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 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records: July to December 1910, June 1911 to December 1913 (monthly discharge only, January toMarch 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. Datum 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 1	2100	10,000	14.62
Apr 11	2345	9,260	14.11
Apr 27	0930	*13,800	*16.97
May 16	0630	5,420	10.75
May 28	0915	6,590	11.94
Aug 29	0630	13,100	16.54

Minimum discharge, 69 ft^3/s, July 19, gage height, 1.86 ft.

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 04292000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/04292000.2011.pdf

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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	7,040	761	945	e467	e208	255	553	1,820	1,260	447	146	687
2	4,670	646	e2,540	e1,390	e205	250	569	1,360	912	368	133	476
3	1,350	530	e1,580	e1,000	e210	e260	679	1,190	787	313	136	397
4	862	513	e1,200	e750	e255	e253	741	2,420	676	304	138	381
5	662	1,170	e863	e577	237	e280	1,700	2,500	596	272	146	553
6	553	1,420	e684	e463	240	e660	1,760	1,820	571	270	122	1,950
7	643	845	e585	e430	249	e1,730	1,100	1,290	507	564	119	1,180
8	700	726	e518	e416	e257	e1,190	1,110	1,060	450	362	129	1,270
9	1,010	1,050	e480	e386	e245	e920	1,430	913	439	269	110	901
10	667	1,100	e446	e370	e241	e812	2,330	760	649	242	213	682
11	527	882	e470	e350	e238	e830	7,310	704	568	222	186	519
12	516	797	e497	e358	e233	e1,640	7,850	644	988	392	137	383
13	460	629	e2,750	374	e235	e1,540	5,100	595	1,010	446	122	340
14	439	539	e1,980	381	233	e1,080	3,890	566	799	333	112	370
15	1,690	519	e1,260	370	e252	e820	2,820	2,010	596	278	167	484
16	3,260	479	e830	371	248	e730	2,050	4,480	457	255	1,270	710
17	1,560	879	e705	e320	248	e733	2,780	3,610	379	230	817	457
18	1,010	1,360	e604	e360	e290	e1,220	2,810	1,830	586	185	372	358
19	805	881	e573	362	e495	e2,400	1,970	1,370	611	103	247	308
20	686	732	e522	286	528	e1,400	3,650	1,360	402	103	190	301
21	576	646	e488	277	407	e1,010	3,700	2,700	332	90	170	316
22	635	571	e470	e270	329	864	2,120	1,820	293	140	300	293
23	527	580	e459	e268	294	759	1,980	1,110	360	137	267	289
24	469	642	e431	e270	269	662	1,990	1,020	934	146	187	468
25	461	627	e379	e250	264	647	2,160	867	1,020	179	154	612
26	462	577	e389	e275	260	539	4,040	803	1,260	195	226	419
27	626	572	e393	e255	251	549	10,800	4,560	877	203	384	328
28	910	456	e402	e240	251	515	6,250	5,580	543	164	2,670	287
29	648	447	e388	e230	---	483	4,510	3,420	424	142	8,900	311
30	599	425	e350	e225	---	468	2,460	2,910	416	179	1,830	1,880
31	724	---	e336	e217	---	503	---	1,750	---	171	967	---
Total	35,747	22,001	24,517	12,558	7,672	26,002	92,212	58,842	19,702	7,704	21,067	17,910
Mean	1,153	733	791	405	274	839	3,074	1,898	657	249	680	597
Max	7,040	1,420	2,750	1,390	528	2,400	10,800	5,580	1,260	564	8,900	1,950
Min	439	425	336	217	205	250	553	566	293	90	110	287
Cfsm	3.72	2.37	2.55	1.31	0.88	2.71	9.92	6.12	2.12	0.80	2.19	1.93
In.	4.29	2.64	2.94	1.51	0.92	3.12	11.07	7.06	2.36	0.92	2.53	2.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	427	539	486	397	341	728	1,644	809	434	300	271	256
Max	1,481	1,263	1,390	1,163	1,624	2,711	3,074	1,903	1,344	1,076	916	655
(WY)	(1991)	(2004)	(1991)	(2006)	(1981)	(1936)	(2011)	(1972)	(1973)	(2008)	(2008)	(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)

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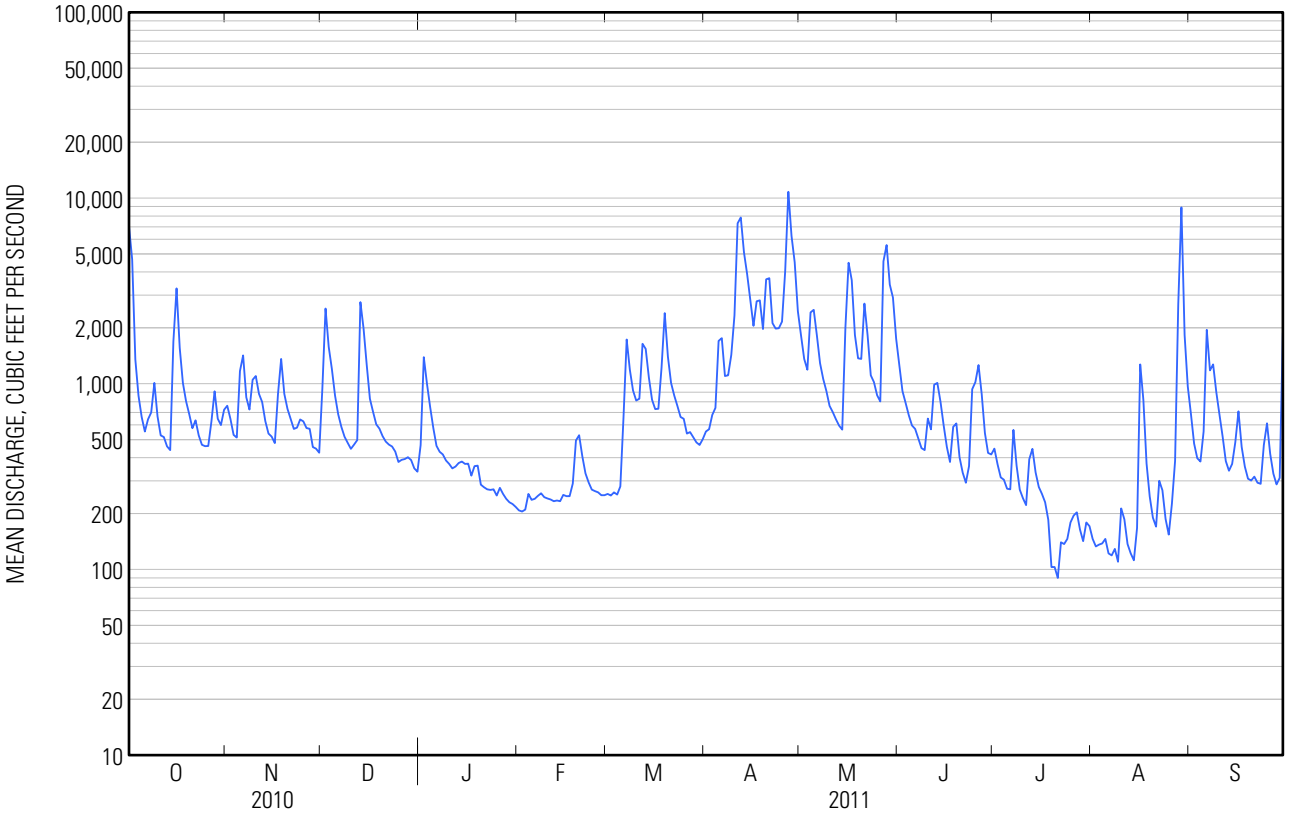
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1910 - 2011	
Annual total	227,278		345,934			
Annual mean	623		948		555	
Highest annual mean					948	2011
Lowest annual mean					305	1965
Highest daily mean	7,040	Oct 1	10,800	Apr 27	13,400	Aug 6, 1995
Lowest daily mean	43	Aug 1	90	Jul 21	16	Oct 26, 1947
Annual seven-day minimum	76	Aug 31	128	Jul 19	44	Aug 11, 2001
Maximum peak flow			13,800	Apr 27	19,000	Aug 6, 1995
Maximum peak stage			16.97	Apr 27	19.98	Aug 6, 1995
Instantaneous low flow			69	Jul 19	11	Sep 2, 1935
Annual runoff (cfsm)	2.01		3.06		1.79	
Annual runoff (inches)	27.27		41.51		24.31	
10 percent exceeds	1,290		2,000		1,210	
50 percent exceeds	461		539		305	
90 percent exceeds	131		215		136