	16.0	14.5	15.0
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	25.0	14.0	19.7

WATER TEMPERATURE, DEGREES CELSIUS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	16.5	14.5	15.5	11.5	10.0	10.5	14.0	10.0	12.0	0.5	0.0	0.0
2	18.0	15.5	16.5	15.0	11.5	13.0	11.0	8.0	10.0	1.0	0.0	0.5
3	19.0	17.0	18.0	16.5	12.0	14.0	9.5	6.5	8.0	3.0	0.0	1.0
4	19.5	18.0	19.0	14.5	10.0	12.0	10.5	6.5	8.5	3.0	0.0	1.0
5	19.5	18.0	18.5	12.0	8.0	10.0	12.5	9.0	10.5	2.5	1.0	1.5
6	19.5	17.0	18.0	11.0	7.0	8.5	11.5	9.5	10.5	2.0	0.0	1.0
7	17.0	13.5	14.5	12.5	7.5	9.5	12.0	9.0	11.0	---	---	---
8	13.5	11.5	12.0	13.0	8.0	10.5	9.0	7.5	8.0	---	---	---
9	12.5	10.5	11.5	12.0	8.5	10.0	9.0	6.0	7.5	---	---	---
10	13.5	11.0	12.0	---	---	---	7.5	4.5	6.0	---	---	---
11	15.0	12.5	13.5	---	---	---	9.5	6.5	7.5	---	---	---
12	16.0	15.0	15.5	---	---	---	7.5	5.0	6.5	---	---	---
13	18.5	16.0	17.0	---	---	---	9.0	7.5	8.5	---	---	---
14	19.0	17.5	18.0	---	---	---	10.0	9.0	9.5	---	---	---
15	17.5	16.0	16.5	---	---	---	9.5	6.0	8.0	---	---	---
16	16.5	14.0	14.5	---	---	---	7.0	5.0	6.0	---	---	---
17	14.0	12.5	13.0	12.0	8.0	10.0	8.0	6.5	7.0	---	---	---
18	12.5	10.0	11.0	10.0	7.5	8.5	9.0	6.5	8.0	---	---	---
19	12.0	10.5	11.0	10.5	6.5	8.5	9.0	6.0	7.0	---	---	---
20	13.5	11.5	12.5	9.0	5.5	8.0	6.5	4.0	5.5	---	---	---
21	14.0	13.0	13.5	8.0	4.5	6.0	5.5	3.0	4.0	---	---	---
22	15.0	14.0	14.5	8.0	4.0	5.5	5.5	2.5	3.5	---	---	---
23	16.0	14.5	15.0	8.5	4.0	6.0	5.5	3.0	4.0	---	---	---
24	17.5	15.5	16.5	9.5	6.5	8.0	5.5	3.0	4.5	---	---	---
25	18.0	16.0	17.5	12.5	9.5	11.0	4.0	1.5	2.5	---	---	---
26	16.0	10.5	13.0	13.0	9.5	11.5	4.0	1.0	2.5	---	---	---
27	10.5	9.0	9.5	11.0	9.5	10.0	2.0	0.0	1.0	---	---	---
28	9.0	8.5	8.5	12.0	10.5	11.0	3.0	0.0	1.0	---	---	---
29	9.5	8.0	8.5	12.0	11.0	11.5	3.5	0.0	1.0	---	---	---
30	11.0	9.5	10.0	14.0	11.5	13.0	0.5	0.0	0.0	---	---	---
31	11.0	10.0	10.5	---	---	---	0.0	0.0	0.0	---	---	---
MONTH	19.5	8.0	14.0	16.5	4.0	9.8	14.0	0.0	6.1	3.0	0.0	0.8

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

OXYGEN, DISSOLVED (MG/L), **WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	15.8	6.0	10.9
8	---	---	---	---	---	---	---	---	---	15.6	5.7	10.7
9	---	---	---	---	---	---	---	---	---	14.8	5.2	10.2
10	---	---	---	---	---	---	---	---	---	13.3	4.5	8.8
11	---	---	---	---	---	---	---	---	---	14.8	5.9	9.8
12	---	---	---	---	---	---	---	---	---	15.2	6.0	10.4
13	---	---	---	---	---	---	---	---	---	15.8	6.3	11.4
14	---	---	---	---	---	---	---	---	---	14.9	5.9	10.1
15	---	---	---	---	---	---	---	---	---	16.3	7.7	11.9
16	---	---	---	---	---	---	---	---	---	16.5	8.3	12.4
17	---	---	---	---	---	---	---	---	---	16.8	7.6	12.0
18	---	---	---	---	---	---	---	---	---	16.4	6.8	11.9
19	---	---	---	---	---	---	---	---	---	16.1	7.1	11.4
20	---	---	---	---	---	---	---	---	---	13.8	4.9	7.4
21	---	---	---	---	---	---	---	---	---	14.1	5.1	8.4
22	---	---	---	---	---	---	---	---	---	14.6	6.4	10.5
23	---	---	---	---	---	---	---	---	---	15.1	6.6	10.7
24	---	---	---	---	---	---	---	---	---	14.8	5.0	8.1
25	---	---	---	---	---	---	---	---	---	10.4	5.6	7.5
26	---	---	---	---	---	---	---	---	---	14.9	7.2	10.1
27	---	---	---	---	---	---	---	---	---	15.3	7.8	11.0
28	---	---	---	---	---	---	---	---	---	17.1	8.8	12.2
29	---	---	---	---	---	---	---	---	---	16.9	9.6	13.0
30	---	---	---	---	---	---	---	---	---	17.8	9.7	13.1
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	17.8	4.5	10.6

OXYGEN, DISSOLVED (MG/L), **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	19.2	9.9	14.1	---	---	---	15.5	7.7	10.7	15.8	12.8	14.0
2	18.9	9.4	13.5	15.2	7.2	11.2	17.4	8.8	12.0	14.8	12.2	13.2
3	18.5	8.7	13.1	14.5	6.4	9.6	17.1	9.9	12.8	15.9	12.6	13.8
4	17.9	8.1	12.3	15.9	7.2	10.4	19.6	10.6	13.9	15.6	12.5	13.9
5	17.6	7.9	12.1	14.9	7.6	10.7	19.8	9.8	13.2	15.2	11.9	13.0
6	17.4	7.7	11.1	16.1	8.6	11.7	16.6	9.0	11.9	14.2	11.8	12.7
7	---	---	---	15.9	8.9	11.5	18.8	8.3	12.3	---	---	---
8	---	---	---	16.0	8.6	11.6	15.1	9.3	11.5	---	---	---
9	---	---	---	---	---	---	17.9	9.7	12.8	---	---	---
10	---	---	---	---	---	---	17.8	11.0	13.4	---	---	---
11	19.0	10.8	14.2	---	---	---	18.1	10.7	13.3	---	---	---
12	17.3	8.5	12.1	---	---	---	18.0	10.9	13.2	---	---	---
13	14.5	8.0	10.9	---	---	---	16.1	10.0	12.1	---	---	---
14	13.2	6.0	8.6	---	---	---	12.5	9.6	10.5	---	---	---
15	11.8	5.7	7.8	---	---	---	16.4	9.7	12.5	---	---	---
16	---	---	---	---	---	---	17.0	11.2	13.2	---	---	---
17	---	---	---	19.1	8.7	12.6	15.6	10.7	12.5	---	---	---
18	---	---	---	18.8	9.2	12.9	15.4	10.2	12.1	---	---	---
19	---	---	---	20.9	9.8	13.8	16.6	10.9	12.9	---	---	---
20	---	---	---	18.7	9.1	13.1	15.4	11.1	12.9	---	---	---
21	---	---	---	19.2	10.7	13.9	---	---	---	---	---	---
22	---	---	---	20.1	10.9	14.2	17.0	12.2	13.8	---	---	---
23	---	---	---	19.8	10.9	14.1	---	---	---	---	---	---
24	---	---	---	14.6	9.1	11.5	17.0	11.6	13.6	---	---	---
25	---	---	---	11.0	7.8	9.0	17.5	12.5	14.3	---	---	---
26	---	---	---	14.7	7.7	10.3	17.4	13.0	14.6	---	---	---
27	---	---	---	14.2	8.6	10.4	17.5	13.3	14.8	---	---	---
28	---	---	---	14.2	8.6	10.4	17.5	13.6	14.9	---	---	---
29	---	---	---	10.9	8.3	9.2	---	---	---	---	---	---
30	---	---	---	11.1	7.8	9.0	---	---	---	---	---	---
31	15.2	9.2	11.3	---	---	---	---	---	---	---	---	---
MONTH	19.2	5.7	11.8	20.9	6.4	11.5	19.8	7.7	12.9	15.9	11.8	13.4

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570076 -- Conodoguinet Cr 115 ft US of Good Hope Dam, PA--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, **WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	50	4.1	9.3
21	---	---	---	---	---	---	---	---	---	21	2.3	6.2
22	---	---	---	---	---	---	---	---	---	14	2.5	5.1
23	---	---	---	---	---	---	---	---	---	45	3.0	8.8
24	---	---	---	---	---	---	---	---	---	26	3.6	9.8
25	---	---	---	---	---	---	---	---	---	39	12	19
26	---	---	---	---	---	---	---	---	---	16	3.3	7.1
27	---	---	---	---	---	---	---	---	---	23	3.9	7.8
28	---	---	---	---	---	---	---	---	---	12	3.2	5.8
29	---	---	---	---	---	---	---	---	---	15	3.2	6.1
30	---	---	---	---	---	---	---	---	---	18	3.2	6.1
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	50	2.3	8.3

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	18	2.6	7.7	24	0.7	5.0	28	1.8	7.4	---	---	---
2	28	4.4	10	60	3.9	9.9	64	1.7	6.2	---	---	---
3	24	3.2	9.0	16	1.6	5.2	35	1.7	4.8	---	---	---
4	38	3.3	7.5	14	1.4	4.0	54	1.7	5.6	---	---	---
5	27	3.7	7.3	8.6	1.4	2.9	11	1.7	4.8	---	---	---
6	46	4.2	8.7	22	1.6	8.3	15	1.8	5.7	---	---	---
7	34	2.6	9.7	26	1.7	9.1	16	2.1	6.9	---	---	---
8	18	1.7	3.8	41	2.1	8.3	29	1.6	7.5	---	---	---
9	13	1.5	3.3	---	---	---	25	2.4	6.7	---	---	---
10	13	2.8	5.1	---	---	---	47	1.9	5.4	---	---	---
11	56	4.7	8.2	---	---	---	18	2.1	5.2	---	---	---
12	28	2.9	8.4	---	---	---	53	2.0	5.7	---	---	---
13	11	1.5	3.8	---	---	---	22	2.1	6.3	---	---	---
14	14	1.9	6.8	---	---	---	20	3.6	9.6	---	---	---
15	30	3.3	7.9	---	---	---	25	2.1	6.6	---	---	---
16	26	3.4	6.5	---	---	---	47	2.4	5.1	---	---	---
17	39	3.6	7.8	12	1.3	4.3	24	2.1	5.8	---	---	---
18	20	1.8	3.8	20	1.2	3.8	63	5.3	14	---	---	---
19	15	2.9	5.1	19	1.8	5.4	31	2.3	6.1	---	---	---
20	22	3.7	5.7	26	1.6	4.8	22	2.5	7.1	---	---	---
21	18	2.6	5.3	46	0.5	6.4	---	---	---	---	---	---
22	19	2.6	4.8	26	2.1	5.2	---	---	---	---	---	---
23	34	3.1	7.1	38	2.1	7.2	---	---	---	---	---	---
24	30	3.1	7.9	22	1.7	6.6	---	---	---	---	---	---
25	33	3.1	7.9	93	2.8	19	---	---	---	---	---	---
26	38	3.1	9.1	46	4.3	20	---	---	---	---	---	---
27	8.8	2.0	3.2	40	2.8	14	---	---	---	---	---	---
28	9.0	2.0	2.6	42	2.6	17	---	---	---	---	---	---
29	5.1	1.9	2.7	56	2.2	12	---	---	---	---	---	---
30	---	---	---	26	2.5	10	---	---	---	---	---	---
31	60	3.4	6.0	---	---	---	---	---	---	---	---	---
MONTH	60	1.5	6.4	93	0.5	8.6	64	1.6	6.6	---	---	---

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA

LOCATION.--Lat 40°15’45", long 76°58’44", Cumberland County, Hydrologic unit 02050305, 13.4 mi upstream of confluence with Susquehanna River.

DRAINAGE AREA.--488 mi^2.

PERIOD OF RECORD.--October 2001 to current year (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 31, 2001 to current year (discontinued).
pH: August 31, 2001 to current year (discontinued).
WATER TEMPERATURE: August 31, 2001 to current year (discontinued).
DISSOLVED OXYGEN: August 31, 2001 to current year (discontinued).
TURBIDITY: August 31, 2001 to current year (discontinued).

INSTRUMENTATION.--Yellow Springs Instruments 6600 multi-parameter sonde (in-situ system).

REMARKS.--Daily specific conductance records rated poor. Daily pH records rated good. Daily water temperature record rated good. Daily dissolved oxygen record rated fair. Daily turbidity records rated good.

All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	Sample type	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 2001													
25...	1200	1028	80020	9	E63	5.9	12.5	131	7.9	559	17.5	E.03	.30

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT 2001						
25...	.34	3.58	.016	.021	<.02	.026

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	Sample type	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
NOV 2001													
01...	1100	1028	80020	9	E66	3.1	11.0	98	8.1	568	10.2	<.04	.31
02...	0900	1028	80020	9	E70	4.5	11.7	108	8.2	550	11.8	<.04	.29
02...	1000	1028	80020	9	E70	140	10.4	96	8.0	559	11.8	<.04	.27
02...	1100	1028	80020	9	E194	43	9.3	86	8.0	565	11.6	<.04	.24
02...	1315	1028	80020	9	E150	50	10.6	100	8.1	556	13.0	E.03	.27
05...	0945	1028	80020	9	E71	9.2	10.0	89	8.0	553	9.7	<.04	.32

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV 2001							
01...	.35	3.84	<.008	.016	<.02	.021	2.8
02...	.37	3.69	.009	.017	<.02	.023	3.0
02...	.92	3.74	E.007	.018	<.02	.116	98
02...	.58	3.77	E.007	.017	E.01	.039	22
02...	.58	3.71	E.007	.017	<.02	.049	33
05...	.46	3.67	.008	.017	<.02	.023	4.1

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
OCT 2001								
19...	1301	--	7.0	69	7.3	727	14.3	2
19...	1302	--	9.3	88	7.8	569	13.9	12
19...	1303	--	10.1	98	7.9	572	13.9	22
19...	1304	--	10.7	104	8.0	569	14.3	30
19...	1305	2.7	10.3	96	8.0	563	12.3	52
19...	1306	5.0	9.8	90	8.0	567	11.4	62
19...	1307	5.4	9.9	90	8.0	566	11.2	72
19...	1308	6.8	9.9	90	8.0	564	11.2	82
19...	1309	3.6	9.9	90	8.0	565	11.1	92
19...	1310	4.6	9.8	90	8.0	565	11.1	102
19...	1311	5.8	9.8	90	8.0	564	11.1	112
19...	1312	2.4	9.8	89	8.0	563	11.1	122
19...	1313	4.1	9.8	89	8.0	563	11.2	132
19...	1314	4.2	9.7	89	8.0	563	11.1	142
19...	1315	5.0	9.7	88	8.0	563	11.1	152
19...	1316	4.5	9.7	88	8.0	562	11.2	162
19...	1317	4.6	9.7	88	8.0	562	11.1	172
19...	1318	4.8	9.6	88	8.0	561	11.1	182
19...	1319	5.0	9.4	85	8.0	558	11.1	192
19...	1320	4.8	9.3	85	8.0	556	11.1	202
19...	1321	4.7	9.3	85	8.0	555	11.1	212
19...	1322	7.8	9.4	86	8.0	555	11.2	222
19...	1323	3.7	9.5	87	8.0	554	11.3	232
19...	1324	9.7	9.2	84	7.9	556	11.1	237
25...	1201	5.5	13.7	144	8.0	557	17.7	60
25...	1202	7.7	13.2	138	7.9	559	17.6	80
25...	1203	8.0	13.0	136	7.9	558	17.6	100
25...	1204	5.0	12.7	133	7.9	560	17.5	120
25...	1205	5.0	12.4	130	7.9	560	17.5	140
25...	1206	5.7	12.3	129	7.9	560	17.5	160
25...	1207	5.4	12.2	128	7.9	560	17.5	180
25...	1208	5.7	11.7	122	7.9	560	17.5	200
25...	1209	4.8	11.7	123	7.9	558	17.5	220

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
NOV 2001								
01...	1131	4.9	11.6	104	8.1	553	10.3	10
01...	1132	2.9	11.4	102	8.1	557	10.2	30
01...	1133	2.8	11.3	100	8.1	563	10.2	50
01...	1134	3.0	11.1	99	8.1	566	10.1	70
01...	1135	2.9	10.9	97	8.1	569	10.1	90
01...	1136	3.1	10.8	96	8.0	570	10.2	110
01...	1137	2.3	10.7	95	8.0	573	10.1	130
01...	1138	4.7	10.6	94	8.0	580	10.1	150
01...	1139	1.7	10.6	95	8.0	585	10.3	170
02...	0901	4.2	11.9	110	8.2	533	11.9	10
02...	0902	5.1	11.9	110	8.2	546	11.9	50
02...	0903	2.6	11.9	110	8.2	545	12.0	70
02...	0904	4.0	11.8	109	8.2	548	11.8	90
02...	0905	5.2	11.6	107	8.2	551	11.8	110
02...	0906	4.9	11.5	106	8.2	552	11.7	130
02...	0907	5.0	11.3	104	8.1	557	11.7	150
02...	0908	5.2	11.3	104	8.1	569	11.7	170
02...	1001	750	11.3	106	8.1	553	12.2	0
02...	1002	300	11.0	102	8.1	553	11.8	20
02...	1003	140	10.9	101	8.1	553	11.8	40
02...	1004	120	10.8	100	8.1	554	11.8	60
02...	1005	86	10.5	97	8.1	555	11.8	80
02...	1006	30	10.3	95	8.0	556	11.7	100
02...	1007	26	10.0	92	8.0	556	11.7	120
02...	1008	21	9.9	91	8.0	559	11.6	140
02...	1009	17	9.7	90	8.0	565	11.6	160
02...	1010	20	9.8	91	8.0	572	11.7	180
02...	1011	34	10.1	93	8.0	574	11.8	200
02...	1101	200	10.3	97	8.1	552	11.8	0
02...	1102	150	9.7	90	8.0	548	11.7	20
02...	1103	22	9.6	89	8.0	547	11.6	40
02...	1104	20	9.5	87	8.0	548	11.5	60
02...	1105	20	9.5	87	8.0	548	11.5	80
02...	1106	10	9.4	86	8.0	554	11.5	100
02...	1107	9.1	9.2	85	8.0	564	11.4	120
02...	1108	10	9.0	82	7.9	576	11.5	140
02...	1109	10	8.7	80	7.9	587	11.6	160
02...	1110	14	8.6	80	7.8	595	11.7	180
02...	1111	11	8.6	80	7.8	594	11.7	200
02...	1316	250	10.0	96	8.1	543	13.4	0
02...	1317	42	10.5	100	8.1	544	13.1	20
02...	1318	11	10.8	102	8.1	540	13.0	40
02...	1319	11	10.9	103	8.1	540	13.1	60
02...	1320	7.3	10.9	104	8.1	540	12.9	80
02...	1321	11	11.0	104	8.1	541	12.9	100
02...	1322	10	11.1	105	8.1	545	12.8	120
02...	1323	24	11.1	105	8.1	554	12.9	140
02...	1324	25	10.7	102	8.0	578	12.9	160
02...	1325	64	9.8	94	7.8	595	13.0	180
02...	1326	95	9.4	90	7.8	598	13.1	200
05...	0946	51	9.8	86	8.3	527	9.6	30
05...	0947	4.3	10.2	90	8.1	550	9.5	50
05...	0948	7.0	10.3	91	8.0	548	9.7	70
05...	0949	3.0	10.3	91	8.0	548	9.8	90
05...	0950	4.7	10.2	90	8.0	550	9.8	110
05...	0951	2.0	10.0	89	8.0	552	9.8	130
05...	0952	2.7	9.9	88	8.0	556	9.8	150
05...	0953	4.2	9.9	87	8.0	568	9.6	170
05...	0954	4.3	9.8	86	7.9	582	9.4	190

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

REMARKS.--Definition of terms used: Total Number - the total number of aquatic invertebrates collected at a site; Total EPT Taxa - total number of distinct taxa within the orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). These orders of insects are generally considered to be pollution sensitive; % Contribution of Dominant Taxa - total number of organisms is an indication of community balance at the lowest taxonomic level possible (usually genus or species). A community that proves dominated by relatively few taxa would include environmental stress. This metric can include the single most dominant taxa, three most dominant, or five most dominant taxa "dominants in common" (DIC). Other definitions can be found on pages 22-33.

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
PLATYHELMINTHES	--	--	--
TURBELLARIA	--	--	--
TRICLADIDA	--	--	--
Planariidae	--	--	18
ANNELIDA	--	--	--
OLIGOCHAETA (aquatic earthworms)	--	--	--
TUBIFICIDA	--	--	--
Enchytraeidae	--	--	--
Tubificidae	--	--	--
Aulodrilus pleuriseta	--	--	--
Spirosperma nikolskyi	--	--	2
Tubificidae w/o capilliform setae	--	--	--
LUMBRICINA	--	--	--
MOLLUSCA	--	--	--
GASTROPODA (snails)	--	--	--
MESOGASTROPODA	--	--	--
Hydrobiidae	--	--	--
Amnicola	--	--	--
Pleuroceridae	--	--	--
Goniobasis	--	--	2
Leptoxis carinata	--	--	--
BASOMMATOPHORA	--	--	--
Ancylidae (limpets)	--	--	--
Ferrissia	--	--	7
Planorbidae	--	--	--
Gyraulus	--	--	--
Planorbella	--	--	1
Lymnaeidae	--	--	--
Fossaria	--	--	--
Physidae	--	--	--
Physella	--	--	1
BIVALVIA (clams and mussels)	--	--	--
VENEROIDA	--	--	--
Corbiculidae	--	--	--
Corbicula fluminea	2	--	39
Sphaeriidae (fingernail clams)	--	--	1
Pisidium	--	--	--
CHELICERATA	--	--	--
ARACHNIDA	--	--	--
HYDRACHNIDIA (water mites)	--	1	1
ARTHROPODA	--	--	--
CRUSTACEA	--	--	--
OSTRACODA	--	--	2
MALACOSTRACA	--	--	--
ISOPODA (sow bugs)	--	--	--
Asellidae	--	--	--
Lirceus	--	--	1
AMPHIPODA (scuds)	--	--	--
Crangonyctidae	--	--	--
Crangonyx	--	--	--
Gammaridae	--	--	--
Gammarus	--	6	28
Hyalellidae	--	--	--
Hyalella azteca	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
INSECTA	--	--	--
EPHEMEROPTERA (mayflies)	--	--	--
PISCIFORMA	--	--	--
Baetidae	3	4	--
Acentrella	4	--	--
Acerpenna	15	15	--
Baetis	6	--	1
Baetis (2-tailed)	--	--	--
SETISURA	--	--	--
Heptageniidae	4	--	--
Heptagenia	1	--	--
Leucrocuta	3	--	--
Stenacron	4	--	1
Stenonema	14	16	7
Isonychiidae	--	--	--
Isonychia	9	5	--
FUCATERGALIA	--	--	--
Leptophlebiidae	--	--	--
Leptophlebia	--	1	--
Paraleptophlebia	--	1	--
Ephemeridae	--	--	--
Hexagenia	--	--	--
Potamanthidae	--	--	--
Anthopotamus	6	5	4
Caenidae	--	--	--
Caenis	1	1	10
Ephemerellidae	--	--	--
Ephemerella	--	1	--
Serratella	1	1	--
Leptohyphidae	--	--	--
Tricorythodes	--	--	--
ODONATA (dragonflies and damselflies)	--	--	--
ZYGOPTERA	--	--	--
Coenagrionidae	--	--	--
Argia	3	2	5
Enallagma	--	--	--
HEMIPTERA (true bugs)	--	--	--
Corixidae	--	--	--
PLECOPTERA (stoneflies)	--	--	--
EUHOLOGNATHA	--	--	--
Taeniopterygidae	--	--	--
Taeniopteryx	--	5	3
SYSTELLAGNATHA	--	--	--
Perlidae	--	--	--
Agnetina	1	--	--
Paragnetina	--	--	--
COLEOPTERA (beetles)	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
POLYPHAGA	--	--	--
Hydrophilidae (water scavenger beetles)	--	--	--
Berosus	--	--	1
Psephenidae (water pennies)	--	--	--
Psephenus	4	1	13
Elmidae (riffle beetles)	--	--	--
Dubiraphia	--	--	3
Macronychus	--	--	--
Optioservus	30	47	32
Promoresia	--	1	--
Stenelmis	42	11	26
Scirtidae	--	--	--
MEGALOPTERA (dobsonflies and fishflies)	--	--	--
Corydalidae	--	--	--
Corydalus	2	--	--
Sialidae	--	--	--
Sialis	1	--	--
TRICHOPTERA (caddisflies)	--	--	--
SPICIPALPIA	--	--	--
Hydroptilidae	--	--	--
Hydroptila	1	2	--
Leucotrichia	3	--	--
Glossosomatidae	--	--	--
Glossosoma	1	--	--
ANNULIPALPIA	--	--	--
Philopotamidae	--	--	--
Chimarra	5	3	--
Hydropsychidae	1	1	--
Cheumatopsyche	35	32	3
Hydropsyche	11	7	7
Hydropsyche bifida gr.	1	9	--
INTEGRIPALPIA	--	--	--
Leptoceridae	--	--	--
Oecetis	--	--	--
Helicopsychidae	--	--	--
Helicopsyche	1	--	2
LEPIDOPTERA (aquatic moths)	--	--	--
Pyralidae	--	--	--
Petrophila	4	1	1
DIPTERA (true flies)	--	--	--
Ceratopogonidae (biting midges)	--	1	--
Probezzia	--	--	1
Chironomidae (non-biting midges)	--	--	--
Tanypodinae	--	--	--
Pentaneurini	--	--	--
Ablabesmyia	--	--	--
Ablabesmyia mallochi	--	--	--
Conchapelopia	1	6	--
Pentaneura	1	1	--
Thienemannimyia gr.	1	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
Procladini	--	--	--
Procladius	--	--	--
Tanypodini	--	--	--
Tanypus	--	--	--
Orthocladiinae	--	--	--
Corynoneurini	--	--	--
Corynoneura	--	--	--
Orthocladiini	--	--	--
Cricotopus/Orthocladius	--	3	2
Cricotopus	--	--	--
Cricotopus bicinctus	3	6	--
Cricotopus trifascia	--	1	--
Cricotopus vierrensis	--	--	--
Eukiefferiella	--	--	--
Eukiefferiella brevicalcar gr.	--	--	5
Nanocladius	--	--	--
Orthocladius	--	3	2
Thiennemaniella	3	--	--
Tvetenia	--	--	--
Tvetenia bavarica gr.	1	--	--
Tvetenia vitracies gr.	--	--	--
Chironominae	1	--	--
Chironomini	--	--	--
Chironomus	--	--	--
Cryptochironomus	--	--	--
Dicrotendipes	--	2	--
Microtendipes pedellus gr.	--	4	--
Paratendipes	--	--	--
Phaenopsectra	--	--	--
Polypedilum	--	--	--
Polypedilum flavum	6	1	1
Polypedilum scalaenum gr.	--	--	--
Pseudochironomini	--	--	--
Pseudochironomus	--	--	--
Tanytarsini	--	--	--
Cladotanytarsus	--	3	--
Rheotanytarsus	6	12	1
Tanytarsus	6	7	--
Simuliidae (black flies)	--	--	--
Simulium	--	--	1
TOTAL TAXA	41	38	35
TOTAL NUMBER	248	229	235
TOTAL EPT TAXA	22	17	9
PERCENT EPT TAXA	54	45	26
HBI	4.56	4.69	5.26
PERCENT DOMINANT TAXA (single)	17	21	17

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	497	425	467
2	---	---	---	---	---	---	---	---	---	539	430	494
3	---	---	---	---	---	---	---	---	---	522	411	478
4	---	---	---	---	---	---	---	---	---	497	405	456
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	522	441	482
12	---	---	---	---	---	---	---	---	---	530	445	488
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	521	---	---
19	---	---	---	---	---	---	---	---	---	530	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	484	389	446
26	---	---	---	---	---	---	---	---	---	492	386	455
27	---	---	---	---	---	---	---	---	---	492	387	454
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	535	429	485	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	539	386	469

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	---	---	---	599	562	577	584	551	566	---	---	---
2	---	---	---	---	---	---	584	545	564	---	---	---
3	---	---	---	---	---	---	571	535	556	---	---	---
4	---	---	---	---	---	---	574	496	541	---	---	---
5	---	---	---	---	---	---	554	473	518	---	---	---
6	---	---	---	602	553	577	534	504	520	---	---	---
7	548	502	527	591	553	572	546	510	530	---	---	---
8	556	506	533	594	483	---	591	542	565	---	---	---
9	543	498	522	578	485	---	590	548	570	---	---	---
10	---	---	---	582	527	554	---	---	---	---	---	---
11	---	---	---	580	526	557	---	---	---	---	---	---
12	---	---	---	593	549	571	---	---	---	---	---	---
13	---	---	---	595	540	567	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	555	---	---	---	---	---	---	---	---	---	---	---
16	561	530	546	---	---	---	---	---	---	---	---	---
17	563	523	544	---	---	---	---	---	---	---	---	---
18	567	524	550	534	440	500	---	---	---	---	---	---
19	563	535	554	559	481	524	---	---	---	---	---	---
20	---	---	---	555	514	531	---	---	---	---	---	---
21	564	533	550	592	521	558	---	---	---	---	---	---
22	575	528	553	591	507	553	---	---	---	---	---	---
23	578	542	562	567	479	528	---	---	---	---	---	---
24	572	544	559	543	507	526	---	---	---	---	---	---
25	573	532	553	530	477	511	---	---	---	---	---	---
26	583	550	567	545	519	531	---	---	---	---	---	---
27	596	562	578	539	501	522	---	---	---	---	---	---
28	604	578	592	545	512	536	---	---	---	---	---	---
29	606	579	591	554	531	545	---	---	---	---	---	---
30	598	569	587	573	551	559	---	---	---	---	---	---
31	584	537	564	---	---	---	---	---	---	---	---	---
MONTH	606	498	557	602	440	545	591	473	548	---	---	---

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	---	---	---	8.5	7.6	8.0
2	---	---	---	---	---	---	---	---	---	8.5	7.7	8.1
3	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
4	---	---	---	---	---	---	---	---	---	8.5	7.7	8.2
5	---	---	---	---	---	---	---	---	---	8.5	7.7	8.2
6	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
7	---	---	---	---	---	---	---	---	---	8.6	7.8	8.2
8	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
9	---	---	---	---	---	---	---	---	---	8.6	7.7	8.2
10	---	---	---	---	---	---	---	---	---	8.5	7.7	8.1
11	---	---	---	---	---	---	---	---	---	8.6	7.8	8.2
12	---	---	---	---	---	---	---	---	---	8.6	7.8	8.2
13	---	---	---	---	---	---	---	---	---	8.5	7.8	8.2
14	---	---	---	---	---	---	---	---	---	8.5	7.7	8.1
15	---	---	---	---	---	---	---	---	---	8.6	7.9	8.2
16	---	---	---	---	---	---	---	---	---	8.6	7.9	8.3
17	---	---	---	---	---	---	---	---	---	8.5	7.8	8.2
18	---	---	---	---	---	---	---	---	---	8.5	7.8	8.2
19	---	---	---	---	---	---	---	---	---	8.6	7.8	8.3
20	---	---	---	---	---	---	---	---	---	8.6	7.7	7.9
21	---	---	---	---	---	---	---	---	---	8.4	7.7	7.9
22	---	---	---	---	---	---	---	---	---	8.4	7.8	8.2
23	---	---	---	---	---	---	---	---	---	8.5	7.8	8.1
24	---	---	---	---	---	---	---	---	---	8.5	7.7	7.9
25	---	---	---	---	---	---	---	---	---	8.1	7.6	7.8
26	---	---	---	---	---	---	---	---	---	8.5	7.8	8.0
27	---	---	---	---	---	---	---	---	---	8.4	7.9	8.1
28	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
29	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
30	---	---	---	---	---	---	---	---	---	8.5	8.0	8.2
31	---	---	---	---	---	---	8.4	7.7	8.1	---	---	---
MAX	---	---	---	---	---	---	---	---	---	8.6	8.0	8.3
MIN	---	---	---	---	---	---	---	---	---	8.1	7.6	7.8

PH, WATER, WHOLE, FIELD, STANDARD UNITS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.5	8.0	8.2	8.4	8.0	8.2	8.4	7.8	8.0	8.3	8.1	8.2
2	8.5	7.9	8.2	8.5	7.9	8.3	8.5	7.9	8.1	8.2	8.0	8.1
3	8.5	7.8	8.1	8.5	7.9	8.0	8.5	8.0	8.1	8.2	8.1	8.1
4	8.5	7.8	8.1	8.5	7.9	8.1	8.6	8.0	8.1	---	---	---
5	8.5	7.8	8.0	8.6	8.0	8.2	8.6	8.0	8.1	8.3	8.1	8.2
6	8.5	7.9	8.0	8.5	8.0	8.2	8.5	7.9	8.0	8.3	8.1	8.2
7	8.5	8.0	8.2	8.5	8.0	8.2	8.6	7.9	8.1	8.3	8.1	8.2
8	8.6	8.0	8.2	8.6	8.0	8.2	8.4	7.9	8.0	8.3	8.1	8.2
9	8.5	8.0	8.2	8.6	8.0	8.2	8.6	7.9	8.1	8.2	8.1	8.2
10	8.5	8.0	8.2	8.6	8.0	8.2	---	---	---	---	---	---
11	8.5	8.0	8.1	8.6	8.0	8.2	---	---	---	---	---	---
12	8.4	7.9	8.1	8.6	8.1	8.2	---	---	---	---	---	---
13	8.4	7.9	8.1	8.6	8.1	8.2	---	---	---	---	---	---
14	8.4	7.8	7.9	---	---	---	---	---	---	---	---	---
15	8.3	7.8	7.9	---	---	---	---	---	---	---	---	---
16	8.3	7.9	8.0	---	---	---	---	---	---	---	---	---
17	8.4	7.9	8.1	8.5	7.9	8.1	---	---	---	---	---	---
18	8.4	8.0	8.2	8.5	7.9	8.1	---	---	---	---	---	---
19	8.4	8.0	8.1	8.6	7.9	8.1	---	---	---	---	---	---
20	8.4	8.0	8.1	8.5	7.9	8.1	---	---	---	---	---	---
21	8.4	8.0	8.1	8.6	8.0	8.2	---	---	---	---	---	---
22	8.3	7.9	8.1	8.7	8.0	8.2	8.5	8.2	8.3	---	---	---
23	8.4	7.9	8.0	8.7	8.0	8.2	8.5	8.0	8.3	---	---	---
24	8.3	7.9	8.1	8.3	7.9	8.0	8.4	8.0	8.2	---	---	---
25	8.3	7.9	8.0	8.1	7.7	7.9	8.5	8.2	8.3	---	---	---
26	8.2	8.0	8.1	8.3	7.7	7.9	8.5	8.2	8.3	---	---	---
27	8.4	8.1	8.2	8.2	7.8	7.8	8.5	8.3	8.4	---	---	---
28	8.4	8.1	8.2	8.2	7.8	7.9	8.4	8.2	8.3	---	---	---
29	8.5	8.1	8.2	8.0	7.8	7.9	8.4	8.2	8.2	---	---	---
30	8.4	8.1	8.2	8.1	7.8	7.9	8.4	8.2	8.2	---	---	---
31	8.5	8.0	8.2	---	---	---	8.4	8.1	8.2	---	---	---
MAX	8.6	8.1	8.2	8.7	8.1	8.3	8.6	8.3	8.4	8.3	8.1	8.2
MIN	8.2	7.8	7.9	8.0	7.7	7.8	8.4	7.8	8.0	8.2	8.0	8.1

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	25.5	24.0	25.0
2	---	---	---	---	---	---	---	---	---	25.0	21.5	23.0
3	---	---	---	---	---	---	---	---	---	23.5	20.5	22.0
4	---	---	---	---	---	---	---	---	---	25.0	22.0	23.5
5	---	---	---	---	---	---	---	---	---	24.5	22.0	23.5
6	---	---	---	---	---	---	---	---	---	23.5	20.5	22.0
7	---	---	---	---	---	---	---	---	---	24.0	20.5	22.5
8	---	---	---	---	---	---	---	---	---	25.0	22.0	23.5
9	---	---	---	---	---	---	---	---	---	25.5	22.0	24.0
10	---	---	---	---	---	---	---	---	---	25.0	23.5	24.0
11	---	---	---	---	---	---	---	---	---	23.5	21.0	22.5
12	---	---	---	---	---	---	---	---	---	23.0	20.5	22.0
13	---	---	---	---	---	---	---	---	---	23.5	20.5	22.0
14	---	---	---	---	---	---	---	---	---	23.5	20.0	21.0
15	---	---	---	---	---	---	---	---	---	20.0	17.5	18.5
16	---	---	---	---	---	---	---	---	---	19.5	17.0	18.5
17	---	---	---	---	---	---	---	---	---	20.5	17.0	19.0
18	---	---	---	---	---	---	---	---	---	20.5	18.5	19.5
19	---	---	---	---	---	---	---	---	---	21.0	19.0	20.0
20	---	---	---	---	---	---	---	---	---	21.0	19.0	19.5
21	---	---	---	---	---	---	---	---	---	21.0	19.0	20.0
22	---	---	---	---	---	---	---	---	---	22.0	20.0	21.0
23	---	---	---	---	---	---	---	---	---	22.0	20.0	21.0
24	---	---	---	---	---	---	---	---	---	22.0	20.0	20.5
25	---	---	---	---	---	---	---	---	---	20.0	17.5	18.5
26	---	---	---	---	---	---	---	---	---	17.5	15.0	16.5
27	---	---	---	---	---	---	---	---	---	17.0	15.5	16.0
28	---	---	---	---	---	---	---	---	---	16.0	14.0	15.0
29	---	---	---	---	---	---	---	---	---	16.0	14.5	15.0
30	---	---	---	---	---	---	---	---	---	16.0	15.0	15.5
31	---	---	---	---	---	---	26.0	23.5	24.5	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	25.5	14.0	20.5

WATER TEMPERATURE, DEGREES CELSIUS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	16.5	14.5	15.5	11.5	10.0	10.5	13.5	10.5	12.0	0.5	0.0	0.0
2	18.0	15.5	16.5	15.0	11.5	13.0	11.0	8.0	10.0	1.5	0.0	0.5
3	19.5	17.0	18.0	16.0	12.5	14.0	9.5	6.5	8.0	3.0	0.0	1.0
4	19.5	18.0	19.0	14.5	10.5	12.5	10.0	7.0	8.5	2.5	0.0	1.0
5	19.5	18.0	19.0	12.0	8.5	10.0	12.0	9.0	10.5	2.0	0.5	1.5
6	19.5	17.0	18.5	11.0	7.0	9.0	11.0	9.5	10.5	2.0	0.0	0.5
7	17.0	13.5	14.5	12.0	7.5	9.5	12.0	9.5	11.0	3.0	0.0	1.0
8	13.5	11.5	12.5	13.0	8.5	10.5	9.5	7.5	8.0	3.0	0.0	1.0
9	12.5	10.5	11.5	12.0	8.5	10.0	9.0	6.0	7.5	4.0	0.0	2.0
10	13.5	11.0	12.0	11.0	7.0	9.0	---	---	---	---	---	---
11	15.0	13.0	14.0	10.5	7.0	8.5	---	---	---	---	---	---
12	16.0	15.0	15.5	9.5	5.5	7.0	---	---	---	---	---	---
13	18.5	16.0	17.0	9.0	5.0	7.0	---	---	---	---	---	---
14	19.0	17.5	18.0	9.0	5.0	7.5	---	---	---	---	---	---
15	17.5	16.5	16.5	---	---	---	---	---	---	---	---	---
16	16.5	14.0	15.0	---	---	---	---	---	---	---	---	---
17	14.0	12.5	13.0	12.0	8.5	10.0	---	---	---	---	---	---
18	12.5	10.0	11.0	10.0	7.5	8.5	---	---	---	---	---	---
19	12.0	10.5	11.5	10.0	7.0	8.5	---	---	---	---	---	---
20	13.5	12.0	12.5	8.5	6.0	8.0	---	---	---	---	---	---
21	14.5	13.0	13.5	8.0	4.5	6.0	---	---	---	---	---	---
22	15.0	14.0	14.5	7.5	4.0	5.5	5.0	2.5	3.5	---	---	---
23	16.0	14.5	15.0	8.0	4.0	6.0	5.0	3.0	4.0	---	---	---
24	17.5	15.5	16.5	9.5	6.0	7.5	5.0	3.0	4.5	---	---	---
25	18.0	16.0	17.5	11.5	9.5	11.0	3.5	1.5	2.5	---	---	---
26	16.0	10.5	13.0	12.5	10.0	11.0	3.5	1.0	2.0	---	---	---
27	10.5	9.0	9.5	10.5	9.5	10.0	2.0	0.0	0.5	---	---	---
28	9.5	8.5	9.0	11.5	10.5	11.0	3.0	0.0	1.0	---	---	---
29	9.5	8.0	8.5	11.5	11.0	11.5	3.5	0.0	1.0	---	---	---
30	11.0	9.5	10.0	13.5	11.5	12.5	0.5	0.0	0.0	---	---	---
31	11.0	10.0	10.5	---	---	---	0.0	0.0	0.0	---	---	---
MONTH	19.5	8.0	14.1	16.0	4.0	9.5	13.5	0.0	5.5	4.0	0.0	0.9

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

OXYGEN, DISSOLVED (MG/L), **WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	13.4	4.9	8.6
2	---	---	---	---	---	---	---	---	---	14.9	5.9	10.1
3	---	---	---	---	---	---	---	---	---	15.5	6.6	10.9
4	---	---	---	---	---	---	---	---	---	14.8	6.5	10.7
5	---	---	---	---	---	---	---	---	---	14.8	6.2	10.5
6	---	---	---	---	---	---	---	---	---	14.7	6.5	10.6
7	---	---	---	---	---	---	---	---	---	14.5	6.1	10.3
8	---	---	---	---	---	---	---	---	---	14.4	5.8	10.2
9	---	---	---	---	---	---	---	---	---	13.7	5.3	9.6
10	---	---	---	---	---	---	---	---	---	12.3	4.7	8.4
11	---	---	---	---	---	---	---	---	---	14.2	5.9	9.7
12	---	---	---	---	---	---	---	---	---	14.5	6.3	10.3
13	---	---	---	---	---	---	---	---	---	14.7	6.4	10.6
14	---	---	---	---	---	---	---	---	---	14.0	6.2	9.9
15	---	---	---	---	---	---	---	---	---	15.8	7.9	11.7
16	---	---	---	---	---	---	---	---	---	16.0	8.3	12.2
17	---	---	---	---	---	---	---	---	---	16.3	7.8	11.9
18	---	---	---	---	---	---	---	---	---	16.1	7.5	11.7
19	---	---	---	---	---	---	---	---	---	15.8	7.6	11.1
20	---	---	---	---	---	---	---	---	---	13.4	5.3	7.6
21	---	---	---	---	---	---	---	---	---	13.5	5.6	8.5
22	---	---	---	---	---	---	---	---	---	14.0	6.8	10.3
23	---	---	---	---	---	---	---	---	---	14.4	6.8	10.4
24	---	---	---	---	---	---	---	---	---	14.2	5.6	8.3
25	---	---	---	---	---	---	---	---	---	10.2	6.2	7.9
26	---	---	---	---	---	---	---	---	---	14.2	7.5	10.0
27	---	---	---	---	---	---	---	---	---	14.7	7.8	10.8
28	---	---	---	---	---	---	---	---	---	15.6	8.8	11.5
29	---	---	---	---	---	---	---	---	---	15.6	9.0	11.8
30	---	---	---	---	---	---	---	---	---	16.3	9.0	11.9
31	---	---	---	---	---	---	11.8	5.6	9.0	---	---	---
MONTH	---	---	---	---	---	---	11.8	5.6	9.0	16.3	4.7	10.3

OXYGEN, DISSOLVED (MG/L), **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.5	9.2	12.5	14.7	9.7	11.9	14.2	7.0	9.7	15.6	12.6	13.9
2	16.7	8.6	11.9	15.3	7.9	12.1	15.8	8.2	10.9	15.4	12.6	13.8
3	16.4	7.9	11.5	14.6	7.0	9.9	16.4	9.3	11.9	15.8	12.6	13.8
4	15.8	7.3	10.9	16.0	7.8	10.9	17.3	9.7	12.4	15.7	12.5	13.7
5	15.3	7.2	10.6	15.4	8.3	11.3	17.5	9.0	11.9	15.4	12.3	13.5
6	15.4	7.3	10.0	16.7	9.8	12.5	14.5	8.4	10.6	14.6	12.3	13.1
7	15.6	8.7	11.2	16.6	10.0	12.4	17.0	8.0	11.2	14.6	11.3	12.7
8	17.1	10.0	13.0	17.8	9.8	13.0	13.6	8.8	10.6	14.5	11.8	12.9
9	17.5	10.5	13.4	18.1	9.4	12.8	16.4	9.2	11.8	14.5	11.9	12.9
10	17.4	10.4	13.4	18.5	10.3	13.3	---	---	---	---	---	---
11	17.6	9.4	12.8	18.2	10.3	13.5	---	---	---	---	---	---
12	15.9	7.9	11.2	19.1	11.2	14.2	---	---	---	---	---	---
13	14.3	7.4	10.2	19.5	11.6	14.6	---	---	---	---	---	---
14	13.0	5.8	8.4	---	---	---	---	---	---	---	---	---
15	12.3	5.8	7.7	---	---	---	---	---	---	---	---	---
16	12.7	7.2	9.5	---	---	---	---	---	---	---	---	---
17	13.3	7.8	10.1	17.0	8.3	11.6	---	---	---	---	---	---
18	14.3	9.2	11.0	16.8	8.9	11.9	---	---	---	---	---	---
19	14.5	9.5	11.5	18.6	9.4	12.7	---	---	---	---	---	---
20	15.2	9.0	11.4	17.1	8.8	12.1	---	---	---	---	---	---
21	14.1	8.2	10.7	18.4	10.0	13.3	---	---	---	---	---	---
22	13.5	7.9	10.5	19.5	10.4	13.8	16.8	12.8	14.2	---	---	---
23	13.8	7.4	9.7	19.6	10.5	13.9	16.8	12.4	14.1	---	---	---
24	13.1	7.1	9.7	13.8	8.8	11.1	16.4	11.9	13.6	---	---	---
25	12.2	6.5	8.9	10.5	7.6	8.8	16.7	12.5	14.1	---	---	---
26	11.1	7.2	9.1	14.1	7.4	9.8	16.6	12.9	14.3	---	---	---
27	13.0	9.6	11.0	---	---	---	16.4	13.1	14.3	---	---	---
28	14.8	9.8	11.8	---	---	---	16.4	12.8	14.2	---	---	---
29	15.4	10.5	12.5	10.0	7.6	8.5	16.0	12.7	13.9	---	---	---
30	15.4	10.4	12.3	10.1	7.1	8.3	15.6	12.9	13.9	---	---	---
31	15.3	9.7	11.7	---	---	---	15.4	12.8	13.9	---	---	---
MONTH	17.6	5.8	11.0	19.6	7.0	11.9	17.5	7.0	12.7	15.8	11.3	13.4

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570078 -- Conodoguinet Cr 126 ft DS of Good Hope Dam at Good Hope, PA--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, **WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			**JULY**			**AUGUST**			**SEPTEMBER**	
1	---	---	---	---	---	---	---	---	---	56	4.8	15
2	---	---	---	---	---	---	---	---	---	14	4.5	8.8
3	---	---	---	---	---	---	---	---	---	19	3.7	10
4	---	---	---	---	---	---	---	---	---	14	3.2	8.9
5	---	---	---	---	---	---	---	---	---	16	4.0	9.4
6	---	---	---	---	---	---	---	---	---	18	4.0	10
7	---	---	---	---	---	---	---	---	---	14	2.8	7.7
8	---	---	---	---	---	---	---	---	---	12	2.0	6.5
9	---	---	---	---	---	---	---	---	---	20	2.3	6.4
10	---	---	---	---	---	---	---	---	---	18	2.7	6.6
11	---	---	---	---	---	---	---	---	---	11	3.0	6.6
12	---	---	---	---	---	---	---	---	---	16	3.1	6.9
13	---	---	---	---	---	---	---	---	---	12	2.7	6.3
14	---	---	---	---	---	---	---	---	---	9.3	3.2	6.6
15	---	---	---	---	---	---	---	---	---	11	2.6	6.1
16	---	---	---	---	---	---	---	---	---	9.6	2.1	5.3
17	---	---	---	---	---	---	---	---	---	12	2.6	5.6
18	---	---	---	---	---	---	---	---	---	29	2.8	6.2
19	---	---	---	---	---	---	---	---	---	9.6	3.1	5.5
20	---	---	---	---	---	---	---	---	---	11	4.3	6.2
21	---	---	---	---	---	---	---	---	---	8.3	2.5	5.3
22	---	---	---	---	---	---	---	---	---	8.4	2.9	4.8
23	---	---	---	---	---	---	---	---	---	9.8	3.2	5.2
24	---	---	---	---	---	---	---	---	---	20	3.5	7.8
25	---	---	---	---	---	---	---	---	---	40	9.8	17
26	---	---	---	---	---	---	---	---	---	11	3.4	6.2
27	---	---	---	---	---	---	---	---	---	8.3	4.2	5.9
28	---	---	---	---	---	---	---	---	---	10	3.1	5.6
29	---	---	---	---	---	---	---	---	---	17	3.5	5.0
30	---	---	---	---	---	---	---	---	---	8.7	3.0	5.1
31	---	---	---	---	---	---	120	4.1	13	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	56	2.0	7.3

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, **WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			**NOVEMBER**			**DECEMBER**			**JANUARY**	
1	7.7	2.5	4.7	30	3.3	5.0	26	1.8	8.9	20	1.8	4.8
2	9.5	3.4	5.8	54	3.6	7.4	15	1.5	5.2	14	2.0	4.0
3	15	2.8	5.6	11	1.5	4.7	17	1.0	5.4	8.8	2.1	3.1
4	7.6	3.6	5.1	11	1.6	5.3	8.7	0.7	3.0	---	---	---
5	20	3.7	6.1	20	2.1	5.5	16	1.1	4.8	7.2	1.6	2.8
6	8.6	3.9	6.4	90	2.8	16	16	0.8	6.0	8.8	1.8	3.7
7	9.0	2.9	5.7	140	2.8	14	19	1.7	7.1	9.8	2.6	4.5
8	12	1.7	3.3	36	2.5	9.0	17	0.9	5.1	7.7	1.9	4.5
9	7.0	1.7	3.6	22	3.4	9.1	16	1.5	6.3	9.6	0.3	4.1
10	14	3.2	4.8	22	3.9	8.9	---	---	---	---	---	---
11	14	4.4	6.0	30	2.0	6.8	---	---	---	---	---	---
12	8.6	4.6	6.4	11	3.1	6.2	---	---	---	---	---	---
13	6.3	2.7	4.6	19	2.0	5.4	---	---	---	---	---	---
14	9.3	3.4	6.2	---	---	---	---	---	---	---	---	---
15	13	6.6	9.5	---	---	---	---	---	---	---	---	---
16	13	3.5	6.7	---	---	---	---	---	---	---	---	---
17	8.6	4.2	5.4	16	1.0	4.9	---	---	---	---	---	---
18	5.3	2.3	3.3	8.7	1.1	4.0	---	---	---	---	---	---
19	11	3.1	4.3	20	1.5	4.3	---	---	---	---	---	---
20	7.3	3.9	5.0	8.6	1.3	3.3	---	---	---	---	---	---
21	7.0	3.3	5.0	15	1.3	3.2	---	---	---	---	---	---
22	7.6	2.5	3.8	11	1.4	3.4	5.7	2.0	3.0	---	---	---
23	10	3.2	4.6	14	1.3	3.6	6.5	1.8	3.4	---	---	---
24	11	3.4	5.4	11	1.5	4.4	8.2	1.7	2.7	---	---	---
25	10	3.4	5.8	47	2.8	15	5.6	1.7	2.4	---	---	---
26	38	3.4	7.1	77	4.7	21	6.9	1.7	2.4	---	---	---
27	7.7	2.1	3.5	52	2.6	14	14	2.1	4.2	---	---	---
28	36	2.0	3.2	35	2.5	16	14	1.8	3.9	---	---	---
29	7.0	1.7	2.7	34	1.9	11	9.8	1.7	3.6	---	---	---
30	10	3.0	4.6	31	1.8	10	17	1.7	4.7	---	---	---
31	9.0	4.0	5.2	---	---	---	21	1.9	4.4	---	---	---
MONTH	38	1.7	5.1	140	1.0	8.2	26	0.7	4.6	20	0.3	3.9

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570080 -- Conodoguinet Creek 600 ft DS of Good Hope Dam, PA

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
MAY 2001							
10...	1141	9.2	99	7.8	357	18.8	0
10...	1142	8.6	94	7.9	382	19.2	10
10...	1143	8.6	93	7.9	432	19.2	20
10...	1144	8.6	94	7.9	450	19.4	30
10...	1145	9.1	98	8.0	342	19.2	40
10...	1146	9.2	100	8.0	448	19.1	50
10...	1147	9.2	99	8.0	447	19.1	60
10...	1148	9.2	100	8.1	448	19.1	70
10...	1149	9.2	100	8.1	448	19.1	80
10...	1150	9.3	100	8.1	450	19.1	90
10...	1151	9.3	100	8.1	449	19.0	100
10...	1152	9.3	100	8.1	449	18.9	110
10...	1153	9.2	100	8.1	452	18.9	120
10...	1154	9.2	99	8.1	452	18.8	130
10...	1155	9.2	99	8.0	454	18.8	140
10...	1156	9.4	100	8.1	454	18.8	150
10...	1157	9.4	100	8.1	456	18.7	160
10...	1158	9.3	100	8.0	458	18.6	170
10...	1159	9.3	99	8.0	461	18.6	180
10...	1200	9.2	98	8.0	464	18.5	190
10...	1201	9.1	98	8.0	466	18.5	200
10...	1202	9.1	97	8.0	470	18.5	210
10...	1203	8.9	96	8.0	472	18.5	220
10...	1204	8.9	95	8.0	473	18.6	230
10...	1205	9.0	96	8.0	473	18.7	240
10...	1206	9.3	100	8.0	474	18.8	250
10...	1207	9.6	104	8.0	471	19.6	255

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570150 -- Conodoguinet Cr DS of Orrs Bridge Rd at Camp Hill, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than. For explanation of units of measurement please refer to pages 42-43.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	Sample type	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT 2001													
25...	1100	1028	80020	9	E64	7.3	11.9	123	7.8	567	16.7	<.04	.32
25...	1101	1028	80020	5	E64	7.3	11.9	123	7.8	567	16.7	E.02	.30
NOV													
02...	1415	1028	80020	9	E71	17	13.7	134	8.3	562	14.4	--	--

Date	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT 2001							
25...	.35	3.17	.024	.027	E.01	.044	--
25...	.38	3.18	.025	.027	E.01	.041	--
NOV							
02...	.46	--	--	--	--	.047	16

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	TUR-BID-ITY FIELD WATER UNFLTRD (NTU) (61028)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)
OCT 2001								
25...	1102	8.6	11.2	116	7.8	581	16.8	13
25...	1103	6.5	11.6	120	7.8	581	16.9	38
25...	1104	7.5	11.4	118	7.8	579	16.8	53
25...	1105	8.5	11.9	123	7.8	576	16.7	78
25...	1106	7.3	12.9	132	7.9	565	16.5	103
25...	1107	7.3	13.5	139	8.0	562	16.5	128
25...	1108	3.6	12.7	131	7.9	559	16.6	153
25...	1109	10	11.4	118	7.9	554	16.7	178
25...	1110	6.6	10.9	113	7.8	549	16.8	203
NOV								
02...	1416	34	12.8	126	8.2	590	14.8	23
02...	1417	16	12.8	127	8.2	583	14.8	48
02...	1418	21	13.9	137	8.3	570	14.8	73
02...	1419	9.3	13.8	136	8.4	555	14.6	98
02...	1420	6.6	14.5	140	8.4	544	14.2	123
02...	1421	9.7	15.1	146	8.5	546	14.2	148
02...	1422	9.6	14.8	144	8.4	554	14.2	173
02...	1423	23	14.3	140	8.4	555	14.3	198
02...	1424	19	13.2	129	8.2	557	14.3	223
02...	1425	21	12.2	120	8.1	567	14.1	248

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570150 -- Conodoguinet Cr DS of Orrs Bridge Rd at Camp Hill, PA--Continued

REMARKS.--Definition of terms used: Total Number - the total number of aquatic invertebrates collected at a site; Total EPT Taxa - total number of distinct taxa within the orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies). These orders of insects are generally considered to be pollution sensitive; % Contribution of Dominant Taxa - total number of organisms is an indication of community balance at the lowest taxonomic level possible (usually genus or species). A community that proves dominated by relatively few taxa would include environmental stress. This metric can include the single most dominant taxa, three most dominant, or five most dominant taxa "dominants in common" (DIC). Other definitions can be found on pages 22-33.

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
PLATYHELMINTHES	--	--	--
TURBELLARIA	--	--	--
TRICLADIDA	--	--	--
Planariidae	--	--	4
ANNELIDA	--	--	--
OLIGOCHAETA (aquatic earthworms)	--	--	--
TUBIFICIDA	--	--	--
Enchytraeidae	--	--	--
Tubificidae	--	--	--
Aulodrilus pleuriseta	--	--	2
Spirosperma nikolskyi	--	--	--
Tubificidae w/o capilliform setae	--	--	28
LUMBRICINA	--	--	1
MOLLUSCA	--	--	--
GASTROPODA (snails)	--	--	--
MESOGASTROPODA	--	--	--
Hydrobiidae	--	--	--
Amnicola	--	--	3
Pleuroceridae	--	--	--
Goniobasis	--	--	--
Leptoxis carinata	--	1	1
BASOMMATOPHORA	--	--	--
Ancylidae (limpets)	--	--	--
Ferrissia	--	--	3
Planorbidae	--	--	--
Gyraulus	--	--	--
Planorbella	--	--	10
Lymnaeidae	--	--	--
Fossaria	--	--	--
Physidae	--	--	--
Physella	--	--	4
BIVALVIA (clams and mussels)	--	--	--
VENEROIDA	--	--	--
Corbiculidae	--	--	--
Corbicula fluminea	--	--	23
Sphaeriidae (fingernail clams)	--	--	--
Pisidium	--	--	--
CHELICERATA	--	--	--
ARACHNIDA	--	--	--
HYDRACHNIDIA (water mites)	--	1	1
ARTHROPODA	--	--	--
CRUSTACEA	--	--	--
OSTRACODA	--	1	--
MALACOSTRACA	--	--	--
ISOPODA (sow bugs)	--	--	--
Asellidae	--	--	--
Lirceus	--	--	--
AMPHIPODA (scuds)	--	--	--
Crangonyctidae	--	--	--
Crangonyx	--	--	--
Gammaridae	--	--	--
Gammarus	91	54	27
Hyalellidae	--	--	--
Hyalella azteca	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570150 -- Conodoguinet Cr DS of Orrs Bridge Rd at Camp Hill, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
INSECTA	--	--	--
EPHEMEROPTERA (mayflies)	--	--	--
PISCIFORMA	--	--	--
Baetidae	--	--	--
Acentrella	--	--	--
Acerpenna	--	--	--
Baetis	29	2	--
Baetis (2-tailed)	1	--	--
SETISURA	--	--	--
Heptageniidae	--	--	--
Heptagenia	--	--	--
Leucrocuta	1	--	--
Stenacron	2	1	--
Stenonema	6	15	6
Isonychiidae	--	--	--
Isonychia	--	2	1
FUCATERGALIA	--	--	--
Leptophlebiidae	--	--	--
Leptophlebia	--	--	--
Paraleptophlebia	--	--	--
Ephemeridae	--	--	--
Hexagenia	--	--	--
Potamanthidae	--	--	--
Anthopotamus	2	11	1
Caenidae	--	--	--
Caenis	14	3	77
Ephemerellidae	--	--	--
Ephemerella	--	--	--
Serratella	--	2	--
Leptohyphidae	--	--	--
Tricorythodes	3	--	--
ODONATA (dragonflies and damselflies)	--	--	--
ZYGOPTERA	--	--	--
Coenagrionidae	--	--	--
Argia	1	2	2
Enallagma	--	--	--
HEMIPTERA (true bugs)	--	--	--
Corixidae	--	--	--
PLECOPTERA (stoneflies)	--	--	--
EUHOLOGNATHA	--	--	--
Taeniopterygidae	--	--	--
Taeniopteryx	--	3	--
SYSTELLAGNATHA	--	--	--
Perlidae	--	--	--
Agnetina	--	--	--
Paragnetina	--	--	--
COLEOPTERA (beetles)	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570150 -- Conodoguinet Cr DS of Orrs Bridge Rd at Camp Hill, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
POLYPHAGA	--	--	--
Hydrophilidae (water scavenger beetles)	--	--	--
Berosus	--	--	1
Psephenidae (water pennies)	--	--	--
Psephenus	5	2	20
Elmidae (riffle beetles)	--	--	--
Dubiraphia	--	2	4
Macronychus	--	--	--
Optioservus	13	37	11
Promoresia	--	--	--
Stenelmis	49	10	27
Scirtidae	--	--	--
MEGALOPTERA (dobsonflies and fishflies)	--	--	--
Corydalidae	--	--	--
Corydalus	--	--	--
Sialidae	--	--	--
Sialis	--	--	--
TRICHOPTERA (caddisflies)	--	--	--
SPICIPALPIA	--	--	--
Hydroptilidae	--	--	--
Hydroptila	1	1	1
Leucotrichia	--	--	--
Glossosomatidae	--	--	--
Glossosoma	--	--	--
ANNULIPALPIA	--	--	--
Philopotamidae	--	--	--
Chimarra	--	--	--
Hydropsychidae	2	--	--
Cheumatopsyche	2	8	--
Hydropsyche	6	12	--
Hydropsyche bifida gr.	--	--	--
INTEGRIPALPIA	--	--	--
Leptoceridae	--	--	--
Oecetis	--	--	--
Helicopsychidae	--	--	--
Helicopsyche	--	--	3
LEPIDOPTERA (aquatic moths)	--	--	--
Pyralidae	--	--	--
Petrophila	--	--	--
DIPTERA (true flies)	--	--	--
Ceratopogonidae (biting midges)	--	--	--
Probezzia	--	--	--
Chironomidae (non-biting midges)	--	--	--
Tanypodinae	--	--	--
Pentaneurini	--	--	--
Ablabesmyia	--	--	--
Ablabesmyia mallochi	--	--	--
Conchapelopia	--	8	1
Pentaneura	1	1	--
Thiennemannimyia gr.	--	1	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

01570150 -- Conodoguinet Cr DS of Orrs Bridge Rd at Camp Hill, PA--Continued

	Sept. 18, 2001	Nov. 19, 2001	Nov. 25, 2002
Procladini	--	--	--
Procladius	--	--	--
Tanypodini	--	--	--
Tanypus	--	--	--
Orthocladiinae	--	--	--
Corynoneurini	--	--	--
Corynoneura	--	--	--
Orthocladiini	--	--	--
Cricotopus/Orthocladius	--	--	--
Cricotopus	2	--	--
Cricotopus bicinctus	1	3	--
Cricotopus trifascia	--	--	--
Cricotopus vierrensis	--	--	--
Eukiefferiella	--	1	4
Eukiefferiella brevicalcar gr.	--	--	--
Nanocladius	1	--	--
Orthocladius	--	1	9
Thiennemaniella	1	--	--
Tvetenia	--	--	--
Tvetenia bavarica gr.	--	--	--
Tvetenia vitracies gr.	--	1	--
Chironominae	1	1	--
Chironomini	--	--	--
Chironomus	--	--	--
Cryptochironomus	--	1	--
Dicrotendipes	--	3	--
Microtendipes pedellus gr.	4	8	1
Paratendipes	--	--	--
Phaenopsectra	--	--	--
Polypedilum	--	2	--
Polypedilum flavum	--	3	--
Polypedilum scalaenum gr.	--	--	13
Pseudochironomini	--	--	--
Pseudochironomus	--	2	--
Tanytarsini	--	--	--
Cladotanytarsus	--	7	--
Rheotanytarsus	2	30	1
Tanytarsus	12	14	--
Simuliidae (black flies)	--	--	--
Simulium	--	--	--
TOTAL TAXA	26	37	30
TOTAL NUMBER	253	257	290
TOTAL EPT TAXA	12	11	6
PERCENT EPT TAXA	46	30	20
HBI	5.49	5.17	5.96
PERCENT DOMINANT TAXA (single)	36	21	27

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

401432076581301 -- Conodoguinet Cr 1.52 mi DS of Good Hope Dam, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

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

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	Sample type	MAGNESIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00924)	POTASSIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00938)	SODIUM, RECOV. FM BOTTOM MATERIAL (MG/KG AS NA) (00934)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01108)	ARSENIC TOTAL IN BOTTOM MATERIAL (µG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (µG/G AS CD) (01028)	CALCIUM SEDIMT, BED MATERL (µG/G) (62456)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01029)	COPPER, RECOV. FM BOTTOM MATERIAL (µG/G AS CU) (01043)
APR 2001 06...	1245	1028	9813	9	4300	3800	150	22000	<6	<1.4	27000	32	32

Date	IRON, SEDIMT, BED MATERIAL AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (µG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (µG/G) (01053)	MERCURY SEDIMENT BEDMAT (µG/G) (30280)	NICKEL, RECOV. FM BOTTOM MATERIAL (µG/G AS NI) (01068)	SELENIUM, TOTAL IN BOTTOM MATERIAL (µG/G) (01148)	ALDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39333)	ALPHA BHC TOTAL IN BOTTOM MATERIAL (µG/KG) (39076)	AROCLOR 1242 PCB BOT.MAT (µG/KG) (39499)	AROCLOR 1248 PCB BOT.MAT (µG/KG) (39503)	AROCLOR 1254 PCB BOT.MAT (µG/KG) (39507)	AROCLOR 1260 PCB BOT.MAT (µG/KG) (39511)	BETA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34257)
APR 2001 06...	26000	37	850	<.14	36	<10	c<200	c<200	c<.25	c<.25	c<.25	c<.25	c<200

Date	CHLORDANE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39351)	CHLORNEB, BED MAT DRY WT, REC (µG/KG) (62903)	CHLOROBENZILATE, BED MAT DRY WT, REC (µG/KG) (39461)	CHLOROTHALONIL, BED MAT DRY WT, REC (µG/KG) (62904)	CHLORPYRIFOS IN BOT. MAT. (µG/KG) (81404)	CIS-CHLORDANE, BED MAT DRY WT, REC (µG/KG) (62802)	CIS-PERMETHRIN BED MAT DRY WT, REC (µG/KG) (62908)	DCPA, BED MAT DRY WT, REC (µG/KG) (62905)	DELTA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34262)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39383)	ENDOSULFAN BETA BOT.MAT (µG/KG) (34359)	ENDOSULFAN SULFATE BOT.MAT (µG/KG) (34354)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (µG/KG) (39389)
APR 2001 06...	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200

Date	ENDRIN ALDEHYDE BOT.MAT (µG/KG) (34369)	ENDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39393)	ENDRIN KETONE, BED MAT DRY WT, REC (µG/KG) (62906)	ETRIDIAZOLE, BED MAT DRY WT, REC (µG/KG) (62907)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (µG/KG) (39423)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (µG/KG) (39413)	HEXACHLOROBENZENE TOT. IN BOTTOM MATL. (µG/KG) (39701)	HEXACHLOROCYCLOPENTADIENE BOT.MAT (µG/KG) (34389)	LINDANE TOTAL IN BOTTOM MATERIAL (µG/KG) (39343)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39321)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (µG/KG) (39301)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (µG/KG) (39363)	PROPACHLOR, BED MAT DRY WT, REC (µG/KG) (62909)
APR 2001 06...	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200

Date	TRIFLURALIN, BED MAT DRY WT, REC (µG/KG) (62902)
APR 2001 06...	c<200

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

401547076584501 -- Conodoguinet Cr 20 ft US of Good Hope Dam, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

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

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	Sample type	MAGNESIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00924)	POTASSIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00938)	SODIUM, RECOV. FM BOTTOM MATERIAL (MG/KG AS NA) (00934)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01108)	ARSENIC TOTAL IN BOTTOM MATERIAL (µG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (µG/G AS CD) (01028)	CALCIUM SEDIMT, BED MATERL (µG/G) (62456)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01029)	COPPER, RECOV. FM BOTTOM MATERIAL (µG/G AS CU) (01043)
APR 2001													
06...	1044	9813	1028	9	15000	3400	<130	29000	16	<1.3	61000	43	58
06...	1045	9813	1028	5	5700	3500	340	23000	<10	<2.4	52000	34	41

Date	IRON, SEDIMT, BED MATERIAL AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (µG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (µG/G) (01053)	MERCURY SEDIMENT BEDMAT (µG/G) (30280)	NICKEL, RECOV. FM BOTTOM MATERIAL (µG/G AS NI) (01068)	SELENIUM, TOTAL IN BOTTOM MATERIAL (µG/G) (01148)	ALDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39333)	ALPHA BHC TOTAL IN BOTTOM MATERIAL (µG/KG) (39076)	AROCLOR 1242 PCB BOT.MAT (µG/KG) (39499)	AROCLOR 1248 PCB BOT.MAT (µG/KG) (39503)	AROCLOR 1254 PCB BOT.MAT (µG/KG) (39507)	AROCLOR 1260 PCB BOT.MAT (µG/KG) (39511)	BETA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34257)
APR 2001													
06...	88000	38	1100	<.13	56	<9	c<100	c<100	c<.25	c<.25	c<.25	c<.25	c<100
06...	37000	46	910	<.24	41	<17	c<200	c<200	c<.25	c<.25	c<.25	c<.25	c<200

Date	CHLORDANE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39351)	CHLORNEB, BED MAT DRY WT, REC (µG/KG) (62903)	CHLOROBENZILATE, BED MAT DRY WT, REC (µG/KG) (39461)	CHLOROTHALONIL, BED MAT DRY WT, REC (µG/KG) (62904)	CHLORPYRIFOS IN BOT. MAT. (µG/KG) (81404)	CIS-CHLORDANE, BED MAT DRY WT, REC (µG/KG) (62802)	CIS-PERMETHRIN BED MAT DRY WT, REC (µG/KG) (62908)	DCPA, BED MAT DRY WT, REC (µG/KG) (62905)	DELTA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34262)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39383)	ENDOSULFAN BETA BOT.MAT (µG/KG) (34359)	ENDOSULFAN SULFATE BOT.MAT (µG/KG) (34354)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (µG/KG) (39389)
APR 2001													
06...	c<100	c<100	c<100	c<100	c<100	c<100	c<50	c<100	c<100	c<100	c<100	c<100	c<100
06...	c<200	c<200	c<200	c<200	c<200	c<200	c<100	c<200	c<200	c<200	c<200	c<200	c<200

Date	ENDRIN ALDEHYDE BOT.MAT (µG/KG) (34369)	ENDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39393)	ENDRIN KETONE, BED MAT DRY WT, REC (µG/KG) (62906)	ETRIDIAZOLE, BED MAT DRY WT, REC (µG/KG) (62907)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (µG/KG) (39423)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (µG/KG) (39413)	HEXACHLOROBENZENE TOT. IN BOTTOM MATL. (µG/KG) (39701)	HEXACHLOROCYCLOPENTADIENE BOT.MAT (µG/KG) (34389)	LINDANE TOTAL IN BOTTOM MATERIAL (µG/KG) (39343)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39321)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (µG/KG) (39301)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (µG/KG) (39363)	PROPACHLOR, BED MAT DRY WT, REC (µG/KG) (62909)
APR 2001													
06...	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100
06...	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200

Date	TRIFLURALIN, BED MAT DRY WT, REC (µG/KG) (62902)
APR 2001	
06...	c<100
06...	c<200

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

401547076584502 -- Conodoguinet Cr 40 ft US of Good Hope Dam, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

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

Date	Time	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	Sample type	MAGNE- SIUM, RECOV. FM BOT- TOM MA- TERIAL (MG/KG) (00924)	POTAS- SIUM, RECOV. FM BOT- TOM MA- TERIAL (MG/KG) (00938)	SODIUM, RECOV. FM BOT- TOM MA- TERIAL (MG/KG AS NA) (00934)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (μG/G) (01108)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (μG/G AS AS) (01003)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (μG/G AS CD) (01028)	CALCIUM SEDIMT, BED MATERL (μG/G) (62456)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (μG/G) (01029)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (μG/G AS CU) (01043)
APR 2001													
06...	0955	1028	9813	9	5100	2600	<170	20000	<7	<1.7	49000	31	37

Date	IRON, SEDIMT, BED MA- TERIAL AS FE) (01170)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (μG/G AS PB) (01052)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (μG/G) (01053)	MERCURY SEDI- MENT BEDMAT (μG/G) (30280)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (μG/G AS NI) (01068)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (μG/G) (01148)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39333)	ALPHA BHC TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39076)	AROCLOR 1242 PCB BOT.MAT (μG/KG) (39499)	AROCLOR 1248 PCB BOT.MAT (μG/KG) (39503)	AROCLOR 1254 PCB BOT.MAT (μG/KG) (39507)	AROCLOR 1260 PCB BOT.MAT (μG/KG) (39511)	BETA BENZENE HEXA- CHLOR- IDE BOT.MAT (μG/KG) (34257)
APR 2001													
06...	29000	44	740	<.17	33	<12	c<200	c<200	c<.25	c<.25	c<.25	c<.25	c<200

Date	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39351)	CHLOR- NEB, BED MAT DRY WT, REC (μG/KG) (62903)	CHLORO- BENZIL- ATE, BED MAT DRY WT, REC (μG/KG) (39461)	CHLORO- THAL- ONIL, BED MAT DRY WT, REC (μG/KG) (62904)	CHLOR- PYRIFOS IN BOT. MAT. (μG/KG) (81404)	CIS- CHLOR- DANE, BED MAT DRY WT, REC (μG/KG) (62802)	CIS- PER- METHRIN BED MAT DRY WT, REC (μG/KG) (62908)	DCPA, BED MAT DRY WT, REC (μG/KG) (62905)	DELTA BENZENE HEXA- CHLOR- IDE BOT.MAT (μG/KG) (34262)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39383)	ENDO- SULFAN BETA BOT.MAT (μG/KG) (34359)	ENDO- SULFAN SULFATE BOT.MAT (μG/KG) (34354)	ENDO- SULFAN I TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39389)
APR 2001													
06...	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200

Date	ENDRIN ALDE- HYDE BOT.MAT (μG/KG) (34369)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39393)	ENDRIN KETONE, BED MAT DRY WT, REC (μG/KG) (62906)	ETRIDI- AZOLE, BED MAT DRY WT, REC (μG/KG) (62907)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (μG/KG) (39423)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39413)	HEXA- CHLORO- BENZENE TOT. IN BOTTOM MATL. (μG/KG) (39701)	HEXA- CHLORO- CYCLO- PENT- ADIENE BOT.MAT (μG/KG) (34389)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39343)	P,P' DDE, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39321)	P,P' DDT, TOTAL IN BOT- TOM MA- TERIAL (μG/KG) (39301)	P,P'- DDD, RECOVER IN BOT- TOM MA- TERIAL (μG/KG) (39363)	PROPA- CHLOR, BED MAT DRY WT, REC (μG/KG) (62909)
APR 2001													
06...	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200	c<200

Date	TRI- FLUR- ALIN, BED MAT DRY WT, REC (μG/KG) (62902)
APR 2001	
06...	c<200

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

401547076584503 -- Conodoguinet Cr 120 ft US of Good Hope Dam, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

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

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	Sample type	MAGNESIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00924)	POTASSIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00938)	SODIUM, RECOV. FM BOTTOM MATERIAL (MG/KG AS NA) (00934)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01108)	ARSENIC TOTAL IN BOTTOM MATERIAL (µG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (µG/G AS CD) (01028)	CALCIUM SEDIMT, BED MATERL (µG/G) (62456)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01029)	COPPER, RECOV. FM BOTTOM MATERIAL (µG/G AS CU) (01043)
APR 2001 06...	1105	1028	9813	9	7000	4300	180	32000	6	<1.4	29000	47	38

Date	IRON, SEDIMT, BED MATERIAL AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (µG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (µG/G) (01053)	MERCURY SEDIMENT BEDMAT (µG/G) (30280)	NICKEL, RECOV. FM BOTTOM MATERIAL (µG/G AS NI) (01068)	SELENIUM, TOTAL IN BOTTOM MATERIAL (µG/G) (01148)	ALDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39333)	ALPHA BHC TOTAL IN BOTTOM MATERIAL (µG/KG) (39076)	AROCLOR 1242 PCB BOT.MAT (µG/KG) (39499)	AROCLOR 1248 PCB BOT.MAT (µG/KG) (39503)	AROCLOR 1254 PCB BOT.MAT (µG/KG) (39507)	AROCLOR 1260 PCB BOT.MAT (µG/KG) (39511)	BETA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34257)
APR 2001 06...	33000	39	490	<.14	45	<10	c<100	c<100	c<.25	c<.25	c<.25	c<.25	c<100

Date	CHLORDANE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39351)	CHLORNEB, BED MAT DRY WT, REC (µG/KG) (62903)	CHLOROBENZILATE, BED MAT DRY WT, REC (µG/KG) (39461)	CHLOROTHALONIL, BED MAT DRY WT, REC (µG/KG) (62904)	CHLORPYRIFOS IN BOT. MAT. (µG/KG) (81404)	CIS-CHLORDANE, BED MAT DRY WT, REC (µG/KG) (62802)	CIS-PERMETHRIN BED MAT DRY WT, REC (µG/KG) (62908)	DCPA, BED MAT DRY WT, REC (µG/KG) (62905)	DELTA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34262)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39383)	ENDOSULFAN BETA BOT.MAT (µG/KG) (34359)	ENDOSULFAN SULFATE BOT.MAT (µG/KG) (34354)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (µG/KG) (39389)
APR 2001 06...	c<100	c<100	c<100	c<100	c<100	c<100	c<50	c<100	c<100	c<100	c<100	c<100	c<100

Date	ENDRIN ALDEHYDE BOT.MAT (µG/KG) (34369)	ENDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39393)	ENDRIN KETONE, BED MAT DRY WT, REC (µG/KG) (62906)	ETRIDIAZOLE, BED MAT DRY WT, REC (µG/KG) (62907)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (µG/KG) (39423)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (µG/KG) (39413)	HEXACHLOROBENZENE TOT. IN BOTTOM MATL. (µG/KG) (39701)	HEXACHLOROCYCLOPENTADIENE BOT.MAT (µG/KG) (34389)	LINDANE TOTAL IN BOTTOM MATERIAL (µG/KG) (39343)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39321)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (µG/KG) (39301)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (µG/KG) (39363)	PROPACHLOR, BED MAT DRY WT, REC (µG/KG) (62909)
APR 2001 06...	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100	c<100

Date	TRIFLURALIN, BED MAT DRY WT, REC (µG/KG) (62902)
APR 2001 06...	c<100

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
EFFECTS OF REMOVING GOOD HOPE MILL DAM PROJECT--Continued

401554076590101 -- Conodoguinet Cr 1500 ft US of Good Hope Dam, PA

REMARKS.--All samples collected by U.S. Geological Survey for the Good Hope Mill Dam Project. Explanation of column headings -- AGENCY COLLECTION CODE: 1028 - U. S. Geological Survey; AGENCY ANALYZING CODE: 80020 - U.S. Geological Survey, 9813 - Pennsylvania Department of Environmental Protection; SAMPLE TYPE: 9 - Routine Sample, 5 - Duplicate Sample. Explanation of remark codes -- E - Estimated Value; < - Less Than; c - Sample Holding Time Exceeded. For explanation of units of measurement please refer to pages 42-43.

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

Date	Time	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	Sample type	MAGNESIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00924)	POTASSIUM, RECOV. FM BOTTOM MATERIAL (MG/KG) (00938)	SODIUM, RECOV. FM BOTTOM MATERIAL (MG/KG AS NA) (00934)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01108)	ARSENIC TOTAL IN BOTTOM MATERIAL (µG/G AS AS) (01003)	CADMIUM RECOV. FM BOTTOM MATERIAL (µG/G AS CD) (01028)	CALCIUM SEDIMT, BED MATERL (µG/G) (62456)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (µG/G) (01029)	COPPER, RECOV. FM BOTTOM MATERIAL (µG/G AS CU) (01043)
APR 2001 06...	1200	1028	9813	9	7800	2500	<100	25000	13	<1.0	9600	38	34

Date	IRON, SEDIMT, BED MATERIAL AS FE) (01170)	LEAD, RECOV. FM BOTTOM MATERIAL (µG/G AS PB) (01052)	MANGANESE, RECOV. FM BOTTOM MATERIAL (µG/G) (01053)	MERCURY SEDIMENT BEDMAT (µG/G) (30280)	NICKEL, RECOV. FM BOTTOM MATERIAL (µG/G AS NI) (01068)	SELENIUM, TOTAL IN BOTTOM MATERIAL (µG/G) (01148)	ALDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39333)	ALPHA BHC TOTAL IN BOTTOM MATERIAL (µG/KG) (39076)	AROCLOR 1242 PCB BOT.MAT (µG/KG) (39499)	AROCLOR 1248 PCB BOT.MAT (µG/KG) (39503)	AROCLOR 1254 PCB BOT.MAT (µG/KG) (39507)	AROCLOR 1260 PCB BOT.MAT (µG/KG) (39511)	BETA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34257)
APR 2001 06...	74000	46	1100	<.10	50	<7	c<10	c<10	c<.25	c<.25	c<.25	c<.25	c<10

Date	CHLORDANE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39351)	CHLORNEB, BED MAT DRY WT, REC (µG/KG) (62903)	CHLOROBENZILATE, BED MAT DRY WT, REC (µG/KG) (39461)	CHLOROTHALONIL, BED MAT DRY WT, REC (µG/KG) (62904)	CHLORPYRIFOS IN BOT. MAT. (µG/KG) (81404)	CIS-CHLORDANE, BED MAT DRY WT, REC (µG/KG) (62802)	CIS-PERMETHRIN BED MAT DRY WT, REC (µG/KG) (62908)	DCPA, BED MAT DRY WT, REC (µG/KG) (62905)	DELTA BENZENE HEXACHLORIDE BOT.MAT (µG/KG) (34262)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39383)	ENDOSULFAN BETA BOT.MAT (µG/KG) (34359)	ENDOSULFAN SULFATE BOT.MAT (µG/KG) (34354)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (µG/KG) (39389)
APR 2001 06...	c<10	c<10	c<10	c<10	c<10	c<10	c<5.0	c<10	c<10	c<10	c<10.0	c<10.0	c<10

Date	ENDRIN ALDEHYDE BOT.MAT (µG/KG) (34369)	ENDRIN, TOTAL IN BOTTOM MATERIAL (µG/KG) (39393)	ENDRIN KETONE, BED MAT DRY WT, REC (µG/KG) (62906)	ETRIDIAZOLE, BED MAT DRY WT, REC (µG/KG) (62907)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (µG/KG) (39423)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (µG/KG) (39413)	HEXACHLOROBENZENE TOT. IN BOTTOM MATL. (µG/KG) (39701)	HEXACHLOROCYCLOPENTADIENE BOT.MAT (µG/KG) (34389)	LINDANE TOTAL IN BOTTOM MATERIAL (µG/KG) (39343)	P,P' DDE, TOTAL IN BOTTOM MATERIAL (µG/KG) (39321)	P,P' DDT, TOTAL IN BOTTOM MATERIAL (µG/KG) (39301)	P,P'-DDD, RECOVER IN BOTTOM MATERIAL (µG/KG) (39363)	PROPACHLOR, BED MAT DRY WT, REC (µG/KG) (62909)
APR 2001 06...	c<10.0	c<10	c<10	c<10	c<10	c<10	c<10	c<10	c<10	c<10	c<10	c<10	

Date	TRIFLURALIN, BED MAT DRY WT, REC (µG/KG) (62902)
APR 2001 06...	c<10