

Water-Data Report 2010

01475001 MANTUA CREEK AT EAST HOLLY AVENUE, AT PITMAN, NJ

DELAWARE RIVER BASIN

LOCATION.--Lat 39°44'20", long 75°06'52" referenced to North American Datum of 1983, Pitman Borough, Gloucester County, NJ, Hydrologic Unit 02040202, on left bank, 0.1 mi downstream of Wadsworth Dam on Kressey Lake, 0.7 mi east of Pitman High School, and 1.4 mi upstream from Porch Branch.

DRAINAGE AREA.--6.24 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.-- Continuous-record gaging station, April 1940 to September 1976, November 2009 to current year. Annual maximum, October 1976 to September 2009. Prior to Nov 1, 2009 published as Mantua Creek at Pitman, NJ (station 01475000, drainage area, 6.05 mi²).

GAGE.--Water-stage recorder and crest stage gage. Datum of gage is 55.66 ft above NAVD of 1988. Prior to Nov 1, 2009, gage was located 0.1 mi upstream, on left abutment just downstream of Wadsworth Dam on Kressey Lake at a datum of 57.11 ft above NAVD of 1988 and drainage area of 6.05 mi².

REMARKS.--Records fair. Occasional regulation by Kressey Lake. Several measurements of water temperature were made during the year. Satellite telemetry at station.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	20	17	23	14	20	31	15	11	10	8.4	6.2
2	---	18	16	18	14	20	24	15	11	10	11	6.1
3	---	17	56	15	14	19	17	17	10	10	8.4	6.0
4	---	17	19	15	14	18	18	15	10	10	7.9	6.0
5	---	17	25	15	13	17	19	14	9.7	10	6.9	6.1
6	---	17	30	15	17	16	19	14	9.8	9.7	7.3	6.0
7	---	17	17	15	15	16	23	14	9.7	9.7	7.1	5.5
8	---	17	16	15	15	15	21	14	8.9	9.8	7.0	5.5
9	---	16	121	15	15	13	27	13	10	9.7	7.1	5.4
10	---	16	37	14	21	11	19	13	11	12	6.7	5.4
11	---	15	19	14	20	11	18	13	10	12	6.4	5.4
12	---	21	16	14	19	14	17	19	9.7	12	6.4	5.5
13	---	22	34	13	18	171	18	16	18	12	6.9	6.1
14	---	19	33	13	17	88	18	15	23	26	6.7	5.7
15	---	17	19	13	16	42	17	31	12	16	6.9	5.6
16	---	16	14	13	18	27	17	15	11	14	8.0	6.4
17	---	16	13	21	17	21	20	14	10	14	7.9	12
18	---	16	13	20	17	18	15	45	9.8	13	7.1	10
19	---	17	16	14	19	17	16	24	9.8	12	7.4	7.2
20	---	20	19	13	20	17	15	16	9.9	11	7.2	6.1
21	---	17	17	13	19	16	16	14	9.7	10	6.5	5.7
22	---	15	17	13	19	26	18	13	9.9	10	11	5.8
23	---	15	17	13	59	34	14	13	10	9.9	19	7.9
24	---	17	16	13	53	20	16	13	13	8.9	16	7.6
25	---	15	18	45	37	18	22	13	15	8.5	13	6.8
26	---	15	137	23	28	23	41	12	11	9.2	8.8	6.2
27	---	14	82	16	22	18	29	11	10	11	7.9	6.2
28	---	13	28	15	20	17	18	13	15	10	7.5	7.8
29	---	13	20	14	---	67	16	13	20	9.7	7.7	7.7
30	---	16	17	14	---	46	16	12	12	9.2	7.6	10
31	---	---	18	14	---	43	---	11	---	8.9	6.4	---
Total	---	501	937	501	590	919	595	490	349.9	348.2	260.1	199.9
Mean	---	16.7	30.2	16.2	21.1	29.6	19.8	15.8	11.7	11.2	8.39	6.66
Max	---	22	137	45	59	171	41	45	23	26	19	12
Min	---	13	13	13	13	11	14	11	8.9	8.5	6.4	5.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	10.4	11.9	12.8	12.5	13.1	14.0	13.4	12.0	10.8	10.7	10.8	10.3
Max	16.1	20.1	30.2	19.5	21.1	29.6	22.9	18.3	20.8	27.7	28.1	23.1
(WY)	(2006)	(1973)	(2010)	(1976)	(1973)	(2010)	(1973)	(1958)	(2003)	(1975)	(1971)	(1975)
Min	6.49	6.37	6.58	6.60	8.16	8.16	7.80	5.93	4.72	3.18	3.44	5.12
(WY)	(1966)	(1966)	(1966)	(1966)	(1974)	(1966)	(1965)	(1965)	(1966)	(1966)	(1966)	(1968)

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SUMMARY STATISTICS

	Nov 1, 2009 – Sep 30, 2010		Water Years 1940 - 2010	
Annual mean			11.7	
Highest annual mean			16.6	1975
Lowest annual mean			6.44	1966
Highest daily mean	171	Mar 13	470	Aug 27, 1971
Lowest daily mean	5.4	Sep 9-11	2.6	Jul 15, 1966
Annual seven-day minimum			2.7	Jul 12, 1966
Maximum peak flow	377	Mar 13	^a 4,200	Sep 1, 1940
Maximum peak stage	5.04	Mar 13	^b 6.64	Sep 1, 1940
Instantaneous low flow	5.0	Sep 12	2.3	Sep 30, 2001
10 percent exceeds			17	
50 percent exceeds			10	
90 percent exceeds			6.7	

^a By computation of peak flow over dam and earthen dike (assuming peak occurred before earthen dike failed)

^b Gage heights are from above Wadsworth Dam prior to November 2009

