



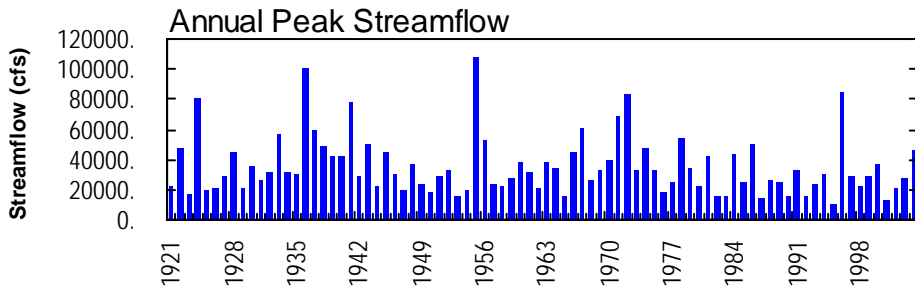
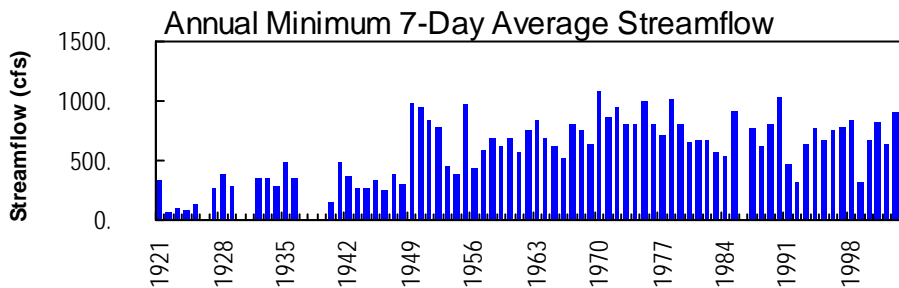
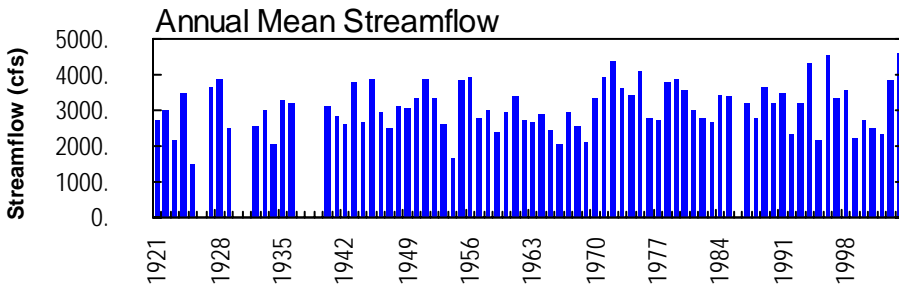
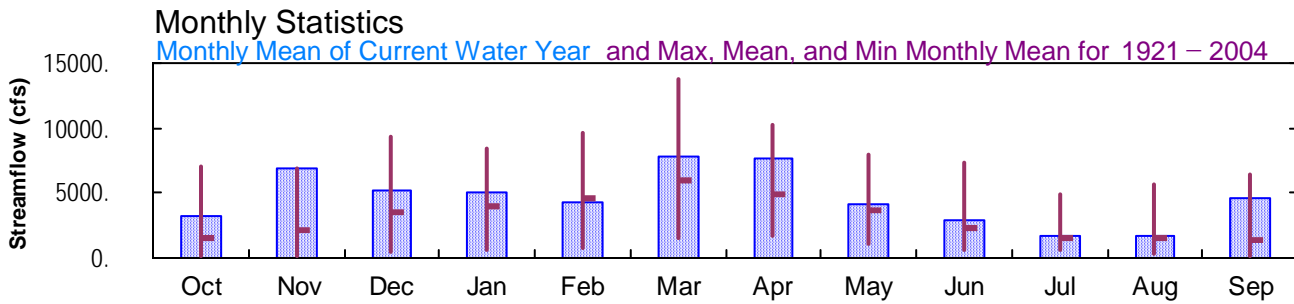
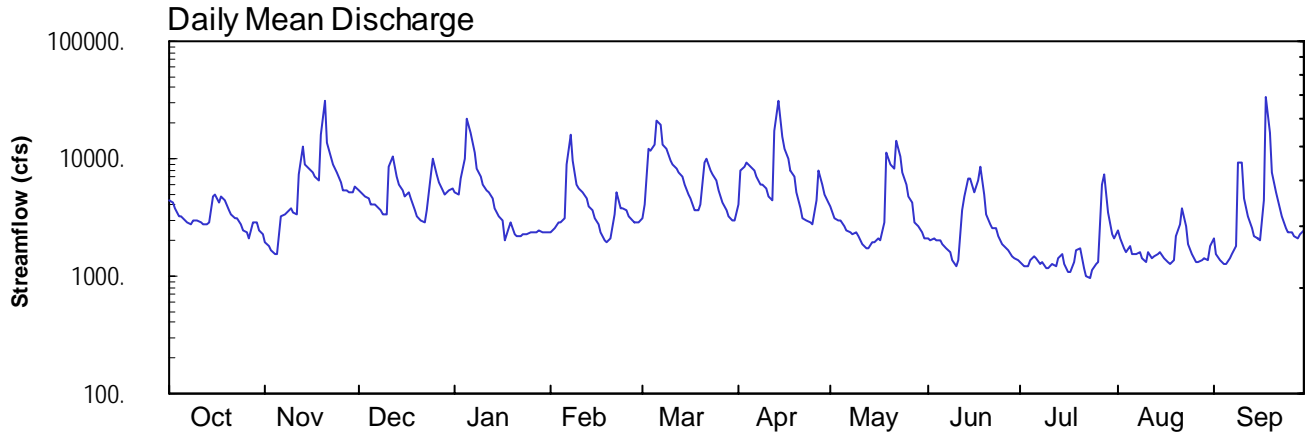
2004 Water Year YOUGHIOGHENY RIVER BASIN

03083500 Youghiogheny River at Sutersville, PA

Latitude: 40° 14' 24"
Allegheny County

Longitude: 079° 48' 24"
Datum: 733.36 feet

Hydrologic Unit Code: 05020006
Drainage Area: 1715. mi²



YOUGHIOGHENY RIVER BASIN

**03083500 YOUGHIOGHENY RIVER AT SUTERSVILLE, PA
(Pennsylvania Water-Quality Network Station)**

LOCATION.--Lat 40°14'24", long 79°48'24", Allegheny County, Hydrologic Unit 05020006, on left bank 500 ft upstream from highway bridge at Sutersville, 2.1 mi downstream from Sewickley Creek, at mile 15.2.

DRAINAGE AREA.--1,715 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge for 1926, 1930, part of 1931, 1937, 1938, and part of 1939, published in WSP 1305.

REVISED RECORDS.--WSP 743: Drainage area. WSP 1305: 1924, 1926 (M), 1931 (M). WSP 1435: 1935-36.

GAGE.--Water-stage recorder. Datum of gage is 733.36 ft above National Geodetic Vertical Datum of 1929. Prior to June 1, 1939, nonrecording gage at site 500 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since January 1925 by Deep Creek Reservoir (station 03076000), since December 1942 by Youghiogheny River Lake (station 03077000) 58 mi upstream, and by several smaller reservoirs above station. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4350	1940	5320	e5210	e2370	3150	4040	3850	2070	1310	2410	2090
2	4310	1770	5060	e4960	e2550	4000	7900	3050	2040	1220	2120	1510
3	3840	1650	4720	e6810	e2880	12200	8400	2990	2110	1210	1740	1360
4	3260	1520	4510	e10000	e2880	11800	9120	2940	2000	1350	1620	1280
5	3180	1520	4050	e21400	e3080	13100	8600	2630	2000	1480	1810	1240
6	2980	3170	4050	e16400	e8870	20800	7960	2490	1860	1430	1560	1420
7	2890	3390	3900	e11000	15800	19100	7100	2390	1720	1260	1530	1560
8	2770	3430	3690	e8100	9530	13200	6110	2260	1610	1310	1580	1800
9	3010	3700	3310	e7150	6060	12200	5930	2330	1370	1180	1410	9240
10	2960	3430	3410	e6100	5530	9460	5540	2200	1200	1150	1330	9390
11	2880	3300	8630	e5450	5100	8750	4800	1900	1350	1250	1580	4550
12	2810	7360	10500	e5250	4540	8250	4370	1710	3630	1200	1450	3170
13	2760	12600	7110	e4500	3900	7670	17400	1720	4710	1420	1490	2590
14	2870	8850	5930	e3740	3560	7050	31100	1940	6850	1510	1560	2220
15	4710	8330	5430	e3220	3110	6080	15100	1980	6800	1240	1580	2060
16	4900	7470	4860	e2940	2780	4960	12200	2060	5120	1070	1420	2020
17	4260	6910	5060	e2040	2330	4530	9990	2040	6580	1100	1300	4390
18	4680	6450	4550	e2520	2050	3620	7990	2890	8710	1300	1260	33600
19	4360	15800	3580	e2830	1930	3580	7170	11300	5010	1660	1390	16600
20	3690	30700	3280	e2310	2140	4130	5230	8910	3330	1760	2150	7630
21	3330	13500	3020	e2180	3410	9430	3810	8320	2770	1190	2770	5090
22	3130	10400	2870	e2210	5110	10200	3090	14300	2510	996	3770	3840
23	3080	8810	3570	e2290	3840	7820	2960	10400	2510	962	2610	3230
24	2800	7690	7430	e2250	3750	7250	2830	7470	2140	1120	1880	2550
25	2420	6350	9860	e2370	3620	6480	2720	6010	1860	1280	1560	2400
26	2350	5270	7240	e2400	3260	5360	4450	4830	1730	1310	1310	2330
27	2130	5290	6170	e2330	3000	4250	7830	4160	1630	5910	1290	2210
28	2920	5250	5360	e2440	2880	3600	5990	2920	1470	7340	1350	2090
29	2830	5240	4890	e2330	2890	3260	4920	2640	1420	3460	1400	2310
30	2490	5750	e5290	e2370	---	3020	4270	2350	1380	2280	1370	2420
31	2230	---	e5610	e2370	---	2990	---	2130	---	2060	1820	---
TOTAL	101180	206840	162260	157470	122750	241290	228920	129110	89490	54318	53420	138190
MEAN	3264	6895	5234	5080	4233	7784	7631	4165	2983	1752	1723	4606
MAX	4900	30700	10500	21400	15800	20800	31100	14300	8710	7340	3770	33600
MIN	2130	1520	2870	2040	1930	2990	2720	1710	1200	962	1260	1240
(†)	-700	-75	-491	-3	+577	+921	+204	+2	-65	-363	-416	+38

† Change in contents, equivalent in cubic feet per second, in Deep Creek Reservoir and Youghiogheny River Lake. Records of contents in Deep Creek Reservoir furnished by Reliant Energy. Records of contents in Youghiogheny River Lake furnished by U.S. Army Corps of Engineers.
e Estimated.

YOUGHIOGHENY RIVER BASIN

03083500 YOUGHIOGHENY RIVER AT SUTERSVILLE, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2004, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1524	2165	3569	3949	4544	5930	4958	3708	2333	1574	1465	1429
MAX	7006	6895	9373	8488	9630	13720	10230	8012	7318	4853	5707	6382
(WY)	1955	2004	1973	1974	1939	1936	1940	1996	1941	1985	1956	1971
MIN	107	209	412	611	716	1539	1637	1012	585	614	309	185
(WY)	1924	1923	1999	1925	1934	1990	1921	1982	1925	1942	1922	1922

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1921 - 2004

ANNUAL TOTAL	1664220		1685238			
ANNUAL MEAN	4560	† -24	4604	† -36	3092	
HIGHEST ANNUAL MEAN					4604	2004
LOWEST ANNUAL MEAN					1496	1925
HIGHEST DAILY MEAN	30700	Nov 20	33600	Sep 18	79000	Mar 18 1936
LOWEST DAILY MEAN	1010	Jul 3	962	Jul 23	57	Sep 30 1922
ANNUAL SEVEN-DAY MINIMUM	1170	Jun 29	1230	Jul 20	64	Sep 24 1922
MAXIMUM PEAK FLOW			46400	Sep 18	a108000	Oct 16 1954
MAXIMUM PEAK STAGE			20.72	Sep 18	b32.50	Oct 16 1954
INSTANTANEOUS LOW FLOW					c57	Sep 29 1922
10 PERCENT EXCEEDS	9750		8970		6840	
50 PERCENT EXCEEDS	3300		3170		1950	
90 PERCENT EXCEEDS	1450		1410		701	

† Change in contents, equivalent in cubic feet per second, in Deep Creek Reservoir and Youghiogheny River Lake. Records of contents in Deep Creek Reservoir furnished by Reliant Energy. Records of contents in Youghiogheny River Lake furnished by U.S. Army Corps of Engineers.

a From rating curve extended above 100,000 ft³/s.

b From floodmark.

c Minimum observed.

YOUGHIOGHENY RIVER BASIN

03083500 YOUGHIOGHENY RIVER AT SUTERSVILLE, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd recover-able, mg/L (00927)	
OCT 2003	02...	1015	1028	9813	4360	9.2	7.1	7.4	192	196	14.0	59	16.3	4.3
DEC 03...	1235	1028	9813	4710	12.6	7.2	7.5	188	195	4.0	62	17.4	4.5	
FEB 2004	10...	1215	1028	9813	E5530	15.5	6.7	7.4	339	343	2.0	80	22.8	5.6
APR 05...	1355	1028	9813	8480	12.3	7.5	7.4	212	212	5.0	61	16.8	4.7	
JUN 02...	1315	1028	9813	1990	10.5	7.9	7.4	320	307	19.5	100	27.4	7.8	
AUG 03...	1340	1028	9813	1670	8.4	7.7	7.2	316	328	25.0	100	28.1	7.7	

Date	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Fluoride, water, unfltrd mg/L (00951)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recover-able, µg/L (01105)	
OCT 2003	25	<.2	40.9	168	2	<.020	.79	<.040	.01	.020	.99	2.5	300	
DEC 03...	25	<.2	39.8	174	2	.030	.85	<.040	.01	.015	.97	1.8	<200	
FEB 2004	10...	26	<.2	49.6	260	2	.070	1.17	<.040	.02	.022	1.5	1.6	400
APR 05...	21	<.2	36.3	174	22	<.020	1.15	<.040	.03	.027	1.3	1.8	600	
JUN 02...	33	<.2	79.2	222	12	<.020	.85	<.040	<.01	.021	.73	1.6	<200	
AUG 03...	39	<.2	78.6	208	12	.030	.70	<.040	<.01	.022	.83	2.1	<200	

Date	Copper, water, unfltrd recover-able, µg/L (01042)	Cyanide amenable to chlorination wat unfltrd mg/L (00722)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, unfltrd recover-able, µg/L (01051)	Manganese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, unfltrd recover-able, µg/L (01092)	Phenolic compounds, water, unfltrd µg/L (32730)
OCT 2003	<10	<1.00	620	<1.0	90	<50	20	<5
DEC 03...	<10	<1.00	400	<1.0	90	<50	<10	<5
FEB 2004	<10	<1.00	870	1.5	170	<50	20	<5
APR 05...	<10	<1.00	960	<1.0	150	<50	10	<5
JUN 02...	<10	<1.00	420	<1.0	50	<50	<10	<5
AUG 03...	<10	<1.00	490	<1.0	60	<50	<10	<5

YOUGHIOGHENY RIVER BASIN

03083500 YOUGHIOGHENY RIVER AT SUTERSVILLE, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

Date	10/07/03
Benthic Macroinvertebrate	Count
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
<i>Ferrissia</i>	1
Bivalvia (CLAMS)	
Veneroidea	
Corbiculidae	
<i>Corbicula fluminea</i>	7
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	2
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	1
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	6
Heptageniidae	
<i>Stenonema</i>	18
Isonychiidae	
<i>Isonychia</i>	1
Tricorythidae	
<i>Tricorythodes</i>	24
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	25
<i>Hydropsyche</i>	15
Hydroptilidae	
<i>Hydroptila</i>	1
Polycentropodidae	
<i>Neureclipsis</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Stenelmis</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	7
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	1
Total Organisms	111
Total Taxa	15