

## WEST BRANCH SUSQUEHANNA RIVER BASIN

## 01542810 WALDY RUN NEAR EMPORIUM, PA

**LOCATION.**--Lat 41°34'44", long 78°17'34", Cameron County, Hydrologic Unit 02050202, on left bank 15 ft downstream from highway bridge on Township Route 318 at North Creek Chapel, 0.1 mi upstream from mouth, and 5.5 mi northwest of Emporium.

**DRAINAGE AREA.**--5.24 mi<sup>2</sup>.

**PERIOD OF RECORD.**--Occasional discharge measurements and annual maximum, water years 1963-64. September 1964 to current year.

**GAGE.**--Water-stage recorder. Datum of gage is 1,263.62 ft above National Geodetic Vertical Datum of 1929. July 25, 1963, to Aug. 27, 1964, crest-stage 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 telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 100 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)
Mar. 18	0200	132	4.57	Aug. 1	0815	123	4.53
Mar. 21	0030	115	4.49	Aug. 9	2345	*315	*5.21
Apr. 5	0730	170	4.72	Aug. 10	1930	149	4.64

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	0.85	2.4	3.7	23	e1.1	5.9	7.3	2.0	13	1.3	96	1.7
2	0.67	2.6	3.3	63	e1.1	5.7	15	2.8	15	1.2	50	16
3	0.54	2.6	2.7	32	1.7	e4.8	23	2.4	11	1.2	37	21
4	0.45	2.6	e4.0	19	13	e6.0	20	2.4	8.7	1.1	66	24
5	0.65	2.7	8.5	13	15	4.5	130	3.1	7.3	0.91	33	14
6	0.45	5.9	2.9	9.6	e9.0	e3.8	68	3.9	6.6	0.92	17	8.9
7	0.33	8.0	2.6	7.7	7.7	e4.4	33	4.9	6.7	0.81	11	6.3
8	0.28	6.7	2.5	7.2	e6.0	4.6	20	6.0	6.4	0.79	7.1	4.6
9	0.26	5.4	2.4	7.0	e5.2	6.0	14	6.4	7.1	0.77	39	3.6
10	0.26	4.5	e3.5	6.3	5.0	e5.5	12	6.6	7.1	1.0	177	2.9
11	0.26	5.0	4.2	5.7	e4.4	e8.0	12	6.3	7.8	1.4	85	2.5
12	0.27	4.5	3.6	5.3	4.8	7.5	12	6.0	16	0.84	58	2.2
13	0.31	4.7	3.2	e4.0	e4.9	7.2	9.9	5.3	48	0.70	29	2.0
14	0.31	4.6	14	e3.4	e3.5	6.6	7.6	4.5	30	0.62	16	2.0
15	0.26	4.2	21	e3.0	3.0	8.4	6.8	4.2	18	0.53	9.8	3.2
16	0.89	4.5	15	e2.6	4.7	27	6.2	5.0	10	0.62	7.1	2.7
17	1.2	43	9.8	e2.0	5.3	82	5.1	4.6	6.8	0.52	5.2	2.0
18	0.90	39	7.6	e1.6	3.8	120	4.3	5.3	5.7	1.5	3.9	1.8
19	1.7	20	6.8	e1.2	2.4	99	3.9	5.1	4.4	1.3	3.1	3.1
20	1.8	12	36	e0.80	2.4	87	3.5	4.9	3.6	0.79	2.6	3.6
21	1.3	8.7	48	e0.60	2.1	104	3.7	6.3	4.7	13	2.4	3.4
22	1.1	7.9	26	e0.50	2.6	81	3.5	6.2	3.7	40	2.2	4.7
23	0.90	6.9	16	e0.45	7.5	45	3.0	6.4	3.4	29	1.9	21
24	0.76	6.3	11	e0.70	11	28	2.7	7.5	3.0	22	1.5	18
25	0.90	5.9	9.4	e1.0	9.9	22	2.6	7.7	2.6	27	1.4	12
26	11	5.2	7.4	e1.0	7.9	19	2.6	8.2	2.3	17	1.6	8.1
27	7.2	4.8	5.7	e1.1	7.4	12	2.4	7.1	2.1	25	1.6	10
28	4.3	4.4	5.1	e1.0	6.7	9.5	2.2	6.4	1.8	68	1.3	48
29	3.1	4.1	4.7	e1.0	---	8.6	2.0	5.4	1.6	29	1.3	33
30	2.8	4.1	4.1	e1.0	---	7.4	2.0	4.5	1.5	13	1.4	18
31	2.5	---	4.6	e1.1	---	6.7	---	6.9	---	7.4	1.1	---
TOTAL	48.50	243.2	299.3	226.85	159.1	847.1	440.3	164.3	265.9	309.22	770.5	304.3
MEAN	1.56	8.11	9.65	7.32	5.68	27.3	14.7	5.30	8.86	9.97	24.9	10.1
MAX	11	43	48	63	15	120	130	8.2	48	68	177	48
MIN	0.26	2.4	2.4	0.45	1.1	3.8	2.0	2.0	1.5	0.52	1.1	1.7
CFSM	0.30	1.55	1.84	1.40	1.08	5.21	2.80	1.01	1.69	1.90	4.74	1.94
IN.	0.34	1.73	2.12	1.61	1.13	6.01	3.13	1.17	1.89	2.20	5.47	2.16

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	4.32	8.92	10.8	8.31	10.9	17.6	17.1	10.9	6.58	2.87	2.96	3.36
MAX	22.1	29.3	27.8	23.8	30.7	33.0	48.3	26.7	30.9	10.2	25.8	15.7
(WY)	1982	1986	1973	1996	1976	1979	1970	2002	1972	1994	1994	1987
MIN	0.10	0.31	2.02	0.83	0.98	4.25	5.34	1.95	0.50	0.26	0.19	0.080
(WY)	1965	1965	1990	1981	1980	1981	1976	1999	1999	1966	1991	1964

e Estimated.

## WEST BRANCH SUSQUEHANNA RIVER BASIN

## 01542810 WALDY RUN NEAR EMPORIUM, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	3394.36		4078.57			
ANNUAL MEAN	9.30		11.2		8.70	
HIGHEST ANNUAL MEAN					14.5	1994
LOWEST ANNUAL MEAN					5.11	1965
HIGHEST DAILY MEAN	131	May 13	177	Aug 10	e300	Jan 19 1996
LOWEST DAILY MEAN	0.12	Sep 13	0.26	Oct 9-11,15	0.00	Sep 14 1964
ANNUAL SEVEN-DAY MINIMUM	0.14	Sep 8	0.28	Oct 9	0.01	Sep 13 1964
MAXIMUM PEAK FLOW			a315	Aug 9	a828	Sep 28 1967
MAXIMUM PEAK STAGE			5.21	Aug 9	6.32	Sep 28 1967
INSTANTANEOUS LOW FLOW					0.00	Sep 14 1964
ANNUAL RUNOFF (CFSM)	1.77		2.13		1.66	
ANNUAL RUNOFF (INCHES)	24.10		28.95		22.56	
10 PERCENT EXCEEDS	25		27		21	
50 PERCENT EXCEEDS	4.5		4.9		3.5	
90 PERCENT EXCEEDS	0.27		0.92		0.42	

a From rating curve extended above 80 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 5.09 ft, 5.86 ft, and at peak flow.

e Estimated.

