0140940810 PUMP BRANCH NEAR ELM, NJ

MULLICA RIVER BASIN

LOCATION.--Lat 39°41′45″, long 74°49′30″ referenced to North American Datum of 1983, Winslow Township, Camden County, NJ, Hydrologic Unit 02040301, on left bank of stream near southern end of Pestleton Road, 0.8 miles upstream from confluence with Blue Anchor Brook, and 1.2 miles north of Elm.

DRAINAGE AREA.--10.8 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2004 to September 2006 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 80 ft above NAVD of 1988, from topographic map.

REMARKS.--Records poor. Some regulation from unknown source. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.4	16	21	8.8	19	14	12	7.0	5.5	22	8.9	12
2	6.4	16	18	8.0	19	14	10	7.1	6.2	17	8.6	46
3	6.3	14	17	21	21	15	8.9	8.4	6.9	16	8.5	53
4	6.0	14	17	14	22	15	8.9	9.6	6.8	14	8.3	39
5	5.4	13	15	12	23	14	8.6	10	9.4	10	8.2	41
6	7.7	13	14	12	20	13	8.4	9.8	10	18	8.0	44
7	11	12	12	10	19	12	7.9	9.7	9.7	15	8.0	30
8	30	12	10	9.2	18	13	15	9.8	11	19	8.3	23
9	59	11	13	7.6	16	12	23	9.2	12	23	8.2	19
10	33	12	13	6.8	16	12	19	8.3	11	19	8.0	15
11	54	10	12	7.1	16	12	17	8.3	9.2	15	8.0	13
12	47	9.6	11	8.1	25	12	16	13	8.3	13	8.3	12
13	36	9.4	10	7.5	26	12	15	10	7.8	11	8.4	11
14	63	9.6	9.5	10	24	11	14	10	6.9	9.9	8.1	12
15	36	9.6	9.3	13	21	9.5	14	16	6.4	8.8	8.3	24
16	28	10	25	12	21	8.6	13	15	5.7	8.6	8.2	24
17	23	14	18	13	20	8.3	12	12	5.3	8.0	7.7	19
18	20	11	16	22	18	8.5	12	11	5.1	7.7	6.8	17
19	17	10	15	24	17	8.9	11	11	4.9	7.4	5.7	15
20	14	10	13	21	16	9.3	11	9.4	4.8	6.9	4.7	13
21	10	11	11	22	16	9.3	11	8.2	4.5	6.3	5.7	12
22	9.1	38	9.3	21	16	9.3	16	7.2	4.4	6.9	6.6	11
23	13	27	8.6	46	16	9.3	30	6.8	4.1	9.7	7.1	11
24	13	20	8.1	37	16	9.2	28	6.7	5.6	12	7.4	12
25	30	18	9.0	33	16	10	27	5.6	16	9.5	8.2	14
26	34	16	12	31	15	14	26	5.6	14	8.5	9.2	13
27	25	14	9.7	26	14	12	21	5.8	13	7.8	14	11
28	15	12	8.7	24	14	11	17	6.3	28	19	16	11
29	15	11	8.9	22	---	11	15	5.5	27	30	13	12
30	19	32	9.6	21	---	12	11	5.6	29	16	13	12
31	18	---	8.1	20	---	12	---	5.5	---	9.6	13	---
Total	710.3	435.2	391.8	550.1	520	353.2	458.7	273.4	298.5	404.6	270.4	601
Mean	22.9	14.5	12.6	17.7	18.6	11.4	15.3	8.82	9.95	13.1	8.72	20.0
Max	63	38	25	46	26	15	30	16	29	30	16	53
Min	5.4	9.4	8.1	6.8	14	8.3	7.9	5.5	4.1	6.3	4.7	11
Cfsm	2.12	1.34	1.17	1.64	1.72	1.05	1.42	0.82	0.92	1.21	0.81	1.85
In.	2.45	1.50	1.35	1.89	1.79	1.22	1.58	0.94	1.03	1.39	0.93	2.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	19.5	10.5	13.9	17.0	19.6	16.2	20.4	11.3	9.43	10.4	8.29	13.2
Max	22.9	14.5	15.1	17.7	20.6	21.0	25.5	13.7	9.95	13.1	8.72	20.0
(WY)	(2006)	(2006)	(2005)	(2006)	(2005)	(2005)	(2005)	(2005)	(2006)	(2006)	(2006)	(2006)
Min	16.2	6.57	12.6	16.3	18.6	11.4	15.3	8.82	8.92	7.68	7.86	6.46
(WY)	(2005)	(2005)	(2006)	(2005)	(2006)	(2006)	(2006)	(2006)	(2005)	(2005)	(2005)	(2005)

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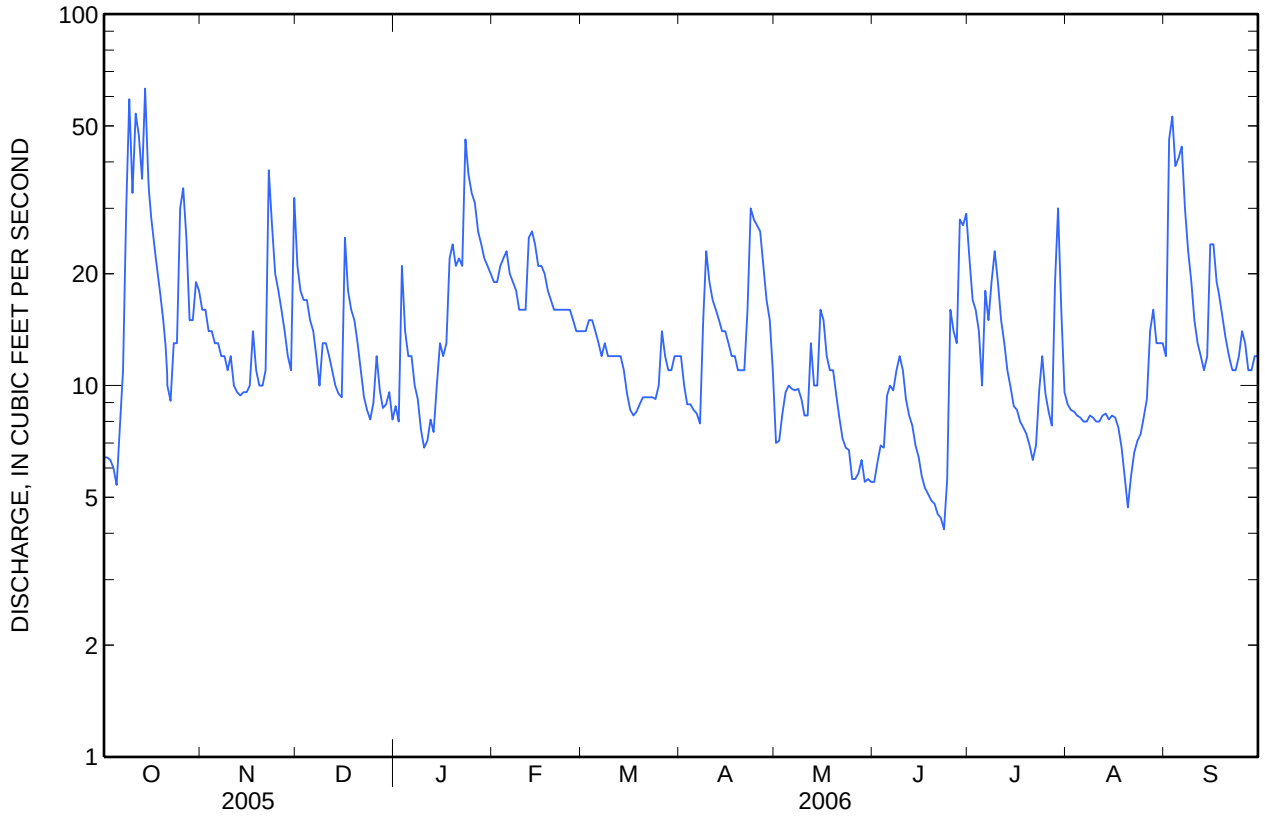
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 2005 - 2006	
Annual total	5,405.7		5,267.2			
Annual mean	14.8		14.4		14.1	
Highest annual mean					14.4	2006
Lowest annual mean					13.8	2005
Highest daily mean	67	Apr 3	63	Oct 14	67	Apr 3, 2005
Lowest daily mean	2.3	Jul 17	4.1	Jun 23	2.3	Jul 17, 2005
Annual seven-day minimum	3.0	Jul 11	4.7	Jun 17	3.0	Jul 11, 2005
Maximum peak flow			[a]125	Oct 11	[a]125	Oct 11, 2005
Maximum peak stage			[b]3.87	Aug 28	[b]3.87	Aug 28, 2006
Instantaneous low flow			2.5	Oct 5	[c]0.98	Jan 18, 2005
Annual runoff (cfsm)	1.37		1.34		1.31	
Annual runoff (inches)	18.62		18.14		17.75	
10 percent exceeds	27		25		24	
50 percent exceeds	12		12		12	
90 percent exceeds	5.8		6.9		5.7	

[a] From rating curve extended above 25 ft³/s.
[b] Effected by backwater caused by aquatic growth.
[c] Result of freeze up upstream.