Low-flow partial record sites

Measurements of streamflow made at low-flow partial-record stations located in the area covered by this report are provided in the following table. The measurements were made during a period of base flow when streamflow is primarily the result of ground-water discharge. These measurements, when correlated with the simultaneous discharge of a nearby stream where historical continuous-record streamflow data are available, will give an indication of the low-flow status of the measured stream. The column headed "Period of Record" shows the water years in which measurements were made at the same, or practically the same, site.

The column headed "Unit Area Discharge" shows the result of the measured discharge divided by the drainage area at the low-flow site. This value is commonly used to make hydrologic comparisons among drainage basins and shows the relative discharge per square mile at each site. A unit area discharge value of 0.10 cubic feet per second per square mile ((ft³/s)/mi²) is sometimes used as a rule of thumb to estimate the 7-day, 10-year (Q7,10) flow value. The 7-day, 10-year flow value is often used to develop limits for permitted withdrawals or discharges to streams. To compare these measured low-flow values to the computed 7-day, 10-year flow value, visit the USGS-PA Flow Statistics web site at http://pa.water.er.usgs.gov/flowstats/ or, for stream data not available at the web site, refer to methods described in *Comparison of Methods for Computing Streamflow Statistics for Pennsylvania Streams* (USGS Water-Resources Investigations Report 99-4068), authored by Ehlke and Reed, to determine the 7-day, 10-year flow value.

Discharge measurements made at low-flow partial-record sites during water year 2002

						Measurement	<u>s</u>
Station Number	Station Name	Location	Drainage area (mi ²)	Period of Record	Date	Unit Area Discharge ((ft ³ /s)/mi ²)	Discharge (ft ³ /s)
		DELAWARE RIVER E	BASINCon	tinued			
		LEHIGH RIVE	R BASIN				
01451110	Hokendauqua Creek near Northampton	Lat 40°42'50", long 75°29'45", Northampton County, Hydrologic Unit 02040106, at bridge on county road, 1.7 mi north of Northampton, and 3.3 mi upstream from mouth.	38.1	1970-78, 1981-91, 2002	9-10-02	.09	3.58
01451165	Catasauqua Creek at Catasauqua	Lat 40°38'52", long 75°28'06", Lehigh County, Hydrologic Unit 02040106, at bridge on North Daulphin Street, Cata- sauqua, 0.1 mi upstream from mouth.	15.7	1970-78, 1981-91, 2002	9-10-02	.12	1.90
01451900	Jordan Creek near Stetlersville	Lat 40°37'46", long 75°33'13", Lehigh County, Hydrologic Unit 02040106, at covered bridge on rural road, 0.5 mi north of Stetlersville.	70.4	1967-69 ^a , 1981-91, 2002	9-10-02	0	no flow
01452300	East Branch Monocacy Creek near Bath	Lat 40°43'10", long 75°22'10", Northampton County, Hydrologic Unit 02040106, on left bank 25 ft down- stream from bridge on LR 40863, 1.5 mi southeast of Bath, and 2.5 mi upstream from mouth.	5.35	1962-69≠, 1969-81 ^b , 1982-88, 2002	9-10-02	0	no flow
01457790	Cooks Creek at Durham Fur- nace	Lat 40°34'56", long 75°12'20", Bucks County, Hydrologic Unit 02040105, on east side of Red Brick Road, 0.1 minorth of State Highway 212, 0.5 mi upstream from mouth and Durham Furnace.	29.4	1934, 1944, 1949-50, 1970-78, 1981-87, 1990-93≠, 2002	9-09-02	.19	5.61
01458900	Tinicum Creek near Ottsville	Lat 40°28'14", long 75°08'13", Bucks County, Hydrologic Unit 02040105, at concrete bridge on gravel road, 0.9 mi below confluence of Rapp Creek and Beaver Creek, 1.5 mi east of Ottsville, and 5.3 mi above mouth.	14.7	1971-81 ^b , 1982-88, 1990-93≠, 2002	9-09-02	.03	0.38

 $\textbf{Discharge measurements made at low-flow partial-record sites during water year 2002} \\ - \textbf{Continued}$

						Measurement	<u>urements</u>	
Station Number	Station Name	Location	Drainage area (mi ²)	Period of Record	Date	Unit Area Discharge ((ft ³ /s)/mi ²)	Discharge (ft ³ /s)	
		TOHICKON CRI	EEK BASIN					
01459100	Beaver Run tribu- tary at Quaker- town	Lat 40°26'37", long 75°19'42", Bucks County, at concrete weir upstream from twin concrete-arch culvert on Erie Ave- nue at intersection with Elm Street in Quakertown, 0.2 mi upstream from mouth.	2.42	1961-68, 1981-91, 2002	9-09-02	0	no flow	
01459150	Tohickon Creek near Quaker- town	Lat 40°26'33", long 75°18'33", Bucks County, Hydrologic Unit 02040105, 1,000 ft downstream from county high- way bridge and 1.0 mi east of Quaker- town.	27.5	1970-78, 1981-91, 2002	9-09-02	.12	3.43	
		JERICHO CREI	EK BASIN					
01462300	Jericho Creek at Washington Crossing	Lat 40°18'40", long 74°54'23", Bucks County, Hydrologic Unit 02040105, at bridge on State Highway 32, 0.3 mi upstream from mouth, and 2.5 mi north- west of Washington Crossing.	9.52	1971-91, 2002	9-10-02	0	no flow	
		NESHAMINY CR	EEK BASIN	1				
01464900	Park Creek near Warrington	Lat 40°13'24", long 75°08'42", Bucks County, at mouth, 0.3 mi upstream from bridge on State Highway 611 cross Little Neshaminy Creek, and 2.0 mi southwest of Warrington.	11.8	1946-57, 1981-91, 2002	9-10-02	.07	0.84	
01465100	Mill Creek at Rushland	Lat 40°15'30", long 75°01'06", Bucks County, Hydrologic Unit 02040201, at bridge on L.R. 09047 at Rushland.	21.6	1950, 1981-91, 2002	9-10-02	.03	0.58	
		POQUESSING CR	REEK BASIN	1				
01465790	Byberry Creek at Chalfont Road, Philadelphia	Lat 40°04'54", long 74°58'57", Philadelphia County, Hydrologic Unit 02040202, on right bank 200 ft downstream from Chalfont Road Bridge, 0.2 mi downstream from Walton Run, at Philadelphia.	5.34	1964-78≠, 1981-91, 2002	9-10-02	.07	0.35	
		FRANKFORD CR	EEK BASIN	1				
01467084	Rock Creek above Curtis Arbore- tum near Phila- delphia	Lat 40°04'54", long 75°09'03", Montgomery County, Hydrologic Unit 02040202, on right bank 60 ft upstream from stonearch bridge, 1,600 ft upstream from Washington Lane, Cheltenham Township, and about 1.2 mi upstream from mouth.	1.15	1971-78≠, 1981-91, 2002	9-10-02	.24	0.28	
		SCHUYLKILL RI	VER BASIN	1				
01467470	Schuylkill River at Port Carbon	Lat 40°41'40", long 76°09'50", Schuylkill County, Hydrologic Unit 02040203, at bridge 550 ft upstream from Mill Creek, at Port Carbon.	27.1	1949-50, 1963-64 ^a , 1981-91, 2002	9-10-02	.22	6.02	
01469090	Bear Creek at Jef- ferson	Lat 40°35'09", long 76°08'03", Schuylkill County, at bridge on T662, 2.0 mi west of Auburn.	10.4	1965 ^a , 1981-91, 2002	9-09-02	.09	0.91	

 $\textbf{Discharge measurements made at low-flow partial-record sites during water year 2002} \\ - \textbf{Continued}$

					<u>Measurements</u>			
Station Number	Station Name	Location	Drainage area (mi ²)	Period of Record	Date	Unit Area Discharge ((ft ³ /s)/mi ²)	Discharge (ft ³ /s)	
SCHUYLKILL RIVER BASINContinued								
01469290	Pine Creek at Barnesville	Lat 40°49'09", long 76°01'06", Schuylkill County, 0.1 mi south of State Highway 45, and 0.8 mi east of Barnesville.	7.33	1964 ^a , 1981-91, 2002	9-09-02	.15	1.11	
01470700	Maiden Creek near Lenharts- ville	Lat 40°35'10", long 75°53'40", Berks County, Hydrologic Unit 02040203, at Zettlemoyers bridge, 1.0 mi north of Lenhartsville.	75.7	1943-57, 1981-91, 2002	9-11-02	.07	5.60	
01470720	Maiden Creek tributary at Lenhartsville	Lat 40°34'23", long 75°52'34", Berks County, Hydrologic Unit 02040203, at bridge on U.S. Highway 22, 0.5 mi east of Lenhartsville, and 0.5 mi upstream from mouth.	7.46	1961-65 ^b , 1965-91, 2002	9-11-02	.05	0.37	
01470758	Moselem Creek near Shoemak- ersville	Lat 40°30'10", long 75°52'47", Berks County, Hydrologic Unit 02040203, at bridge on county road, 0.35 mi upstream from mouth, 2.8 mi west of Moselem Springs, and 5 mi east of Shoemakers- ville.	13.5	1970-78, 1981-91, 2002	9-11-02	.76	10.3	
01470760	Maiden Creek near East Berk- ley	Lat 40°25'57", long 75°56'19", Berks County, Hydrologic Unit 02040203, at bridge on SR 61, 1.7 mi northwest of Temple.	192	1908, 1909 2002	9-12-02	.06	12.4	
01470763	Willow Creek near Temple	Lat 40°25'37", long 75°56'21", Berks County, Hydrologic Unit 02040203, 800 ft upstream from mouth at bridge on SR 61 near Temple.	21.6	2002	9-11-02	.22	4.75	
01470800	Tulpehocken Creek at Bern- ville	Lat 40°25'32", long 75°06'49", Berks County, at a single-span concrete high- way bridge on L.R. 06047, 600 ft upstream from confluence with Northkill Creek, and 0.5 mi south of Bernville.	84.8	1944, 1951, 1955, 1957, 1972-77 ^a , 1981-91, 2002	9-10-02	.31	26.6	
01471520	Wyomissing Creek at West Reading	Lat 40°19'41", long 75°56'41", Berks County, at West Reading, and 180 ft upstream from mouth.	15.6	1948-53 ^c , 1981-91, 2002	9-10-02	.42	6.61	
01471620	Allegheny Creek at Gibralter	Lat 40°17'06", long 75°52'25", Berks County, 600 ft upstream from Schuylkill Canal, at Gibralter.	17.9	1967 ^a , 1981-91, 2002	9-11-02	.20	3.57	
01471800	Pine Creek near Manatawny	Lat 40°24'43", long 75°44'02", Berks County, Hydrologic Unit 02040203, at steel bridge on macadam road, at Lob- achsville, 0.5 mi upstream from mouth, 0.5 mi below West Branch Pine Creek and 2 mi north of Manatawny.	9.61	1970-81 ^{b} , 1982-91, 2002	9-11-02	.10	0.95	
01471900	Manatawny Creek at Earlville	Lat 40°19'05", long 75°44'01", Berks County, Hydrologic Unit 02040203, at bridge on State Highway 562 at Ear- lville, and 2.7 mi south of Spangsville.	61.6	1947-57, 1981-91, 2002	9-11-02	.21	13.0	
01472100	Pigeon Creek at Parker Ford	Lat 40°11'48", long 75°35'13", Chester County, Hydrologic Unit 02040203, 50 ft downstream from bridge on State Highway 724, at Parker Ford	13.9	1944-57, 1981-91, 2002	9-11-02	.13	1.85	

 $\textbf{Discharge measurements made at low-flow partial-record sites during water year 2002} \\ - \textbf{Continued}$

-					<u>Measurements</u>				
Station Number	Station Name	Location	Drainage area (mi ²)	Period of Record	Date	Unit Area Discharge ((ft ³ /s)/mi ²)	Discharge (ft ³ /s)		
	SCHUYLKILL RIVER BASINContinued								
01472130	French Creek near St. Peters	Lat 40°11'03", long 75°45'10", Chester County, at highway bridge, 1.2 mi north- west of St. Peters.	11.8	1932-33, 1981-91, 2002	9-09-02	.07	0.82		
01472150	French Creek at Coventryville	Lat 40°11'03", long 75°45'10", Chester County, at highway bridge, 0.1 mi south of State Highway 23, at Coventryville, 0.3 mi downstream from South Branch, 0.6 mi southwest of Pottstown.	36.9	1951-69, 1981-91, 2002	9-10-02	.13	4.91		
01472175	Unnamed tribu- tary to Picker- ing Creek near Ludwigs Cor- ner	Lat 40°06'06", long 75°39'32", Chester County, at bridge on rural road, 2.1 mi southeast of Ludwigs Corner.	1.87	1967-68 ^a , 1981-91, 2002	9-10-02	.12	0.23		
01472280	Macoby Creek at Green Lane	Lat 40°20'22", long 75°28'20", Chester County, at bridge on State Highway 29, at Green Lane, and 0.1 mi upstream from mouth.	17.4	1949, 1981-91, 2002	9-11-02	.02	0.30		
01472450	Unami Creek at Sumneytown	Lat 40°19'34", long 75°27'00", Montgomery County, at bridge on State Highway 63, at Sumneytown.	47.0	$1946 \neq \frac{\mathbf{a}}{4}$, $1951 \neq \frac{\mathbf{a}}{4}$, $1981-91$, 2002	9-11-02	.03	1.56		
01472800	East Branch Perkiomen Creek near Har- leyville	Lat 40°16'25", long 75°24'55", Montgomery County, Hydrologic Unit 02040203, at bridge on LR 46023, and 1.5 mi southwest of Harleysville.	56.4	1958-69, 1981-88, 2002	9-11-02	1.15	64.8 ^{d}		
01473100	Zacharias Creek near Skippack	Lat 40°12'26", long 75°21'57", Montgomery County, at concrete weir, 1.2 mi southeast of Skippack.	7.27	1960-80 ^b , 1981-91, 2002	9-11-02	.04	0.27		
01473200	Trout Creek near Valley Forge	Lat 40°05'30", long 75°25'22", Chester County, at bridge on Richard Road, 750 ft upstream from bridge on State Highway 23, and 2.2 mi east of Valley Forge.	6.55	1946-57, 1981-91, 2002	9-11-02	0	no flow		
		CHRISTINA RI	VER BASIN	1					
01478150	East Branch White Clay Creek at Lan- denberg	Lat 39°46'40", long 75°46'28", Chester County, Hydrologic Unit 02040205, at county highway bridge at Landenberg, 1.4 mi downstream from Egypt Run and 4 mi southeast of West Grove.	25.6	1970-78, 1981-91, 2002	9-10-02	.21	5.46		
01479700	West Branch Red Clay Creek near Kennett Square	Lat 39°48'39", long 75°45'18", Chester County, Hydrologic Unit 02040205, at county highway bridge on Kaolin Road, 1 mi upstream from East Branch Red Clay Creek, 1.4 mi east of Kaolin and 2.5 mi south of Kennett Square.	16.9	1970-78, 1980-91, 2002	9-10-02	.29	4.85		
01480630	Buck Run near Doe Run	Lat 39°55'46", long 75°48'36", Chester County, Hydrologic Unit 02040205, 1,300 ft downstream from bridge on county road, 0.65 mi upstream from Doe Run, and 2.0 mi southwest of Mortonville.	24.4	1949, 1955, 1981-91, 2002	9-10-02	.16	3.85		

Discharge measurements made at low-flow partial-record sites during water year 2002—Continued

					<u>Measurements</u>		
Station Number	Station Name	Location	Drainage area (mi ²)	Period of Record	Date	Unit Area Discharge ((ft ³ /s)/mi ²)	Discharge (ft ³ /s)
		CHRISTINA RIVER	BASINCon	tinued			
01480665	East Branch Bran- dywine Creek at Dorlan	Lat 40°03'08", long 75°43'28", Chester County, Hydrologic Unit 02040205, 300 ft upstream from bridge on private road, 0.3 mi upstream from Marsh Creek, and 0.5 mi northwest of Dorlan.	33.4	1967-68≠, 1981-91, 2002	9-09-02	.14	4.56

 [≠] Operated as a continuous-record gaging station.
a Operated as a miscellaneous station.
b Operated as a crest-stage partial-record station.
c Published as Wyomissing Creek near Reading.
d Includes Distributary from Bradshaw Reservoir (pumpage from Delaware River).