Water-Data Report 2011

011058837 QUASHNET RIVER AT WAQUOIT VILLAGE, MA

MASSACHUSETTS-RHODE ISLAND COASTAL BASIN
CAPE COD SUBBASIN

LOCATION.--Lat 41°35′32″, long 70°30′30″ referenced to North American Datum of 1927, Barnstable County, MA, Hydrologic Unit 01090002, on right bank 15 ft upstream from bridge on Martins Road, 0.5 mi northeast of Waquoit Village, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--2.58 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS.--WDR MA-RI-92-1: 1990 (M), 1991.

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 0.86 ft above National Geodetic Vertical Datum of 1929.

COOPERATION.--Massachusetts Department of Conservation and Recreation, Office of Water Resources; and Massachusetts Department of Environmental Protection, Office of Watershed Management.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. Flow at times includes overflow and leakage from Johns Pond. Occasional regulation by cranberry bog upstream. Occasional backwater from tidal surge. Surface drainage, from topography, about 2.58 mi^2, excludes area drained by Johns Pond. This stream drains from a ground-water basin which is larger or smaller than, and not coincident with, the surface-water basin.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 011058837, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/011058837.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18	16	18	16	16	19	28	26	24	21	17	19
2	21	15	19	17	21	21	25	26	24	21	18	19
3	19	15	18	18	21	18	24	26	23	22	19	19
4	18	16	18	16	18	21	24	26	21	21	18	18
5	18	18	18	15	18	22	24	27	21	21	18	19
6	23	17	17	15	23	23	22	26	21	20	17	20
7	25	17	17	15	20	24	22	26	20	20	19	22
8	23	23	17	15	21	23	23	26	20	21	20	30
9	21	23	17	15	20	22	24	25	22	26	19	29
10	20	22	16	15	19	21	24	25	24	24	19	26
11	20	22	16	14	18	23	23	25	23	23	19	25
12	20	20	17	17	18	23	23	25	28	22	18	24
13	19	20	20	16	18	22	36	25	27	21	18	23
14	19	20	19	15	18	22	38	25	26	24	18	21
15	23	20	18	16	18	22	32	25	25	22	26	21
16	21	20	18	15	18	24	29	27	24	21	34	21
17	19	22	17	15	18	24	30	28	24	21	29	20
18	19	21	17	17	18	23	28	28	24	20	26	20
19	18	20	17	21	19	23	27	32	23	20	23	20
20	18	20	18	18	18	23	27	30	22	19	22	20
21	17	20	19	18	18	24	27	28	22	19	21	19
22	17	20	18	17	18	24	26	27	22	19	21	19
23	16	20	18	16	18	23	26	27	28	18	20	20
24	16	19	18	16	18	23	27	27	27	18	20	24
25	17	19	18	16	24	23	26	27	25	18	20	22
26	17	19	18	16	24	23	26	26	24	18	20	21
27	17	19	19	18	21	23	26	26	23	18	20	21
28	17	19	17	17	23	25	27	25	23	18	21	20
29	16	18	16	17	---	22	29	25	22	18	20	22
30	16	18	16	16	---	22	27	24	21	18	19	23
31	16	---	16	16	---	23	---	24	---	17	19	---
Total	584	578	545	504	542	698	800	815	703	629	638	647
Mean	18.8	19.3	17.6	16.3	19.4	22.5	26.7	26.3	23.4	20.3	20.6	21.6
Max	25	23	20	21	24	25	38	32	28	26	34	30
Min	16	15	16	14	16	18	22	24	20	17	17	18
Cfsm	7.30	7.47	6.81	6.30	7.50	8.73	10.3	10.2	9.08	7.86	7.98	8.36
In.	8.42	8.33	7.86	7.27	7.81	10.06	11.53	11.75	10.14	9.07	9.20	9.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.8	15.7	15.4	15.4	16.3	18.9	21.7	21.2	19.6	16.8	15.7	15.5
Max	25.0	24.2	28.9	29.1	31.2	39.7	34.5	31.1	32.5	29.5	24.6	22.7
(WY)	(2010)	(2010)	(2010)	(2010)	(2010)	(2010)	(2010)	(2010)	(2006)	(2006)	(2006)	(2009)
Min	10.2	11.2	9.56	9.02	8.50	9.20	12.9	11.7	12.2	10.5	9.50	10.7
(WY)	(1996)	(2002)	(1996)	(2002)	(2002)	(2002)	(1992)	(1995)	(1995)	(2002)	(2002)	(1995)

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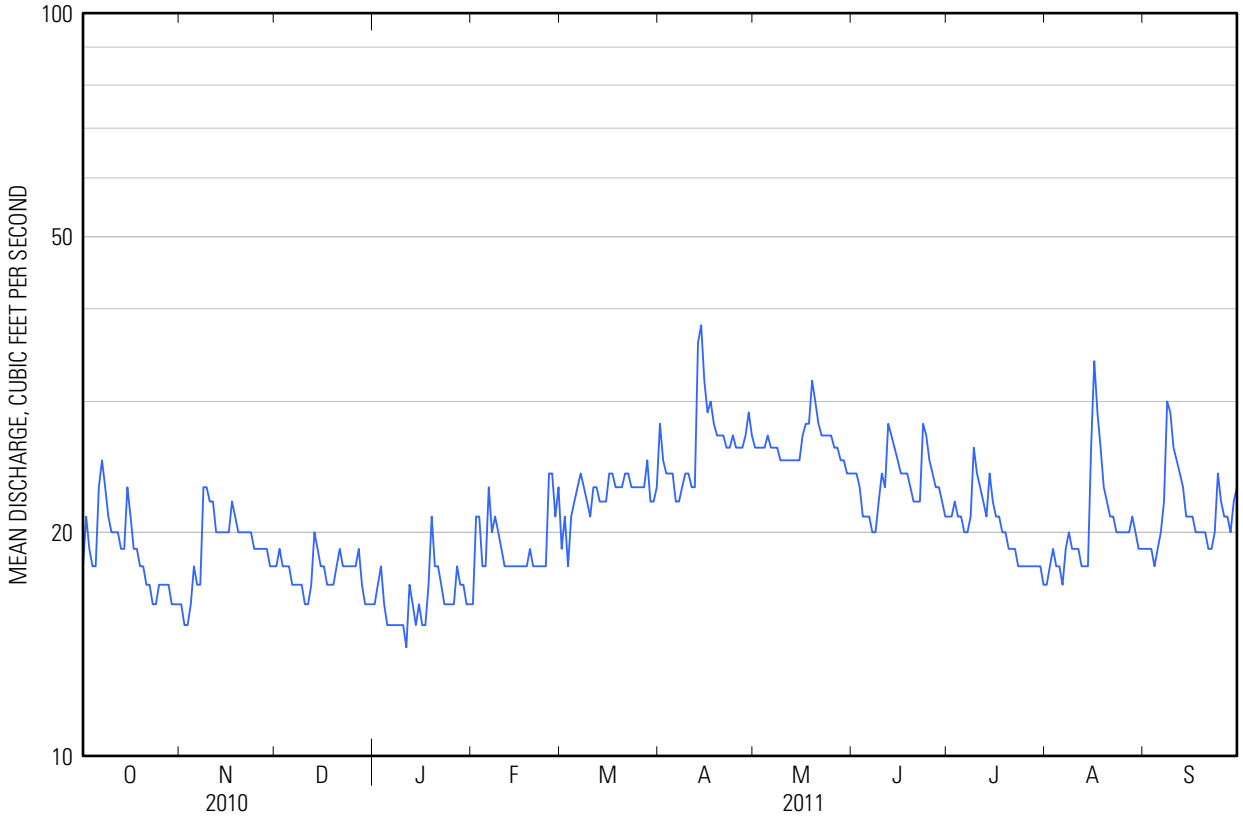
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1989 - 2011	
Annual total	9,240		7,683			
Annual mean	25.3		21.0		17.2	
Highest annual mean					27.2	2010
Lowest annual mean					11.0	2002
Highest daily mean	47	Mar 14	38	Apr 14	48	Jun 7, 2006
Lowest daily mean	15	Nov 2	14	Jan 11	5.9	Oct 24, 1995
Annual seven-day minimum	16	Oct 29	15	Jan 5	6.8	Jan 15, 2002
Maximum peak flow			[a]44	Apr 13	[b]83	Oct 28, 2006
Maximum peak stage			[c]3.58	Aug 28	[c]4.55	Aug 19, 1991
Instantaneous low flow			14	Jan 10	5.7	Oct 24, 1995
Annual runoff (cfsm)	9.81		8.16		6.68	
Annual runoff (inches)	[d]133.23		[d]110.78		[d]90.81	
10 percent exceeds	36		26		25	
50 percent exceeds	23		20		16	
90 percent exceeds	17		17		11	

[a] Gage height associated with peak flow, 3.03 ft.
[b] Gage height associated with peak flow, 3.81 ft.
[c] Affected by tidal backwater.
[d] Extremely high runoff is likely due to groundwater contributions from outside the topographic surface-water basin.