

NESHAMINY CREEK BASIN

01464645 NORTH BRANCH NESHAMINY CREEK BELOW LAKE GALENA NEAR NEW BRITAIN, PA

LOCATION.--Lat 40°18'44", long 75°12'25", Bucks County, Hydrologic Unit 02040201, on left bank 0.3 mi downstream from Lake Galena (Peace Valley Reservoir), 1.5 mi west of New Britain, 2.0 mi north of Chalfont on Callowhill Road, and 4.0 mi west of Doylestown.

DRAINAGE AREA.--16.2 mi².

PERIOD OF RECORD.--November 1985 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 280 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Galena (Peace Valley Reservoir). Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

COOPERATION.--Records of change in contents in Lake Galena provided by Forest Park Water Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	22	22	21	24	33	23	24	26	27	26
2	24	23	22	22	21	24	30	23	24	25	25	24
3	24	22	22	22	21	24	28	24	24	26	29	23
4	25	21	23	24	23	23	34	24	24	24	32	24
5	26	21	23	24	23	22	31	25	23	24	25	24
6	25	21	25	28	23	23	29	25	23	26	23	24
7	24	21	23	25	23	23	29	25	23	27	24	26
8	23	21	22	25	23	23	29	26	24	31	26	25
9	24	21	22	24	27	23	31	26	26	27	29	25
10	28	21	23	24	23	23	34	25	29	26	28	26
11	25	23	23	24	23	24	31	24	27	30	30	26
12	22	25	23	23	22	27	26	24	28	28	24	25
13	22	24	23	23	21	24	26	25	23	28	23	26
14	25	24	33	23	25	24	25	25	23	26	23	24
15	24	23	27	23	23	25	24	23	23	26	24	26
16	21	23	25	23	26	25	25	25	23	24	25	23
17	21	23	25	23	25	32	26	24	24	25	24	23
18	22	23	24	23	24	26	27	24	22	28	24	23
19	22	24	24	23	29	26	25	25	23	29	23	24
20	22	23	24	23	26	26	24	27	24	25	23	23
21	20	23	24	23	26	32	30	20	25	26	24	23
22	21	23	24	23	27	62	35	25	24	27	24	24
23	23	23	24	23	27	55	35	26	25	25	24	22
24	23	23	23	22	29	45	31	72	24	26	25	22
25	20	23	22	22	29	39	28	82	23	25	25	23
26	22	23	22	21	28	34	26	55	26	24	26	23
27	22	28	22	21	27	30	26	37	28	24	23	22
28	22	24	22	21	28	78	25	27	26	24	25	24
29	21	23	22	21	25	68	24	23	25	23	25	23
30	21	22	22	21	---	49	23	21	26	23	24	23
31	21	---	22	21	---	40	---	21	---	25	24	---
TOTAL	709	683	727	710	718	1023	850	901	736	803	780	719
MEAN	22.9	22.8	23.5	22.9	24.8	33.0	28.3	29.1	24.5	25.9	25.2	24.0
MAX	28	28	33	28	29	78	35	82	29	31	32	26
MIN	20	21	22	21	21	22	23	20	22	23	23	22
(≠)	-6.0	-11.1	+4.6	-9.3	+22.8	+5.7	-4.2	+3.3	-3.0	0	-0.7	-7.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

MEAN	23.2	24.6	49.9	35.5	27.7	39.2	31.7	28.1	21.0	19.8	16.8	23.6
MAX	81.8	86.4	145	80.4	58.8	123	80.0	81.1	44.3	55.3	41.7	114
(WY)	1997	1996	1997	1996	1988	1994	1996	1998	1989	1988	1994	1999
MIN	3.91	5.85	17.5	6.62	5.36	4.75	4.68	6.55	5.38	4.92	4.97	3.63
(WY)	1989	1992	1995	1986	1989	1988	1988	1986	1986	1990	1987	1988

≠ Change in contents, equivalent in cubic feet per second, in Lake Galena.

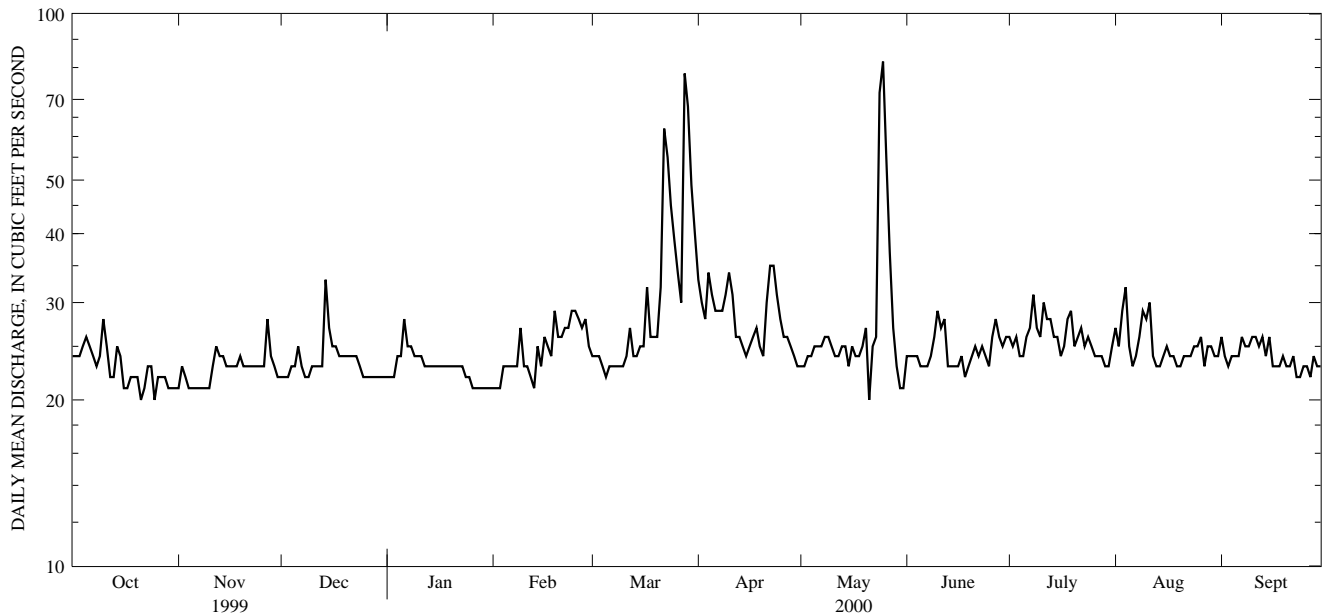
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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	12336		9359			
ANNUAL MEAN	33.8		25.6		28.9	
HIGHEST ANNUAL MEAN					44.3	1996
LOWEST ANNUAL MEAN					13.1	1992
HIGHEST DAILY MEAN	1040	Sep 17	82	May 25	1040	Sep 17 1999
LOWEST DAILY MEAN	20	Oct 21, 25	20	Oct 21 ^a	3.1	Dec 22 1989
ANNUAL SEVEN-DAY MINIMUM	21	Nov 4	21	Nov 4	3.1	Dec 22 1989
INSTANTANEOUS PEAK FLOW			127	Aug 3	b 2340	Sep 16 1999
INSTANTANEOUS PEAK STAGE			2.54	Aug 3	4.96	Sep 16 1999
10 PERCENT EXCEEDS	32		29		58	
50 PERCENT EXCEEDS	26		24		21	
90 PERCENT EXCEEDS	22		22		4.8	

^a Also Oct. 25, May 21.

^b From rating curve extended above 270 ft³/s on basis of slope-conveyance computation.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000