03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA

Monongahela Basin
Youghiogheny Subbasin

LOCATION.--Lat 40°01′03″, long 79°35′38″ referenced to North American Datum of 1927, Fayette County, PA, Hydrologic Unit 05020006, on left bank at downstream side of Crawford Avenue bridge at Connellsville, 1.2 mi upstream from Mounts Creek, at river mile 44.0.

DRAINAGE AREA.--1,326 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1908 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: Drainage area. WSP 1305: 1912 (M), 1914 (M), 1916-17 (M), 1918, 1922-25. WSP 1435: 1919-20. WSP 1725: 1916, 1932 (monthly, yearly summaries).

GAGE.--Water-stage recorder. Datum of gage is 860.13 ft above National Geodetic Vertical Datum of 1929 (U.S. Geological Survey benchmark). Prior to Aug 15, 1928, nonrecording gage, and Aug 15, 1928 to Jul 7, 1958, water-stage recorder at same site and datum. Jul 8, 1958 to Sep 8, 1959, nonrecording gage at site 0.4 mi downstream at different datum. Satellite telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the U.S. Army Corps of Engineers, Pittsburgh District and the Pennsylvania Department of Environmental Protection.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since January 1925 by Deep Creek Reservoir, since December 1942 by Youghiogheny River Lake (station 03077000) 29.4 mi upstream, and by several smaller reservoirs upstream of station. Several measurements of water temperature were made during the year.

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	939	1,030	1,450	3,910	5,600	3,090	1,800	4,400	6,910	1,600	1,930	1,050
2	928	1,010	1,380	3,720	6,040	2,820	1,720	4,040	4,530	1,340	2,740	1,010
3	926	1,000	5,870	3,210	4,940	2,970	1,520	3,160	4,730	1,100	4,430	991
4	920	988	4,860	2,560	4,890	6,710	1,550	3,170	4,790	1,570	3,270	967
5	932	985	3,240	2,260	9,120	16,600	2,290	2,800	7,500	1,960	2,980	954
6	1,020	1,030	2,570	3,000	16,000	10,200	2,380	2,400	7,780	1,650	2,630	978
7	1,020	1,120	2,080	4,580	16,100	7,890	2,310	2,260	4,410	1,440	1,720	1,050
8	1,010	1,090	2,200	3,870	9,300	8,470	2,140	2,140	2,360	1,940	1,150	1,030
9	1,020	1,060	4,880	3,570	7,760	7,750	2,040	2,660	2,370	1,950	1,120	2,170
10	995	1,030	15,600	3,540	7,100	6,760	1,940	9,360	2,490	2,020	1,190	2,010
11	985	1,020	9,640	5,780	6,030	6,080	1,880	8,670	2,640	1,750	1,010	1,060
12	1,010	1,120	7,160	7,150	5,560	4,750	1,870	10,100	2,300	1,370	964	939
13	1,030	1,630	12,100	5,800	5,350	3,870	1,840	9,650	1,720	1,310	930	2,110
14	1,010	1,500	17,200	5,470	5,090	3,290	1,880	8,610	1,760	898	926	1,860
15	1,010	3,800	8,660	4,690	4,800	3,750	1,750	8,260	2,670	793	1,090	1,290
16	989	3,630	7,560	3,540	4,440	3,570	1,580	9,460	2,030	730	1,050	1,070
17	998	2,180	7,060	3,270	3,770	2,960	1,380	9,530	2,370	1,130	1,070	988
18	993	1,630	7,080	3,200	5,230	2,810	1,320	12,100	2,000	1,150	1,050	1,080
19	1,020	1,400	6,640	3,070	5,290	4,730	1,260	13,300	1,720	1,080	1,020	1,030
20	1,020	1,370	6,180	2,710	3,820	8,280	1,970	11,400	1,370	1,090	1,010	1,010
21	1,000	1,310	5,590	2,080	3,130	6,770	3,700	11,600	1,460	1,140	996	988
22	992	1,250	4,920	1,740	2,780	6,280	3,970	9,800	1,460	1,430	1,020	975
23	996	1,200	5,420	1,600	2,940	5,480	3,350	7,980	1,200	2,990	872	963
24	1,100	1,140	10,400	1,420	2,730	4,760	2,850	5,520	1,030	3,200	962	926
25	1,260	1,070	7,220	1,350	2,620	3,840	2,510	2,700	937	1,770	970	990
26	1,180	1,260	6,110	1,440	2,590	3,020	2,290	2,310	900	1,300	970	1,030
27	1,010	4,700	5,150	1,620	4,010	2,620	2,170	2,100	952	1,190	962	1,040
28	1,110	3,490	4,040	1,880	3,360	2,800	2,550	2,760	1,060	1,090	1,020	1,070
29	908	2,270	4,570	1,890	3,000	2,450	4,040	3,780	1,080	1,010	1,180	1,050
30	888	1,780	4,670	7,410	---	2,130	4,470	3,750	1,250	995	1,210	1,050
31	860	---	4,150	6,060	---	1,950	---	4,130	---	1,950	936	---
Total	31,079	49,093	195,650	107,390	163,390	159,450	68,320	193,900	79,779	45,936	44,378	34,729
Mean	1,003	1,636	6,311	3,464	5,634	5,144	2,277	6,255	2,659	1,482	1,432	1,158
Max	1,260	4,700	17,200	7,410	16,100	16,600	4,470	13,300	7,780	3,200	4,430	2,170
Min	860	985	1,380	1,350	2,590	1,950	1,260	2,100	900	730	872	926

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1924, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,126	1,653	2,574	4,697	4,098	5,490	3,830	2,696	2,379	1,110	764	1,100
Max	5,117	4,937	5,795	8,679	9,354	9,777	6,572	6,675	5,224	5,102	1,904	5,158
(WY)	(1912)	(1914)	(1922)	(1913)	(1918)	(1912)	(1914)	(1924)	(1910)	(1912)	(1912)	(1911)
Min	36.4	68.4	342	503	1,589	1,913	1,335	1,125	938	221	99.5	132
(WY)	(1909)	(1909)	(1909)	(1918)	(1924)	(1915)	(1921)	(1911)	(1922)	(1918)	(1910)	(1922)

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

SUMMARY STATISTICS

	Water Years 1909 - 1924	
Annual mean	2,620	
Highest annual mean	3,976	1912
Lowest annual mean	1,879	1923
Highest daily mean	59,200	Mar 21 1912
Lowest daily mean	11	Oct 18 1910
Annual seven-day minimum	14	Oct 15 1910
Maximum peak flow	[a]65,900	Mar 29 1924
Maximum peak stage	[b]20.5	Mar 29 1924
Instantaneous low flow	11	Sep 23 1908[c]
Annual runoff (cfsm)	1.98	
Annual runoff (inches)	26.84	
10 percent exceeds	6,200	
50 percent exceeds	1,370	
90 percent exceeds	195	

[a] Estimated from hydrograph.

[b] From graph based on gage readings.

[c] Also Sep 26, 27, 1908, and Oct 18, 1910.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2008, BY WATER YEAR (WY)

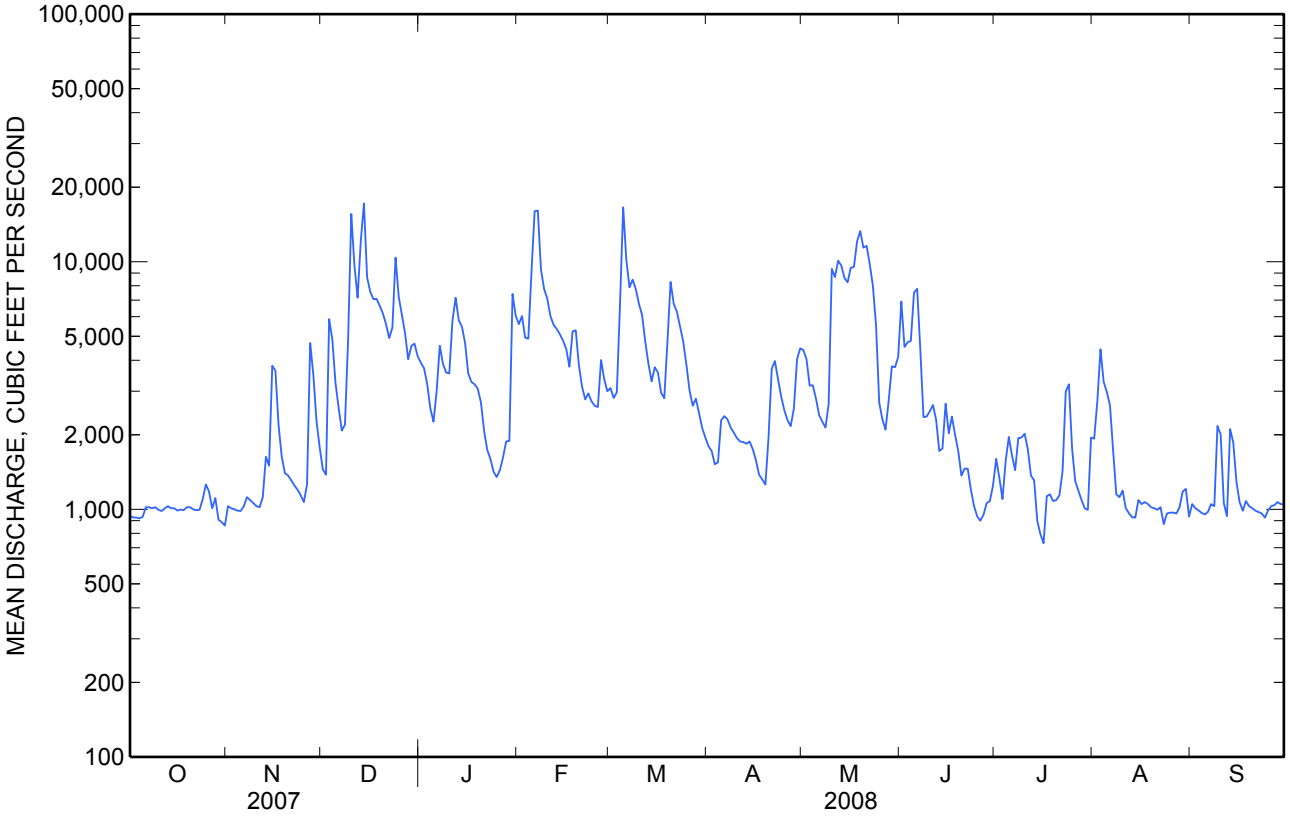
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,410	1,962	2,958	3,354	3,777	4,904	4,130	3,123	1,920	1,324	1,273	1,237
Max	5,938	7,518	8,050	9,737	7,916	11,370	8,463	7,142	5,805	4,143	4,772	5,400
(WY)	(1955)	(1986)	(1973)	(1937)	(1939)	(1936)	(1993)	(1996)	(1941)	(1985)	(1956)	(1971)
Min	139	84.5	295	465	630	1,189	1,321	662	504	279	155	146
(WY)	(1931)	(1931)	(1999)	(1925)	(1934)	(1990)	(1925)	(1926)	(1925)	(1930)	(1930)	(1925)

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1925 - 2008	
Annual total	1,007,802		1,173,094			
Annual mean	2,761		3,205		2,609	
Highest annual mean					3,944	1996
Lowest annual mean					1,223	1925
Highest daily mean	17,200	Dec 14	17,200	Dec 14	58,100	Mar 18, 1936
Lowest daily mean	532	Aug 3	730	Jul 16	39	Nov 16, 1930
Annual seven-day minimum	668	Jul 30	955	Oct 29	62	Nov 14, 1930
Maximum peak flow			23,900	Dec 13	[a]103,000	Oct 16, 1954
Maximum peak stage			11.23	Dec 13	21.96	Oct 16, 1954
10 percent exceeds	6,940		7,180		5,820	
50 percent exceeds	1,260		2,090		1,620	
90 percent exceeds	715		990		616	

[a] From rating curve extended above 55,000 ft^3/s.

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued



WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2007 to current year.

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. Inorganic sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa. Some values for filtered parameters exceed values for the corresponding unfiltered parameter. These results are within the limits of analytical precision and methods. Organic sample analyses were performed at the USGS National Water Quality Laboratory (pharmaceuticals, wastewater compounds, and hormones) and the USGS Organic Geochemistry Research Laboratory (antibiotics).

Laboratory analyses for hormones and pharmaceuticals at the U.S. Geological Survey National Water Quality Laboratory use research analytical methods. These methods are currently undergoing testing and evaluation and have not gone through the U.S. Geological Survey approval process. These research data may have greater uncertainty than data generated by approved methods.

COOPERATION.--Organic samples were collected in cooperation with the Pennsylvania Department of Environmental Protection, Bureau of Water Standards and Facility Regulation. Inorganic samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) in cooperation with that agency.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 1 of 3
[Remark codes: <, less than.]

Date	Time	11-Keto testos-terone, water, fltrd, ng/L (64507)	17-alpha-Estra-diol, water, fltrd, ng/L (64508)	17-alpha-Ethynyl estra-diol, wat fil ng/L (64509)	17-a-Ethynyl estra-diol-d4 ID std, wat flt % recvy (90813)	17-beta-Estra-diol, water, fltrd, ng/L (64510)	17-beta-Estra-diol-d4 ID std, wat fil % recvy (90777)	3-beta-Copros-tanol, water, fltrd, ng/L (64512)	4-Andro-stene-3,17-dione, wat fil ng/L (64513)	4-Andro stene-dione-d7, ID std, wat flt % recvy (90815)	Choles-terol, water, fltrd, ng/L (64514)	Choles-terol-d7, ID std, wat fil % recvy (90778)	cis-Andros-trone, water, fltrd, ng/L (64515)
Nov													
27...	1107	<.80	<.80	<.80	84.7	<.80	72.0	<4,000	<2.00	93.0	<4,000	31.8	<.80
Mar													
11...	1142	<.80	<.80	<.80	79.3	<.80	73.5	<4,000	<2.00	99.9	<4,000	35.3	<.80
May													
19...	1312	<.80	<.80	<.80	69.2	<.80	77.3	<4,000	<2.00	72.6	<4,000	63.8	<.80

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 3
[Remark codes: <, less than.]

Date	Di-hydro-testos-terone, water, fltrd, ng/L (64524)	Dihydro testos-terone-d4, ID std, wat flt % recvy (90823)	Epi-testos-terone, water, fltrd, ng/L (64517)	Equile-nin, water, fltrd, ng/L (64518)	Equilin water, fltrd, ng/L (64519)	Estriol water, fltrd, ng/L (64520)	Estriol d3, ID std, wat flt % recvy (90819)	Estrone water, fltrd, ng/L (64521)	Estrone d4, ID std, wat flt % recvy (90820)	Mest-ranol, water, fltrd, ng/L (64522)	Mes-tranol-d4, ID std, wat flt % recvy (90821)	Noreth-indrone water, fltrd, ng/L (64511)	Nor-ethin-drone-d6, ID std, wat flt % recvy (90814)
Nov													
27...	<.80	80.7	<4.00	<2.00	<4.00	<.80	77.0	<.80	74.7	<.80	72.7	<.80	84.4
Mar													
11...	<.80	74.3	<4.00	<2.00	<4.00	<.80	73.2	<.80	80.4	<.80	69.3	<.80	83.5
May													
19...	<.80	77.7	<4.00	<2.00	<4.00	<.80	65.3	<.80	74.7	<.80	79.2	<.80	67.3

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 3 of 3
[Remark codes: <, less than.]

Date	Progesterone, water, fltrd, ng/L (64523)	Progesterone-d9, ID std, wat flt % recvy (90822)	Testosterone, water, fltrd, ng/L (64525)	Testosterone-d5, ID std, wat flt % recvy (90824)	t-DiEtstilbes-trol-d8, ID std, wat flt % recvy (90817)	trans-Diethylstilbes-trol, wat flt ng/L (64516)
Nov						
27...	<4.00	25.5	<.80	80.9	65.5	<.80
Mar						
11...	<4.00	63.6	<.80	87.2	68.7	<.80
May						
19...	<4.00	35.9	<.80	73.2	82.8	<.80

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 1 of 2
[Remark codes: <, less than; E, estimated.]

Date	Time	1,7-Dimethylxanthine, water, fltrd, µg/L (62030)	Acetaminophen, water, fltrd, µg/L (62000)	Albuterol, water, fltrd, µg/L (62020)	Caffeine, water, fltrd, µg/L (50305)	Carbamazepine water, fltrd, µg/L (62793)	Carbamazepine-d10, surrog, wat flt % recvy (90797)	Codeine water, fltrd, µg/L (62003)	Cotinine, water, fltrd, µg/L (62005)	Dehydronifedipine, water, fltrd, µg/L (62004)	Diltiazem, water, fltrd, µg/L (62008)	Diphenhydramine, water, fltrd, µg/L (62796)	Ethyl nicotinate-d4, surrog, wat flt % recvy (99571)
Nov													
27...	1106	<.100	E.012	<.040	E.036	<.040	105	<.040	<.028	<.060	<.040	<.023	83.9
Mar													
11...	1141	<.100	E.031	<.040	E.031	<.040	135	<.040	<.026	<.060	<.040	<.050	104
May													
19...	1311	<.100	E.011	<.040	E.028	<.040	124	<.040	<.026	<.060	<.040	<.050	91.3
Jul													
15...	1056	<.100	E.005	<.040	E.027	<.040	123	<.040	<.026	<.060	<.040	<.050	102

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 2
[Remark codes: <, less than; E, estimated.]

Date	Sulfamethoxazole, water, fltrd, µg/L (62021)	Thiabendazole, water, fltrd, µg/L (62801)	Trimethoprim, water, fltrd, µg/L (62023)	Warfarin, water, fltrd, µg/L (62024)
Nov				
27...	<.100	<.040	<.020	<.060
Mar				
11...	<.100	<.100	<.040	<.060
May				
19...	<.100	<.100	<.040	<.060
Jul				
15...	<.100	<.100	<.040	<.060

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 1 of 3
[Remark codes: <, less than.]

Date	Time	4-EC-tetracycline HCl, water, fltrd, µg/L (63731)	4-Epioxytetracycline water, fltrd, µg/L (63729)	4-Epitetracycline HCl, water, fltrd, µg/L (63727)	Anhydroerthromycin, water, fltrd, µg/L (63674)	Azithromycin water, fltrd, µg/L (62792)	Carbamazepine water, fltrd, µg/L (62793)	Chloramphenicol, water, fltrd, µg/L (65194)	Chlorotetracycline water, fltrd, µg/L (61744)	Ciprofloxacin, water, fltrd, µg/L (62898)	Doxycycline water, fltrd 0.7u GF µg/L (62694)	Enrofloxacin, water, fltrd, µg/L (66495)	Erythromycin water, fltrd, µg/L (62797)
Nov													
27...	1105	<.010	<.010	<.010	<.008	<.005	<.005	<.100	<.010	<.005	<.010	<.005	<.008
Mar													
11...	1140	<.010	<.010	<.010	<.008	<.005	<.005	<.100	<.010	<.005	<.010	<.005	<.008
May													
19...	1310	<.010	<.010	<.010	<.008	<.005	<.005	<.100	<.010	<.005	<.010	<.005	<.008
Jul													
15...	1055	<.010	<.010	<.010	<.008	<.005	<.005	<.100	<.010	<.005	<.010	<.005	<.008

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 3
[Remark codes: <, less than.]

Date	Ibuprofen, water, fltrd, µg/L (62014)	Isochlortetracycline wat flt µg/L (64175)	Isoepichlorotetracycline water, fltrd, µg/L (64047)	Lincomycin, water, fltrd, µg/L (62894)	Lomefloxacin, water, fltrd, µg/L (62900)	Norfloxacin, water, fltrd 0.7u GF µg/L (62757)	Ofloxacin, water, fltrd, µg/L (62899)	Ormetoprim, water, fltrd, µg/L (62962)	Oxytetracycline water, fltrd, µg/L (61759)	Roxithromycin, water, fltrd, µg/L (62895)	Sarafloxacin, water, fltrd 0.7u GF µg/L (62771)	Sulfachlorpyridazine, wat flt gf 0.7u µg/L (62774)	Sulfadiazine water, fltrd, µg/L (62963)
Nov													
27...	<.050	<.010	<.010	<.005	<.005	<.005	<.005	<.005	<.010	<.005	<.005	<.005	<.100
Mar													
11...	<.050	<.010	<.010	<.005	<.005	<.005	<.005	<.005	<.010	<.005	<.005	<.005	<.100
May													
19...	<.050	<.010	<.010	<.005	<.005	<.005	<.005	<.005	<.010	<.005	<.005	<.005	<.100
Jul													
15...	<.050	<.010	<.010	<.005	<.005	<.005	<.005	<.005	<.010	<.005	<.005	<.005	<.100

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 3 of 3
[Remark codes: <, less than.]

Date	Sulfadimethoxine, water, fltrd 0.7u GF µg/L (62776)	Sulfamethazine, water, fltrd, µg/L (61762)	Sulfamethoxaxole, water, fltrd 0.7u GF µg/L (62775)	Sulfathiazole, water, fltrd 0.7u GF µg/L (62778)	Tetracycline water, fltrd 0.7u GF µg/L (62781)	Trimethoprim, water, fltrd, µg/L (62023)	Tylosin water, fltrd, µg/L (62896)	Virginiamycin, water, fltrd, µg/L (62897)
Nov								
27...	<.005	<.005	<.005	<.020	<.010	<.005	<.005	<.005
Mar								
11...	<.005	<.005	<.005	<.050	<.010	<.005	<.008	<.005
May								
19...	<.005	<.005	<.005	<.050	<.010	<.005	<.008	<.005
Jul								
15...	<.005	<.005	.005	<.050	<.010	<.005	<.008	<.005

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 1 of 3
[Remark codes: <, less than; M, presence verified but not quantified.]

Date	Time	Instantaneous discharge, ft3/s (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, µS/cm 25 degC (90095)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recoverable, mg/L (00916)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)
Nov													
27...	1055	4,860	11.6	6.8	7.3	146	156	8.0	44	12.5	3.1	16	24.7
Mar													
11...	1130	6,500	14.7	6.7	7.2	159	173	4.0	40	10.9	3.1	11	25.4
May													
19...	1300	12,400	11.5	6.7	7.4	119	124	10.6	38	10.7	2.7	13	19.2
Jul													
15...	1045	790	9.3	7.2	7.6	180	182	20.7	62	17.3	4.6	22	37.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 3
[Remark codes: <, less than; M, presence verified but not quantified.]

Date	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total non-filterable, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Total nitrogen, water, unfltrd mg/L (00600)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L as P (00665)	Cryptosporidium, mth1623 water, oocysts /10 L (99599)	Enterococci, m-E MF, water, col/ 100 mL (31649)	E coli, m-TEC MF, water, col/ 100 mL (31648)	Giardia method 1623, water, cysts/ 10 L (99597)	Aluminum, water, unfltrd recoverable, µg/L (01105)
Nov													
27...	134	58	.030	.60	<.040	1.0	.01	.061	1	7,100	2,500	7	1,100
Mar													
11...	102	<2	.020	.78	<.040	.89	<.01	<.010	.0	9	15	.0	200
May													
19...	78	16	.030	.61	<.040	.93	.01	.035	.0	380	1,500	.0	600
Jul													
15...	120	<5	.020	.41	<.040	.79	<.01	<.010	.0	6	9	.0	<200

03082500 YOUGHIOGHENY RIVER AT CONNELLSVILLE, PA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 3 of 3
[Remark codes: <, less than; M, presence verified but not quantified.]

Date	Copper, water, unfltrd recover -able, µg/L (01042)	Iron, water, unfltrd recover -able, µg/L (01045)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Nickel, water, unfltrd recover -able, µg/L (01067)	Zinc, water, unfltrd recover -able, µg/L (01092)
Nov						
27...	<4	2,340	M	480	<50	30
Mar						
11...	<4	270	<1.0	120	<50	10
May						
19...	<4	980	<1.0	140	<50	20
Jul						
15...	<4	80	<1.0	30	<50	<10