04292000 LAMOILLE RIVER AT JOHNSON, VT

Richelieu Basin
Lamoille Subbasin

LOCATION.--Lat 44°37′22″, long 72°40′36″ referenced to North American Datum of 1927, Lamoille County, Hydrologic Unit 02010005, on right bank, above falls, 0.8 mi south of State Highways 15 and 100 C intersection in Johnson, 0.8 mi upstream from Railroad Street bridge in Johnson, 0.9 mi upstream from Gihon River, and 1.0 mi downstream of Waterman Brook.

DRAINAGE AREA.--310.00 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records: July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, February 1913), September 1928 to current year.

REVISED RECORDS.--WSP 894: Drainage area. WSP 1114: 1933, 1934(M). WSP 1237: 1912(M), 1930, 1932(M).

GAGE.--Water-stage recorder. Elevation of gage is 506.7 ft above National Geodetic Vertical Datum of 1929, by levels. Prior to December 31, 1913, nonrecording gage at bridge 0.7 mi downstream at different datum.

COOPERATION.--Vermont Department of Environmental Conservation.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by power plant upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,400 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 21	0415	6,970	12.29
Oct 29	0200	6,090	11.45
May 17	0215	6,830	12.16
Jul 12	0715	*7,570	*12.81

Minimum discharge, 73 ft^3/s, Sept. 24, gage height, 1.93 ft.

04292000 LAMOILLE RIVER AT JOHNSON, VT—Continued

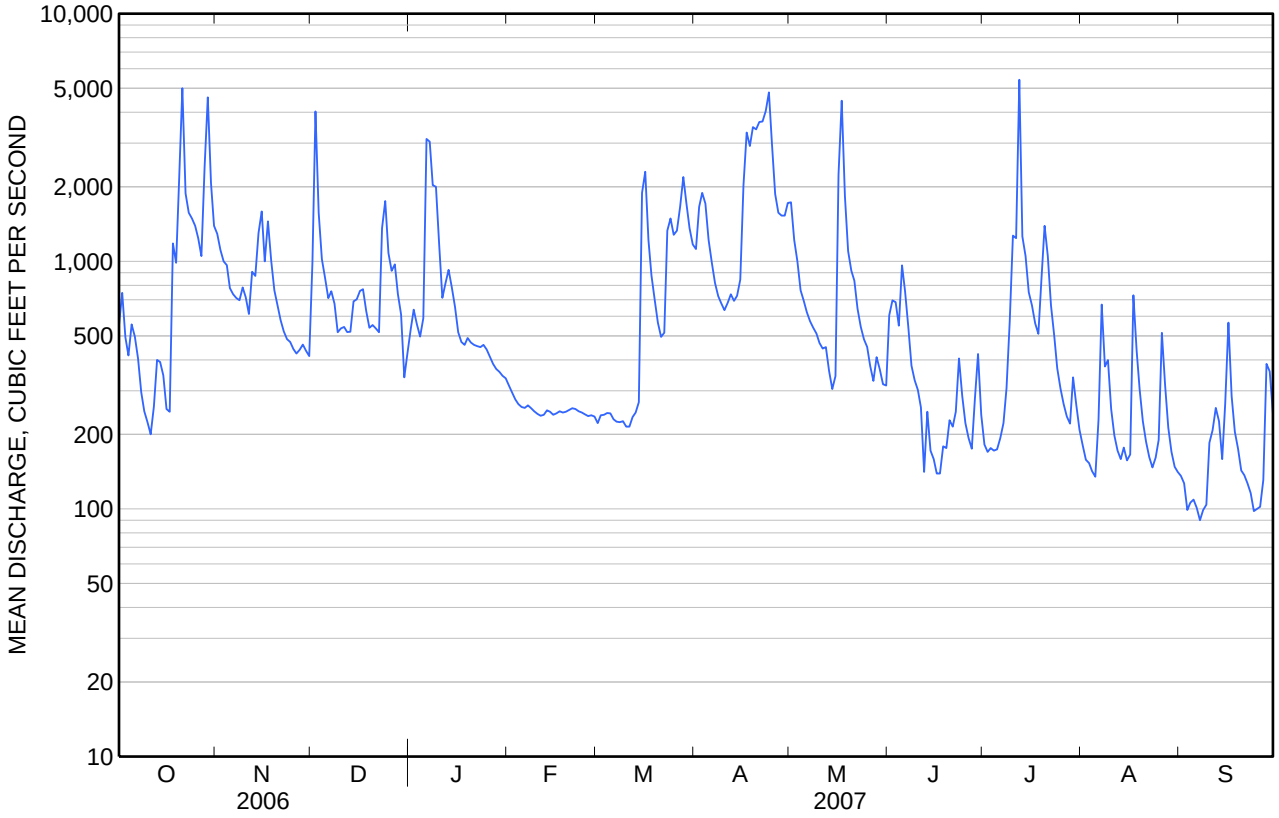
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	551	1,290	990	e530	e315	e222	e1,120	1,730	605	182	181	136
2	746	1,110	4,030	e638	e295	e239	e1,660	1,220	695	170	158	127
3	493	1,000	1,570	e556	e277	e240	e1,890	999	684	176	153	99
4	417	964	1,020	e497	e265	244	1,710	764	550	172	142	106
5	556	779	856	e589	e258	243	1,220	695	963	174	135	109
6	497	737	e710	e3,120	e256	e230	989	623	755	193	229	101
7	405	711	e757	3,040	e262	e225	818	573	545	222	669	90
8	296	696	e674	2,030	e255	224	724	539	379	307	376	99
9	248	784	e517	2,000	e248	226	677	511	331	570	399	104
10	224	716	e536	e1,170	e242	215	635	468	302	1,270	253	185
11	200	613	543	e712	e238	e215	679	444	257	1,240	198	208
12	259	908	518	e817	e240	e235	736	450	141	5,410	172	256
13	400	873	519	e923	e250	e245	692	361	247	1,260	159	226
14	392	1,300	689	e785	e247	e270	726	305	172	1,050	177	159
15	346	1,590	702	e655	e240	e1,890	844	344	159	750	157	268
16	253	999	759	e517	e243	e2,300	2,030	2,240	139	664	166	565
17	247	1,450	772	e472	e248	e1,220	3,310	e4,450	139	562	729	285
18	1,180	1,010	630	e460	e245	e875	2,920	e1,830	179	509	438	205
19	986	764	539	e490	e247	e700	3,480	1,100	176	840	304	175
20	2,150	663	553	e470	251	e565	3,410	917	228	1,390	226	143
21	5,000	579	536	e460	255	e495	3,650	835	215	1,050	187	137
22	1,880	521	517	e454	253	e515	3,670	642	247	663	162	127
23	1,570	485	1,360	e450	248	e1,330	4,040	544	405	502	147	116
24	1,490	472	1,750	e460	245	e1,490	4,810	484	287	370	161	98
25	1,390	442	1,080	e440	241	e1,280	2,980	451	222	307	190	100
26	1,240	424	915	e412	237	e1,330	1,870	378	193	265	514	102
27	1,050	439	972	e385	239	e1,660	1,570	329	175	236	317	131
28	2,400	461	738	e367	236	e2,190	1,530	410	276	221	213	385
29	4,590	435	e610	e358	---	e1,720	1,530	366	422	340	170	359
30	2,070	414	e340	e345	---	e1,360	1,720	319	240	263	148	243
31	1,390	---	e426	e337	---	e1,170	---	315	---	209	141	---
Total	34,916	23,629	27,128	24,939	7,076	25,363	57,640	25,636	10,328	21,537	7,771	5,444
Mean	1,126	788	875	804	253	818	1,921	827	344	695	251	181
Max	5,000	1,590	4,030	3,120	315	2,300	4,810	4,450	963	5,410	729	565
Min	200	414	340	337	236	215	635	305	139	170	135	90
Cfsm	3.63	2.54	2.82	2.60	0.82	2.64	6.20	2.67	1.11	2.24	0.81	0.59
In.	4.19	2.84	3.26	2.99	0.85	3.04	6.92	3.08	1.24	2.58	0.93	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	417	530	475	392	341	722	1,631	801	429	286	257	255
Max	1,481	1,263	1,390	1,163	1,624	2,711	2,868	1,903	1,344	1,028	849	655
(WY)	(1991)	(2004)	(1991)	(2006)	(1981)	(1936)	(1933)	(1972)	(1973)	(1973)	(2004)	(1938)
Min	84.1	140	162	93.0	114	157	556	245	123	88.5	59.1	93.6
(WY)	(1964)	(1954)	(1948)	(1948)	(1934)	(1940)	(1995)	(1965)	(1988)	(1911)	(2001)	(1978)

04292000 LAMOILLE RIVER AT JOHNSON, VT—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1910 - 2007	
Annual total	299,658		271,407			
Annual mean	821		744		546	
Highest annual mean					854	2006
Lowest annual mean					305	1965
Highest daily mean	6,830	May 20	5,410	Jul 12	13,400	Aug 6, 1995
Lowest daily mean	77	Aug 19	90	Sep 7	16	Oct 26, 1947
Annual seven-day minimum	139	Aug 13	101	Sep 3	44	Aug 11, 2001
Maximum peak flow			7,570	Jul 12	19,000	Aug 6, 1995
Maximum peak stage			12.81	Jul 12	19.98	Aug 6, 1995
Instantaneous low flow			73	Sep 24	11	Sep 2, 1935
Annual runoff (cfsm)	2.65		2.40		1.76	
Annual runoff (inches)	35.96		32.57		23.94	
10 percent exceeds	1,610		1,660		1,200	
50 percent exceeds	588		468		300	
90 percent exceeds	199		171		135