

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 National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	27	25	25	25	28	26	30	29	34	34	23
2	27	27	26	25	25	25	25	36	31	34	36	23
3	26	28	26	26	25	27	25	29	30	34	34	25
4	28	28	26	26	25	25	25	25	30	35	30	28
5	28	28	27	26	25	25	25	24	31	32	31	29
6	28	28	26	26	25	26	26	25	32	31	32	28
7	26	27	25	26	25	26	26	26	31	31	31	27
8	26	27	25	26	25	27	26	27	27	33	31	26
9	25	27	24	26	25	26	34	26	27	34	30	28
10	25	28	25	26	25	26	28	26	30	34	31	31
11	26	29	26	26	26	27	28	25	31	34	29	30
12	28	29	26	25	25	28	28	25	32	34	33	25
13	27	28	26	25	25	28	29	38	29	32	35	25
14	25	28	26	25	25	27	26	129	28	31	34	25
15	26	28	25	25	25	27	26	85	25	32	35	24
16	26	28	24	25	24	27	27	56	23	35	37	24
17	28	28	26	25	24	27	29	41	25	36	37	27
18	29	28	24	25	24	29	29	78	28	38	38	26
19	29	28	23	25	23	26	29	77	26	38	38	25
20	28	27	24	25	23	36	30	53	27	35	35	26
21	27	27	26	24	23	30	29	39	29	34	33	25
22	30	27	27	25	23	29	30	32	28	34	33	24
23	30	26	26	25	23	26	27	27	28	33	32	26
24	31	26	24	27	23	26	29	25	33	31	29	27
25	33	26	24	26	23	26	29	25	34	31	27	26
26	32	26	24	26	25	25	29	25	33	31	29	26
27	31	26	23	25	27	26	28	28	35	28	28	27
28	30	24	23	25	28	26	35	29	30	29	28	26
29	28	23	23	25	---	27	28	30	29	34	27	25
30	28	23	24	24	---	26	30	30	30	34	26	25
31	28	---	25	25	---	26	---	30	---	34	25	---
TOTAL	866	810	774	786	689	836	841	1201	881	1030	988	782
MEAN	27.9	27.0	25.0	25.4	24.6	27.0	28.0	38.7	29.4	33.2	31.9	26.1
MAX	33	29	27	27	28	36	35	129	35	38	38	31
MIN	25	23	23	24	23	25	25	24	23	28	25	23
(≠)	-6.2	-12.1	-5.0	-1.5	-2.2	+16.3	+11.1	+4.9	0.0	-3.6	-3.2	-6.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

MEAN	23.5	24.7	47.0	34.3	27.7	38.5	31.6	28.9	25.0	21.2	18.5	24.0
MAX	81.8	86.4	145	80.4	58.8	123	80.0	81.1	80.4	55.3	41.7	114
(WY)	1997	1996	1997	1996	1988	1994	1996	1998	2001	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1986 - 2002	
ANNUAL TOTAL	12447		10484			
ANNUAL MEAN	34.1		28.7		29.2	
HIGHEST ANNUAL MEAN					44.3	1996
LOWEST ANNUAL MEAN					13.1	1992
HIGHEST DAILY MEAN	943	Jun 17	129	May 14	1040	Sep 17 1999
LOWEST DAILY MEAN	23	Jan 7 ^a	23	Nov 29, 30 ^b	3.1	Dec 22 1989
ANNUAL SEVEN-DAY MINIMUM	23	Mar 1	23	Feb 19	3.1	Dec 22 1989
MAXIMUM PEAK FLOW			173	May 13	c2340	Sep 16 1999
MAXIMUM PEAK STAGE			2.71	May 13	4.96	Sep 16 1999
10 PERCENT EXCEEDS	36		34		51	
50 PERCENT EXCEEDS	28		27		23	
90 PERCENT EXCEEDS	24		25		5.0	

^a Also Nov. 29, 30, Dec. 19, 27-29.

^b Also Dec. 19, 27-29, Feb. 19-25, June 16, Sept. 1, 2.

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

