2004 Water Year

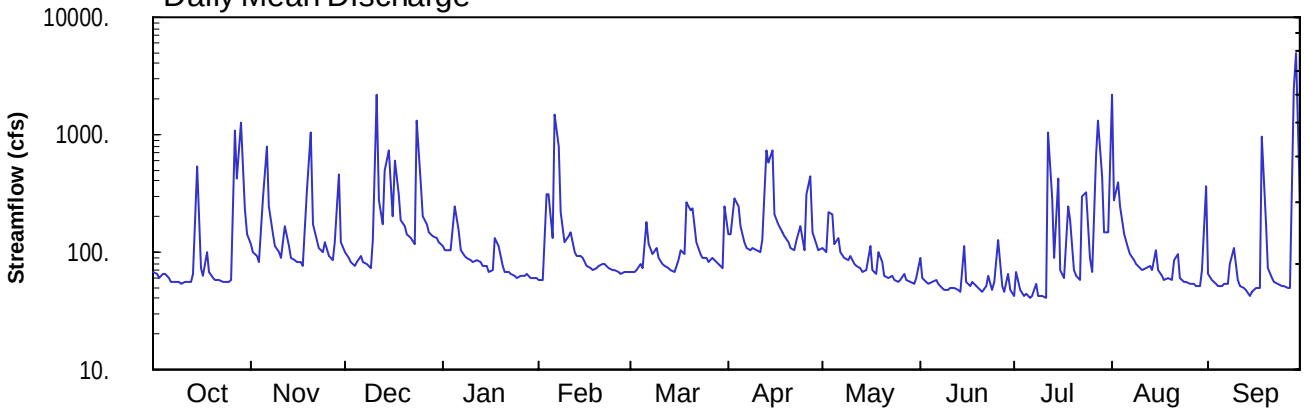
SCHUYLKILL RIVER BASIN

01474000 Wissahickon Creek at Mouth, Philadelphia, PA

Latitude: 40°00'55" Longitude: 075°12'26" Hydrologic Unit Code: 02040203

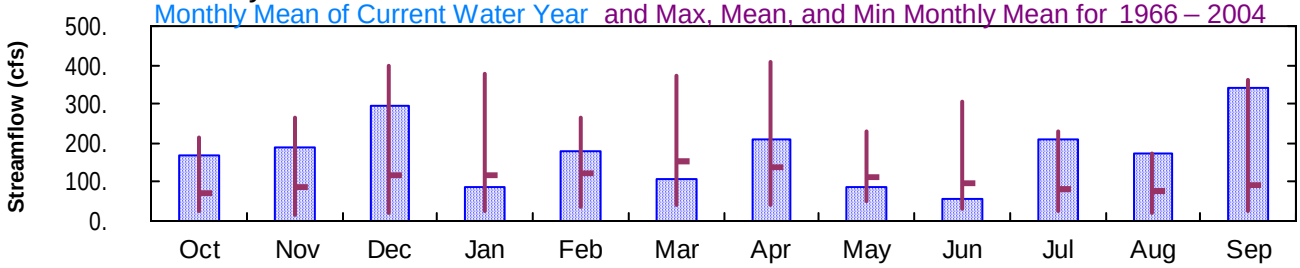
Philadelphia County Datum: 26.41 feet Drainage Area: 64. mi²

Daily Mean Discharge

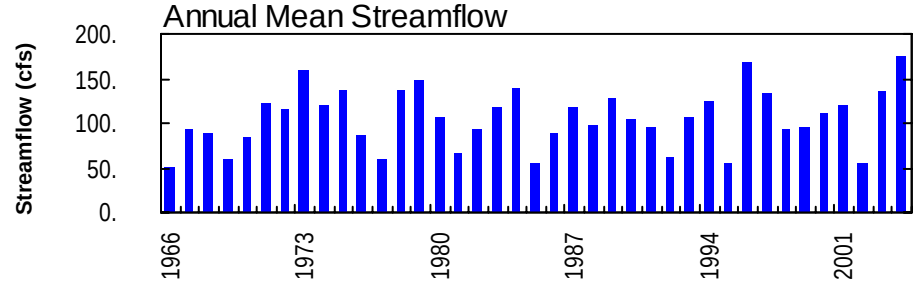


Monthly Statistics

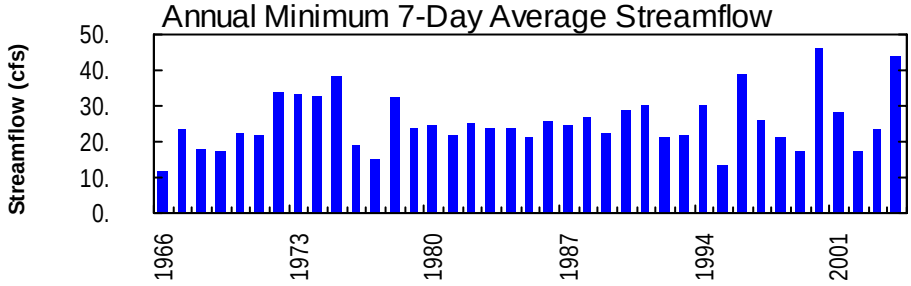
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1966 – 2004



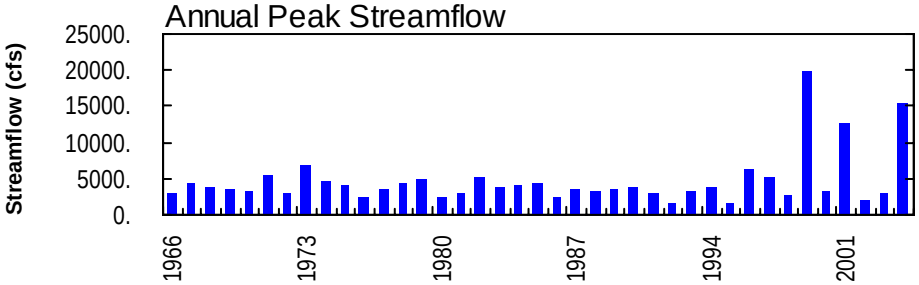
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01474000–Wissahickon Creek at Mouth, Philadelphia

SCHUYLKILL RIVER BASIN

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°00'55", long 75°12'26", Philadelphia County, Hydrologic Unit 02040203, on left bank 100 ft upstream from dam at Ridge Avenue, 750 ft upstream from mouth, and 1,000 ft northwest of Gustine Lake in Philadelphia.

DRAINAGE AREA.--64.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1897 to September 1903, January 1905 to July 1906, October 1965 to current year. Prior to October 1965, records furnished by Department of Public Works, City of Philadelphia. Records for 1971-74 published in WDR PA-81-1. Prior to October 1965, published as "*near Philadelphia*".

REVISED RECORDS.--WSP 1302: 1905: WDR PA-89-1: 1988.

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Datum of gage is 26.41 ft above National Geodetic Vertical Datum of 1929. Prior to October 1965, water-stage recorder at about same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft^3/s (revised) and maximum (*****):

Date	Time	Discharge ft^3/s	Gage Height (ft)
Dec. 11	1445	3,760	6.05
Feb. 6	2015	3,570	5.91
July 12	1645	3,010	5.47
July 27	2215	3,150	5.58
July 28	0700	3,070	5.52
Aug. 1	0815	7,700	8.23
Sept. 28	1930	12,200	9.66
Sept. 29	0200	*15,300	*10.46

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	68	117	102	112	58	68	142	106	88	42	2220	66
2	65	101	89	106	58	69	143	101	59	67	271	58
3	61	91	81	103	313	70	289	221	56	47	386	54
4	64	82	77	105	309	79	241	207	53	42	243	52
5	66	300	83	241	130	74	167	116	56	44	142	51
6	61	780	92	153	1500	178	121	130	58	41	108	53
7	56	245	82	104	777	116	107	99	53	43	96	53
8	55	144	78	93	217	98	104	91	49	54	85	78
9	56	112	74	90	122	108	108	86	47	43	78	109
10	54	99	126	85	138	87	104	91	47	42	72	58
11	55	89	2160	82	147	78	99	79	50	41	72	51
12	56	165	279	84	102	75	125	75	50	1020	74	49
13	55	113	172	83	91	74	725	72	48	286	76	48
14	64	88	500	77	93	71	569	68	46	87	71	43
15	531	87	746	76	87	69	724	69	113	418	104	46
16	74	83	201	68	76	86	210	114	56	71	71	50
17	63	81	600	71	72	104	171	70	51	61	62	49
18	101	76	310	131	72	96	149	64	56	242	58	955
19	67	332	185	111	74	269	135	99	51	187	59	180
20	60	1040	164	75	76	224	120	82	48	72	59	72
21	57	171	140	68	79	233	109	63	47	62	85	61
22	57	127	130	68	81	121	103	61	52	58	95	57
23	55	109	118	65	72	98	125	61	61	300	60	53
24	55	100	1320	63	71	91	166	57	48	323	56	51
25	55	123	371	61	71	88	105	55	56	90	56	51
26	57	91	201	63	67	84	311	57	128	69	54	50
27	1100	86	175	62	66	90	441	64	51	643	53	50
28	431	122	150	65	68	87	150	57	46	1310	51	2450
29	1260	454	137	61	69	78	119	56	66	446	52	4920
30	233	122	131	60	---	74	106	54	48	150	70	279
31	140	---	119	59	---	249	---	61	---	149	365	---
TOTAL	5232	5730	9193	2745	5156	3386	6288	2686	1738	6550	5404	10197
MEAN	169	191	297	88.5	178	109	210	86.6	57.9	211	174	340
MAX	1260	1040	2160	241	1500	269	725	221	128	1310	2220	4920
MIN	54	76	74	59	58	68	99	54	46	41	51	43
CFSM	2.64	2.98	4.63	1.38	2.78	1.71	3.27	1.35	0.91	3.30	2.72	5.31
IN.	3.04	3.33	5.34	1.60	3.00	1.97	3.65	1.56	1.01	3.81	3.14	5.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	70.6	88.3	117	117	124	153	138	115	96.6	83.1	77.5	90.9
MAX	216	265	398	378	266	370	410	229	306	230	174	365
(WY)	1997	1973	1997	1979	1979	1994	1983	1984	2001	1975	2004	1999
MIN	23.1	17.7	22.7	24.3	37.0	40.7	41.3	50.8	32.0	23.7	19.8	23.0
(WY)	1966	1966	1966	1981	1969	1985	1985	1986	1986	1999	1966	1968

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL TOTAL	60120		64305			
ANNUAL MEAN	165		176		106	
HIGHEST ANNUAL MEAN					176	2004
LOWEST ANNUAL MEAN					50.6	1966
HIGHEST DAILY MEAN	2160	Dec 11	4920	Sep 29	5560	Sep 16 1999
LOWEST DAILY MEAN	37	Aug 26	41	Jul 6,11	8.8	Aug 30 1995
ANNUAL SEVEN-DAY MINIMUM	44	Aug 20	44	Jul 5	12	Aug 27 1966
MAXIMUM PEAK FLOW			**a**15300	Sep 29	**a**19800	Sep 16 1999
MAXIMUM PEAK STAGE			10.46	Sep 29	**b**11.50	Sep 16 1999
INSTANTANEOUS LOW FLOW			39	Sep 14	2.0	Jul 18 1905**c**
ANNUAL RUNOFF (CFSM)	2.57		2.75		1.65	
ANNUAL RUNOFF (INCHES)	34.94		37.38		22.45	
10 PERCENT EXCEEDS	362		303		183	
50 PERCENT EXCEEDS	86		82		60	
90 PERCENT EXCEEDS	54		51		28	

a From rating curve extended above 4,000 ft^3/s on basis of slope-area measurement at peak flow.
b From floodmark. Maximum recorded 10.77 ft.
c Also July 19. Minimum observed is outside computed statistical period.

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, 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 unf lab, µS/cm 25 degC (90095)	Specif. 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)
OCT 2003													
06...	1245	1028	9813	61	11.2	8.2	8.2	673	678	11.7	200	46.0	21.6
DEC													
10...	1130	1028	9813	77	17.4	8.2	8.1	972	985	4.2	210	47.8	20.9
FEB 2004													
12...	1200	1028	9813	100	14.8	7.9	7.9	676	697	3.9	170	40.0	17.1
APR													
13...	1300	1028	9813	493	12.5	7.3	7.3	--	681	8.9	160	34.3	17.9
JUN													
15...	1330	1028	9813	55	9.4	8.0	8.0	742	733	19.8	210	45.5	23.2
AUG													
24...	1230	1028	9813	59	10.1	8.1	8.1	575	587	20.2	180	39.1	20.1

Date	ANC, wat unf 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)	Orthophosphate, 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 recoverable, µg/L (01105)	Copper, water, unfltrd recoverable, µg/L (01042)
OCT 2003													
06...	125	49.4	462	6	<.020	6.27	<.200	.71	.754	7.0	3.4	<200	<10
DEC													
10...	116	49.8	4	<2	<.020	5.54	<.200	.47	.542	6.0	3.1	<200	<10
FEB 2004													
12...	89	34.2	388	<2	<.020	3.31	.320	.27	.326	4.0	3.9	<200	<10
APR													
13...	44	20.9	386	456	.200	1.58	.080	.09	1.10	4.6	6.4	10400	130
JUN													
15...	124	61.0	590	12	.070	6.11	<.200	.77	.823	6.8	4.1	<200	10
AUG													
24...	112	38.0	372	6	.030	4.22	<.200	.54	.595	4.4	3.6	<200	<10

Date	Iron, water, unfltrd recoverable, µg/L (01045)	Lead, water, unfltrd recoverable, µg/L (01051)	Manganese, water, unfltrd recoverable, µg/L (01055)	Nickel, water, unfltrd recoverable, µg/L (01067)	Zinc, water, unfltrd recoverable, µg/L (01092)
OCT 2003					
06...	110	<1.0	10	<50	30
DEC					
10...	120	<1.0	20	<50	20
FEB 2004					
12...	190	<1.0	30	<50	10
APR					
13...	16600	230	780	<50	390
JUN					
15...	180	1.0	20	<50	120
AUG					
24...	50	<1.0	10	<50	10

01474000 WISSAHICKON CREEK AT MOUTH, PHILADELPHIA, 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	09/12/03
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	1
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
Corbicula fluminea	1
Arthropoda	
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
Gammarus	16
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
Baetis	22
Trichoptera (CADDISFLIES)	
Hydropsychidae	
Cheumatopsyche	4
Hydropsyche	37
Philopotamidae	
Chimarra	9
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
Optioservus	1
Stenelmis	63
Psephenidae (WATER PENNIES)	
Psephenus	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	8
Total Organisms	163
Total Taxa	11