

Water-Data Report 2011

04282805 BARTLETT BROOK AT SOUTH BURLINGTON, VT

Richelieu Basin
Winooski Subbasin

LOCATION.--Lat 44°25'34", long 73°12'54" referenced to North American Datum of 1983, Chittenden County, Hydrologic Unit 02010003, on left bank, 10 ft downstream of Road, 530 ft upstream from mouth, 720 ft south of Bartlett Bay Road and Brigham Road intersection, and 1.5 mi south of Shelburne Road (Rte 7) and Interstate 189 intersection in South Burlington.

DRAINAGE AREA.--1.04 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records: July 2010 to Sept. 2011.

GAGE.--Water-stage recorder. Datum of gage is 115 ft above North American Vertical Datum of 1988, from topographic map.

COOPERATION.--State of Vermont Agency of Natural Resources and the University of Vermont.

REMARKS.--Records fair except for those for estimated daily discharges, which are poor.

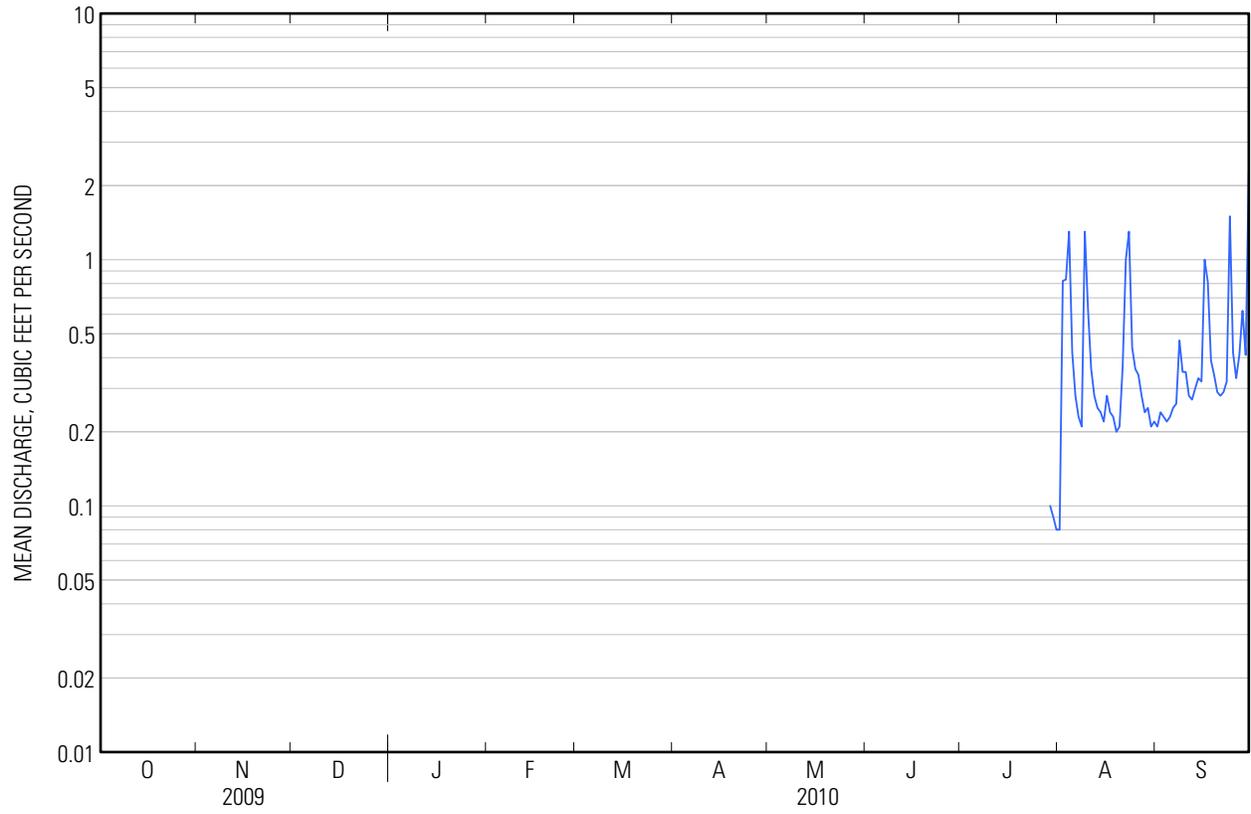
EXTREMES FOR CURRENT YEAR.--Maximum discharge, 133 ft³/s, Apr. 26, gage height, 3.39 ft; minimum discharge, 0.13 ft³/s, July 22, 23, gage height, 1.00 ft.

04282805 BARTLETT BROOK AT SOUTH BURLINGTON, VT—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	---	---	0.08	0.21
2	---	---	---	---	---	---	---	---	---	---	0.82	0.24
3	---	---	---	---	---	---	---	---	---	---	0.83	0.23
4	---	---	---	---	---	---	---	---	---	---	1.3	0.22
5	---	---	---	---	---	---	---	---	---	---	0.42	0.23
6	---	---	---	---	---	---	---	---	---	---	0.28	0.25
7	---	---	---	---	---	---	---	---	---	---	e0.23	0.26
8	---	---	---	---	---	---	---	---	---	---	e0.21	0.47
9	---	---	---	---	---	---	---	---	---	---	e1.3	0.35
10	---	---	---	---	---	---	---	---	---	---	0.63	0.35
11	---	---	---	---	---	---	---	---	---	---	0.36	0.28
12	---	---	---	---	---	---	---	---	---	---	0.28	0.27
13	---	---	---	---	---	---	---	---	---	---	0.25	0.30
14	---	---	---	---	---	---	---	---	---	---	0.24	0.33
15	---	---	---	---	---	---	---	---	---	---	0.22	0.32
16	---	---	---	---	---	---	---	---	---	---	0.28	1.0
17	---	---	---	---	---	---	---	---	---	---	0.24	0.81
18	---	---	---	---	---	---	---	---	---	---	0.23	0.39
19	---	---	---	---	---	---	---	---	---	---	0.20	0.34
20	---	---	---	---	---	---	---	---	---	---	0.21	0.29
21	---	---	---	---	---	---	---	---	---	---	0.37	0.28
22	---	---	---	---	---	---	---	---	---	---	1.0	0.29
23	---	---	---	---	---	---	---	---	---	---	1.3	0.32
24	---	---	---	---	---	---	---	---	---	---	0.44	1.5
25	---	---	---	---	---	---	---	---	---	---	0.36	0.42
26	---	---	---	---	---	---	---	---	---	---	0.34	0.33
27	---	---	---	---	---	---	---	---	---	---	0.28	0.41
28	---	---	---	---	---	---	---	---	---	---	0.24	0.62
29	---	---	---	---	---	---	---	---	---	0.10	0.25	0.41
30	---	---	---	---	---	---	---	---	---	0.09	0.21	2.3
31	---	---	---	---	---	---	---	---	---	0.08	0.22	---
Total	---	---	---	---	---	---	---	---	---	---	13.62	14.02
Mean	---	---	---	---	---	---	---	---	---	---	0.44	0.47
Max	---	---	---	---	---	---	---	---	---	---	1.3	2.3
Min	---	---	---	---	---	---	---	---	---	---	0.08	0.21
Cfsm	---	---	---	---	---	---	---	---	---	---	0.42	0.45
In.	---	---	---	---	---	---	---	---	---	---	0.49	0.50

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	9.1	0.90	4.7	e1.3	e0.29	e0.40	1.8	1.8	1.7	0.58	0.24	0.60
2	1.9	0.75	4.9	e2.5	e0.32	e0.38	2.1	1.4	1.2	0.54	0.24	0.52
3	0.90	0.70	1.7	1.2	e0.33	e0.43	2.0	4.9	1.1	1.8	0.24	0.45
4	0.76	1.3	1.2	e0.70	e0.33	e0.61	2.9	15	0.99	0.97	0.22	0.51
5	0.69	3.9	1.0	e0.63	e0.33	e0.96	6.8	7.0	0.94	0.56	0.21	e7.2
6	1.7	1.9	0.90	e0.56	e0.32	e6.0	5.4	3.7	0.84	1.9	0.22	e18
7	2.1	1.3	0.79	e0.51	e0.31	e3.0	3.3	2.6	0.84	1.6	0.28	6.5
8	1.2	e2.4	0.69	e0.47	e0.32	e2.1	2.6	1.8	0.79	0.65	0.25	5.6
9	0.99	e3.7	e0.58	e0.43	e0.31	e1.6	2.4	1.4	2.8	0.52	0.96	2.7
10	0.61	1.8	e0.56	e0.40	e0.32	e1.4	3.8	1.2	2.1	0.49	1.8	1.8
11	0.53	1.3	0.56	e0.38	e0.31	5.1	11	1.1	1.9	0.47	0.52	1.4
12	0.53	1.0	1.4	e0.38	e0.30	5.5	5.6	0.97	3.1	0.96	0.32	1.1
13	0.48	0.96	9.2	e0.36	e0.29	4.3	4.3	0.89	1.5	0.63	0.29	1.0
14	0.47	0.85	2.2	e0.34	e0.30	3.4	4.1	1.3	1.0	0.52	0.29	0.99
15	8.1	0.83	1.1	e0.32	e0.32	2.4	3.0	7.7	0.85	0.42	0.98	2.0
16	6.8	0.81	0.88	e0.31	e0.34	3.1	2.7	9.4	0.76	0.36	1.2	1.1
17	2.0	2.0	0.74	e0.29	e0.39	7.7	4.1	6.7	0.68	0.36	0.48	0.87
18	1.3	1.2	0.69	e0.34	e1.6	17	2.8	3.4	0.66	0.41	0.37	0.76
19	1.0	0.91	0.63	e0.32	e2.7	7.1	2.3	4.0	0.60	0.36	0.32	0.67
20	0.83	0.82	0.57	e0.30	e1.5	3.9	9.4	4.2	0.54	0.29	0.29	0.99
21	1.3	0.74	0.54	e0.30	e0.98	3.5	5.5	5.4	0.52	0.27	0.33	0.73
22	1.0	0.76	0.54	e0.26	e0.79	3.3	3.7	2.5	0.67	0.23	0.31	0.67
23	0.74	1.00	0.53	e0.25	e0.60	2.5	3.7	1.7	1.5	0.24	0.29	0.64
24	0.99	1.1	0.50	e0.24	e0.48	2.1	3.1	1.4	1.4	0.28	0.26	3.4
25	1.1	0.81	e0.46	e0.26	e0.39	1.8	2.7	1.1	2.2	0.26	0.28	1.1
26	0.96	0.92	e0.45	e0.29	e0.34	1.5	18	3.4	1.7	0.33	0.27	0.80
27	1.2	0.80	e0.43	e0.29	e0.33	1.4	26	12	0.94	0.26	0.25	0.71
28	0.82	0.71	e0.42	e0.28	e0.44	1.3	11	11	0.75	0.23	14	0.64
29	0.90	0.70	0.44	e0.27	---	1.3	4.5	5.4	0.65	0.25	4.6	4.8
30	0.92	1.3	0.41	e0.25	---	1.4	2.4	2.8	0.62	0.38	1.2	3.9
31	1.2	---	0.49	e0.24	---	1.5	---	1.8	---	0.26	0.77	---
Total	53.12	38.17	40.20	14.97	15.58	97.98	163.0	128.96	35.84	17.38	32.28	72.15
Mean	1.71	1.27	1.30	0.48	0.56	3.16	5.43	4.16	1.19	0.56	1.04	2.40
Max	9.1	3.9	9.2	2.5	2.7	17	26	15	3.1	1.9	14	18
Min	0.47	0.70	0.41	0.24	0.29	0.38	1.8	0.89	0.52	0.23	0.21	0.45
Cfsm	1.65	1.22	1.25	0.46	0.54	3.04	5.22	4.00	1.15	0.54	1.00	2.31
In.	1.90	1.37	1.44	0.54	0.56	3.50	5.83	4.61	1.28	0.62	1.15	2.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2010 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.71	1.27	1.30	0.48	0.56	3.16	5.43	4.16	1.19	0.56	0.74	1.44
Max	1.71	1.27	1.30	0.48	0.56	3.16	5.43	4.16	1.19	0.56	1.04	2.41
(WY)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)
Min	1.71	1.27	1.30	0.48	0.56	3.16	5.43	4.16	1.19	0.56	0.44	0.47
(WY)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)	(2010)	(2010)

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SUMMARY STATISTICS

	Water Year 2011		Water Years 2010 - 2011	
Annual total	709.63			
Annual mean	1.94		1.94	
Highest annual mean			1.94	2011
Lowest annual mean			1.94	2011
Highest daily mean	26	Apr 27	26	Apr 27, 2011
Lowest daily mean	0.21	Aug 5	0.08	Jul 31, 2010 ^a
Annual seven-day minimum	0.23	Jul 31	0.22	Aug 30, 2010
Maximum peak flow	^b 133	Apr 26	^b 133	Apr 26, 2011
Maximum peak stage	3.39	Apr 26	3.39	Apr 26, 2011
Instantaneous low flow	0.13	Jul 22 ^c	0.07	Jul 30, 2010 ^d
Annual runoff (cfsm)	1.87		1.87	
Annual runoff (inches)	25.38		25.40	
10 percent exceeds	4.7		4.7	
50 percent exceeds	0.92		0.92	
90 percent exceeds	0.29		0.29	

^a Also August 1, 2010.

^b From rating extended above 15 ft³/s on basis of culvert measurements of peak flow at gage heights 2.48 ft, 2.54 ft, and 3.39 ft.

^c Also July 23.

^d Also July 31, 2010 and August 1, 2, 2010.

