

## KISKIMINETAS RIVER BASIN

## 03040000 STONYCREEK RIVER AT FERNDALE, PA

**LOCATION.**--Lat 40°17'08", long 78°55'15", Cambria County, Hydrologic unit 05010007, on right bank 50 ft upstream from highway bridge at Ferndale, 0.4 mi downstream from Bens Creek, 1.2 mi upstream from Johnstown city limits, and 5.2 mi upstream from confluence with Little Conemaugh River.

**DRAINAGE AREA.**--451 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1913 to March 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Monthly figures adjusted for storage and diversion for October 1918 to September 1921, published in WSP 503, 523, have been found in error and should not be used. Published as "at Johnstown" 1914-36, and as "Stony Creek at Ferndale" 1938-79. Gage-height records collected in this vicinity since 1885 are contained in reports of U.S. Weather Bureau.

**REVISED RECORDS.**--WSP 743: Drainage area. WSP 1305: 1915, 1918, 1923-26. WSP 1435: 1920-21, 1932, 1941 (M), 1943 (M), 1945-46 (M). WDR PA-78-3: 1977 (M). See also PERIOD OF RECORD.

**GAGE.**--Water-stage recorder. Datum of gage is 1,184.06 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 19, 1936, nonrecording gage at site 3.5 mi downstream at different datum. Dec. 8, 1938 to Jan. 30, 1940, nonrecording gage at site 50 ft downstream at present datum.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Regulation by mine pumpage and reservoirs and diversion above station; the four largest reservoirs have a combined capacity of 42,360 acre-ft. Figures of daily discharge do not include diversion from Stonycreek River and Quemahoning Creek Reservoir to plants of Bethlehem Steel Co., and from Mill Creek, Dalton Run, and North Fork Bens Creek Reservoirs for water supply of city of Johnstown. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	570	560	3170	e350	823	989	389	3000	486	283	508
2	118	499	495	5930	e345	816	1470	375	2210	454	262	572
3	99	405	447	3300	e340	761	1210	353	3950	330	363	591
4	95	350	360	2300	e565	723	1030	402	8140	301	475	700
5	96	327	419	1750	e800	869	2890	541	4010	305	412	579
6	89	706	423	1460	e600	2190	2420	710	2540	330	342	438
7	80	865	367	1260	e550	2230	1940	574	3100	477	313	361
8	73	710	389	1160	e510	1830	1900	921	3040	410	352	316
9	67	575	313	1150	e480	2980	2090	1790	2410	461	552	284
10	67	508	324	1250	e450	2600	2010	4520	1800	434	1160	258
11	102	529	374	1080	e440	1780	2020	4190	1450	931	768	234
12	245	562	420	927	e375	1500	1920	2440	1260	557	615	216
13	206	756	427	777	e330	2250	1600	2460	1340	449	479	212
14	151	644	665	724	e335	3310	1360	2010	1160	375	385	223
15	122	526	725	646	e330	3220	1210	1570	999	329	321	243
16	238	487	681	555	e300	3830	1080	2180	854	416	289	246
17	523	875	605	578	e290	4460	982	1860	778	352	349	215
18	360	1160	546	493	e300	4420	885	1830	1100	297	287	215
19	261	932	497	e480	e320	3880	831	1580	964	279	237	2680
20	216	932	1930	e470	e330	3840	747	1330	936	252	212	2290
21	180	835	2370	e440	e365	4290	678	1520	1430	241	202	1090
22	153	762	1580	e400	e780	3640	674	1340	1260	265	187	792
23	141	712	1390	e395	1960	2730	618	1920	999	259	179	1380
24	130	625	1120	e395	1870	2160	548	1960	828	272	165	1070
25	124	608	1010	e390	1430	1770	510	1630	716	248	162	844
26	330	572	870	e385	1180	1520	512	1900	635	224	484	770
27	354	564	750	e380	969	1320	500	1580	575	222	739	705
28	252	519	682	e375	855	1120	449	1360	531	214	539	1730
29	249	494	640	e360	---	1020	420	1200	483	180	384	1280
30	559	537	586	e350	---	1020	403	1040	449	168	387	952
31	584	---	703	e350	---	968	---	1180	---	164	364	---
TOTAL	6406	19146	22668	33680	17749	69870	35896	48655	52947	10682	12248	21994
MEAN	207	638	731	1086	634	2254	1197	1570	1765	345	395	733
MAX	584	1160	2370	5930	1960	4460	2890	4520	8140	931	1160	2680
MIN	67	327	313	350	290	723	403	353	449	164	162	212
CFSM	0.46	1.42	1.62	2.41	1.41	5.00	2.65	3.48	3.91	0.76	0.88	1.63
IN.	0.53	1.58	1.87	2.78	1.46	5.76	2.96	4.01	4.37	0.88	1.01	1.81

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	239	414	666	757	1027	1601	1355	846	521	260	182	194
MAX	1514	2099	2162	1929	2575	3581	3426	1792	1773	874	1098	1449
(WY)	1977	1986	1973	1952	1986	1994	1993	1978	1972	1977	1979	1996
MIN	13.6	20.4	48.4	137	262	367	336	186	77.4	28.4	26.3	18.9
(WY)	1964	1954	1954	1977	1963	1990	1946	1941	1965	1965	1957	1943

e Estimated.

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## 03040000 STONYCREEK RIVER AT FERNDALE, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	221779		351941			
ANNUAL MEAN	608		964		672	
HIGHEST ANNUAL MEAN					1044	
LOWEST ANNUAL MEAN					280	
HIGHEST DAILY MEAN	4950	May 18	8140	Jun 4	15900	Jun 23 1972
LOWEST DAILY MEAN	51	Sep 9,11	67	Oct 9,10	11	Sep 26 1959
ANNUAL SEVEN-DAY MINIMUM	53	Sep 8	81	Oct 4	12	Oct 5 1963
MAXIMUM PEAK FLOW			11300	Jun 4	<b>ab</b> 59000	Mar 18 1936
MAXIMUM PEAK STAGE			10.18	Jun 4	<b>c</b> 30.26	Mar 18 1936
INSTANTANEOUS LOW FLOW			66	Oct 10	<b>d</b> 5.0	Sep 8 1929
ANNUAL RUNOFF (CFSM)	1.35		2.14		1.49	
ANNUAL RUNOFF (INCHES)	18.29		29.03		20.24	
10 PERCENT EXCEEDS	1400		2200		1600	
50 PERCENT EXCEEDS	420		575		333	
90 PERCENT EXCEEDS	74		224		61	

**a** About.

**b** From rating curve extended above 13,000 ft<sup>3</sup>/s on the basis of slope-area and contracted-opening measurement of peak flow.

**c** From highwater mark, site and datum then in use.

**d** Minimum observed.

