03010500 ALLEGHENY RIVER AT ELDRED, PA

Allegheny Basin
Upper Allegheny Subbasin

LOCATION.--Lat 41°57′48″, long 78°23′11″ referenced to North American Datum of 1927, McKean County, PA, Hydrologic Unit 05010001, on right bank at site of former highway bridge, 700 ft upstream from bridge on State Highway 346, 1,000 ft upstream from Knapp Creek, 0.5 mi north of Eldred, at river mile 267.8.

DRAINAGE AREA.--550 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,416.53 ft above National Geodetic Vertical Datum of 1929 (U.S. Geological Survey benchmark). 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.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 25	1300	5,260	13.44
Feb 8	0400	*12,200	*16.59
Mar 21	1900	6,240	13.36
Apr 3	1300	6,350	13.44

Minimum discharge, 41 ft^3/s, Sept. 27, 28, gage height, 1.58 ft.

03010500 ALLEGHENY RIVER AT ELDRED, PA—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	106	186	1,690	1,600	872	884	4,400	548	364	272	137	88
2	95	176	1,350	1,410	1,320	744	5,330	547	328	288	199	75
3	89	165	1,760	1,100	1,160	626	6,210	560	293	223	190	68
4	87	156	1,830	1,070	1,060	1,370	5,570	1,180	298	327	150	62
5	83	153	1,410	1,110	1,910	2,950	4,600	1,120	363	295	124	58
6	79	188	1,180	954	4,480	2,770	3,640	974	298	228	170	58
7	84	330	1,040	1,190	9,340	2,240	2,800	903	256	204	204	69
8	101	270	956	1,880	11,500	1,980	2,290	898	228	212	177	64
9	95	234	865	2,520	8,260	1,820	1,930	866	227	195	177	66
10	84	220	1,050	2,890	5,160	1,440	1,650	751	217	194	316	69
11	79	215	1,200	3,120	2,730	1,310	1,460	665	211	170	457	72
12	81	205	3,030	3,520	1,800	1,280	1,460	648	191	150	357	68
13	80	369	3,790	3,230	1,670	1,180	1,310	691	170	359	277	74
14	79	609	3,710	2,620	1,500	1,440	1,190	576	211	628	219	116
15	76	930	2,910	2,120	1,180	2,930	1,030	555	334	345	190	145
16	73	1,550	2,200	1,700	938	3,450	924	561	296	238	176	97
17	73	1,160	1,850	1,380	854	2,960	844	734	251	197	148	74
18	71	999	1,460	1,200	1,560	2,420	783	842	234	172	128	65
19	76	921	1,220	1,020	1,780	2,730	730	928	256	153	115	59
20	92	867	1,100	880	1,240	4,310	678	870	222	153	104	54
21	118	1,020	994	e750	e1,100	5,810	659	850	214	185	95	51
22	100	1,100	901	e700	e1,080	5,540	605	834	490	172	88	49
23	200	1,480	1,800	e680	e1,000	4,050	554	780	462	170	81	48
24	922	1,220	4,250	e620	e850	2,600	525	685	431	677	76	45
25	533	1,100	5,140	e600	e800	1,890	485	607	325	655	73	44
26	329	1,260	4,490	e580	e780	1,840	473	545	263	365	69	43
27	275	3,200	2,990	e550	730	1,800	585	501	255	269	70	41
28	288	3,640	2,030	e550	612	3,000	558	456	246	213	73	46
29	255	3,160	2,140	612	668	4,230	646	406	250	177	118	55
30	219	2,270	2,160	899	---	4,290	579	371	283	153	162	84
31	199	---	1,800	936	---	3,800	---	351	---	145	114	---
Total	5,121	29,353	64,296	43,991	67,934	79,684	54,498	21,803	8,467	8,184	5,034	2,007
Mean	165	978	2,074	1,419	2,343	2,570	1,817	703	282	264	162	66.9
Max	922	3,640	5,140	3,520	11,500	5,810	6,210	1,180	490	677	457	145
Min	71	153	865	550	612	626	473	351	170	145	69	41
Cfsm	0.30	1.78	3.77	2.58	4.26	4.67	3.30	1.28	0.51	0.48	0.30	0.12
In.	0.35	1.99	4.35	2.98	4.59	5.39	3.69	1.47	0.57	0.55	0.34	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	477	852	1,109	1,092	1,101	1,885	2,012	1,160	760	428	286	358
Max	2,213	3,175	2,390	3,359	3,250	4,697	5,314	3,273	6,490	3,893	2,336	2,340
(WY)	(2007)	(1951)	(1973)	(1952)	(1976)	(1945)	(1940)	(1943)	(1972)	(1942)	(2003)	(1977)
Min	41.6	62.0	55.1	87.3	213	728	385	292	109	57.8	43.4	34.6
(WY)	(1965)	(1965)	(1961)	(1961)	(1980)	(1993)	(1946)	(1985)	(1991)	(1966)	(1957)	(1959)

03010500 ALLEGHENY RIVER AT ELDRED, PA—Continued

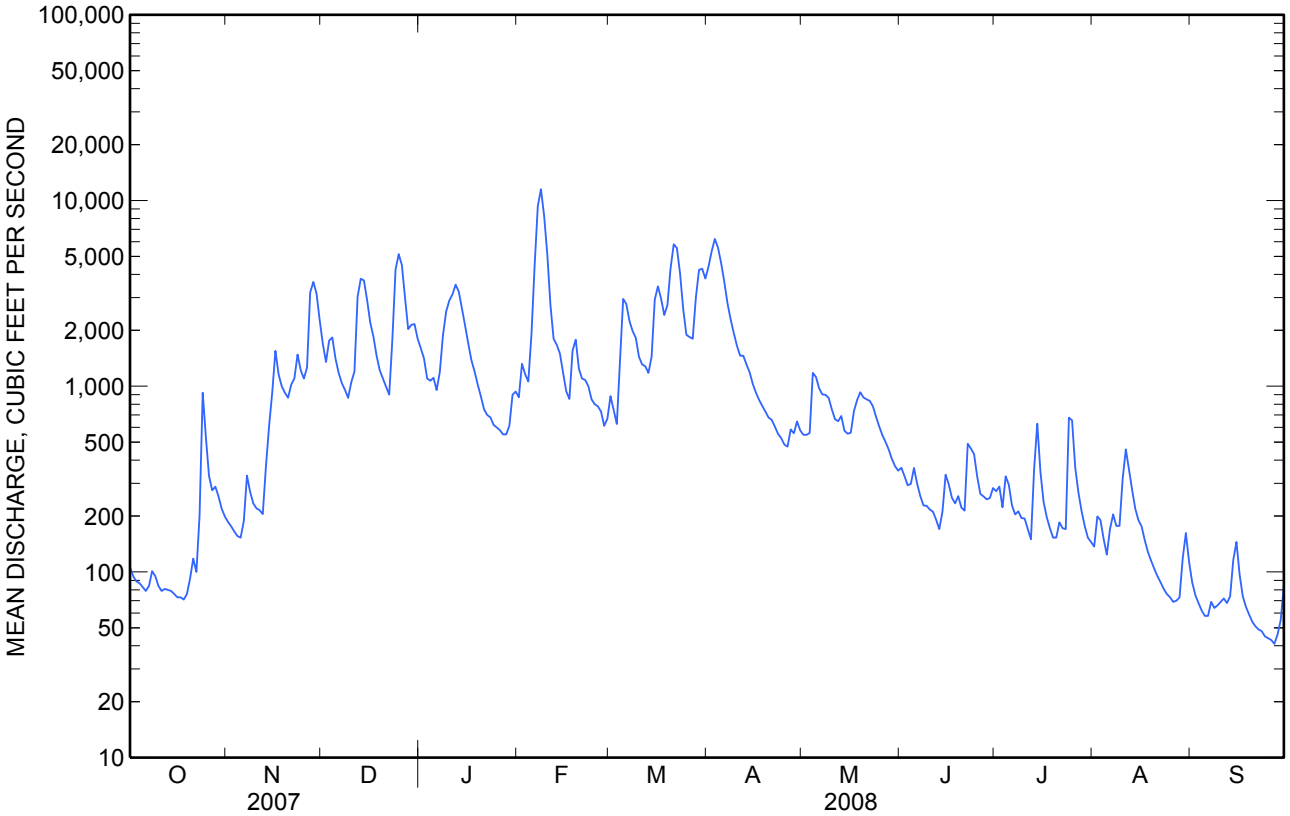
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	371,613		390,372			
Annual mean	1,018		1,067		959	
Highest annual mean					1,475	1972
Lowest annual mean					631	1962
Highest daily mean	12,000	Mar 16	11,500	Feb 8	55,700	Jun 23, 1972
Lowest daily mean	52	Aug 4	41	Sep 27	16	Sep 6, 1999
Annual seven-day minimum	61	Jul 31	45	Sep 22	20	Sep 1, 1999
Maximum peak flow			12,200	Feb 8	[a]65,400	Jun 23, 1972
Maximum peak stage			16.59	Feb 8	[b]29.05	Jun 23, 1972
Instantaneous low flow			41	Sep 27[c]	15	Sep 6, 1999
Annual runoff (cfsm)	1.85		1.94		1.74	
Annual runoff (inches)	25.13		26.40		23.68	
10 percent exceeds	2,640		2,920		2,290	
50 percent exceeds	402		582		535	
90 percent exceeds	89		79		87	

[a] From rating curve extended above 21,000 ft³/s on basis of slope-area measurement at gage height 27.6 ft.

[b] From floodmark.

[c] Also Sep 28.



03010500 ALLEGHENY RIVER AT ELDRED, PA—Continued

WATER-QUALITY RECORDS

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

REMARKS.--Analyses for pH, water temperature, specific conductance, and dissolved oxygen were performed on site. All other sample analyses were performed at the Pennsylvania Department of Environmental Protection laboratory in Harrisburg, Pa.

COOPERATION.--Water-quality 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 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)
Oct													
11...	1345	78	8.4	7.4	7.7	128	131	15.4	40	11.0	3.1	36	8.3
Dec													
06...	1330	1,160	14.3	7.2	7.1	71	75	.5	23	6.5	1.8	11	9.2
Feb													
07...	1330	9,580	12.6	6.5	6.6	48	50	1.0	13	3.5	1.1	5	6.8
Apr													
17...	1300	876	11.8	7.1	7.2	68	68	10.1	22	6.1	1.8	13	8.5
Jun													
11...	1200	202	7.2	7.1	7.4	97	98	24.0	29	8.0	2.2	26	7.9
Aug													
20...	1130	106	8.8	7.4	7.6	120	121	19.4	40	10.9	3.0	35	8.3

03010500 ALLEGHENY RIVER AT ELDRED, PA—Continued

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-filter-able, 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 nitro-gen, water, unfltrd mg/L (00600)	Ortho-phos-phate, water, unfltrd mg/L as P (70507)	Phos-phorus, water, unfltrd mg/L as P (00665)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	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)
Oct													
11...	78	<2	.030	<.04	<.040	.24	.01	.026	<200	<4	520	<1.0	250
Dec													
06...	86	16	<.020	.50	<.040	.70	.01	.015	<200	<4	250	<1.0	60
Feb													
07...	78	18	<.020	.36	<.040	.68	.03	.066	1,200	<4	1,840	M	100
Apr													
17...	52	6	<.020	.33	<.040	.42	.01	.016	<200	<4	480	<1.0	70
Jun													
11...	78	8	<.050	.24	<.040	.58	<.01	.041	<200	<4	700	<1.0	170
Aug													
20...	92	<5	<.020	<.04	<.040	.23	.01	.025	<200	<4	550	<1.0	190

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	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, unfltrd recover-able, µg/L (01092)
Oct		
11...	<50	20
Dec		
06...	<50	<10
Feb		
07...	<50	<10
Apr		
17...	<50	<10
Jun		
11...	<50	<10
Aug		
20...	<50	<10