



2005 Water Year
TUNKHANNOCK CREEK BASIN
01534000 Tunkhannock Creek near Tunkhannock, PA

Latitude: 41° 33' 30"

Longitude: 075° 53' 42"

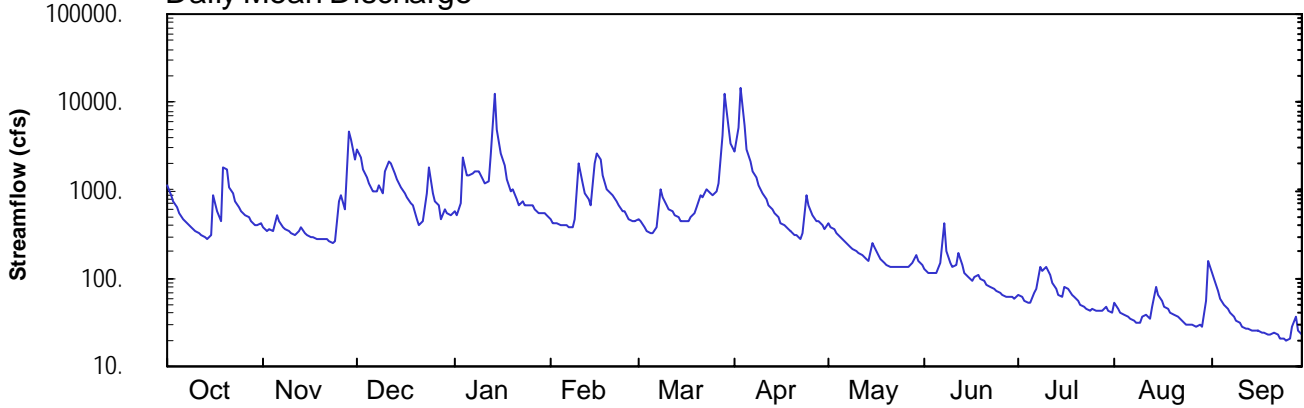
Hydrologic Unit Code: 02050106

Wyoming County

Datum: 610.10 feet

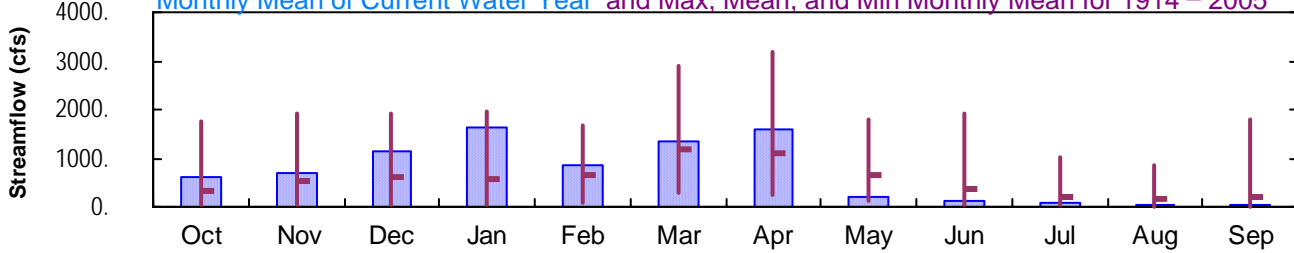
Drainage Area: 383. mi²

Daily Mean Discharge

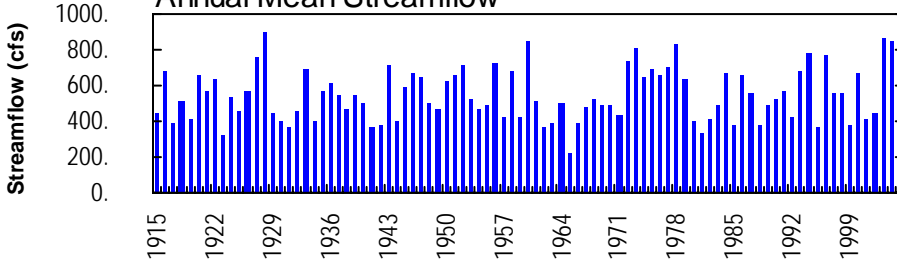


Monthly Statistics

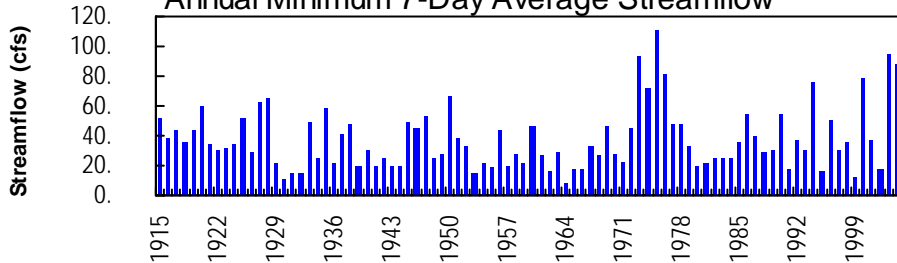
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1914 – 2005



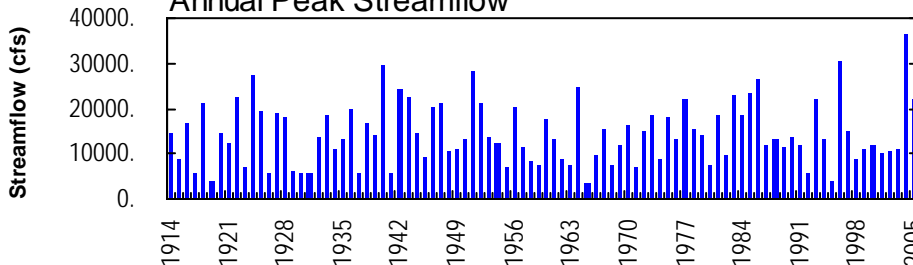
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°33'30", long 75°53'42", Wyoming County, Hydrologic Unit 02050106, on left bank 300 ft upstream from bridge on U.S. Highway 6 at Dixon, 3.0 mi northeast of Tunkhannock, and 4.0 mi upstream from mouth.

DRAINAGE AREA.--383 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1965, published as "at Dixon".

REVISED RECORDS.--WSP 756: Drainage area. WSP 1051: 1921(M), 1932, 1934-35(M), 1936, 1938(M), 1939-40, 1942-44, 1945(M). WSP 1302: 1922, 1923(M), 1924-25, 1927-28. WSP 1432: 1919(M), 1920, 1933, 1934(P). WDR PA-85-2: 1954(P), 1955(M), 1956(P), 1957(M), 1958-64(P), 1967-71(P), 1977(M), 1978(P), 1981(M), 1982-84(P). WDR PA-96-2: 1947(M), 1986(M).

GAGE.--Water-stage recorder. Datum of gage is 610.10 ft above National Geodetic Vertical Datum of 1929 (Pennsylvania Department of Transportation bench mark). Prior to Aug. 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 5,700 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	1845	10,000	9.67	Mar. 29	1045	15,500	12.08
Jan. 14	1345	18,500	13.22	Apr. 3	0630	*22,000	*14.46

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	1160	373	2870	593	e470	e460	2800	423	127	65	53	113
2	883	341	2390	520	e430	e440	5070	374	118	63	46	100
3	754	358	1740	719	e420	e380	14300	356	112	57	42	73
4	635	352	1410	2310	e410	e350	5340	323	116	53	39	58
5	549	517	1180	1450	e400	e320	2960	292	116	54	37	51
6	482	445	997	1460	e400	e320	2100	270	152	68	35	45
7	442	388	972	1590	e390	387	1650	252	434	78	34	40
8	407	362	1140	1630	388	1020	1410	232	205	135	32	36
9	379	338	910	1680	481	848	1120	214	152	123	31	34
10	352	325	1650	1320	2050	677	932	200	134	136	37	31
11	330	317	2140	1200	1230	609	791	191	140	111	39	29
12	309	336	1980	1250	922	575	680	181	196	90	36	27
13	291	382	1560	2670	771	533	616	164	143	74	47	26
14	286	331	1310	12600	693	488	551	159	118	65	80	25
15	306	307	1060	4880	2070	441	483	253	103	60	66	26
16	857	300	910	2630	2580	447	431	230	93	78	57	25
17	565	292	840	1910	2210	440	396	185	105	76	49	24
18	438	285	724	1330	1460	504	364	163	110	66	44	24
19	1790	280	671	978	1020	563	336	152	101	62	41	23
20	1690	273	471	1050	929	631	310	143	93	56	38	23
21	1090	285	e410	805	856	899	306	137	85	51	37	24
22	926	268	e440	e670	762	840	286	136	80	48	35	23
23	733	255	941	e740	690	1020	329	136	77	46	32	21
24	641	263	1820	e670	575	940	858	135	72	43	30	21
25	578	759	936	e690	570	900	689	137	67	45	30	20
26	527	881	750	e680	e470	980	520	138	64	43	30	21
27	484	600	668	e610	e440	1210	452	132	61	43	28	28
28	446	4760	e460	e540	442	4240	451	147	63	43	29	36
29	412	3790	606	e550	---	12200	396	186	60	48	28	25
30	412	2190	561	e550	---	5170	370	158	59	44	57	24
31	427	---	532	e510	---	3410	---	140	---	42	158	---
TOTAL	19581	20953	35049	50785	24529	42242	47297	6339	3556	2066	1377	1076
MEAN	632	698	1131	1638	876	1363	1577	204	119	66.6	44.4	35.9
MAX	1790	4760	2870	12600	2580	12200	14300	423	434	136	158	113
MIN	286	255	410	510	388	320	286	132	59	42	28	20
CFSM	1.65	1.82	2.95	4.28	2.29	3.56	4.12	0.53	0.31	0.17	0.12	0.09
IN.	1.90	2.04	3.40	4.93	2.38	4.10	4.59	0.62	0.35	0.20	0.13	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2005, BY WATER YEAR (WY)

MEAN	327	540	630	572	654	1167	1111	636	355	213	175	221
MAX	1772	1934	1919	1978	1682	2910	3202	1806	1939	1007	841	1793
(WY)	1956	1973	1997	1979	1925	1936	1993	1989	1972	1947	1994	2004
MIN	21.4	25.9	51.6	59.0	76.3	288	235	122	48.4	23.9	19.0	12.4
(WY)	1965	1965	1923	1981	1980	1915	1946	1941	1962	1962	1930	1964

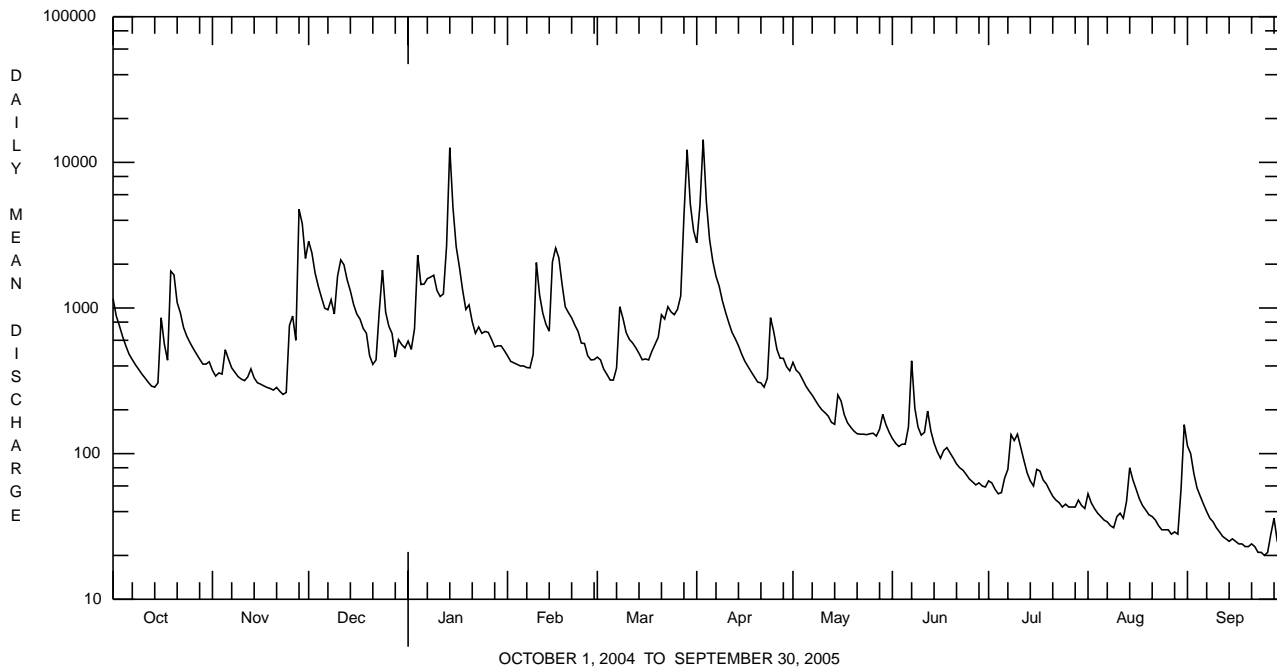
e Estimated.

TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1914 - 2005	
ANNUAL TOTAL	279630		254850			
ANNUAL MEAN	764		698		548	
HIGHEST ANNUAL MEAN					897	1928
LOWEST ANNUAL MEAN					220	1965
HIGHEST DAILY MEAN	23400	Sep 18	14300	Apr 3	23400	Sep 18 2004
LOWEST DAILY MEAN	66	Jul 12	20	Sep 25	6.9	Sep 24 1964
ANNUAL SEVEN-DAY MINIMUM	88	Jul 6	22	Sep 20	7.9	Sep 18 1964
MAXIMUM PEAK FLOW			a22000	Apr 3	a36500	Sep 18 2004
MAXIMUM PEAK STAGE			14.46	Apr 3	b19.97	Jan 19 1996
INSTANTANEOUS LOW FLOW					6.2	Sep 24 1964
ANNUAL RUNOFF (CFSM)	1.99		1.82		1.43	
ANNUAL RUNOFF (INCHES)	27.16		24.75		19.44	
10 PERCENT EXCEEDS	1600		1570		1250	
50 PERCENT EXCEEDS	450		362		267	
90 PERCENT EXCEEDS	200		37		50	

a Rating extended above 14,000 ft³/s based on slope-area measurements at gage heights 15.77 ft and 19.69 ft.
 b Gage height affected by backwater.



TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, 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)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recoverable, mg/L (00916)
NOV 2004 04...	0915	1028	9813	344	30	12.3	7.6	7.4	143	145	7.6	45	14.9
JAN 2005 10...	1200	1028	9813	1300	30	13.3	6.8	7.6	131	127	2.6	37	12.3
MAR 07...	1300	1028	9813	344	30	14.9	7.5	7.7	161	157	2.3	44	14.9
MAY 16...	1200	1028	9813	225	30	11.2	8.0	7.9	158	159	16.6	49	16.3
JUL 06...	0930	1028	9813	61	30	7.8	6.9	7.6	192	197	22.6	61	20.4
SEP 14...	1340	1028	9813	25	30	11.3	8.5	7.4	208	211	22.0	67	22.7

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat fltrd, mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd as N, mg/L (00610)	Nitrate water, unfltrd as N, mg/L (00620)	Nitrite water, unfltrd as N, mg/L (00615)	Ortho-phosphate, water, unfltrd as P, mg/L (70507)	Phosphorus, water, unfltrd as P, mg/L (00665)	Total nitrogen, water, unfltrd as P, mg/L (00600)	Organic carbon, water, unfltrd as P, mg/L (00680)	Aluminum, water, unfltrd recoverable, mg/L (01105)
NOV 2004 04...	2.0	36	8.8	116	<2	<.020	.28	<.040	.02	.016	.46	2.2	<200
JAN 2005 10...	1.5	25	9.6	94	2	<.020	.57	<.040	.01	.017	.71	2.1	<200
MAR 07...	1.7	31	10.1	80	<2	<.020	.69	<.040	<.01	.012	.98	1.7	<200
MAY 16...	1.9	37	10.8	134	4	.020	.33	<.040	<.01	.025	.58	--	<200
JUL 06...	2.3	49	10.4	114	<2	.030	.12	<.040	<.01	.013	.52	--	<200
SEP 14...	2.5	51	12.7	160	4	.020	.16	<.040	.01	.015	.29	--	<200

Date	Copper, water, unfltrd recoverable, μ g/L (01042)	Iron, water, unfltrd recoverable, μ g/L (01045)	Lead, water, unfltrd recoverable, μ g/L (01051)	Manganese, water, unfltrd recoverable, μ g/L (01055)	Nickel, water, unfltrd recoverable, μ g/L (01067)	Zinc, water, unfltrd recoverable, μ g/L (01092)
NOV 2004 04...	<10	200	<1.0	10	<50	<10
JAN 2005 10...	<10	190	<1.0	20	<50	60
MAR 07...	<10	80	<1.0	10	<50	<10
MAY 16...	<10	70	<1.0	10	<50	<10
JUL 06...	<10	50	<1.0	40	<50	10
SEP 14...	<10	90	<1.0	40	<50	<10

TUNKHANNOCK CREEK BASIN

01534000 TUNKHANNOCK CREEK NEAR TUNKHANNOCK, 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	08/05/04
Benthic macroinvertebrate	Count
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	51
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	4
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Baetis</i>	2
Ephemerellidae	
<i>Ephemerella</i>	1
<i>Serratella</i>	9
Heptageniidae	
<i>Stenonema</i>	5
Isonychiidae	
<i>Isonychia</i>	3
Trichoptera (CADDISFLIES)	
Apataniidae	
<i>Apatania</i>	2
Hydropsychidae	
<i>Cheumatopsyche</i>	2
<i>Hydropsyche</i>	1
Psychomyiidae	
<i>Psychomyia</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	50
<i>Stenelmis</i>	3
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	15
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	3
Total Organisms	
	152
Total Taxa	
	15