Water-Data Report 2007

04282815 ENGLESBY BROOK AT BURLINGTON, VT

Richelieu Basin
Winooski Subbasin

LOCATION.--Lat 44°27′28″, long 73°13′11″ referenced to North American Datum of 1927, Chittenden County, Hydrologic Unit 02010003, on right bank, 125 ft downstream from Vermont Railroad culvert, 0.25 mi upstream from mouth, 0.35 mi downstream from Pine Street culvert, 0.8 mi northwest from junction of US 7 and Interstate 189, 1.3 mi south of City Hall in Burlington.

DRAINAGE AREA.--0.9 mi², (About) Drainage area affected by stormwater diversions.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records: October 1999 to current year. Water-quality records: October 1999 to September 2001.

GAGE.--Concrete control with v-notch weir, water-stage recorder, and crest-stage gage. Elevation of gage is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map.

COOPERATION.--Lake Champlain Basin Program and City of Burlington, VT.

REMARKS.--Records good except those for periods of estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 206 ft³/s, Aug. 31, 2004, gage-height 5.18 ft; no flow for many days in water years 2000-2007.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 46 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec 1	1850	*97	*4.33
No other peak greater than base discharge			

Minimum discharge, 0.00 ft³/s, on many days during June, July, August, and September.

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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	1.6	0.70	9.5	0.96	e0.09	e0.08	0.76	0.18	0.04	0.00	0.02	0.09
2	0.98	0.52	5.7	0.94	e0.13	e0.11	0.80	0.16	0.80	0.01	0.00	0.07
3	0.41	0.39	2.0	0.56	e0.14	0.34	0.84	0.14	0.40	0.02	0.02	0.00
4	0.59	0.32	0.89	0.49	e0.12	0.23	2.3	0.13	0.49	0.02	0.02	0.00
5	0.69	0.28	0.59	0.57	e0.09	e0.14	2.6	0.09	0.36	0.25	0.04	0.00
6	0.25	0.22	0.46	3.7	e0.07	e0.12	1.5	0.06	0.08	0.44	1.3	0.00
7	0.25	0.22	0.44	1.6	e0.07	e0.08	0.87	0.05	0.05	0.46	0.75	0.00
8	0.19	0.31	0.37	1.7	e0.07	e0.04	0.68	0.06	0.03	1.4	0.17	0.00
9	0.13	0.29	0.33	1.0	e0.06	e0.03	0.53	0.05	0.17	3.1	0.05	0.14
10	0.11	0.25	0.32	0.67	e0.06	e0.08	0.42	0.06	0.03	0.46	0.01	0.23
11	0.37	0.77	0.34	0.54	e0.06	0.30	0.38	0.06	0.02	1.2	0.02	0.40
12	1.6	1.8	0.33	0.48	e0.06	0.37	1.1	0.03	0.02	0.59	0.01	0.65
13	1.1	0.91	0.32	0.56	e0.05	0.77	1.5	0.03	0.02	1.7	0.02	0.13
14	0.50	1.7	0.30	0.45	e0.04	2.3	1.5	0.02	0.01	1.2	0.03	0.11
15	0.29	1.4	0.34	e0.40	e0.05	e5.4	2.5	0.05	0.01	0.47	0.01	1.7
16	0.20	1.2	0.31	e0.33	e0.07	e2.0	9.1	1.9	0.00	0.06	0.21	0.49
17	0.24	2.7	0.27	e0.31	e0.08	1.7	3.6	0.56	0.03	0.01	0.49	0.19
18	1.1	1.5	0.22	e0.22	e0.08	1.0	1.4	0.24	0.03	0.08	0.06	0.25
19	0.36	0.90	0.24	0.34	e0.09	0.65	0.80	0.14	0.42	0.38	0.03	0.23
20	8.8	0.65	0.22	0.30	e0.09	0.38	0.62	0.21	0.28	0.88	0.03	0.21
21	4.7	0.50	0.21	0.25	e0.09	0.43	0.51	0.34	0.02	0.45	0.02	0.19
22	1.9	0.41	0.32	e0.20	e0.10	2.0	0.37	0.14	0.01	0.11	0.02	0.19
23	1.5	0.38	1.9	e0.18	e0.09	4.5	0.22	0.12	0.00	0.04	0.02	0.02
24	1.0	0.34	1.1	e0.16	e0.08	2.7	0.26	0.15	0.00	0.02	0.03	0.00
25	0.78	0.42	0.57	e0.11	e0.08	2.1	0.20	0.07	0.00	0.02	0.16	0.00
26	0.55	0.43	2.4	e0.07	e0.08	3.2	0.16	0.05	0.00	0.02	0.14	0.00
27	0.41	0.32	1.4	e0.08	e0.09	4.1	0.28	0.15	0.00	0.02	0.05	0.23
28	3.8	0.31	0.71	e0.07	e0.09	2.1	0.29	0.17	0.00	0.03	0.05	1.2
29	2.8	0.26	0.44	e0.08	---	1.5	0.27	0.05	0.00	0.03	0.05	0.34
30	1.7	0.47	0.39	e0.07	---	1.1	0.36	0.04	0.00	0.04	0.25	0.10
31	0.98	---	0.35	e0.07	---	0.85	---	0.05	---	0.01	0.08	---
Total	39.88	20.87	33.28	17.46	2.27	40.70	36.72	5.55	3.32	13.52	4.16	7.16
Mean	1.29	0.70	1.07	0.56	0.08	1.31	1.22	0.18	0.11	0.44	0.13	0.24
Max	8.8	2.7	9.5	3.7	0.14	5.4	9.1	1.9	0.80	3.1	1.3	1.7
Min	0.11	0.22	0.21	0.07	0.04	0.03	0.16	0.02	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.52	0.61	0.69	0.43	0.43	0.69	1.29	0.91	0.58	0.43	0.52	0.30
Max	1.29	1.11	1.49	1.25	1.59	1.31	2.99	2.15	1.49	1.11	2.67	0.63
(WY)	(2007)	(2004)	(2004)	(2006)	(2000)	(2007)	(2001)	(2006)	(2002)	(2004)	(2004)	(2002)
Min	0.02	0.17	0.12	0.09	0.01	0.08	0.28	0.18	0.11	0.02	0.03	0.13
(WY)	(2002)	(2002)	(2002)	(2001)	(2004)	(2006)	(2006)	(2007)	(2007)	(2001)	(2002)	(2001)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2000 - 2007	
Annual total	286.54		224.89			
Annual mean	0.79		0.62		0.62	
Highest annual mean					0.90	2004
Lowest annual mean					0.40	2003
Highest daily mean	24	May 19	9.5	Dec 1	33	Aug 31, 2004
Lowest daily mean	0.00	Feb 21	[a]0.00	Jun 16	[a]0.00	Oct 2, 1999
Annual seven-day minimum	0.00	Feb 28	0.00	Jun 23	0.00	Jan 17, 2000
Maximum peak flow			[b]97	Dec 1	[b]206	Aug 31, 2004
Maximum peak stage			4.33	Dec 1	5.18	Aug 31, 2004
10 percent exceeds	1.6		1.6		1.5	
50 percent exceeds	0.28		0.25		0.17	
90 percent exceeds	0.01		0.02		0.00	

[a] Also occurred on many days as noted in the Extremes paragraph.
[b] From rating curve extended above 10 ft³/s on basis of culvert computation at gage height 4.84 ft.