



2005 Water Year  
OHIO RIVER BASIN  
03010500 Allegheny River at Eldred, PA

Latitude: 41° 57' 48"

Longitude: 078° 23' 11"

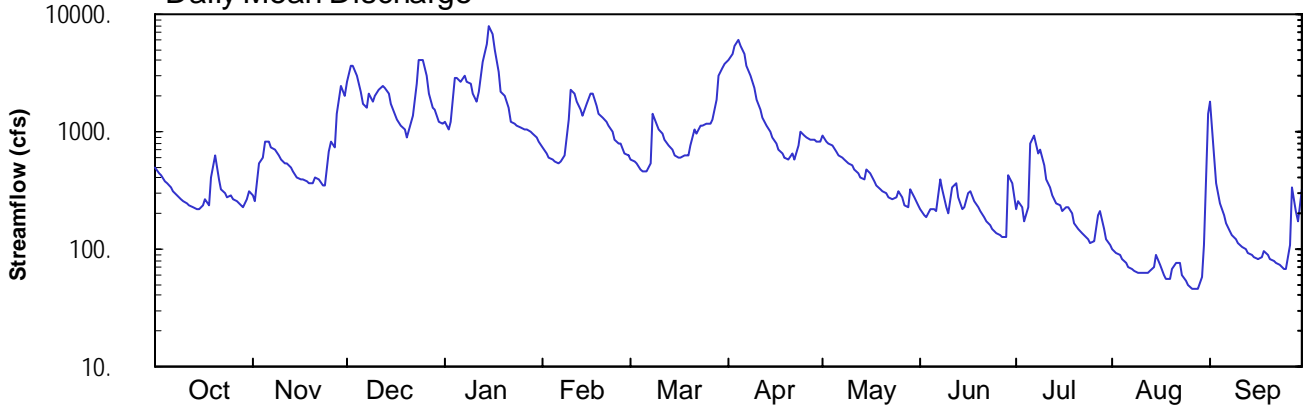
Hydrologic Unit Code: 05010001

Mckean County

Datum: 1416.53 feet

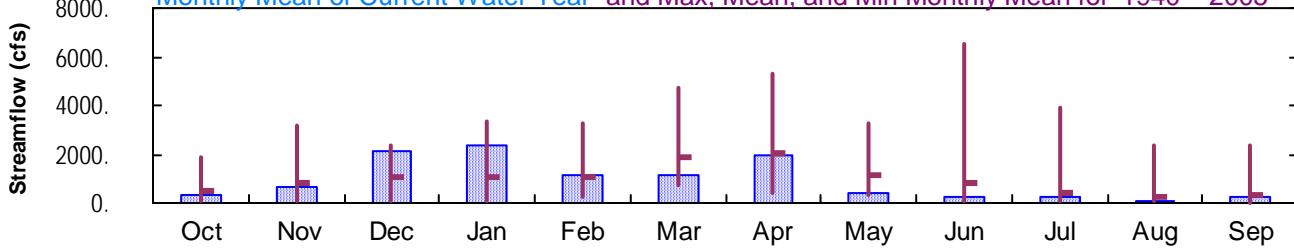
Drainage Area: 550. mi<sup>2</sup>

### Daily Mean Discharge

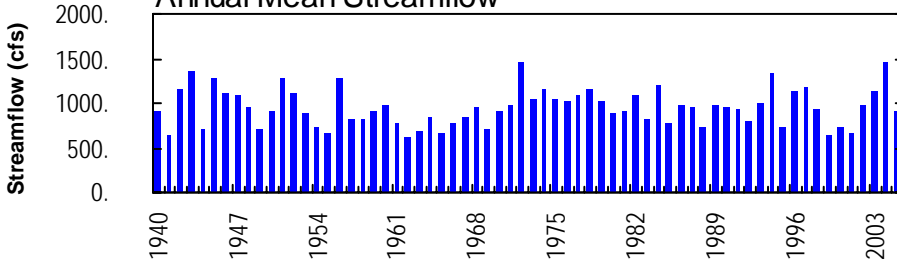


### Monthly Statistics

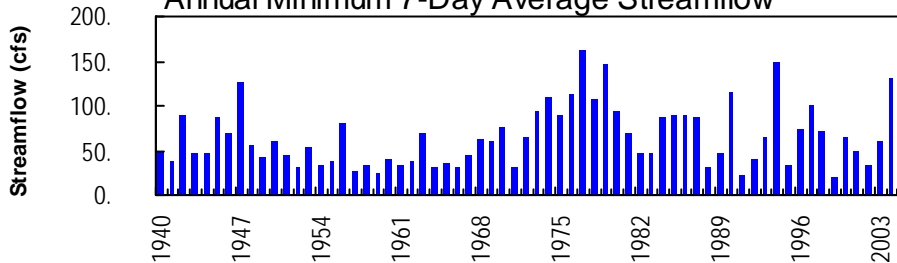
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1940 – 2005



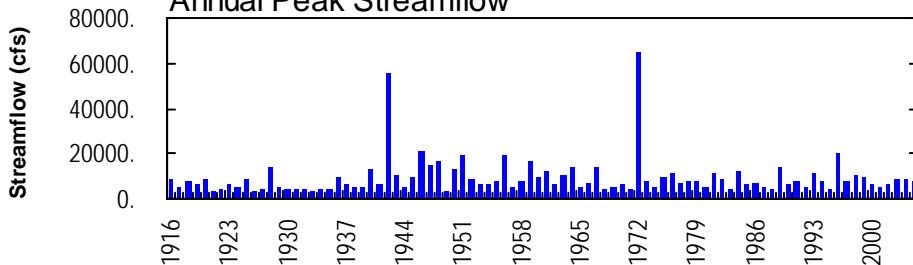
### Annual Mean Streamflow



### Annual Minimum 7-Day Average Streamflow



### Annual Peak Streamflow



## OHIO RIVER MAIN STEM

03010500 ALLEGHENY RIVER AT ELDRED, PA  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 41°57'48", long 78°23'11", McKean County, Hydrologic Unit 05010001, on right bank at site of former highway bridge, 600 ft upstream from bridge on State Highway 346, 1,000 ft upstream from Knapp Creek, 0.5 mi north of Eldred, at mile 267.8.

**DRAINAGE AREA.**--550 mi<sup>2</sup>.

## WATER-DISCHARGE 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.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 5,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Jan. 15	1500	*8,110	*16.17	Apr. 4	0900	6,160	14.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	494	286	2700	1230	e740	e588	4090	931	216	221	98	1820
2	447	260	3660	1050	e653	e556	4620	827	194	258	94	644
3	420	539	3630	1190	e613	e528	5400	800	185	227	89	359
4	384	604	2960	2850	e574	e482	6070	758	220	173	81	250
5	356	816	2220	2880	e547	e456	5390	686	220	228	76	197
6	329	838	1730	2680	e534	e467	4550	633	213	788	71	166
7	305	735	1580	3010	e547	541	3670	603	389	916	68	141
8	285	691	2080	2620	e627	1400	2980	582	318	652	65	130
9	267	633	1790	2520	1240	1190	2350	540	229	692	63	120
10	255	580	2020	2100	2310	1020	1880	506	204	508	63	113
11	245	544	2290	1830	2120	e945	1550	474	336	399	63	105
12	236	526	2480	2180	1820	e847	1300	448	356	333	63	98
13	225	497	2400	3840	1540	e773	1140	412	271	283	64	93
14	220	450	2110	5510	1380	e692	1010	394	221	245	71	89
15	220	414	1700	7830	1710	e635	891	472	230	232	90	85
16	239	398	1400	6850	2090	e608	785	440	299	209	73	83
17	264	387	1280	4980	2090	608	708	378	308	229	61	85
18	239	375	1110	3280	1680	634	657	350	255	231	56	96
19	409	366	1050	2160	1410	614	611	324	231	201	55	91
20	617	366	878	1990	1340	769	579	305	211	165	67	83
21	388	408	1160	1590	1200	1030	652	295	188	145	75	79
22	324	388	1380	1240	1140	943	589	279	170	135	75	76
23	296	354	2510	e1150	1010	1110	752	263	157	132	59	72
24	276	355	4070	e1130	863	1120	990	277	146	122	53	69
25	282	683	4090	e1090	802	1160	930	309	135	113	49	68
26	270	813	3030	e1050	788	1180	899	271	130	116	47	110
27	251	725	2110	e1030	649	1280	856	235	126	192	45	333
28	236	1430	1580	e992	e617	1860	861	227	127	209	46	214
29	228	2410	1550	e952	---	2990	807	323	423	146	58	176
30	261	2050	1240	e879	---	3460	838	280	369	120	108	327
31	312	---	1170	e813	---	3760	---	240	---	106	1410	---
TOTAL	9580	19921	64958	74496	32634	34246	58405	13862	7077	8726	3456	6372
MEAN	309	664	2095	2403	1166	1105	1947	447	236	281	111	212
MAX	617	2410	4090	7830	2310	3760	6070	931	423	916	1410	1820
MIN	220	260	878	813	534	456	579	227	126	106	45	68
CFSM	0.56	1.21	3.81	4.37	2.12	2.01	3.54	0.81	0.43	0.51	0.20	0.39
IN.	0.65	1.35	4.39	5.04	2.21	2.32	3.95	0.94	0.48	0.59	0.23	0.43

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2005, BY WATER YEAR (WY)

MEAN	452	826	1092	1055	1093	1869	2040	1181	779	429	285	352
MAX	1894	3175	2390	3359	3250	4697	5314	3273	6490	3893	2336	2340
(WY)	1991	1951	1973	1952	1976	1945	1940	1943	1972	1942	2003	1977
MIN	41.6	62.0	55.1	87.3	21.3	728	385	292	109	57.8	43.4	34.6
(WY)	1965	1965	1961	1961	1980	1993	1946	1985	1991	1966	1957	1959

e Estimated.

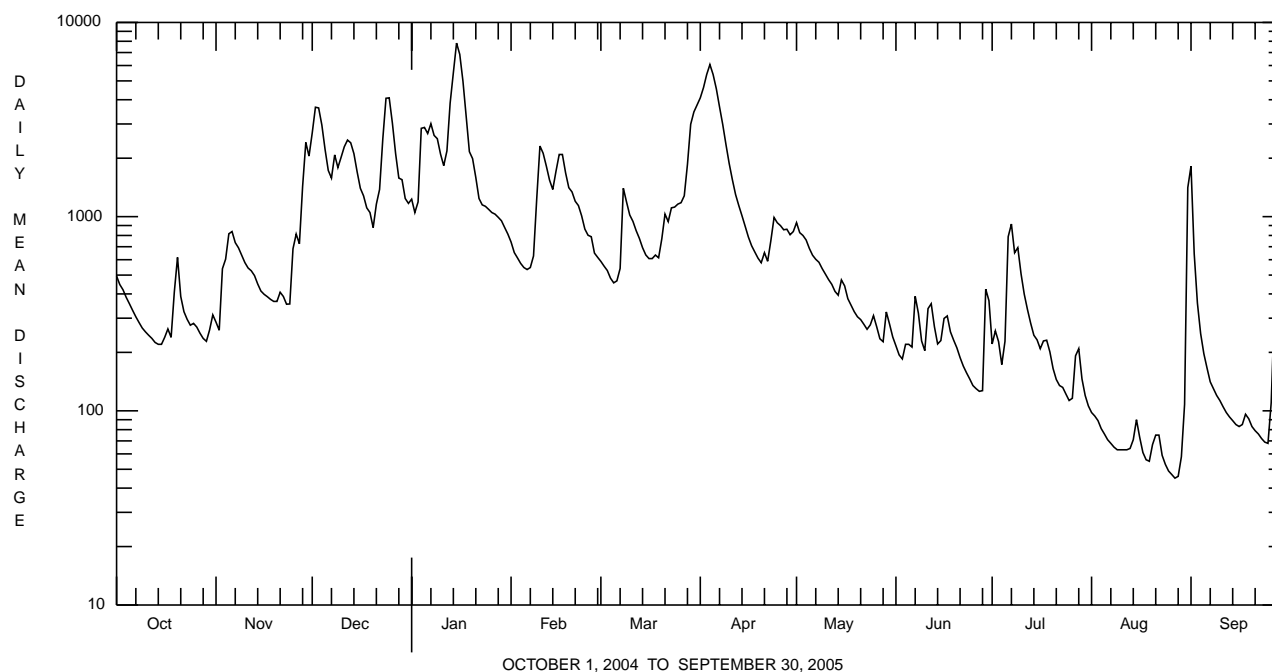
## OHIO RIVER MAIN STEM

## 03010500 ALLEGHENY RIVER AT ELDRED, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1940 - 2005	
ANNUAL TOTAL	481598		333733			
ANNUAL MEAN	1316		914		953	
HIGHEST ANNUAL MEAN					1475	1972
LOWEST ANNUAL MEAN					631	1962
HIGHEST DAILY MEAN	7990	Sep 19	7830	Jan 15	55700	Jun 23 1972
LOWEST DAILY MEAN	112	Jul 11,12	45	Aug 27	16	Sep 6 1999
ANNUAL SEVEN-DAY MINIMUM	130	Jul 6	51	Aug 23	20	Sep 1 1999
MAXIMUM PEAK FLOW			8110	Jan 15	<b>a</b> 65400	Jun 23 1972
MAXIMUM PEAK STAGE			16.17	Jan 15	<b>b</b> 29.05	Jun 23 1972
INSTANTANEOUS LOW FLOW			44	Aug 27	15	Sep 6 1999
ANNUAL RUNOFF (CFSM)	2.39		1.66		1.73	
ANNUAL RUNOFF (INCHES)	32.57		22.57		23.54	
10 PERCENT EXCEEDS	3220		2300		2280	
50 PERCENT EXCEEDS	814		506		527	
90 PERCENT EXCEEDS	269		90		86	

**a** From rating curve extended above 21,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 27.6 ft.

**b** From floodmark.



## OHIO RIVER MAIN STEM

03010500 ALLEGHENY RIVER AT ELDRED, 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 2004 TO SEPTEMBER 2005

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)
NOV 2004 01...	1045	1028	9813	287	9.9	7.2	7.1	98	97	11.0	32	8.7	2.5
JAN 2005 12...	1345	1028	9813	1930	13.4	6.8	6.6	73	71	2.6	22	6.0	1.7
MAR 15...	1215	1028	9813	E635	13.2	6.6	7.2	78	81	.3	25	6.7	2.0
MAY 03...	1215	1028	9813	803	11.7	7.7	7.3	71	72	8.2	24	6.5	1.8
JUL 26...	0945	1028	9813	114	6.7	7.0	7.6	111	106	22.9	37	10.2	2.8
SEP 07...	1100	1028	9813	139	7.6	7.5	7.5	104	101	18.2	35	9.8	2.6

Date	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)	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)	Copper, water, unfltrd recover-able, µg/L (01042)
NOV 2004 01...	26	8.0	54	<2	<.020	.14	<.040	.01	.022	.30	2.0	<200	<10
JAN 2005 12...	13	8.6	42	16	<.020	.52	<.040	.02	.022	.51	1.2	420	<10
MAR 15...	16	8.9	62	4	<.020	.50	<.040	.01	.011	.57	1.0	<200	<10
MAY 03...	15	9.0	52	10	.030	.32	<.040	<.01	.016	.38	--	<200	<10
JUL 26...	32	8.0	84	18	.040	.06	<.040	.02	.032	.25	--	<200	20
SEP 07...	27	9.7	74	4	.020	.18	<.040	.02	.036	.38	--	<200	<10

Date	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)
NOV 2004 01...	470	<1.0	60	<50	<10
JAN 2005 12...	730	<1.0	60	<50	<10
MAR 15...	400	<1.0	60	<50	<10
MAY 03...	360	<1.0	50	<50	<10
JUL 26...	620	1.0	170	<50	20
SEP 07...	800	<1.0	170	<50	<10

## OHIO RIVER MAIN STEM

## 03010500 ALLEGHENY RIVER AT ELDRED, 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	10/26/04
Benthic macroinvertebrate	Count
Nematoda (NEMATODES)	1
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	1
Tubificida	
Naididae	1
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	6
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Plauditus</i>	2
Ephemerellidae	
<i>Attenella</i>	4
Heptageniidae	
<i>Stenonema</i>	17
Plecoptera (STONEFLIES)	
Taeniopterygidae	
<i>Taenionema</i>	4
<i>Taeniopteryx</i>	28
Megaloptera	
Corydalidae (FISHFLIES AND DOBSONFLIES)	
<i>Nigronia</i>	1
Trichoptera (CADDISFLIES)	
Brachycentridae	
<i>Brachycentrus</i>	1
<i>Micrasema</i>	1
Hydropsychidae	
<i>Cheumatopsyche</i>	17
<i>Hydropsyche</i>	2
Hydroptilidae	
<i>Hydroptila</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Dubiraphia</i>	4
<i>Optioservus</i>	1
<i>Stenelmis</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	15
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	3
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	1
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	1
Total Organisms	113
Total Taxa	22