

Water-Data Report 2007

01410225 MORSES MILL STREAM AT PORT REPUBLIC, NJ

MULLICA RIVER BASIN

LOCATION.--Lat 39°30'23", long 74°30'20" referenced to North American Datum of 1983, Galloway Township, Atlantic County, NJ, Hydrologic Unit 02040301, at bridge on Moss Mill Road (County Alternate Route 561), 0.6 mi upstream of Mill Pond, and 1.2 mi southwest of Port Republic.

DRAINAGE AREA.--8.25 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1986-1993. Continuous-record gaging station, October 2004 to September 2007 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 10 ft above NAVD of 1988, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Occasional regulation from ponds upstream. Several measurements of water temperature were made during the year. Satellite gage-height telemetry at station.

01410225 MORSES MILL STREAM AT PORT REPUBLIC, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	7.2	12	17	19	12	14	12	14	6.6	5.3	4.5	2.5
2	7.1	11	17	27	12	25	12	13	6.8	5.1	3.8	2.2
3	6.7	10	15	24	13	26	12	13	8.2	5.0	3.3	2.0
4	6.4	9.9	15	19	12	21	15	12	31	5.2	3.0	1.9
5	6.1	9.6	15	17	11	17	20	12	e33	5.3	2.7	1.8
6	9.7	9.6	14	17	11	15	18	12	22	5.1	2.7	1.8
7	13	9.5	13	16	11	14	15	12	15	4.9	2.8	1.7
8	10	22	12	28	11	14	13	12	11	4.6	2.8	1.7
9	8.6	30	12	36	10	13	13	12	9.7	4.3	2.6	1.7
10	7.8	24	12	27	10	13	12	11	8.5	4.1	2.8	1.7
11	7.9	19	12	20	10	13	12	11	8.1	4.2	2.7	2.0
12	9.5	19	12	18	10	13	17	10	9.0	4.1	2.5	2.1
13	8.1	38	12	17	10	13	27	11	9.5	3.8	2.3	1.9
14	7.3	39	12	17	21	12	22	11	8.6	3.7	2.1	1.8
15	7.0	29	12	16	26	12	23	10	8.1	3.6	2.0	3.5
16	6.6	23	12	16	21	19	49	10	7.9	3.6	2.0	3.3
17	8.3	25	11	15	18	34	46	12	7.4	3.6	2.2	2.6
18	17	23	11	14	15	30	32	12	7.1	4.1	2.1	2.3
19	14	20	11	15	14	22	25	11	6.8	5.7	2.1	2.1
20	14	18	10	15	13	20	17	11	7.0	4.9	3.2	2.0
21	14	17	11	14	13	17	18	9.9	7.0	4.2	6.8	1.9
22	11	17	11	14	9.4	15	18	9.2	6.5	3.9	8.5	1.9
23	10	29	18	14	4.5	15	17	8.7	6.1	4.0	6.7	1.9
24	9.5	36	18	13	11	17	17	8.9	5.9	4.0	5.5	1.9
25	8.9	31	16	13	12	16	16	8.8	6.0	3.8	4.5	1.9
26	8.4	25	25	13	16	15	15	8.4	6.0	3.7	3.9	1.9
27	8.5	21	23	13	17	14	15	8.7	5.7	3.7	3.4	1.9
28	20	19	18	13	15	9.7	16	8.6	5.6	3.6	3.1	1.8
29	21	18	16	13	---	9.3	15	8.1	5.6	5.3	3.1	1.8
30	16	17	14	12	---	12	15	7.6	5.6	6.8	2.9	1.9
31	13	---	13	12	---	12	---	6.8	---	5.4	2.7	---
Total	322.6	630.6	440	537	368.9	512.0	574	325.7	291.3	138.6	105.3	61.4
Mean	10.4	21.0	14.2	17.3	13.2	16.5	19.1	10.5	9.71	4.47	3.40	2.05
Max	21	39	25	36	26	34	49	14	33	6.8	8.5	3.5
Min	6.1	9.5	10	12	4.5	9.3	12	6.8	5.6	3.6	2.0	1.7
Cfsm	1.26	2.55	1.72	2.10	1.60	2.00	2.32	1.27	1.18	0.54	0.41	0.25
In.	1.45	2.84	1.98	2.42	1.66	2.31	2.59	1.47	1.31	0.62	0.47	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.49	11.5	11.4	14.9	12.6	13.2	14.2	9.50	7.66	5.59	3.56	5.25
Max	10.4	21.0	14.2	18.4	13.5	16.5	19.1	10.5	9.71	6.88	3.64	11.4
(WY)	(2007)	(2007)	(2007)	(2006)	(2006)	(2007)	(2007)	(2007)	(2007)	(2006)	(2006)	(2006)
Min	5.12	6.21	9.45	8.89	11.1	8.94	8.45	7.62	6.30	4.47	3.40	2.05
(WY)	(2005)	(2006)	(2005)	(2005)	(2005)	(2006)	(2006)	(2006)	(2006)	(2007)	(2007)	(2007)

01410225 MORSES MILL STREAM AT PORT REPUBLIC, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2005 - 2007	
Annual total	3,965.3		4,307.4			
Annual mean	10.9		11.8		9.72	
Highest annual mean					11.8	2007
Lowest annual mean					8.31	2005
Highest daily mean	39	Nov 14	49	Apr 16	49	Apr 16, 2007
Lowest daily mean	1.4	Mar 17	1.7	Sep 7-10	1.4	Mar 17, 2006
Annual seven-day minimum	1.7	Aug 20	1.8	Sep 4	1.7	Aug 20, 2006
Maximum peak flow			57	Apr 16	57	Apr 16, 2007
Maximum peak stage			9.60	Apr 16	9.60	Apr 16, 2007
Instantaneous low flow			1.6	Sep 8-11	0.90	Jan 4, 2005
Annual runoff (cfsm)	1.32		1.43		1.18	
Annual runoff (inches)	17.88		19.42		16.01	
10 percent exceeds	20		21		18	
50 percent exceeds	9.0		11		8.5	
90 percent exceeds	4.0		2.6		2.9	

