

01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, NH

LOCATION.--Lat 45°02'25", long 71°26'37", Coos County, Hydrologic Unit 01080101, on right bank, 1,200 ft downstream from Indian Stream, 2.5 mi west of Pittsburg, and at mile 376.5.

DRAINAGE AREA.--254 mi².

PERIOD OF RECORD.--Discharge records: October 1956 to current year.

REVISED RECORDS.--WDR MA-NH-RI-VT-73-1: 1958, 1960(M), 1969(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,150 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by First Connecticut and Second Connecticut Lakes and Lake Francis 3.7 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s, April 27 and July 21, 1996, gage height, 7.97 ft, from rating curve extended above 2,600 ft³/s; minimum daily 30 ft³/s, August 6, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,120 ft³/s, March 31, gage height 7.87 ft, from peak stage indicator; minimum daily discharge, 92 ft³/s, May 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	696	320	385	756	886	661	2570	e233	188	1150	259	223
2	695	513	829	754	879	581	1590	e233	141	1020	256	220
3	719	627	850	755	873	450	1320	e260	147	767	252	224
4	712	468	850	769	872	444	878	e310	172	473	277	244
5	721	922	854	831	852	426	574	e231	141	467	358	250
6	743	526	847	1030	844	412	661	e238	144	457	358	234
7	703	348	843	1010	843	398	755	339	154	439	355	252
8	679	271	838	1370	843	397	905	486	204	430	354	258
9	612	247	830	2170	835	406	1170	428	259	424	353	303
10	572	424	816	1160	829	705	1150	347	219	734	352	396
11	565	392	807	598	822	898	1080	307	194	1490	517	304
12	559	293	814	769	829	e645	1050	262	178	1220	529	275
13	555	239	815	1010	853	e538	1130	235	182	1150	418	271
14	551	196	813	961	889	491	1260	218	221	1120	388	265
15	438	203	803	957	883	477	1230	208	235	1060	375	260
16	381	197	806	1000	866	440	812	199	501	1030	397	260
17	381	184	802	1000	858	407	655	189	1030	728	379	335
18	381	165	802	982	737	409	769	183	1110	656	372	365
19	377	173	796	977	668	282	600	175	1040	581	367	362
20	376	176	795	970	668	162	752	136	1020	548	361	358
21	376	172	787	958	663	150	783	113	1020	502	358	358
22	249	181	776	937	658	146	549	110	983	434	358	354
23	180	179	774	916	657	140	e414	107	957	421	354	354
24	182	177	774	911	658	137	e373	104	671	355	354	351
25	179	159	774	920	661	e130	371	100	286	300	320	349
26	179	176	774	913	657	137	e349	96	329	283	257	349
27	185	209	774	903	655	198	e316	95	529	340	263	359
28	209	205	770	901	655	774	e312	101	516	388	256	383
29	218	218	768	897	---	1990	e284	92	425	405	252	371
30	211	213	768	893	---	e2370	e250	100	753	394	251	363
31	233	---	761	886	---	e4470	---	101	---	324	241	---
TOTAL	13817	8773	24495	29864	21893	20271	24912	6336	13949	20090	10541	9250
MEAN	446	292	790	963	782	654	830	204	465	648	340	308
MAX	743	922	854	2170	889	4470	2570	486	1110	1490	529	396
MIN	179	159	385	598	655	130	250	92	141	283	241	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1998, BY WATER YEAR (WY)

MEAN	552	552	741	791	778	555	621	508	383	412	434	445
MAX	1342	1057	1485	1175	1325	1088	1030	1691	863	1187	1043	1095
(WY)	1978	1978	1960	1960	1974	1979	1974	1974	1984	1996	1976	1963
MIN	111	181	384	462	376	209	247	162	80.9	55.7	64.7	111
(WY)	1969	1967	1979	1979	1980	1962	1995	1988	1962	1965	1975	1968

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1957 - 1998

ANNUAL TOTAL	205953	204191										
ANNUAL MEAN	564	559								563		
HIGHEST ANNUAL MEAN										789		1976
LOWEST ANNUAL MEAN										379		1995
HIGHEST DAILY MEAN	1790	May 2			e 4470	Mar 31				e 4470	Mar 31	1998
LOWEST DAILY MEAN	159	Nov 25			92	May 29				30	Aug 6	1965
ANNUAL SEVEN-DAY MINIMUM	174	Nov 19			98	May 25				33	Aug 20	1975
INSTANTANEOUS PEAK FLOW					5120	Mar 31				ab 5260	Apr 27	1996
INSTANTANEOUS PEAK STAGE					c 7.87	Mar 31				b 7.97	Apr 27	1996
10 PERCENT EXCEEDS	840				979					1020		
50 PERCENT EXCEEDS	565				428					517		
90 PERCENT EXCEEDS	211				179					152		

a From rating curve extended above 2,600 ft³/s.
 b Also occurred on July 21, 1996.
 c From peak stage indicator.
 e Estimated.

CONNECTICUT RIVER BASIN

01129440 MOHAWK RIVER NEAR COLEBROOK, NH

LOCATION--Lat 44°52'28", Long 71°24'38", Coos County, Hydrologic Unit 01080101, on right bank, upstream of Bungy Road Bridge, south of the intersection of State Highway 26 and Bungy Road, 0.8 mi upstream of Read Brook, 1.7 mi downstream of Roaring Brook, 5 mi east of Colebrook, and 5.5 mi west of Dixville Notch.

DRAINAGE AREA--36.7 mi².

PERIOD OF RECORD--Discharge records: October 1986 to current year.

GAGE--Water-stage recorder and crest-stage gage. Elevation of gage is 1,190 ft above sea level, from topographic map.

REMARKS--Records good except those for estimated daily discharges and period March 29 to April 6, which are fair, and estimated daily discharges during period February 5-18, which are poor.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 2	2300	793	6.49	Mar. 31	0145	* 4,880	* 10.99
Nov. 4	2230	656	6.29	June 27	1200	506	6.29
Mar. 10	1245	505	6.03	July 11	0800	741	6.83
Mar. 29	1645	1,340	7.03	Aug. 11	0800	736	6.82

Minimum discharge, 14 ft³/s, September 1-2, 27.

REVISIONS--The peak discharges and annual maximum (*) reported for water years 1987, 1988, 1989, 1990, 1991, 1992, 1994, 1996, and 1997 have been revised as shown in the following table. They supersede figures published in the reports for 1987, 1988, 1989, 1990, 1991, 1992, 1994, 1996, and 1997.

Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
1987	Apr. 01, 1987	0131	* 4,500	* 8.93	1989	May 06, 1989	1030	984	6.74
1987	May 24, 1987	0200	794	6.50	1989	May 12, 1989	1030	1,070	6.84
1987	June 08, 1987	1615	917	6.66	1990	Mar. 17, 1990	1800	* 2,090	* 7.71
1988	Mar. 26, 1988	1240	765	6.46	1991	Dec. 23, 1989	1445	* 2,530	* 7.99
1988	Apr. 05, 1988	1340	* 1,650	* 7.38	1992	Oct. 06, 1991	----	* 2,370	* 7.89
1988	Apr. 29, 1988	0545	1,190	6.97	1994	Apr. 16, 1994	----	* 2,420	* 7.92
1988	Aug. 07, 1988	0445	925	6.67	1996	Jan. 19, 1996	2300	2,760	8.12
1988	Aug. 15, 1988	1400	1,120	6.89	1996	Apr. 23, 1996	2245	* 3,970	8.71
1989	Nov. 02, 1988	0950	702	6.37	1996	Apr. 27, 1996	0015	3,020	8.26
1989	Mar. 29, 1989	0415	* 2,620	* 8.04	1996	May 01, 1996	0445	1,820	7.51
1989	Apr. 06, 1989	2215	1,110	6.88	1997	Dec. 02, 1996	0945	* 2,800	* 8.14
1989	May 02, 1989	1330	1,470	7.23					

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	69	39	e21	42	67	1170	49	122	130	29	15
2	41	237	e34	e21	46	72	670	61	41	84	26	15
3	33	239	e35	e28	49	64	461	72	57	59	23	19
4	25	145	e38	e66	e41	54	274	71	63	49	21	38
5	39	241	38	e74	e40	46	194	62	47	87	19	20
6	30	97	38	e104	e38	42	156	128	41	57	18	17
7	24	75	37	e115	e38	e40	154	95	44	45	17	32
8	22	63	35	222	e42	38	168	99	142	41	17	24
9	21	63	e33	203	e38	76	170	108	89	38	16	57
10	21	85	e33	100	e44	331	150	77	53	162	16	53
11	19	67	e29	80	e47	144	127	65	44	353	252	30
12	18	54	e27	e63	e85	86	126	54	37	140	65	27
13	17	46	e28	e73	e168	e73	132	47	104	85	34	27
14	16	e42	e30	e63	e80	e68	129	43	288	66	26	23
15	16	46	e28	e62	e55	e62	124	39	141	52	23	22
16	18	45	e28	e62	e62	e57	126	36	233	75	50	24
17	17	e43	e29	e61	e69	e53	198	36	159	172	28	20
18	16	42	e30	e58	e65	e50	188	35	138	112	24	19
19	16	41	e31	e55	65	47	113	30	104	58	23	18
20	17	40	e30	e53	54	46	255	25	91	51	20	20
21	17	41	e25	e53	48	43	155	25	71	49	20	24
22	16	43	e26	e49	42	e42	110	32	54	41	21	20
23	16	39	e27	e49	41	41	92	30	47	49	18	18
24	18	38	e27	e48	33	38	104	28	44	64	19	17
25	17	e37	e28	e46	39	38	102	25	53	39	21	17
26	18	38	e28	e42	30	45	85	23	90	35	23	15
27	23	63	e30	e43	28	159	73	21	211	33	18	45
28	37	e47	e27	e42	34	560	75	19	89	33	17	85
29	26	e40	e23	e44	---	1010	65	28	59	51	17	32
30	28	e38	e27	45	---	1210	56	50	132	34	17	24
31	37	---	e23	45	---	2450	---	76	---	33	15	---
TOTAL	727	2204	941	2090	1463	7152	6002	1589	2888	2377	953	817
MEAN	23.5	73.5	30.4	67.4	52.3	231	200	51.3	96.3	76.7	30.7	27.2
MAX	48	241	39	222	168	2450	1170	128	288	353	252	85
MIN	16	37	23	21	28	38	56	19	37	33	15	15
CFSM	.64	2.00	.83	1.84	1.42	6.29	5.45	1.40	2.62	2.09	.84	.74
IN.	.74	2.23	.95	2.12	1.48	7.25	6.08	1.61	2.93	2.41	.97	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1998, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	57.1	71.5	56.4	51.1	36.3	92.2	208	99.6	56.3	42.1	36.1	30.1
MAX	122	110	127	134	109	231	344	177	96.3	108	93.3	53.2
(WY)	1991	1989	1991	1996	1996	1998	1996	1989	1998	1996	1988	1993
MIN	23.5	33.0	25.9	25.8	13.4	23.0	74.2	51.3	26.7	13.0	13.1	11.1
(WY)	1998	1995	1990	1994	1993	1994	1995	1998	1992	1991	1987	1995

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1987 - 1998
ANNUAL TOTAL	23810	29203	
ANNUAL MEAN	65.2	80.0	69.7
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			44.1
HIGHEST DAILY MEAN	544	Apr 7	2450
LOWEST DAILY MEAN	15	Aug 1	a 15
ANNUAL SEVEN-DAY MINIMUM	16	Oct 17	16
INSTANTANEOUS PEAK FLOW			b 4880
INSTANTANEOUS PEAK STAGE			10.99
INSTANTANEOUS LOW FLOW			c 14
ANNUAL RUNOFF (CFSM)	1.78	2.18	1.90
ANNUAL RUNOFF (INCHES)	24.13	29.60	25.82
10 PERCENT EXCEEDS	164	143	134
50 PERCENT EXCEEDS	37	43	41
90 PERCENT EXCEEDS	20	19	17

a Also occurred September 1-2, 26.
b From rating curve extended above 2,200 ft³/s.
c Also occurred September 2, 27.
d Also occurred on September 5-7, 1996.
e Estimated.

CONNECTICUT RIVER BASIN

01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH

LOCATION.--Lat 44°44'56", long 71°37'50", Coos County, Hydrologic Unit 01080101, on left bank, at North Stratford, 400 ft downstream from Nulhegan River, and at mile 344.5.

DRAINAGE AREA.--799 mi².

PERIOD OF RECORD.--Discharge records: August 1930 to current year.
Water-quality records: Water years 1957, 1995, 1996.

REVISED RECORDS.--WSP 781: 1934(M). WSP 891: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 880.17 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes and Lake Francis 36 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,300 ft³/s, March 31, gage height, 15.63 ft; minimum daily discharge, 294 ft³/s, May 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	964	745	1050	e1350	1730	23500	855	2350	2560	625	380
2	1520	1760	1080	e1200	e1240	2200	14600	839	1140	2500	537	363
3	1310	2930	1490	e1500	e1210	2060	9750	1020	981	1880	494	402
4	1210	2100	1500	e1620	e1280	1920	6370	1320	1300	1230	462	574
5	1220	3580	1440	1900	e1200	1680	3930	1150	997	1290	488	531
6	1320	2660	1370	e2760	e1120	1500	2940	1360	774	1200	515	443
7	1160	1710	1320	3860	e1130	1380	2820	1880	695	988	505	450
8	1050	1340	1280	6120	e1140	1300	2840	1950	920	893	504	512
9	991	1220	1250	11300	e1100	1560	3190	2030	1160	836	487	585
10	896	2030	1230	9100	e1100	5400	3080	1570	851	1950	470	1050
11	853	1900	1190	4420	e1240	5300	2710	1350	696	5550	1990	796
12	827	1440	1230	2530	e1650	3310	2500	1070	591	5420	2420	595
13	811	1170	1540	2580	e2090	2180	2480	896	685	3030	1270	544
14	797	942	1460	2300	e1860	2110	2640	797	2080	2360	886	505
15	780	938	1160	e1000	e1510	1840	2550	717	1900	1920	730	471
16	662	894	1640	e1000	e1450	1610	2360	646	2180	1670	1060	513
17	646	828	e1550	e1940	e1460	1330	2170	607	3990	2180	968	481
18	627	761	1400	e1860	e1370	1280	2620	600	3590	1870	757	548
19	615	758	1380	e1830	e1300	1230	1990	535	2850	1410	681	529
20	604	726	1390	e1820	e1120	954	2760	487	2580	1130	617	508
21	601	705	1150	e1780	e1200	866	3160	435	2800	1160	587	533
22	597	724	e1100	e1430	e1260	825	2230	419	2210	953	576	515
23	460	693	1340	e1380	e1180	789	1690	423	1960	870	550	478
24	451	669	1410	e1510	e1390	761	1510	391	1680	1110	551	463
25	451	607	1310	e1800	e1380	700	1420	358	1010	843	587	454
26	454	667	1360	e1610	e1250	751	1320	333	994	690	561	448
27	508	860	1360	e1490	e1320	1250	1150	312	2620	622	498	723
28	752	766	1320	e1610	1450	5300	1110	294	2510	693	451	2010
29	796	903	1170	e1490	---	10700	1030	303	1450	864	422	1140
30	708	800	1510	e1450	---	13700	935	606	1600	879	425	832
31	760	---	1270	e1420	---	27600	---	587	---	801	409	---
TOTAL	25967	38045	40945	78660	37350	105116	113355	26140	51144	51352	22083	18376
MEAN	838	1268	1321	2537	1334	3391	3779	843	1705	1657	712	613
MAX	1530	3580	1640	11300	2090	27600	23500	2030	3990	5550	2420	2010
MIN	451	607	745	1000	1100	700	935	294	591	622	409	363

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1998, BY WATER YEAR (WY)

	1288	1603	1534	1355	1222	1649	3899	2545	1266	895	849	913
MEAN	1288	1603	1534	1355	1222	1649	3899	2545	1266	895	849	913
MAX	3445	3119	3095	2537	3295	6254	7348	6018	3724	2818	2475	3203
(WY)	1978	1960	1974	1998	1981	1936	1934	1972	1943	1996	1976	1954
MIN	355	583	643	549	350	271	1206	843	472	292	220	357
(WY)	1949	1948	1948	1948	1940	1940	1995	1998	1962	1955	1940	1949

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1930 - 1998

ANNUAL TOTAL		572940		608533						1584		
ANNUAL MEAN		1570		1667						2246		1974
HIGHEST ANNUAL MEAN										1033		1995
LOWEST ANNUAL MEAN										28000		Mar 19 1936
HIGHEST DAILY MEAN		8530		Apr 8		27600		Mar 31		108		Sep 29 1960
LOWEST DAILY MEAN		398		Sep 17		294		May 28		128		Aug 16 1975
ANNUAL SEVEN-DAY MINIMUM		440		Sep 13		345		May 23		32300		Mar 31 1998
INSTANTANEOUS PEAK FLOW						32300		Mar 31		32300		Mar 31 1998
INSTANTANEOUS PEAK STAGE						15.63		Mar 31		ab 20.60		Mar 6 1979
10 PERCENT EXCEEDS		3120				2650				3030		
50 PERCENT EXCEEDS		1240				1200				1120		
90 PERCENT EXCEEDS		593				505				454		

- a Ice jam.
- b From floodmarks in well.
- e Estimated.

CONNECTICUT RIVER BASIN

01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, NH

LOCATION.--Lat 44°37'30", long 71°28'10", Coos County, Hydrologic Unit 01080101, on left bank, 75 ft upstream from highway bridge, 0.2 mi downstream from Nash Stream, and 2.8 mi northeast of Groveton.

DRAINAGE AREA.--232 mi².

PERIOD OF RECORD.--Discharge records: August 1940 to November 1980, October 1982 to current year.

Water-quality records: Water year 1955.

GAGE.--Water-stage recorder. Elevation of gage is 920 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges which are poor. Prior to May 21, 1969, some regulation by pond 9 mi upstream on Nash Stream. Small diversion upstream for municipal supply of Berlin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	1700	* 9,130	* 8.97	June 17	1245	3,040	5.81

Minimum discharge, 79 ft³/s, September 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	216	215	e111	e212	e530	7810	573	636	1330	283	95
2	216	829	e184	e127	e211	e800	5300	615	397	1620	216	88
3	186	1590	e245	e155	e208	e560	3570	781	334	1010	180	112
4	166	907	e243	e272	e200	e450	2490	764	414	682	157	165
5	197	1100	212	e332	e190	e392	1760	684	333	1000	141	148
6	228	746	206	e510	e179	e336	1340	1060	267	1020	127	112
7	185	503	200	e1080	e173	e311	1180	1450	241	678	129	e111
8	160	399	190	e1400	e165	e304	1250	1110	537	526	127	127
9	146	379	e162	1820	e153	405	1330	901	566	e450	112	173
10	137	697	e150	1420	e155	1640	1330	724	e364	e900	97	280
11	124	563	e165	920	e175	1780	1150	704	e269	e2000	700	201
12	118	420	e190	e630	e500	1300	1050	584	e219	e1600	705	145
13	111	346	e165	e610	e950	e910	1060	498	e264	e1080	411	130
14	108	284	e158	e500	e674	e670	1100	444	1670	e848	264	115
15	106	292	e152	e341	e455	512	1060	395	2200	622	196	102
16	111	276	e159	e425	e400	433	1070	354	2000	509	218	148
17	122	244	e175	e445	e346	e370	1570	323	2820	537	233	149
18	127	248	e169	e433	e316	e335	1870	314	2060	697	172	108
19	114	241	e167	e423	e335	313	1370	279	1320	503	145	91
20	106	228	e171	e409	e355	286	1560	257	1050	415	126	85
21	102	226	e148	e383	326	260	1640	254	1060	383	118	114
22	100	241	e129	e325	286	261	1230	241	719	329	117	160
23	100	233	e129	e268	272	261	1000	229	570	337	106	123
24	102	223	e135	e329	271	260	1020	205	460	506	111	97
25	100	194	e148	e338	e412	e255	1120	185	390	378	167	85
26	101	231	e163	e305	e404	258	1050	171	371	295	256	79
27	127	288	e152	e271	e319	760	842	151	1000	258	237	199
28	185	e268	e142	e256	e311	2570	725	138	1490	230	161	781
29	192	e250	e133	e236	---	4500	649	134	774	295	129	466
30	172	e216	e145	e228	---	5570	595	263	629	367	126	279
31	182	---	e133	e219	---	8170	---	275	---	354	110	---
TOTAL	4473	12878	5235	15521	8953	35762	50091	15060	25424	21759	6377	5068
MEAN	144	429	169	501	320	1154	1670	486	847	702	206	169
MAX	242	1590	245	1820	950	8170	7810	1450	2820	2000	705	781
MIN	100	194	129	111	153	255	595	134	219	230	97	79
CFSM	.62	1.85	.73	2.16	1.38	4.97	7.20	2.09	3.65	3.03	.89	.73
IN.	.72	2.06	.84	2.49	1.44	5.73	8.03	2.41	4.08	3.49	1.02	.81
(†)	2.72	2.61	2.74	3.60	3.53	3.46	2.51	2.34	2.20	2.23	2.53	2.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	313	452	347	256	215	460	1425	1134	454	248	204	199
MAX	1057	1128	994	748	851	1374	2416	2695	1115	840	572	1427
(WY)	1991	1970	1974	1978	1970	1945	1954	1972	1947	1996	1969	1954
MIN	69.7	118	68.6	53.3	56.6	74.4	532	402	179	94.0	78.4	51.0
(WY)	1949	1948	1948	1948	1980	1941	1995	1941	1953	1991	1975	1948

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1940 - 1998

ANNUAL TOTAL	166369	206601										
ANNUAL MEAN	456	566								476		
HIGHEST ANNUAL MEAN										696		1954
LOWEST ANNUAL MEAN										297		1980
HIGHEST DAILY MEAN				2930	May 2		8170	Mar 31		8350	Apr 23	1954
LOWEST DAILY MEAN				76	Aug 9		79	Sep 26		32	Sep 14	1948
ANNUAL SEVEN-DAY MINIMUM				88	Aug 5		102	Oct 20		37	Sep 9	1948
INSTANTANEOUS PEAK FLOW							9130	Mar 31		a 24100	May 20	1969
INSTANTANEOUS PEAK STAGE							8.97	Mar 31		b 12.01	May 20	1969
INSTANTANEOUS LOW FLOW							c 79	Sep 26		32	Sep 14	1948
ANNUAL RUNOFF (CFSM)		1.96					2.44				2.05	
ANNUAL RUNOFF (INCHES)		26.68					33.13				27.85	
10 PERCENT EXCEEDS		1170					1270			1110		
50 PERCENT EXCEEDS		244					284			245		
90 PERCENT EXCEEDS		122					123			95		

(†) Diversion in cubic feet per second for municipal supply of Berlin; records furnished by City of Berlin.

a From rating curve extended above 8,700 ft³/s on basis of contracted-opening measurement of peak flow.

b From floodmarks. Caused by failure of dam on Nash Stream.

c Also occurred September 27.

e Estimated.

01131500 CONNECTICUT RIVER NEAR DALTON, NH

LOCATION.--Lat 44°24'36", long 71°43'16", Coos County, Hydrologic Unit 01080101, on left bank, 250 ft upstream from highway bridge, 1,200 ft downstream from dam of Gilman Paper Co., 1.2 mi downstream from Dalton, and at mile 300.1.

DRAINAGE AREA.--1,514 mi².

PERIOD OF RECORD.--Discharge records: March 1927 to current year. Published as "at Waterford, VT" 1927-35. Records published for both sites January to September 1935.

Water-quality records: Water years 1953, 1971, 1994-95.

REVISED RECORDS.--WSP 891: Drainage area. WSP 1231: 1935. WSP 1301: 1928-35(M).

GAGE.--Water-stage recorder. Datum of gage is 799.89 ft above sea level. Prior to September 30, 1935, nonrecording gage at bridge 10.5 mi downstream at mean sea level. January 1, 1935, to June 29, 1937, nonrecording gage at bridge 250 ft downstream at present datum. Since June 2, 1961, auxiliary water-stage recorder 10.8 mi downstream from base gage. July 11, 1956, to June 1, 1961, auxiliary nonrecording gage read hourly at same site.

REMARKS.--Records good except those for estimated daily discharges and for period June 25-26, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, and other reservoirs. These reservoirs have a combined usable capacity of about 8.3 billion ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,000 ft³/s, April 1, gage height, 23.70 ft; minimum daily discharge, 685 ft³/s, May 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1910	1250	1770	1590	2350	2400	38400	2430	2480	4040	1610	831
2	2300	2280	1190	1250	2160	2940	38100	2280	3370	7600	1220	758
3	2000	5050	1480	1430	2040	3700	28400	2540	1940	5590	1100	862
4	1790	5120	2040	1630	1910	3660	20500	2880	2020	3980	983	902
5	1820	5050	2100	2140	2000	3330	13800	3080	2440	3380	979	1070
6	2080	5810	2160	2540	1970	2980	8390	3240	1720	3870	955	1050
7	1980	4070	2170	4440	1840	2730	6380	5110	1640	3220	989	901
8	1610	3140	2260	7470	1780	2550	6010	4730	1610	2430	969	1030
9	1450	2730	1810	10500	1820	2550	5990	4380	2490	2180	947	1110
10	1360	3130	1760	11300	1720	5290	6140	4030	2060	2700	873	1560
11	1280	4170	1440	11300	1760	8520	5690	3630	1500	6480	2960	1810
12	1180	3410	1270	8540	1830	6510	5110	3220	1360	9910	6610	1280
13	1200	2800	1230	5420	2440	4370	4830	2570	1300	7930	5140	1110
14	1110	2230	1950	4740	3360	3620	4790	2180	3140	5320	2960	995
15	1120	1950	1810	3950	3120	3430	4860	1940	6380	4200	1770	961
16	1240	1980	1340	3380	2660	3190	4710	1690	5480	3460	1610	1330
17	995	1720	1660	3450	2350	2940	4940	1620	7910	3370	2100	1260
18	1040	1690	1850	3430	2340	2640	5880	1590	9020	3630	1700	1000
19	1040	1640	1660	3190	2260	2590	5560	1460	7170	3280	1390	1020
20	1040	1580	1660	3190	2050	2390	5320	1290	5660	2500	1270	1010
21	849	1490	1640	3100	2020	2150	6870	1270	5440	2260	1150	921
22	1010	1480	1380	3030	1710	1920	5850	1130	5040	2080	1080	1170
23	893	1620	1220	2760	2220	1800	4600	1070	4010	1780	1060	1020
24	839	1410	1430	2160	1820	1720	3950	1190	3460	2200	1010	922
25	804	1300	1580	2510	2070	1600	3990	1100	2960	2120	1210	859
26	772	1220	1560	2890	2320	1580	4020	685	2030	1620	1630	853
27	884	1760	1680	2900	2100	2030	3510	900	e2730	1320	1400	988
28	1100	1650	1570	2380	2030	6180	3100	851	e6190	1260	1120	2640
29	1370	1780	1630	2600	---	14300	2960	781	4540	1490	951	3390
30	1340	1610	1250	2600	---	18500	2430	1070	3140	1940	922	1950
31	1170	---	1630	2280	---	25000	---	1430	---	1730	921	---
TOTAL	40576	76120	51180	124090	60050	149110	265080	67367	110230	108870	50589	36563
MEAN	1309	2537	1651	4003	2145	4810	8836	2173	3674	3512	1632	1219
MAX	2300	5810	2260	11300	3360	25000	38400	5110	9020	9910	6610	3390
MIN	772	1220	1190	1250	1710	1580	2430	685	1300	1260	873	758

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1998, BY WATER YEAR (WY)

MEAN	2179	2874	2492	2115	1817	2919	7783	5545	2506	1582	1425	1510
MAX	6129	7331	5786	4321	6093	12140	15380	11890	5915	5059	3662	7140
(WY)	1978	1928	1974	1996	1981	1936	1934	1972	1947	1996	1976	1954
MIN	654	1066	860	751	533	482	2631	1951	1030	654	406	654
(WY)	1949	1948	1948	1948	1940	1940	1995	1941	1988	1955	1942	1995

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1927 - 1998	
ANNUAL TOTAL	1076468		1139825			
ANNUAL MEAN	2949		3123		2900	
HIGHEST ANNUAL MEAN					4203	
LOWEST ANNUAL MEAN					1934	
HIGHEST DAILY MEAN	13500		38400		46500	
LOWEST DAILY MEAN	718		685		115	
ANNUAL SEVEN-DAY MINIMUM	810		864		265	
INSTANTANEOUS PEAK FLOW			42000		48300	
INSTANTANEOUS PEAK STAGE			23.70		25.60	
10 PERCENT EXCEEDS	6150		5670		6090	
50 PERCENT EXCEEDS	2080		2040		1860	
90 PERCENT EXCEEDS	1040		1010		814	

e Estimated.

CONNECTICUT RIVER BASIN

01133000 EAST BRANCH PASSUMPSIC RIVER NEAR EAST HAVEN, VT

LOCATION.--Lat 44°38'02", long 71°53'53", Caledonia County, Hydrologic Unit 01080102, on right bank in Burke, 0.5 mi upstream from Flower Brook, 2.1 mi south of East Haven, and 8.4 mi upstream from mouth.

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--Discharge records: July 1939 to October 1945, October 1948 to September 1979, October 1997 to present. Prior to October 1951, published as Passumpsic River near East Haven.

Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1141: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 943.88 ft above sea level (levels by Corps of Engineers). Prior to October 1, 1973, at datum 2.00 ft higher.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 9	0445	1,100	5.73	Apr. 1	2300	1,860	7.02
Mar. 29	1845	822	5.18	Aug. 11	1715	862	5.26
Mar. 31	1830	* 2,100	* 7.38				

Minimum discharge, 34 ft³/s, May 29, August 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	65	65	e45	e62	87	1300	88	243	354	68	39
2	65	115	e64	e46	e60	103	1000	96	92	284	57	41
3	58	231	e64	e48	e60	105	642	120	130	145	51	56
4	73	159	e63	e66	e58	96	403	100	91	109	47	102
5	124	261	61	e68	e58	83	309	102	71	177	44	61
6	100	139	61	e105	e57	77	262	161	62	118	41	51
7	80	103	60	e180	e55	75	261	166	61	93	41	107
8	52	88	59	e430	e55	72	272	119	76	88	42	91
9	48	95	e58	753	e54	108	268	106	70	106	37	115
10	47	151	e54	319	e53	351	240	95	55	355	37	137
11	44	106	e48	197	e53	224	206	87	48	377	491	80
12	55	87	e50	122	e145	e110	195	76	46	229	301	66
13	55	77	e56	134	e220	e90	195	70	98	149	127	63
14	49	73	e54	105	e120	e83	188	66	173	119	84	54
15	47	75	e50	e78	e84	e84	176	61	109	95	70	57
16	48	71	e52	e84	e80	e78	167	57	207	83	74	122
17	44	68	e54	e82	e76	e76	187	64	190	e67	64	72
18	43	66	e56	e82	e74	e75	192	62	253	e55	58	58
19	42	67	e54	e83	e75	e74	151	54	147	e42	52	52
20	50	63	e50	e82	e77	e71	287	51	107	e59	47	50
21	49	62	e46	e80	e72	e70	211	50	e100	71	49	60
22	47	63	e45	e72	e70	e68	160	50	149	62	50	72
23	45	61	e44	e70	e66	e66	138	47	178	90	45	52
24	46	61	e46	e72	e64	e64	131	44	112	135	59	47
25	46	58	e46	e72	e63	e65	131	41	91	78	75	45
26	47	61	e48	e70	e62	e67	120	39	91	65	65	44
27	72	106	e50	e68	58	137	110	37	164	59	54	150
28	92	78	e48	e70	61	400	105	36	124	76	46	e100
29	67	78	e47	e68	---	718	97	39	88	108	45	e80
30	58	71	e47	e66	---	829	93	71	147	80	50	66
31	61	---	e46	e64	---	1760	---	105	---	101	42	---
TOTAL	1837	2859	1646	3881	2092	6366	8197	2360	3573	4029	2413	2190
MEAN	59.3	95.3	53.1	125	74.7	205	273	76.1	119	130	77.8	73.0
MAX	124	261	65	753	220	1760	1300	166	253	377	491	150
MIN	42	58	44	45	53	64	93	36	46	42	37	39
CFSM	1.10	1.77	.99	2.33	1.39	3.82	5.08	1.42	2.21	2.42	1.45	1.36
IN.	1.27	1.98	1.14	2.68	1.45	4.40	5.67	1.63	2.47	2.79	1.67	1.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

MEAN	82.8	101	83.1	63.6	52.3	94.3	287	215	108	69.1	57.4	60.2
MAX	218	233	250	148	114	244	469	423	319	241	121	177
(WY)	1946	1960	1974	1978	1976	1953	1954	1972	1973	1973	1962	1954
MIN	24.4	39.3	41.0	21.4	16.9	20.5	154	76.1	48.9	31.7	28.9	28.3
(WY)	1949	1979	1956	1940	1940	1940	1972	1998	1953	1955	1975	1978

SUMMARY STATISTICS

FOR 1998 WATER YEAR

WATER YEARS 1939 - 1998

ANNUAL TOTAL	41443	
ANNUAL MEAN	114	106
HIGHEST ANNUAL MEAN		166
LOWEST ANNUAL MEAN		76.0
HIGHEST DAILY MEAN	a 1760	Mar 31
LOWEST DAILY MEAN	36	May 28
ANNUAL SEVEN-DAY MINIMUM	40	May 23
INSTANTANEOUS PEAK FLOW	a 2100	Mar 31
INSTANTANEOUS PEAK STAGE	7.38	Mar 31
INSTANTANEOUS LOW FLOW	d 34	May 29
ANNUAL RUNOFF (CFSM)	2.11	1.97
ANNUAL RUNOFF (INCHES)	28.66	26.75
10 PERCENT EXCEEDS	196	230
50 PERCENT EXCEEDS	72	63
90 PERCENT EXCEEDS	46	31

- a From rating curve extended above 1,290 ft³/s at gage height 6.30 ft.
- b From rating curve extended above 1,300 ft³/s on basis of slope area measurement of peak flow.
- c From high-water marks in well.
- d Also occurred on August 10.
- e Estimated.
- f Also occurred on September 2-5, 1953 and August 21,22, 1975.

CONNECTICUT RIVER BASIN

01135150 POPE BROOK (SITE W-3) NEAR NORTH DANVILLE, VT

LOCATION.--Lat 44°28'35", long 72°07'33", Caledonia County, Hydrologic Unit 01080102, on left bank, 0.3 mi north of Pope Cemetery, 1.1 mi upstream of North Brook, and 1.7 mi northwest of North Danville.

DRAINAGE AREA.--3.25 mi²

PERIOD OF RECORD.--Discharge records: December 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,141.20 ft above sea level.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 1960-1990, 380 ft³/s, June 30, 1973, gage height, 3.4 ft (data provided by USACOE-CRREL).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	1440	119	2.28	July 10	0505	73	1.91
Apr. 1	1930	* 168	* 2.58	Aug. 11	0535	73	1.91
June 18	0935	95	2.10	Aug. 12	0110	162	2.55
June 20	1355	81	1.99				

Minimum discharge, 1.7 ft³/s, May 28, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	3.5	4.2	e2.4	4.1	6.3	80	5.0	9.8	17	3.2	2.6
2	4.1	13	e4.0	e2.5	4.1	6.2	54	6.4	3.3	10	2.9	2.8
3	3.3	8.8	3.9	2.9	4.1	5.9	38	6.2	4.8	6.9	2.7	3.0
4	3.1	11	3.9	4.5	3.9	5.5	26	5.3	3.2	6.4	2.6	3.6
5	7.3	11	4.0	4.8	3.9	4.9	21	5.1	2.9	11	2.4	2.6
6	3.8	6.2	4.0	8.6	3.8	4.7	20	14	2.6	6.3	2.3	2.4
7	3.1	5.4	3.9	9.6	3.7	4.6	20	8.0	2.6	5.7	2.4	2.9
8	2.8	5.0	3.5	40	3.5	4.4	20	6.0	3.0	5.4	2.3	4.2
9	2.7	13	4.1	27	3.4	8.5	19	5.5	2.7	5.9	2.1	3.8
10	2.7	12	3.6	12	3.2	16	16	6.3	2.2	26	2.2	3.3
11	2.5	7.0	3.0	9.6	3.3	7.7	14	5.5	2.0	17	19	2.6
12	2.5	6.1	3.5	e8.0	12	6.2	13	4.7	2.6	9.2	41	2.5
13	2.5	5.6	3.4	e7.5	8.8	e6.2	12	4.2	14	7.5	5.9	2.4
14	2.4	5.4	3.1	e7.0	e5.6	6.3	11	3.9	14	6.5	4.6	2.3
15	2.5	5.5	e3.1	e6.6	e4.8	5.8	11	3.5	8.7	5.6	4.1	6.0
16	2.5	5.4	3.1	e6.4	e4.6	5.3	10	3.3	22	7.1	9.8	7.7
17	2.4	5.3	3.1	e6.2	e4.4	5.2	11	4.6	8.5	8.7	4.8	3.0
18	2.3	5.0	2.9	e6.2	4.5	5.1	9.8	3.4	30	5.2	4.3	2.6
19	2.3	5.1	2.9	e6.0	4.8	5.1	8.2	3.0	15	4.3	3.7	2.5
20	2.3	4.8	3.0	5.9	4.7	5.0	17	2.8	23	5.2	3.3	2.4
21	2.3	4.7	2.7	5.6	4.3	4.8	9.8	2.8	13	4.6	3.4	2.4
22	2.3	4.9	e2.7	5.3	4.1	4.8	8.0	2.7	11	3.7	3.3	2.2
23	2.3	4.6	e2.6	e5.2	3.9	4.6	7.4	2.5	12	14	3.1	2.1
24	2.5	4.5	e2.7	e5.0	3.9	4.5	7.3	2.3	8.2	7.8	10	2.0
25	2.6	4.3	2.8	e4.8	4.0	4.5	7.3	2.2	6.8	4.7	6.8	2.1
26	2.5	4.8	2.9	4.7	3.9	4.8	6.6	2.1	12	4.1	4.5	2.0
27	5.8	7.3	2.9	e4.6	3.8	13	6.4	2.0	21	3.6	3.5	5.4
28	5.3	5.4	2.8	4.6	4.6	26	6.1	1.9	9.0	3.3	3.1	5.3
29	3.6	4.5	2.8	4.5	---	31	5.6	2.2	7.2	9.6	3.5	2.8
30	3.5	4.2	2.7	4.3	---	44	5.3	2.3	7.4	5.2	3.3	2.5
31	3.5	---	2.6	4.2	---	71	---	10	---	3.9	2.7	---
TOTAL	98.7	193.3	100.4	236.5	127.7	337.9	500.8	139.7	284.5	241.4	172.8	94.0
MEAN	3.18	6.44	3.24	7.63	4.56	10.9	16.7	4.51	9.48	7.79	5.57	3.13
MAX	7.3	13	4.2	40	12	71	80	14	30	26	41	7.7
MIN	2.3	3.5	2.6	2.4	3.2	4.4	5.3	1.9	2.0	3.3	2.1	2.0
CFSM	.98	1.98	1.00	2.35	1.40	3.35	5.14	1.39	2.92	2.40	1.72	.96
IN.	1.13	2.21	1.15	2.71	1.46	3.87	5.73	1.60	3.26	2.76	1.98	1.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	3.98	5.78	4.74	5.37	3.78	6.24	18.7	8.57	4.47	3.57	3.40	2.57
MAX	6.54	11.4	9.22	9.04	8.16	10.9	25.4	15.6	9.48	7.79	6.00	3.72
(WY)	1996	1996	1997	1996	1996	1998	1994	1996	1998	1998	1997	1997
MIN	2.20	2.79	3.24	2.50	1.98	2.66	6.87	4.51	1.84	1.40	1.73	1.61
(WY)	1995	1995	1998	1994	1993	1994	1995	1998	1995	1991	1993	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1991 - 1998

ANNUAL TOTAL	2353.2	2527.7										
ANNUAL MEAN	6.45	6.93								6.04		
HIGHEST ANNUAL MEAN										8.44		1996
LOWEST ANNUAL MEAN										3.93		1995
HIGHEST DAILY MEAN	64	Jul 15				80	Apr 1			85	Apr 17	1993
LOWEST DAILY MEAN	1.4	Aug 8				1.9	May 28			.82	Aug 3	1991
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 4				2.1	May 24			.91	Jul 28	1991
INSTANTANEOUS PEAK FLOW						a 168	Apr 1			a 249	Jul 15	1997
INSTANTANEOUS PEAK STAGE						2.58	Apr 1			2.96	Jul 15	1997
INSTANTANEOUS LOW FLOW						1.7	May 28			.74	Aug 2	1991
ANNUAL RUNOFF (CFSM)	1.98					2.13				1.86		
ANNUAL RUNOFF (INCHES)	26.94					28.93				25.24		
10 PERCENT EXCEEDS	14					13				12		
50 PERCENT EXCEEDS	4.1					4.6				3.7		
90 PERCENT EXCEEDS	2.3					2.5				1.6		

a From rating curve extended above 84 ft³/s on basis of theoretical weir formula.
 b From floodmarks.
 c Also occurred on May 29.
 e Estimated.

01135300 SLEEPERS RIVER (SITE W-5) NEAR ST. JOHNSBURY, VT

LOCATION.--Lat 44°26'04", long 72°02'22", Caledonia County, Hydrologic Unit 01080102, on left bank, just upstream of Emerson Falls, 1.5 mi northwest of Post Office in St. Johnsbury, and 2.6 mi above mouth.

DRAINAGE AREA.--42.9 mi².

PERIOD OF RECORD.--Discharge Records: October 1990 to current year.

Water-quality records: Water year 1992 to 1995.

GAGE.--Water-stage recorder. Datum of gage is 641.68 ft above sea level.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 603 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	1030	901	3.03	July 10	0800	638	2.64
Apr. 1	2130	1,810	4.00	Aug. 11	0715	675	2.70
June 16	1315	614	2.60	Aug. 12	0230	* 7,570	* 7.11

Minimum discharge, 13 ft³/s, December 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	36	47	e27	48	94	834	52	113	212	32	28
2	49	118	42	e28	48	105	615	65	39	145	26	30
3	35	166	e40	e29	47	100	404	82	51	76	23	41
4	31	94	42	e52	47	91	278	63	37	61	21	52
5	78	180	45	e54	46	75	223	60	38	156	20	33
6	45	71	45	e86	43	71	209	177	26	75	18	27
7	31	56	43	e145	43	68	211	125	25	58	18	31
8	26	49	39	e580	46	64	202	79	31	55	19	58
9	25	109	31	459	e40	122	191	68	39	61	16	46
10	24	193	32	173	38	277	165	70	23	287	14	54
11	22	79	26	123	38	132	145	70	21	189	263	34
12	21	61	31	96	115	88	138	53	19	115	1380	28
13	21	54	38	e100	175	74	132	45	137	79	116	27
14	21	46	35	72	70	67	122	41	194	67	76	24
15	21	55	28	e64	58	e66	112	37	117	53	63	40
16	23	52	31	e76	e56	64	105	33	282	45	126	148
17	21	49	31	e74	e54	61	117	47	126	82	72	47
18	20	48	e30	e74	53	62	129	41	210	50	58	34
19	20	45	31	e72	59	63	95	30	179	39	47	29
20	19	48	32	71	64	62	210	27	182	48	40	27
21	19	46	26	66	56	59	126	26	138	59	41	26
22	19	50	e26	55	52	58	96	24	87	39	41	24
23	20	48	e26	e54	51	56	84	23	144	110	37	22
24	22	45	29	e54	50	53	82	20	73	104	95	20
25	23	38	28	e53	52	54	84	18	58	51	116	20
26	24	47	30	e52	50	58	77	17	136	40	67	20
27	54	99	33	50	50	130	70	16	243	34	48	49
28	71	47	32	53	62	354	67	15	106	30	37	87
29	45	53	e30	52	---	429	62	16	70	92	35	39
30	37	45	e29	50	---	549	56	25	66	58	39	30
31	35	---	28	49	---	787	---	49	---	41	31	---
TOTAL	980	2127	1036	3043	1611	4393	5441	1514	3010	2611	3035	1175
MEAN	31.6	70.9	33.4	98.2	57.5	142	181	48.8	100	84.2	97.9	39.2
MAX	78	193	47	580	175	787	834	177	282	287	1380	148
MIN	19	36	26	27	38	53	56	15	19	30	14	20
CFSM	.74	1.65	.78	2.29	1.34	3.30	4.23	1.14	2.34	1.96	2.28	.91
IN.	.85	1.84	.90	2.64	1.40	3.81	4.72	1.31	2.61	2.26	2.63	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1998, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	56.5	72.3	64.4	63.5	44.2	87.9	210	92.1	46.3	40.4	40.9	26.4
MAX	128	124	143	108	93.3	142	302	175	100	84.2	97.9	39.2
(WY)	1991	1991	1991	1996	1996	1998	1994	1996	1998	1998	1998	1998
MIN	20.0	31.6	33.4	24.5	19.8	39.1	75.2	48.8	14.9	8.47	16.1	12.4
(WY)	1995	1995	1998	1994	1993	1994	1995	1998	1995	1991	1993	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1991 - 1998

ANNUAL TOTAL	25827.0	29976	
ANNUAL MEAN	70.8	82.1	70.4
HIGHEST ANNUAL MEAN			93.2
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	956	Jul 15	1380
LOWEST DAILY MEAN	8.5	Aug 10	14
ANNUAL SEVEN-DAY MINIMUM	10	Aug 5	18
INSTANTANEOUS PEAK FLOW		a 7570	Aug 12
INSTANTANEOUS PEAK STAGE		7.11	Aug 12
INSTANTANEOUS LOW FLOW		13	Dec 9
ANNUAL RUNOFF (CFSM)	1.65	1.91	1.64
ANNUAL RUNOFF (INCHES)	22.39	25.98	22.28
10 PERCENT EXCEEDS	167	151	150
50 PERCENT EXCEEDS	43	52	41
90 PERCENT EXCEEDS	20	23	13

a From rating curve extended above 560 ft³/s on basis of theoretical weir formula.
e Estimated.

CONNECTICUT RIVER BASIN

01135500 PASSUMPSIC RIVER AT PASSUMPSIC, VT

LOCATION.--Lat 44°21'56", long 72°02'23", Caledonia County, Hydrologic Unit 01080102, on right bank, 0.7 mi upstream from Water Andric, 1 mi downstream from dam and village of Passumpsic, and 4 mi upstream from mouth.

DRAINAGE AREA.--436 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year. Monthly discharge only October 1928, published in WSP 1301.

Water-quality records: Water years 1953, 1967-74 (partial-record station), 1994.

REVISED RECORDS.--WSP 781: 1933(M). WSP 871: Drainage area. WSP 1231: 1929, 1930-31(M).

GAGE.--Water-stage recorder. Elevation of gage is 490 ft above sea level, from topographic map.

REMARKS.--Records good except for those estimated daily discharges, which are fair. Low flow regulated by powerplants upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1780, about 31.5 ft in November 1927, from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 9	0115	8,320	12.95	Aug. 12	0515	8,400	13.05
Apr. 1	0200	* 9,500	* 14.25				

Minimum daily discharge, 212 ft³/s, August 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	591	384	520	e315	e517	765	8550	580	1330	1590	465	259
2	507	611	448	e320	e515	1060	7770	588	796	2440	362	258
3	397	1530	e445	e345	e500	1180	5240	799	596	1300	316	334
4	357	1020	e450	e370	e490	1050	3450	748	670	791	290	436
5	560	1690	468	e455	e480	872	2470	680	474	1770	268	423
6	643	1150	469	e680	e470	798	1970	955	390	1200	226	281
7	432	787	458	e1180	e460	758	1800	1450	360	784	240	503
8	356	648	e420	e4000	e460	692	1770	1150	400	661	247	655
9	317	675	e390	6130	e450	887	1710	978	547	628	232	541
10	294	1410	e400	3430	e455	2650	1560	802	401	1750	212	911
11	282	998	e345	e1500	e480	e1630	1360	795	327	1970	2140	604
12	266	753	e325	e1030	e600	e1140	1250	647	294	1580	4920	420
13	293	641	e360	e940	e1600	e930	1210	531	504	995	1650	371
14	265	504	e335	e880	e1180	e850	1170	484	1540	793	859	333
15	286	580	e300	e810	e675	e820	1110	448	1320	638	626	341
16	282	570	e325	e800	e660	824	1060	407	1500	529	684	887
17	273	503	e325	e780	e630	826	1100	419	1720	994	565	597
18	266	504	e315	e780	e620	754	1320	496	1400	772	468	404
19	259	474	e320	e770	638	721	1050	379	1510	548	398	341
20	250	499	e330	e760	671	685	1580	339	1090	480	374	316
21	276	463	e275	e700	604	647	1570	337	1840	636	340	306
22	256	494	e270	e640	567	611	1140	304	926	464	358	434
23	267	491	e270	e610	567	618	954	316	1080	536	332	384
24	266	467	e295	e590	539	578	880	296	779	1100	382	306
25	266	395	e300	e580	554	526	883	265	582	661	698	276
26	293	457	e320	e560	562	604	852	254	666	462	545	265
27	356	785	e330	e550	540	877	764	219	1210	406	455	489
28	662	731	e330	e540	562	2560	719	231	1150	374	370	1280
29	542	642	e333	e540	---	4560	674	237	689	636	324	774
30	413	758	e328	e540	---	5500	616	357	576	687	341	493
31	394	---	e325	e520	---	8130	---	376	---	538	311	---
TOTAL	11167	21614	11124	32645	17046	45103	57552	16867	26667	28713	19998	14222
MEAN	360	720	359	1053	609	1455	1918	544	889	926	645	474
MAX	662	1690	520	6130	1600	8130	8550	1450	1840	2440	4920	1280
MIN	250	384	270	315	450	526	616	219	294	374	212	258
CFSM	.83	1.65	.82	2.42	1.40	3.34	4.40	1.25	2.04	2.12	1.48	1.09
IN.	.95	1.84	.95	2.79	1.45	3.85	4.91	1.44	2.28	2.45	1.71	1.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

	MEAN	525	705	598	492	422	935	2264	1348	647	409	345	348
MAX	1522	1667	1919	1255	2280	4013	3931	3082	1846	1519	963	1126	
(WY)	1946	1960	1974	1978	1981	1936	1934	1972	1973	1973	1990	1954	
MIN	132	253	169	128	123	161	806	517	225	138	122	98.8	
(WY)	1948	1948	1948	1948	1980	1940	1995	1941	1988	1955	1934	1948	

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1929 - 1998

ANNUAL TOTAL	297959	302718	
ANNUAL MEAN	816	829	752
HIGHEST ANNUAL MEAN			1153
LOWEST ANNUAL MEAN			472
HIGHEST DAILY MEAN	5780	Jul 15	15400
LOWEST DAILY MEAN	187	Aug 7	13
ANNUAL SEVEN-DAY MINIMUM	237	Aug 5	75
INSTANTANEOUS PEAK FLOW			18200
INSTANTANEOUS PEAK STAGE			23.49
ANNUAL RUNOFF (CFSM)	1.87		1.73
ANNUAL RUNOFF (INCHES)	25.42		23.45
10 PERCENT EXCEEDS	1860	1520	1690
50 PERCENT EXCEEDS	500	565	427
90 PERCENT EXCEEDS	282	294	168

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH

LOCATION.--Lat 44°16'08", long 71°37'52", Grafton County, Hydrologic Unit 01080101, on left bank, 0.2 mi upstream from Pierce Bridge and Bethlehem Junction, 0.8 mi upstream from unnamed tributary entering from left, 3 mi east of Bethlehem, 3.4 mi downstream from Little River, and at mile 35.0.

DRAINAGE AREA.--87.6 mi².

PERIOD OF RECORD.-- Discharge records: August 1939 to current year.

Water-quality records: Water years 1967-74, 1992-95.

REVISED RECORDS.--WSP 1701: 1951(M), 1953-54(M).

GAGE.--Water-stage recorder. Datum of gage is 1,180.74 ft above sea level (levels by U.S. Army Corps of Engineers).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	1900	3,340	7.11	June 14	1715	* 5,000	* 8.40

Minimum discharge, 39 ft³/s, January 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	96	84	44	e85	e167	1750	220	105	605	73	59
2	86	1130	72	e49	84	e191	1280	366	89	550	67	58
3	77	1060	76	56	e81	e193	1060	369	89	292	63	71
4	75	353	78	114	e79	e176	657	306	86	214	60	68
5	96	518	81	120	e78	144	471	430	86	362	57	60
6	102	291	78	163	e73	122	380	1370	80	295	55	56
7	82	216	75	e366	71	115	328	791	85	212	68	60
8	74	177	e72	e1190	70	109	321	529	186	184	61	89
9	71	180	e58	1080	67	276	332	387	173	163	54	130
10	70	473	e62	516	69	1210	331	331	118	331	50	207
11	66	286	e62	334	68	495	282	311	97	708	156	120
12	64	208	e63	218	e198	272	262	252	85	557	534	94
13	64	171	e62	223	393	214	275	221	407	333	221	87
14	59	141	e61	164	205	202	292	198	2420	256	119	81
15	60	144	e54	135	e151	192	296	179	1130	208	92	89
16	61	130	e60	171	e139	168	335	165	1290	182	86	237
17	62	116	65	152	e122	149	704	155	981	171	81	135
18	60	108	61	140	107	147	591	146	670	168	73	101
19	58	102	61	141	152	144	373	131	676	139	69	90
20	57	98	61	131	125	134	555	122	422	138	64	82
21	57	97	52	118	106	127	471	115	326	148	62	80
22	57	105	47	e100	95	125	353	128	256	118	64	77
23	53	96	e48	90	e89	118	308	122	215	115	61	77
24	53	92	e52	e113	90	112	306	108	187	134	86	71
25	54	79	61	e115	233	108	351	98	164	106	233	69
26	54	89	63	e106	151	113	326	92	169	95	150	66
27	58	129	61	e98	116	450	257	86	374	89	98	113
28	92	94	55	e93	111	1460	228	80	282	81	78	224
29	76	93	48	e88	---	1840	207	81	187	96	69	128
30	68	85	58	e88	---	1660	202	100	160	89	69	99
31	71	---	54	e87	---	2570	---	82	---	80	63	---
TOTAL	2127	6957	1945	6603	3408	13503	13884	8071	11595	7219	3136	2978
MEAN	68.6	232	62.7	213	122	436	463	260	387	233	101	99.3
MAX	102	1130	84	1190	393	2570	1750	1370	2420	708	534	237
MIN	53	79	47	44	67	108	202	80	80	80	50	56
CFSM	.78	2.65	.72	2.43	1.39	4.97	5.28	2.97	4.41	2.66	1.15	1.13
IN.	.90	2.95	.83	2.80	1.45	5.73	5.90	3.43	4.92	3.07	1.33	1.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

MEAN	157	220	166	119	107	188	513	512	206	107	94.8	96.6
MAX	416	524	590	438	712	691	896	1054	462	308	273	550
(WY)	1978	1960	1974	1996	1981	1953	1969	1940	1973	1996	1990	1954
MIN	34.1	59.0	44.9	30.9	31.9	47.3	176	221	91.5	39.0	34.0	32.5
(WY)	1948	1979	1948	1948	1980	1940	1995	1993	1953	1991	1961	1948

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1939 - 1998

ANNUAL TOTAL	70879	81426	
ANNUAL MEAN	194	223	207
HIGHEST ANNUAL MEAN			323
LOWEST ANNUAL MEAN			131
HIGHEST DAILY MEAN	1540	Apr 19	2570
LOWEST DAILY MEAN	46	Aug 20	44
ANNUAL SEVEN-DAY MINIMUM	54	Sep 14	52
INSTANTANEOUS PEAK FLOW			5000
INSTANTANEOUS PEAK STAGE			8.40
INSTANTANEOUS LOW FLOW			39
ANNUAL RUNOFF (CFSM)	2.22	2.55	2.37
ANNUAL RUNOFF (INCHES)	30.10	34.58	32.18
10 PERCENT EXCEEDS	485	458	461
50 PERCENT EXCEEDS	102	115	106
90 PERCENT EXCEEDS	58	61	46

a From rating curve extended above 4,100 ft³/s on basis of slope-area measurement of peak flow.

b From floodmarks in well.

e Estimated.

CONNECTICUT RIVER BASIN

01138500 CONNECTICUT RIVER AT WELLS RIVER, VT

LOCATION.--Lat 44°09'13", long 72°02'34", Orange County, Hydrologic Unit 01080101, on right bank, at village of Wells River, 200 ft downstream from bridge on U.S. Highway 302, 400 ft upstream from Wells River, 1,200 ft downstream from Ammonoosuc River, and at mile 266.0.

DRAINAGE AREA.--2,644 mi².

PERIOD OF RECORD.--Discharge records: October 1949 to current year. October and November 1949 monthly discharge only, published in WSP 1301.

Water-quality records: 1952, 1957, 1979 to 1986.

REVISED RECORDS.--WDR NH-VT-93-1: 1992.

GAGE.--Water-stage recorder. Datum of gage is 399.75 ft above sea level.

REMARKS.--Records good except those for estimated daily discharge, which are fair. Flow regulated by powerplants, by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and other reservoirs. These reservoirs have a combined capacity of about 14.8 billion ft³.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,100 ft³/s, July 1, 1973, gage height, 17.35 ft, from peak-stage indicator; minimum daily discharge 152 ft³/s, August 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 45,100 ft³/s, April 2, gage height, 14.10 ft; minimum daily discharge, 940 ft³/s, October 25, September 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3410	e1550	3150	2500	5010	5040	42000	2880	3640	7420	3200	1470
2	3340	e1800	3110	2470	4830	6820	44300	4550	4530	14200	2180	2430
3	3890	e2100	3300	2480	5850	6670	41800	4470	4860	11900	2130	2520
4	3320	3260	2590	2840	4630	7900	30800	5080	3060	6040	2800	1960
5	2760	7320	3820	4320	5200	7350	20700	5250	3750	6030	2200	1340
6	4590	8200	2790	5800	5170	7550	15100	6180	2990	6880	2540	940
7	3870	9350	3810	5580	5680	6270	14000	8420	1790	6830	2410	1070
8	3310	4920	4590	14200	4950	6190	13900	8350	3620	4890	1320	4010
9	2890	2760	4750	22900	5100	6160	13800	8310	3740	3960	1060	3860
10	2750	5790	4090	21100	4840	14700	12700	8060	4060	6110	1390	5680
11	1970	7780	4310	18100	3710	14600	11500	8090	3430	9400	6320	3940
12	1260	5900	2740	12200	5280	10600	9860	7500	3100	13900	10100	3230
13	2220	4730	1920	10000	6600	8150	9380	6490	2270	12800	10100	1390
14	1630	4720	2860	7710	5850	7600	8340	4420	7750	10300	7050	2360
15	2430	4120	4090	6340	6180	5460	8040	3190	10300	6110	4640	3240
16	1870	3610	2470	5590	5390	6230	8730	2710	11500	4880	3620	4990
17	1860	3170	5000	4810	5520	5780	9230	2040	13600	6220	4540	4490
18	1310	4250	2720	5460	5710	4720	9160	3890	13400	5950	3660	3500
19	1520	2630	3920	5990	4710	4920	8150	1840	13500	6140	3260	1420
20	1210	2740	2700	4140	5620	5670	9010	2280	10700	5300	2360	1770
21	1420	3230	2970	3950	5550	4880	8690	2370	8510	4300	3430	1680
22	1570	2790	2810	4080	5990	2360	7250	1850	8190	4540	2580	1750
23	1380	2090	3160	4500	5990	3330	7040	2430	7060	4830	3310	2380
24	1070	2850	2080	4230	6930	4940	4660	1120	7080	5830	3810	1980
25	940	3070	2290	2630	7340	5370	4480	1190	6310	3750	6410	2450
26	1020	3650	3270	3680	5340	7010	7290	2070	5300	3520	4770	1470
27	1560	3490	2960	4240	4960	7630	5800	1360	8360	3360	3020	1460
28	e1600	3610	3490	3980	5400	13000	6480	1490	8590	3130	2600	5020
29	e1700	3550	3610	4130	---	24000	6120	1240	7810	4440	2320	4050
30	e1300	3210	3590	3730	---	24200	4840	1340	7830	2400	2200	2780
31	e1750	---	2440	4180	---	29600	---	1190	---	2420	2050	---
TOTAL	66720	122240	101400	207860	153330	274700	403150	121650	200630	197780	113380	80630
MEAN	2152	4075	3271	6705	5476	8861	13440	3924	6688	6380	3657	2688
MAX	4590	9350	5000	22900	7340	29600	44300	8420	13600	14200	10100	5680
MIN	940	1550	1920	2470	3710	2360	4480	1120	1790	2400	1060	940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1998, BY WATER YEAR (WY)

MEAN	3738	4818	4635	3762	3834	5888	12650	8408	4438	2879	2557	2497
MAX	9801	9815	11320	7717	10050	13420	20110	17120	10320	8566	6709	10810
(WY)	1978	1960	1974	1996	1981	1979	1954	1972	1984	1996	1990	1954
MIN	1226	2008	1445	1632	1824	2492	3634	3479	1906	1206	1013	883
(WY)	1964	1979	1979	1981	1980	1962	1995	1987	1988	1991	1970	1978

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1950 - 1998

ANNUAL TOTAL	1887460	2043470										
ANNUAL MEAN	5171	5599								5013		
HIGHEST ANNUAL MEAN										7355		1996
LOWEST ANNUAL MEAN										3211		1965
HIGHEST DAILY MEAN	21700	Apr 8	44300	Apr 2	50600	Mar 27	1953					
LOWEST DAILY MEAN	940	Oct 25	a 940	Oct 25	152	Aug 28	1960					
ANNUAL SEVEN-DAY MINIMUM	1230	Oct 20	1230	Oct 20	522	Aug 1	1955					
INSTANTANEOUS PEAK FLOW			45100	Apr 2	57100	Jul 1	1973					
INSTANTANEOUS PEAK STAGE			14.10	Apr 2	b 17.35	Jul 1	1973					
10 PERCENT EXCEEDS	10100		10000		10400							
50 PERCENT EXCEEDS	4010		4310		3580							
90 PERCENT EXCEEDS	1870		1750		1300							

a Also occurred on September 6.

b From peak stage indicator.

e Estimated.

01139000 WELLS RIVER AT WELLS RIVER, VT

LOCATION.--Lat 44°09'03", long 72°03'55", Orange County, Hydrologic Unit 01080103, on right bank, 0.8 mi west of village of Wells River, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--98.4 mi².

PERIOD OF RECORD.--Discharge records: August 1940 to current year.

Water-quality records: Water years 1957-58, 1995.

REVISED RECORDS.--WSP 1171: Drainage area. WSP 1201: 1942(P), 1944-45(M), 1946-47(P), 1948(M), 1950.

GAGE.--Water-stage recorder. Datum of gage is 505.53 ft above sea level (levels by Connecticut River Power Co.).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some diurnal fluctuation at low flow prior to 1958 and since June 1984 caused by small powerplant upstream. Flow partly regulated by Groton and Ricker Ponds.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 980 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	1430	1,540	5.25	June 27	1330	989	4.40
Mar. 31	2330	* 1,890	* 5.73	Aug. 11	1300	1,760	5.55
Apr. 2	0300	1,680	5.45	Aug. 12	1200	1,080	4.56
June 16	1730	1,000	4.42				

Minimum daily discharge, 45 ft³/s, August 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	62	113	e67	e108	e150	1460	127	98	476	76	e84
2	93	119	102	e69	e106	e180	1370	168	87	590	64	e79
3	86	298	98	e74	e105	208	1000	245	87	359	59	e85
4	142	174	95	e98	e103	194	698	189	82	245	54	82
5	168	271	97	e122	e100	184	527	171	83	274	52	74
6	137	187	99	e148	e96	174	446	419	67	213	49	64
7	98	144	95	e230	e94	162	413	411	64	164	48	76
8	80	120	93	1010	e88	150	385	284	88	147	50	204
9	70	135	74	1240	e85	228	360	225	108	153	50	147
10	64	335	e71	651	e83	595	327	202	85	492	45	e125
11	60	218	e62	426	e82	383	285	214	70	474	913	e90
12	55	165	e72	e260	e125	243	260	177	60	373	854	e80
13	53	135	e84	e220	369	e180	244	146	137	255	432	e75
14	52	114	e76	e175	248	e160	229	130	412	197	244	e70
15	55	120	e65	e148	e205	e160	215	121	357	151	168	104
16	60	115	e70	e155	e150	e155	206	111	643	126	135	487
17	56	108	e69	e158	e127	e145	252	116	470	199	118	220
18	53	104	e69	e158	e120	e140	249	117	284	143	104	146
19	51	98	e70	e153	e118	e139	203	101	264	115	94	114
20	52	114	e73	e145	e132	e135	409	95	255	105	84	101
21	51	107	e59	e135	e120	e135	327	100	201	114	81	97
22	51	112	e58	e120	e110	e135	248	96	152	98	82	91
23	51	112	e60	e105	e108	e132	193	88	142	102	77	81
24	50	106	e65	e103	e108	e128	188	79	124	161	159	73
25	51	94	e64	e101	e108	e125	188	71	104	113	460	70
26	52	100	e70	e103	e105	e130	184	68	235	96	e280	69
27	61	186	e75	e110	e105	e240	166	63	714	87	e186	127
28	96	130	e72	e114	e120	614	157	59	413	76	e168	488
29	78	131	e70	e114	---	962	144	60	254	97	e127	265
30	73	107	e68	e112	---	1050	134	104	547	101	e127	179
31	67	---	e68	e109	---	1470	---	88	---	89	e99	---
TOTAL	2265	4321	2376	6933	3528	9186	11467	4645	6687	6385	5539	4047
MEAN	73.1	144	76.6	224	126	296	382	150	223	206	179	135
MAX	168	335	113	1240	369	1470	1460	419	714	590	913	488
MIN	50	62	58	67	82	125	134	59	60	76	45	64
CFSM	.74	1.46	.78	2.27	1.28	3.01	3.88	1.52	2.27	2.09	1.82	1.37
IN.	.86	1.63	.90	2.62	1.33	3.47	4.34	1.76	2.53	2.41	2.09	1.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1998, BY WATER YEAR (WY)

MEAN	95.0	129	119	97.1	94.4	188	451	257	134	78.6	65.4	58.5
MAX	337	279	395	285	349	467	764	589	449	323	305	196
(WY)	1982	1990	1984	1996	1981	1953	1952	1972	1973	1973	1990	1981
MIN	16.3	37.6	36.3	23.2	22.1	49.5	137	82.2	38.9	25.2	18.7	17.9
(WY)	1964	1971	1948	1948	1980	1941	1995	1965	1995	1965	1980	1963

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1940 - 1998

ANNUAL TOTAL	66720	67379	
ANNUAL MEAN	183	185	147
HIGHEST ANNUAL MEAN			239
LOWEST ANNUAL MEAN			66.5
HIGHEST DAILY MEAN	2220	Jul 15	1470
LOWEST DAILY MEAN	15	Jul 2	45
ANNUAL SEVEN-DAY MINIMUM	28	Jun 27	50
INSTANTANEOUS PEAK FLOW			1890
INSTANTANEOUS PEAK STAGE			5.73
ANNUAL RUNOFF (CFSM)	1.86	1.88	1.50
ANNUAL RUNOFF (INCHES)	25.22	25.47	20.33
10 PERCENT EXCEEDS	414	384	340
50 PERCENT EXCEEDS	99	118	82
90 PERCENT EXCEEDS	48	64	29

a From rating curve extended above 1,400 ft³/s on basis of peak flow over dam.
e Estimated.

01141800 MINK BROOK NEAR ETNA, NH

LOCATION.--Lat 43°42'08", long 72°11'15", Grafton County, Hydrologic Unit 01080104, on left bank, 2 mi northeast of Etna, and 5 mi east of Hanover.

DRAINAGE AREA.--4.60 mi².

PERIOD OF RECORD.--Discharge records: August 1962 to September 1998 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,000 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and those below 0.5 ft³/s, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 55 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	----	75	Ice Jam	Mar. 30	1700	* 234	3.02
Mar. 10	0715	70	2.37	Apr. 1	1930	106	2.55
Mar. 17	1245	Ice Jam	* 3.52	June 27	0815	144	2.71

Minimum discharge, 0.24 ft³/s, October 2, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.94	e3.3	e1.5	e3.1	19	85	4.7	2.3	11	.67	.49
2	.26	12	e3.0	e1.2	e3.0	18	52	6.8	1.4	7.7	.59	.67
3	.35	7.0	e2.8	1.3	e3.0	18	37	7.5	1.7	5.5	.52	1.0
4	.39	3.3	2.7	4.3	e2.9	13	25	5.8	1.3	4.5	.47	.64
5	.93	4.1	3.2	3.4	e2.9	11	18	5.4	1.1	16	.43	.54
6	.65	2.3	3.0	e7.0	e2.8	9.2	15	19	.97	7.0	.58	.48
7	.52	1.6	2.7	e12	e2.8	8.5	14	13	1.9	5.3	.81	.61
8	.45	1.3	2.4	e56	e2.7	e8.1	13	9.2	3.6	5.1	.59	.52
9	.40	11	e3.0	35	e2.6	27	12	7.7	2.1	5.0	.47	.85
10	.38	11	e2.8	19	2.6	56	9.9	16	1.5	5.6	.41	.83
11	.33	4.9	e2.6	14	2.7	e29	8.4	12	1.2	4.2	3.2	.60
12	.30	3.3	e2.3	e11	e14	e15	7.5	8.0	1.5	3.6	3.2	.51
13	.29	2.4	e2.0	e9.7	e15	e12	6.9	6.5	5.1	3.1	1.4	.46
14	.31	e2.8	e1.9	e9.2	e8.6	e10	6.4	5.6	15	2.6	1.0	.42
15	.39	e2.5	e1.9	e8.4	e6.8	e9.0	5.9	4.9	12	2.2	.82	.83
16	.53	2.3	e2.0	e7.6	e5.6	e7.6	5.6	4.2	21	2.0	.67	5.3
17	.41	e2.3	e2.0	e6.8	e5.3	e7.4	6.4	4.9	11	1.8	.61	1.7
18	.37	2.2	e1.9	e5.6	e5.0	e7.4	5.7	4.2	8.5	1.5	.56	1.2
19	.35	e2.2	e1.9	e5.3	e5.5	8.7	6.0	3.4	6.2	1.3	.47	.95
20	.33	2.2	1.8	e5.1	5.8	7.8	26	3.0	4.7	3.9	.41	.85
21	.33	2.5	e1.5	5.0	5.4	7.4	11	2.8	3.7	2.8	.41	.74
22	.34	2.8	1.4	e4.8	4.9	10	8.0	2.7	3.2	1.8	.39	.70
23	.33	2.8	e1.5	e4.7	4.7	e6.8	6.9	2.4	3.0	3.6	.41	.66
24	.32	e2.6	e1.6	e4.6	7.0	e6.0	13	2.0	2.5	3.0	1.7	.58
25	.43	e2.6	e1.8	4.5	8.4	e6.4	10	1.8	2.5	1.9	2.7	.60
26	.45	e2.8	e2.4	4.2	7.0	9.3	8.1	1.7	24	1.5	3.5	.58
27	1.4	e6.0	2.1	e4.0	7.0	32	6.8	1.5	73	1.2	1.6	1.7
28	.89	e3.8	1.8	3.8	7.6	81	6.2	1.3	20	1.0	1.0	1.5
29	.58	e3.4	e1.7	3.6	---	135	5.5	1.2	11	1.0	.78	1.1
30	.46	e3.0	2.1	e3.4	---	131	5.0	1.1	8.4	.91	.68	.92
31	.39	---	1.7	e3.3	---	149	---	1.4	---	.83	.54	---
TOTAL	14.17	113.94	68.8	269.3	154.7	875.6	446.2	171.7	255.37	118.44	31.59	28.53
MEAN	.46	3.80	2.22	8.69	5.53	28.2	14.9	5.54	8.51	3.82	1.02	.95
MAX	1.4	12	3.3	56	15	149	85	19	73	16	3.5	5.3
MIN	.26	.94	1.4	1.2	2.6	6.0	5.0	1.1	.97	.83	.39	.42
CFSM	.10	.83	.48	1.89	1.20	6.14	3.23	1.20	1.85	.83	.22	.21
IN.	.11	.92	.56	2.18	1.25	7.08	3.61	1.39	2.07	.96	.26	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1998, BY WATER YEAR (WY)

MEAN	5.10	7.12	6.92	4.81	5.10	13.9	23.6	11.8	4.55	2.48	1.92	1.64
MAX	23.2	17.9	22.4	16.4	22.4	48.7	49.4	27.9	13.8	11.6	15.0	7.66
(WY)	1976	1976	1984	1986	1984	1977	1969	1976	1973	1996	1976	1987
MIN	.23	.76	1.03	.67	.70	2.66	5.78	3.29	.53	.19	.047	.089
(WY)	1964	1972	1979	1981	1980	1989	1995	1965	1964	1965	1965	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1962 - 1998

ANNUAL TOTAL	2230.02	2548.34		
ANNUAL MEAN	6.11	6.98	7.42	
HIGHEST ANNUAL MEAN			14.0	1976
LOWEST ANNUAL MEAN			2.52	1965
HIGHEST DAILY MEAN	136	Feb 22	149	Mar 31
LOWEST DAILY MEAN	.08	Aug 11	.26	Oct 2
ANNUAL SEVEN-DAY MINIMUM	.12	Aug 6	.34	Oct 18
INSTANTANEOUS PEAK FLOW			c 234	Mar 30
INSTANTANEOUS PEAK STAGE			d 3.52	Mar 17
INSTANTANEOUS LOW FLOW			f .24	Oct 2
ANNUAL RUNOFF (CFSM)	1.33		1.52	
ANNUAL RUNOFF (INCHES)	18.03		20.61	
10 PERCENT EXCEEDS	15		13	
50 PERCENT EXCEEDS	2.1		3.0	
90 PERCENT EXCEEDS	.29		.49	

a Also occurred on September 2-5, 21, 1995.

b Also occurred on August 30, 1995.

c From rating curve extended above 130 ft³/s on basis of slope-area measurement at gage heights 3.50 ft and 3.75 ft.

d Ice jam.

e Estimated.

f Also occurred on October 3.

CONNECTICUT RIVER BASIN

01142500 AYERS BROOK AT RANDOLPH, VT

LOCATION--Lat 43°56'04", long 72°39'30", Orange County, Hydrologic Unit 01080105, on right bank, 135 ft upstream from bridge on State Highway 12, just north of village limits of Randolph, 0.4 mi upstream from Adams Brook, and 1.2 mi upstream from mouth.

DRAINAGE AREA--30.5 mi².

PERIOD OF RECORD--Discharge records: July 1939 to September 1975, June 1976 to current year.

REVISED RECORDS--WDR MA-NH-RI-VT-72-1: 1949(M), 1952(M), 1953(P), 1958(P), 1960(M), 1967(M).

GAGE--Water-stage recorder. Datum of gage is 630.50 ft (Vermont State Department of Highways datum). Prior to October 1, 1964, at site 140 ft downstream at datum 2.25 ft higher and October 1, 1964, to September 30, 1975, at site 140 ft downstream at datum 1.25 ft higher.

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

EXTREMES OUTSIDE PERIOD OF RECORD--Maximum stage since at least 1830, about 18 ft, present datum, in November 1927.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	1045	1,410	7.90	June 27	0800	* 3,480	* 11.93
Mar. 29	1800	665	5.88	July 1	1330	544	5.48
Mar. 31	1915	1,040	6.98	Aug. 11	0730	418	5.02
Apr. 2	0100	774	6.22				

Minimum discharge, 8.2 ft³/s, October 11.

REVISIONS--The peak discharges and annual maximum (*) reported for water years 1992, 1994, and 1996 have been revised as shown in the following table. They supersede figures published in the reports for 1992, 1994, and 1996.

Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
1992	Mar. 11, 1992	----	* 886	* 6.49	1996	Jan. 20, 1996	0045	846	6.43
1994	Apr. 16, 1994	----	* 1,040	* 6.98	1996	Jan. 27, 1996	2200	* 873	* 6.51

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	16	37	e14	e29	47	596	42	32	263	21	e27
2	18	50	34	e16	e28	51	486	50	21	177	19	e30
3	15	51	34	e20	e27	53	349	53	25	131	18	e27
4	15	43	33	37	e26	52	258	51	20	109	17	e25
5	21	72	35	32	e25	52	206	61	18	141	16	e22
6	17	42	34	40	e25	50	174	107	16	95	16	e21
7	13	35	e31	69	e25	48	153	85	17	82	18	e49
8	11	31	e27	421	e25	46	137	65	25	79	17	e37
9	11	64	e24	386	e24	89	125	58	22	84	15	e43
10	11	100	e25	201	e24	201	108	63	17	103	14	e35
11	9.6	56	e21	e130	e25	122	94	64	16	77	156	e29
12	9.7	46	e24	e100	e78	106	86	53	17	65	62	e25
13	9.8	41	e25	e78	68	e82	78	47	48	57	40	e23
14	9.9	39	e22	e68	39	e77	72	44	161	52	31	e23
15	11	39	e18	e62	36	e70	66	41	113	46	27	e125
16	12	37	e24	e55	40	e66	63	38	131	42	25	e79
17	11	35	e24	e52	41	e62	82	39	106	39	23	46
18	11	35	e23	e50	40	e59	69	36	121	36	22	35
19	10	33	e24	e47	43	e57	59	32	131	34	20	31
20	9.7	32	25	e45	44	e55	147	30	106	54	18	28
21	9.5	34	19	e44	40	52	85	30	71	42	17	27
22	9.5	41	e19	e40	37	51	69	28	57	34	17	26
23	11	38	e21	e37	37	47	62	26	52	46	16	25
24	10	36	e21	e36	36	48	68	24	49	44	75	24
25	11	33	e22	e34	38	48	63	22	43	33	107	23
26	10	35	25	e34	36	49	58	21	188	30	59	23
27	27	63	24	e34	37	145	54	20	1550	28	e45	46
28	34	43	22	e34	41	295	51	18	346	25	e43	46
29	21	40	18	e33	---	525	47	18	219	24	e39	35
30	18	40	23	e31	---	569	45	20	173	23	e35	30
31	16	---	e18	e29	---	753	---	19	---	23	e30	---
TOTAL	432.7	1300	776	2309	1014	4027	4010	1305	3911	2118	1078	1065
MEAN	14.0	43.3	25.0	74.5	36.2	130	134	42.1	130	68.3	34.8	35.5
MAX	34	100	37	421	78	753	596	107	1550	263	156	125
MIN	9.5	16	18	14	24	46	45	18	16	23	14	21
CFSM	.46	1.42	.82	2.44	1.19	4.26	4.38	1.38	4.27	2.24	1.14	1.16
IN.	.53	1.59	.95	2.82	1.24	4.91	4.89	1.59	4.77	2.58	1.31	1.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1998, BY WATER YEAR (WY)

	MEAN	27.1	39.7	41.7	35.1	33.8	75.3	162	78.9	39.4	20.5	15.6	15.1
MAX	102	102	151	96.8	136	189	289	173	142	85.5	64.0	48.9	
(WY)	1946	1960	1984	1996	1981	1979	1969	1972	1947	1973	1989	1981	
MIN	2.29	9.05	11.9	9.31	8.27	14.0	46.7	23.4	7.32	2.05	1.90	1.91	
(WY)	1964	1954	1948	1981	1940	1940	1995	1941	1965	1965	1965	1963	

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1939 - 1998

ANNUAL TOTAL		17706.5		23345.7		
ANNUAL MEAN		48.5		64.0		
HIGHEST ANNUAL MEAN						78.4
LOWEST ANNUAL MEAN						16.7
HIGHEST DAILY MEAN		343	Apr 7	1550	Jun 27	1550
LOWEST DAILY MEAN		6.9	Aug 8	a 9.5	Oct 21	.80
ANNUAL SEVEN-DAY MINIMUM		8.6	Aug 5	10	Oct 18	.97
INSTANTANEOUS PEAK FLOW				3480	Jun 27	3480
INSTANTANEOUS PEAK STAGE				11.93	Jun 27	11.93
INSTANTANEOUS LOW FLOW				8.2	Oct 11	.60
ANNUAL RUNOFF (CFSM)		1.59		2.10		1.59
ANNUAL RUNOFF (INCHES)		21.60		28.47		21.61
10 PERCENT EXCEEDS		125		116		110
50 PERCENT EXCEEDS		33		37		27
90 PERCENT EXCEEDS		11		17		6.8

a Also occurred on October 22.

e Estimated.

0114400 WHITE RIVER AT WEST HARTFORD, VT

LOCATION.--Lat 43°42'51", long 72°25'07", Windsor County, Hydrologic Unit 01080105, on left bank, 700 ft upstream from highway bridge at West Hartford, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--690 mi².

PERIOD OF RECORD.--Discharge records: June 1915 to current year. October 1927 to September 1928 monthly discharge only, published in WSP 1301.

Water-quality records: Water years 1953, 1967-74, 1992-95.

REVISED RECORDS.--WSP 756: Drainage area. WSP 781: 1928(M). WSP 1031: 1916(m), 1923. WSP 1301: 1916-26(M), 1929(M).

GAGE.--Water-stage recorder. Datum of gage is 374.53 ft above sea level. Prior to October 30, 1927, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some diurnal fluctuation at low flow during period 1934-50 caused by powerplant upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft³/s, November 4, 1927, gage height, 29.3 ft, from floodmarks, from rating curve extended above 29,000 ft³/s on basis of slope-area measurement of peak flow; minimum observed, about 35 ft³/s, August 4, 1918; minimum daily discharge, 54 ft³/s, September 27, 28, 1963. Stage and discharge of the flood of November 4, 1927, are the greatest since at least 1761.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	1600	18,200	13.05	Apr. 2	0300	15,500	12.17
Mar. 31	2230	20,200	13.67	June 27	1545	* 34,500	* 17.38

Minimum discharge, 217 ft³/s, October 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	673	397	921	e310	e620	1170	13900	1180	719	3440	432	451
2	631	1740	798	e320	e590	1340	11800	1280	590	3360	395	426
3	501	2300	738	e375	e580	1440	8570	1820	585	2320	372	452
4	462	1500	727	e635	e560	1390	5920	1510	569	1880	353	443
5	465	2800	740	999	e550	1360	4490	1650	490	2210	336	420
6	624	1780	750	912	e540	1320	3720	1930	450	1810	318	383
7	464	1270	706	3410	e530	1260	3330	2540	436	1480	337	366
8	391	1030	669	11900	e520	1190	3080	1990	569	1370	358	370
9	352	1130	533	11600	e520	1540	2900	1710	566	1400	326	465
10	328	2670	528	5160	e520	4460	2660	1710	461	1610	292	596
11	300	1780	516	3410	e560	3200	2350	1980	406	1510	2040	559
12	270	1320	488	e2300	e900	2140	2160	1660	383	1310	1830	452
13	261	1100	609	e1900	2340	1790	2030	1400	653	1100	1230	405
14	255	957	551	e1280	e1200	e1600	1920	1260	4410	980	791	381
15	259	953	399	e1200	e890	e1400	1810	1150	6340	861	633	374
16	263	894	455	e1180	e950	e1290	1710	1040	5280	767	550	2120
17	261	793	553	e1100	e920	e1210	2080	982	4260	771	495	1190
18	245	782	569	e1060	e900	e1170	2050	1030	4720	766	454	780
19	239	714	521	e1040	e1000	e1110	1710	870	3470	662	418	627
20	236	726	511	e980	1190	e1050	3560	791	3470	746	385	549
21	233	683	424	e900	1120	e1020	2850	746	2270	981	367	506
22	231	815	307	e850	1020	e975	2240	728	1700	705	359	470
23	228	823	304	e720	963	e940	1950	688	1430	715	350	439
24	225	773	440	e710	940	e930	2010	628	1220	1050	395	422
25	226	671	467	e710	997	e990	1930	579	1080	746	1750	402
26	223	729	491	e705	948	e1110	1760	558	5570	616	1900	390
27	273	1420	549	e705	940	e2450	1590	518	21500	558	1050	505
28	612	1180	e430	e695	1020	9190	1480	487	7620	507	746	726
29	502	1070	e350	e685	---	15900	1360	462	4020	465	610	635
30	415	877	e335	e650	---	13000	1260	483	3070	458	565	516
31	401	---	e320	e640	---	17200	---	468	---	451	508	---
TOTAL	11049	35677	16699	59041	24328	96135	100180	35828	88307	37605	20945	16820
MEAN	356	1189	539	1905	869	3101	3339	1156	2944	1213	676	561
MAX	673	2800	921	11900	2340	17200	13900	2540	21500	3440	2040	2120
MIN	223	397	304	310	520	930	1260	462	383	451	292	366
CFSM	.52	1.72	.78	2.76	1.26	4.49	4.84	1.67	4.27	1.76	.98	.81
IN.	.60	1.92	.90	3.18	1.31	5.18	5.40	1.93	4.76	2.03	1.13	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1998, BY WATER YEAR (WY)

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	668	1021	1007	854	802	1897	3877	1990	903	496	374	401																																																																								
MAX	2416	2391	3189	2178	3503	7170	7286	4734	3459	2010	1822	2774																																																																								
(WY)	1946	1960	1984	1996	1981	1936	1969	1940	1947	1996	1976	1938																																																																								
MIN	80.0	285	237	197	169	222	1131	634	224	108	90.5	77.5																																																																								
(WY)	1964	1954	1923	1925	1940	1940	1995	1941	1921	1965	1965	1963																																																																								

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1915 - 1998

ANNUAL TOTAL	393067	542614	
ANNUAL MEAN	1077	1487	1189
HIGHEST ANNUAL MEAN			1910
LOWEST ANNUAL MEAN			494
HIGHEST DAILY MEAN	8580	Apr 7	21500
LOWEST DAILY MEAN	120	Aug 11	223
ANNUAL SEVEN-DAY MINIMUM	146	Aug 6	229
INSTANTANEOUS PEAK FLOW			34500
INSTANTANEOUS PEAK STAGE			17.38
INSTANTANEOUS LOW FLOW			217
ANNUAL RUNOFF (CFSM)	1.56	2.15	1.72
ANNUAL RUNOFF (INCHES)	21.19	29.25	23.41
10 PERCENT EXCEEDS	2830	2820	2700
50 PERCENT EXCEEDS	641	791	630
90 PERCENT EXCEEDS	220	367	190

a Also occurred on September 28, 1963.

b From rating curve extended above 29,000 ft³/s as explained under Extremes paragraphs.

c From floodmarks.

d About.

e Estimated.

CONNECTICUT RIVER BASIN

01144500 CONNECTICUT RIVER AT WEST LEBANON, NH

LOCATION.--Lat 43°38'46", long 72°18'46", Grafton County, Hydrologic Unit 01080104, on left bank, 50 ft downstream from railroad bridge at West Lebanon, 500 ft downstream from White River, and at mile 215.0.

DRAINAGE AREA.--4,092 mi².

PERIOD OF RECORD.--Discharge records: October 1911 to November 1976 (published as "at White River Junction, VT"), November 1978 to current year.

Water-quality records: Water year 1954, 1994.

REVISED RECORDS.--WSP 741: 1932 (adjusted monthly and yearly figures only). WSP 781: 1928(M). WSP 891: Drainage area. WSP 1301: 1922-26(M).

GAGE.--Water-stage recorder. Datum of gage is 321.52 ft above sea level. Prior to June 16, 1918, nonrecording gage on downstream side of pier of railroad bridge 50 ft upstream at same datum. June 16, 1918, to November 2, 1930, nonrecording gage at various locations on upstream and downstream sides of railroad bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, Union Village Reservoir, and other reservoirs. These reservoirs have a combined usable capacity of about 17.2 billion ft³.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136,000 ft³/s, November 4, 1927, gage height, 35.0 ft, present site; minimum daily discharge 82 ft³/s, August 8, 1965. Stage and discharge of flood November 4, 1927, are the greatest since at least 1760.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59,900 ft³/s April 2, gage height, 21.86 ft; minimum daily discharge, 1,130 ft³/s, October 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	4600	4740	e3500	5550	9350	52800	5970	2380	12200	4190	2720
2	4930	2710	4630	2910	6810	9700	57700	6540	5610	17700	2260	3320
3	4250	9420	4410	2860	6080	10300	56200	6430	5310	16700	2950	3280
4	4270	6070	4190	4840	7270	10500	49700	7420	5060	11900	3560	2450
5	3470	8730	5380	4850	5660	10800	38700	8120	4290	10100	1860	2020
6	4660	11900	4090	5450	7210	9320	27600	9230	3700	10100	2920	1270
7	5050	11200	5050	8820	7190	9450	20600	13200	2060	9350	3290	1770
8	4260	6990	5430	28900	7010	8580	19000	12200	4330	7570	1210	3980
9	3240	4980	4250	39100	6520	9270	19300	9870	4810	6610	3810	4410
10	3050	8300	4980	33300	6180	22300	17400	11000	4440	8030	2030	4850
11	2790	9660	5920	27900	6010	24100	16100	11200	4670	11500	6130	5750
12	1130	8910	3670	20200	6130	16000	13000	10400	3570	14200	11600	4710
13	2750	6360	2790	13900	e8150	10900	12800	10300	2160	14600	12800	5050
14	2360	6400	4290	11700	e7600	11300	13300	6090	13000	13200	7630	2090
15	2720	5850	5390	9620	e7000	9360	12000	4720	19100	8040	6750	2350
16	2450	5850	3690	7530	6740	9540	11300	4340	18600	5880	4190	6100
17	2120	6360	3790	7090	7270	9540	12300	3230	20500	6780	5710	6610
18	1880	4170	4740	8200	7670	7470	12300	5000	20100	7130	5460	5690
19	1520	4330	4370	6420	7660	6660	11200	4570	18200	6320	3810	3090
20	2040	4540	4420	7560	7660	6860	14900	2610	17400	6620	2370	2230
21	1870	4200	2860	e5400	6920	6930	13700	3280	11800	5640	3380	2400
22	1490	4430	3570	e5900	7380	6160	11500	3420	10900	7990	3580	2850
23	2020	3000	3900	e4850	7750	6340	9790	2820	9790	5610	3900	2640
24	1510	4450	2890	e6100	8110	6510	9210	2610	7740	7290	4300	2820
25	1310	4000	3280	e4150	8630	6890	7970	3060	8560	4930	8360	2520
26	1670	4520	4460	e3500	7450	7840	8410	2960	11700	4790	9200	2130
27	1550	4940	3500	e6600	6490	11700	9140	2040	38400	4640	4060	1940
28	2790	5950	4020	e4700	7230	24200	7570	2000	22200	3450	4200	5610
29	2410	4830	5650	6210	---	42600	7330	1990	15400	3190	2820	5490
30	2980	4710	3420	5350	---	46400	8140	2000	13200	4660	2560	3750
31	2090	---	3690	6290	---	51500	---	2010	---	3470	3280	---
TOTAL	84750	182360	131460	313700	197330	438370	580960	180630	328980	260190	144170	105890
MEAN	2734	6079	4241	10120	7048	14140	19370	5827	10970	8393	4651	3530
MAX	5050	11900	5920	39100	8630	51500	57700	13200	38400	17700	12800	6610
MIN	1130	2710	2790	2860	5550	6160	7330	1990	2060	3190	1210	1270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1977, 1979 - 1998, BY WATER YEAR (WY)

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	4766	6804	6260	5101	4821	9213	20270	13050	6278	3796	3074	3198	12990	24860	16890	11680	17650	35510	32900	25890	16870	14050	8904	12900	1982	1928	1984	1996	1981	1936	1934	1972	1947	1973	1990	1954	1314	2313	1795	1627	1419	1626	5536	4556	1946	1393	1072	1007	1948	1948	1948	1948	1940	1940	1995	1987	1921	1921	1942	1921																											
MAX (WY)	1982	1928	1984	1996	1981	1936	1934	1972	1947	1973	1990	1954	12990	24860	16890	11680	17650	35510	32900	25890	16870	14050	8904	12900	1982	1928	1984	1996	1981	1936	1934	1972	1947	1973	1990	1954	1314	2313	1795	1627	1419	1626	5536	4556	1946	1393	1072	1007	1948	1948	1948	1948	1940	1940	1995	1987	1921	1921	1942	1921																											
MIN (WY)	1948	1948	1948	1948	1940	1940	1995	1987	1921	1921	1942	1921																																																																											

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1912 - 1977, 1979 - 1998

ANNUAL TOTAL	2628780	2948790	
ANNUAL MEAN	7202	8079	7163
HIGHEST ANNUAL MEAN			10700
LOWEST ANNUAL MEAN			4101
HIGHEST DAILY MEAN	35400	Apr 8	57700
LOWEST DAILY MEAN	1130	Oct 12	1130
ANNUAL SEVEN-DAY MINIMUM	1630	Oct 21	1630
INSTANTANEOUS PEAK FLOW			59900
INSTANTANEOUS PEAK STAGE		21.86	Apr 2
10 PERCENT EXCEEDS	14400		14400
50 PERCENT EXCEEDS	5050		5850
90 PERCENT EXCEEDS	2440		2410

e Estimated.

01150500 MASCOMA RIVER AT MASCOMA, NH

LOCATION.--Lat 43°38'55", long 72°10'55", Grafton County, Hydrologic Unit 01080104, on right bank, at Mascoma, 100 ft downstream from outlet of Mascoma Lake.

DRAINAGE AREA.--153 mi².

PERIOD OF RECORD.--Discharge records: August 1923 to present; August 1923 to January 1993, at site 900 ft downstream and different datum.

REVISED RECORDS.--WSP 726: Drainage area. WSP 801: 1925(M), WRD NH-VT-84-1: 1973(M).

GAGE.--Water-stage recorder. Elevation of gage is 755 ft above sea level, from topographic map.

REMARKS.--Records fair. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,840 ft³/s, March 19, 1936, gage height, 7.50 ft (at different datum), from rating curve extended above 2,500 ft³/s on basis of computations of flow over dam at gage heights 6.85 ft. and 7.50 ft; minimum daily discharge, 2 ft³/s, February 3, 1939, September 1, 1940.

EXTREMES FOR CURENT YEAR.--Maximum discharge, 2,790 ft³/s, April 1, gage height, 8.07 ft; minimum daily discharge, 26 ft³/s, September 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	97	129	55	113	448	2690	212	61	545	47	34
2	40	101	128	55	111	447	2530	154	65	461	44	34
3	40	156	125	55	108	476	2030	175	66	400	40	34
4	40	208	123	56	105	504	1600	203	63	333	40	34
5	41	232	119	69	96	505	1300	222	58	388	39	33
6	42	268	117	82	87	473	746	259	56	491	37	32
7	44	266	114	86	86	432	495	483	56	486	36	32
8	44	256	100	259	86	391	544	646	63	382	35	30
9	44	252	87	482	78	379	564	599	73	295	35	29
10	44	348	85	605	70	618	551	536	78	248	34	29
11	43	416	84	635	70	864	686	537	76	218	35	28
12	43	403	83	616	72	892	652	481	76	204	36	28
13	137	346	82	550	78	698	444	414	78	173	38	27
14	203	308	82	364	87	589	314	357	406	126	40	27
15	173	303	63	238	102	552	328	309	840	97	39	27
16	167	306	42	225	112	499	326	276	915	94	37	28
17	195	289	42	208	116	444	319	247	873	90	36	31
18	220	278	43	191	123	403	319	198	749	85	33	33
19	214	209	43	175	123	381	319	170	657	80	32	33
20	212	143	44	169	132	359	324	164	605	63	30	32
21	207	136	45	161	146	337	379	97	526	53	30	31
22	202	134	45	152	148	334	405	57	248	57	29	29
23	195	133	46	144	141	321	390	64	93	63	29	28
24	189	131	47	141	139	308	374	65	94	68	30	27
25	183	129	49	135	206	293	373	67	61	71	31	27
26	179	125	50	132	318	276	375	68	54	70	34	27
27	176	123	50	130	433	280	365	67	467	67	40	27
28	125	126	52	127	473	409	339	65	1100	62	43	26
29	94	128	52	123	---	672	313	63	1350	58	42	26
30	96	129	53	119	---	1730	290	60	774	54	40	26
31	96	---	54	116	---	2430	---	60	---	51	37	---
TOTAL	3768	6479	2278	6655	3959	17744	20684	7375	10681	5933	1128	889
MEAN	122	216	73.5	215	141	572	689	238	356	191	36.4	29.6
MAX	220	416	129	635	473	2430	2690	646	1350	545	47	34
MIN	40	97	42	55	70	276	290	57	54	51	29	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1998, BY WATER YEAR (WY)

MEAN	140	186	192	159	168	312	639	348	180	117	95.2	90.2
MAX	461	560	607	368	550	1222	1338	769	493	658	443	591
(WY)	1976	1928	1984	1978	1981	1936	1969	1996	1984	1973	1990	1938
MIN	34.6	35.8	46.5	39.3	38.7	65.4	180	78.2	54.1	30.9	19.0	29.6
(WY)	1964	1965	1979	1981	1980	1931	1995	1957	1985	1985	1985	1998

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1923 - 1998

ANNUAL TOTAL	76656	87573	
ANNUAL MEAN	210	240	219
HIGHEST ANNUAL MEAN			359
LOWEST ANNUAL MEAN			84.4
HIGHEST DAILY MEAN	3240	Apr 20	5090
LOWEST DAILY MEAN	31	Aug 24	2.0
ANNUAL SEVEN-DAY MINIMUM	33	Aug 18	16
INSTANTANEOUS PEAK FLOW			27
INSTANTANEOUS PEAK STAGE			2790
10 PERCENT EXCEEDS	499	540	Apr 1
50 PERCENT EXCEEDS	119	125	8.07
90 PERCENT EXCEEDS	38	34	Apr 1
			9.08
			472
			124
			49

a Also occurred on September 29, 30.

b From rating curve extended above 2,500 ft³/s on basis of computations of flow over dam at gage heights 6.85 ft and 7.50 ft. from gage located 900 ft downstream of present site at different datum.

CONNECTICUT RIVER BASIN

01150900 OTTAUQUECHEE RIVER NEAR WEST BRIDGEWATER, VT

LOCATION.--Lat 43°37'20", long 72°45'34", Rutland County, Hydrologic Unit 02010001, on right bank, 50 ft upstream from highway bridge on Mission Chapel Road, 1.6 mi northwest of West Bridgewater and 2.6 mi southeast of Sherburne Center.

DRAINAGE AREA.--23.4 mi².

PERIOD OF RECORD.--Discharge records: October 1984 to current year.

REVISED RECORDS.--WRD NH-VT-87-1: 1985-86.

GAGE.--Water-stage recorder. Elevation of gage is 1,150 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 08	1015	1,090	6.01	Apr. 02	0015	962	5.79
Mar. 29	1630	1,550	6.77	June 15	0030	1,310	6.40
Mar. 31	2045	* 1,570	* 6.80	June 26	1730	734	5.34

Minimum discharge, 8.2 ft³/s, September 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	28	41	e16	e23	46	963	45	23	135	12	12
2	15	225	34	e17	e23	56	701	69	17	116	11	11
3	15	173	30	e17	e22	58	469	89	27	79	10	12
4	16	111	30	e22	e21	49	228	75	21	60	9.9	10
5	22	191	32	e40	e21	46	150	84	18	78	9.9	9.8
6	20	108	31	137	e20	41	123	134	15	56	11	9.2
7	16	70	28	230	e20	38	106	123	15	45	13	10
8	14	54	26	703	e20	35	96	93	24	41	11	15
9	13	86	e21	806	e20	68	89	76	26	39	10	12
10	12	149	e20	352	e20	181	79	91	20	41	9.6	16
11	11	97	e19	163	e20	151	70	95	18	43	76	12
12	10	64	e19	e100	e31	e100	64	73	20	34	48	11
13	10	50	e19	e85	e115	e70	60	60	95	29	28	10
14	9.9	42	e20	e67	e93	e50	57	51	575	25	20	9.6
15	9.7	41	e21	e57	e63	e45	56	45	984	22	17	9.8
16	14	37	19	e50	e48	e40	58	39	413	20	15	35
17	11	33	18	e45	40	e37	91	38	234	19	14	18
18	10	31	17	e43	39	e35	86	34	136	18	14	13
19	10	29	e16	e40	42	e34	67	29	138	16	13	12
20	10	29	e16	e38	42	e34	165	26	167	16	11	11
21	9.6	30	e15	e35	35	e35	132	25	103	15	11	13
22	10	39	14	e33	32	e34	101	23	82	14	10	12
23	11	35	16	e30	30	e33	84	21	94	30	10	11
24	11	33	17	e29	30	e32	89	19	64	32	27	10
25	11	28	18	e29	32	e32	86	18	51	19	41	9.9
26	10	32	19	e28	30	e38	74	17	511	15	39	9.9
27	24	99	18	e28	30	e160	63	16	435	14	23	13
28	28	57	17	e27	32	773	55	15	243	13	18	12
29	20	45	16	e26	---	1460	50	15	129	13	16	10
30	17	38	e16	e25	---	1010	47	15	96	13	14	9.5
31	17	---	e15	e24	---	1370	---	14	---	13	13	---
TOTAL	440.2	2084	658	3342	994	6191	4559	1567	4794	1123	585.4	368.7
MEAN	14.2	69.5	21.2	108	35.5	200	152	50.5	160	36.2	18.9	12.3
MAX	28	225	41	806	115	1460	963	134	984	135	76	35
MIN	9.6	28	14	16	20	32	47	14	15	13	9.6	9.2
CFSM	.61	2.97	.91	4.61	1.52	8.53	6.49	2.16	6.83	1.55	.81	.53
IN.	.70	3.31	1.05	5.31	1.58	9.84	7.25	2.49	7.62	1.79	.93	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1998, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	51.0	66.7	48.3	48.6	38.7	90.3	152	82.0	44.5	32.4	24.4	25.9		
MAX	121	121	87.2	108	76.6	200	269	169	160	125	51.5	97.2		
(WY)	1988	1989	1997	1998	1990	1998	1994	1996	1996	1996	1986	1987		
MIN	14.2	25.4	21.2	19.4	14.5	44.6	45.7	34.7	13.7	6.77	7.88	6.19		
(WY)	1998	1995	1998	1988	1987	1989	1995	1995	1988	1991	1985	1995		

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1985 - 1998

ANNUAL TOTAL	17905.7	26706.3		
ANNUAL MEAN	49.1	73.2		
HIGHEST ANNUAL MEAN			58.7	
LOWEST ANNUAL MEAN			82.5	1996
HIGHEST DAILY MEAN	515	Apr 7	1460	Mar 29 1998
LOWEST DAILY MEAN	4.9	Aug 11	9.2	Sep 6 1991
ANNUAL SEVEN-DAY MINIMUM	5.3	Aug 5	10	Oct 17 1991
INSTANTANEOUS PEAK FLOW			a 1570	Mar 31 1995
INSTANTANEOUS PEAK STAGE			6.80	Mar 31 1987
INSTANTANEOUS LOW FLOW			8.2	Sep 15 1991
ANNUAL RUNOFF (CFSM)	2.10	3.13		2.51
ANNUAL RUNOFF (INCHES)	28.47	42.46		34.10
10 PERCENT EXCEEDS	133	130		122
50 PERCENT EXCEEDS	26	30		32
90 PERCENT EXCEEDS	8.1	11		11

a From rating curve extended above 670 ft³/s.
e Estimated.

01151500 OTTAUQUECHEE RIVER AT NORTH HARTLAND, VT

LOCATION.--Lat 43°36'09", long 72°21'17", Windsor County, Hydrologic Unit 01080106, on left bank, 100 ft upstream from highway bridge at North Hartland, 0.3 mi downstream from North Hartland Dam, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--221 mi².

PERIOD OF RECORD.--Discharge records: October 1930 to current year.

Water-quality records: Water years 1954-55.

GAGE.--Water-stage recorder. Datum of gage is 336.77 ft above sea level (levels by U. S. Army Corps of Engineers).

REMARKS.-- Records good. Flow regulated by powerplants upstream and by North Hartland Reservoir since March 1961; greater regulation by powerplants at North Hartland Reservoir since July 1985. Small seasonal storage in reservoir at Plymouth.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1760, 21.5 ft in November 1927, from floodmarks, discharge 30,400 ft³/s, by computation of peak flow over dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s, September 21, 1938, gage height, 17.68 ft, from rating curve extended above 6,200 ft³/s on basis of computation of flow over dam at gage heights 15.58 ft, 17.68 ft, and 21.5 ft; minimum, 0.2 ft³/s, July 6, 1984 during hydroelectric construction; minimum daily discharge, 3.8 ft³/s, July 3, 1933. Maximum discharge since construction of North Hartland Dam in March 1961, 6,170 ft³/s, March 17, 1977, gage height, 8.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,320 ft³/s, April 6, gage height, 8.40 ft; minimum daily discharge, 44 ft³/s, September 4-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	106	494	149	234	346	1840	708	259	858	100	63
2	98	953	382	147	274	507	1130	721	200	839	86	73
3	97	1080	180	146	306	605	1500	787	211	632	86	67
4	97	421	260	147	256	507	2270	553	166	526	85	44
5	99	783	350	367	234	504	3180	400	133	760	85	44
6	170	608	242	378	250	431	3860	421	124	581	85	44
7	108	441	242	912	231	348	3340	969	138	433	103	88
8	71	335	258	2900	172	351	3180	764	259	442	93	89
9	83	336	229	4160	194	487	2780	642	241	399	79	67
10	63	758	176	2850	238	1390	2300	644	176	374	74	80
11	53	888	185	1700	243	1330	1860	966	150	425	280	98
12	53	339	156	1040	419	724	1580	674	207	318	280	89
13	53	206	145	810	731	560	1150	605	452	272	202	66
14	91	324	147	533	405	632	691	532	2000	253	112	58
15	57	321	205	431	242	624	619	470	2080	219	95	59
16	71	321	187	437	245	454	498	369	3020	194	95	119
17	64	304	176	403	419	448	570	385	3360	185	95	142
18	62	242	178	406	402	458	586	396	2250	185	95	85
19	61	254	178	409	386	529	611	305	1590	148	79	56
20	61	314	180	532	405	512	1160	343	1210	162	72	56
21	61	254	179	476	375	446	969	259	837	166	72	56
22	61	232	125	331	295	447	708	236	675	151	72	78
23	61	234	83	201	302	446	619	269	769	218	71	71
24	53	364	140	231	334	448	683	214	542	315	124	56
25	60	289	181	297	368	381	690	179	450	174	197	56
26	60	349	180	411	346	412	592	195	2380	132	151	56
27	69	307	181	287	342	1030	546	172	2460	132	123	56
28	232	313	181	329	342	2580	485	165	1500	132	97	66
29	151	316	138	325	---	3800	441	143	1000	132	84	71
30	118	316	149	275	---	4110	428	143	862	122	79	52
31	163	---	166	233	---	3610	---	143	---	120	77	---
TOTAL	2736	12308	6253	22253	8990	29457	40866	13772	29701	9999	3428	2105
MEAN	88.3	410	202	718	321	950	1362	444	990	323	111	70.2
MAX	232	1080	494	4160	731	4110	3860	969	3360	858	280	142
MIN	53	106	83	146	172	346	428	143	124	120	71	44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1998, BY WATER YEAR (WY)

MEAN	219	342	343	300	282	625	1368	666	293	165	120	131
MAX (WY)	1060	816	1028	900	1157	2570	2587	1676	990	1131	759	1030
MIN (WY)	1988	1976	1984	1996	1981	1936	1969	1940	1998	1973	1976	1938
MIN (WY)	33.3	70.5	72.2	56.2	55.4	84.0	346	201	70.3	34.8	28.5	29.7
MIN (WY)	1965	1965	1948	1948	1940	1940	1995	1941	1965	1965	1965	1967

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1931 - 1998
ANNUAL TOTAL	145208	181868	
ANNUAL MEAN	398	498	404
HIGHEST ANNUAL MEAN			691
LOWEST ANNUAL MEAN			173
HIGHEST DAILY MEAN	3000	Apr 8	4160
LOWEST DAILY MEAN	23	Aug 9	a 44
ANNUAL SEVEN-DAY MINIMUM	31	Sep 22	59
INSTANTANEOUS PEAK FLOW			5320
INSTANTANEOUS PEAK STAGE			8.40
10 PERCENT EXCEEDS	1080		1030
50 PERCENT EXCEEDS	229		207
90 PERCENT EXCEEDS	48		71
			17.68
			24400
			3.8
			13300
			1936
			1933
			1967
			1938
			1938

a Also occurred on September 5, 6.

b From rating curve extended above 6,200 ft³/s as explained above.

CONNECTICUT RIVER BASIN

01152500 SUGAR RIVER AT WEST CLAREMONT, NH

LOCATION.--Lat 43°23'15", long 72°21'45", Sullivan County, Hydrologic Unit 01080104, on right bank, 0.2 mi downstream from Redwater Brook at West Claremont, and 2.4 mi upstream from mouth.

DRAINAGE AREA.--269 mi².

PERIOD OF RECORD.--Discharge records: May 1928 to current year. Published as "at Claremont" prior to October 1928. Water-quality records: Water year 1954, 1995-96

REVISED RECORDS.--WSP 711: 1930(M). WSP 756: Drainage area. WSP 1901: 1960 (adjusted figures only).

GAGE.--Water-stage recorder. Datum of gage is 358.78 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to October 1, 1928, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Regulation by Sunapee Lake 25 mi upstream and occasional diurnal fluctuation at low flow by mills upstream; greater regulation by mills prior to 1971.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft³/s, March 19, 1936, gage height, 10.92 ft, from rating curve extended above 6,700 ft³/s on basis of computations of flow over dam at gage heights 10.49 ft and 10.93 ft; maximum gage height, 11.80 ft, March 12, 1936 (ice jam); minimum daily discharge, 14 ft³/s, August 26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 1	0245	* 4,200	* 6.00	No other peak greater than base discharge.			
Minimum daily discharge, 32 ft ³ /s, October 17.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	137	431	144	e155	774	3770	322	228	942	89	57
2	47	415	387	196	e150	888	3340	339	205	729	65	63
3	52	611	318	206	e150	962	2690	443	210	553	59	86
4	49	466	281	221	e165	851	2100	442	187	468	55	76
5	56	426	269	273	e165	780	1660	405	163	689	51	71
6	51	349	258	300	e160	704	1380	552	142	650	51	63
7	51	293	240	496	e170	648	1210	939	110	525	55	62
8	44	256	219	1300	e160	600	1050	788	185	407	56	63
9	39	330	181	1730	e150	967	949	673	200	333	51	67
10	38	723	180	1150	e145	2140	797	738	168	296	46	73
11	36	567	160	914	e145	1930	706	808	135	269	63	70
12	35	443	142	736	e300	1280	636	705	128	244	99	65
13	34	369	152	638	e670	996	594	593	251	217	99	59
14	34	341	128	520	e560	848	551	520	1160	184	86	56
15	36	329	72	416	e490	751	488	464	1800	157	69	60
16	34	326	104	e370	e440	653	447	420	2140	137	62	89
17	32	307	148	e345	e380	545	507	406	2390	125	67	87
18	56	269	137	e300	e390	530	464	409	2130	122	67	78
19	117	254	143	e280	e430	629	412	364	1720	100	61	71
20	125	249	145	e270	e480	666	956	290	1410	109	55	65
21	122	242	106	e240	e450	624	877	287	1150	116	51	59
22	121	248	103	e220	e430	576	675	276	867	114	53	61
23	116	277	120	e205	e400	553	556	228	776	113	53	59
24	108	267	144	e210	e500	521	566	197	631	153	75	57
25	115	246	162	e210	e870	497	584	177	444	142	85	55
26	114	252	195	e190	e860	531	567	163	937	112	92	53
27	145	356	203	e180	720	901	502	151	1000	103	103	58
28	150	331	182	e170	663	1980	443	140	1030	93	87	54
29	160	314	152	e170	---	3460	393	131	804	90	75	51
30	149	269	197	e165	---	3620	360	123	676	91	69	49
31	137	---	183	e160	---	3950	---	128	---	95	61	---
TOTAL	2445	10262	5842	12925	10748	35355	30230	12621	23377	8478	2110	1937
MEAN	78.9	342	188	417	384	1140	1008	407	779	273	68.1	64.6
MAX	160	723	431	1730	870	3950	3770	939	2390	942	103	89
MIN	32	137	72	144	145	497	360	123	110	90	46	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1998, BY WATER YEAR (WY)

	215	350	364	322	331	673	1288	648	317	175	136	128
MEAN	215	350	364	322	331	673	1288	648	317	175	136	128
MAX	895	917	1146	1090	1343	2490	2746	1657	818	711	952	1269
(WY)	1976	1996	1997	1978	1981	1936	1969	1940	1940	1973	1990	1938
MIN	39.2	66.9	92.9	84.7	74.5	108	359	179	67.5	26.2	29.4	44.7
(WY)	1984	1972	1948	1948	1942	1940	1995	1965	1965	1965	1965	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1928 - 1998

ANNUAL TOTAL	147974	156330	
ANNUAL MEAN	405	428	411
HIGHEST ANNUAL MEAN			660
LOWEST ANNUAL MEAN			139
HIGHEST DAILY MEAN	5190	Apr 19	11200
LOWEST DAILY MEAN	32	Oct 17	14
ANNUAL SEVEN-DAY MINIMUM	34	Oct 11	21
INSTANTANEOUS PEAK FLOW		4200	a 14000
INSTANTANEOUS PEAK STAGE		6.00	Apr 1
10 PERCENT EXCEEDS	1070	923	b 11.80
50 PERCENT EXCEEDS	245	240	209
90 PERCENT EXCEEDS	44	57	69

a From rating curve extended above 6,700 ft³/s as explained above.
 b Ice jam.
 e Estimated.

01153550 WILLIAMS RIVER NEAR ROCKINGHAM, VT

LOCATION.--Lat 43°11'30", long 72°29'08", Windham County, Hydrologic Unit 01080107, on left bank, 50 ft downstream from highway bridge on Parker Hill Road, 0.2 mi downstream from Divoll Brook, 0.35 mi northeast of Rockingham, 2.2 mi upstream from mouth, and 4.5 mi northwest of Bellows Falls.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--Discharge records: October 1986 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 300 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges which are poor. Low flow regulated by powerplant upstream October 1986 to September 1992.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1938 had greatest discharge since at least 1753.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	0930	3,020	6.91	Mar. 31	1815	3,470	7.21
Mar. 29	1915	4,230	7.65	June 14	1415	* 6,290	* 8.70

Minimum discharge, 16 ft³/s, September 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	50	218	e60	e112	e180	1830	121	200	374	27	17
2	30	804	167	e72	e107	e210	1550	182	90	247	25	23
3	33	361	143	e80	e100	e220	1070	244	137	169	24	37
4	43	210	141	e200	e98	e215	710	205	92	138	23	27
5	42	288	150	e250	e95	e208	525	244	73	248	22	21
6	40	166	148	e370	e94	e200	430	646	62	172	22	19
7	32	129	133	781	e94	e190	381	493	62	140	25	22
8	28	112	123	2290	e94	e185	346	331	128	153	27	26
9	27	443	103	1800	e97	628	326	267	113	171	23	23
10	27	610	e104	826	e100	1270	289	909	77	141	21	25
11	26	274	e102	557	e130	623	249	921	65	115	61	23
12	25	197	e100	e375	e200	368	224	617	69	98	50	19
13	25	161	e98	e290	e280	301	208	385	587	84	34	18
14	27	143	e93	e250	e200	284	194	298	3340	73	27	17
15	29	161	e96	e225	e178	264	180	244	1680	64	24	19
16	32	141	e98	e205	e170	227	170	205	1190	58	23	31
17	31	130	e100	e195	e155	209	197	219	790	52	26	27
18	30	124	e98	e190	e145	203	173	200	656	47	33	21
19	30	115	e96	e180	e170	283	156	158	619	42	27	19
20	30	121	e87	e170	e152	275	664	137	514	62	23	18
21	31	115	e77	e155	e145	259	332	127	359	62	20	17
22	31	142	e72	e142	e140	230	247	141	254	47	20	19
23	33	149	e76	e135	e135	209	211	113	317	57	19	21
24	34	138	e82	e130	e130	190	213	97	233	84	37	19
25	42	118	e76	e130	e133	187	197	85	183	52	47	17
26	46	143	e86	e130	e128	232	178	79	434	43	42	17
27	140	288	e74	e128	e132	843	162	70	282	38	31	20
28	116	188	e84	e125	e158	2080	152	63	236	35	25	20
29	68	163	e79	e122	---	2940	139	58	188	32	21	17
30	54	149	e73	e118	---	2320	129	54	174	32	21	16
31	48	---	e65	e115	---	2510	---	74	---	30	19	---
TOTAL	1267	6333	3242	10796	3872	18543	11832	7987	13204	3160	869	635
MEAN	40.9	211	105	348	138	598	394	258	440	102	28.0	21.2
MAX	140	804	218	2290	280	2940	1830	921	3340	374	61	37
MIN	25	50	65	60	94	180	129	54	62	30	19	16
CFSM	.36	1.88	.93	3.11	1.23	5.34	3.52	2.30	3.93	.91	.25	.19
IN.	.42	2.10	1.08	3.59	1.29	6.16	3.93	2.65	4.39	1.05	.29	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1998, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	137	210	188	177	151	406	656	299	147	68.3	47.4	55.8
MAX	461	382	443	441	306	850	1199	544	440	227	123	282
(WY)	1988	1996	1997	1996	1997	1990	1994	1996	1998	1996	1990	1987
MIN	29.4	71.5	78.2	58.7	51.0	184	156	90.4	34.9	21.3	19.5	13.4
(WY)	1994	1995	1990	1989	1993	1994	1995	1995	1995	1995	1993	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1987 - 1998

ANNUAL TOTAL	74924.6	81740	
ANNUAL MEAN	205	224	212
HIGHEST ANNUAL MEAN			283
LOWEST ANNUAL MEAN			111
HIGHEST DAILY MEAN	2160	Apr 7	3340
LOWEST DAILY MEAN	9.7	Aug 11	16
ANNUAL SEVEN-DAY MINIMUM	11	Jul 29	18
INSTANTANEOUS PEAK FLOW			6290
INSTANTANEOUS PEAK STAGE			8.70
INSTANTANEOUS LOW FLOW			16
ANNUAL RUNOFF (CFSM)	1.83	2.00	1.89
ANNUAL RUNOFF (INCHES)	24.89	27.15	25.69
10 PERCENT EXCEEDS	580	432	466
50 PERCENT EXCEEDS	104	128	103
90 PERCENT EXCEEDS	19	23	24

a From rating curve extended above 3,800 ft³/s.
e Estimated.

CONNECTICUT RIVER BASIN

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, NH

LOCATION.--Lat 43°07'34", long 72°26'14", Cheshire County, Hydrologic Unit 01080104, on left bank, at North Walpole, 100 ft upstream from Saxtons River, 0.7 mi downstream from Vilas Bridge between Bellows Falls, VT, and North Walpole, and at mile 172.5.

DRAINAGE AREA.--5,493 mi², includes that of Saxtons River.

PERIOD OF RECORD.--Discharge records: March 1942 to current year.

Water-quality records: Water years 1975 to September 1980 (published as "at Walpole"), October 1980.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1980 to September 1981.

WATER TEMPERATURES: October 1980 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 218.63 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis, Moore and Comerford Reservoirs, and other reservoirs, combined usable capacity, about 24.8 billion ft³.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1750, 43.8 ft, March 19, 1936, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,000 ft³/s, April 1, gage height, 25.75 ft; minimum daily discharge, 1,580 ft³/s, September 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3320	4810	6870	3610	7170	13000	72400	9420	4530	16200	4290	3330
2	5100	6470	7610	3780	7200	14400	71800	8640	6260	22100	3170	2620
3	5680	12500	5820	4110	8990	16100	70500	9310	6600	21300	3420	3220
4	4430	9980	5370	5360	7080	14400	66100	11400	6900	16100	3490	2970
5	4550	10400	6170	7500	8690	14600	56800	11300	6520	13400	2460	2290
6	4360	13500	7480	7800	7100	14600	45600	12200	4400	14500	3180	1580
7	5750	14600	5630	10800	7500	13000	34500	18600	2530	11600	3770	2310
8	5050	10600	6610	33400	9450	13000	29700	17500	4930	11000	1880	4770
9	3880	7920	7600	58100	7230	14100	28800	15100	6090	9350	3830	4810
10	3440	12300	6340	48000	7150	29400	25600	16500	6130	8690	3240	4720
11	3380	12900	5180	36700	7090	36700	21700	18000	6030	13200	4530	5710
12	2130	12500	6460	29400	9320	24900	19800	16200	4660	16000	11100	5980
13	2520	10000	4480	18400	11200	17100	21800	14100	5790	15900	15800	5310
14	2470	8070	4930	16900	11900	15100	13800	12300	21300	16000	9350	2650
15	3040	8380	5290	11200	8520	15200	14800	7370	35100	11300	8170	2920
16	2770	8370	5130	11600	8830	12300	14400	7740	33100	7710	5210	5710
17	2790	8080	4980	9450	9950	12800	15500	5330	36800	7590	5960	6470
18	2740	7040	4300	10000	10400	12700	15900	7140	33800	8070	6520	7240
19	1870	6270	5130	9400	10700	10900	14400	7220	27300	7960	5310	4300
20	2450	6250	5480	10700	10700	10200	19700	5790	26700	7580	3140	2380
21	2310	6270	4950	9720	10700	10800	21100	4040	18500	7550	2610	2470
22	2140	6160	2680	7570	9330	10800	16300	5050	15100	8370	4300	3040
23	2620	4490	3540	7290	10400	9310	14100	4750	13700	7020	3530	3070
24	2110	5570	3470	7320	9860	9540	13300	3800	11400	7740	5400	2980
25	2000	6190	4140	7220	10900	9450	12200	4060	11800	6370	7670	2640
26	2350	5450	6150	7200	11800	9480	11300	3880	18500	5680	10100	2730
27	2370	6360	4870	7270	10500	17200	11400	3450	36300	6860	6240	2250
28	3210	7360	5150	7290	10300	33800	11400	2860	40800	4450	3590	5130
29	3270	7860	5860	7090	---	56100	11100	2420	21800	4570	3970	6180
30	3450	7690	5730	7080	---	66600	9530	2170	18500	4070	3580	5120
31	2570	---	4930	7060	---	70700	---	2940	---	4210	3740	---
TOTAL	100120	254340	168330	428320	259960	628280	805330	270580	491870	322440	162550	116900
MEAN	3230	8478	5430	13820	9284	20270	26840	8728	16400	10400	5244	3897
MAX	5750	14600	7610	58100	11900	70700	72400	18600	40800	22100	15800	7240
MIN	1870	4490	2680	3610	7080	9310	9530	2170	2530	4070	1880	1580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1998, BY WATER YEAR (WY)

MEAN	6257	8689	8479	7098	7139	13520	27230	16530	8171	4670	3972	3750
MAX	18300	18420	22550	17930	21810	34150	45630	33380	20600	18930	12990	14820
(WY)	1978	1960	1984	1996	1981	1979	1969	1972	1947	1973	1990	1954
MIN	1424	2886	2124	1866	2736	4532	7803	6477	3276	1845	1461	1555
(WY)	1949	1948	1948	1948	1980	1956	1995	1965	1963	1965	1942	1995

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1942 - 1998
ANNUAL TOTAL	3563460	4009020	
ANNUAL MEAN	9763	10980	9627
HIGHEST ANNUAL MEAN			14630
LOWEST ANNUAL MEAN			4991
HIGHEST DAILY MEAN	51600	Apr 8	72400
LOWEST DAILY MEAN	1830	Aug 7	1580
ANNUAL SEVEN-DAY MINIMUM	2020	Aug 2	2210
INSTANTANEOUS PEAK FLOW			75000
INSTANTANEOUS PEAK STAGE		25.75	Apr 1
10 PERCENT EXCEEDS	21000		21200
50 PERCENT EXCEEDS	6620		7360
90 PERCENT EXCEEDS	2730		2960
			2010

a Also occurred on September 2, 1957.

01155500 WEST RIVER AT JAMAICA, VT

LOCATION--Lat 43°06'32", long 72°46'33", Windham County, Hydrologic Unit 01080107, on left bank, 0.2 mi upstream from Depot Street bridge in Jamaica, 0.4 mi upstream from Ball Mountain Brook, and 2.8 mi downstream from Ball Mountain Dam.

DRAINAGE AREA--179 mi².

PERIOD OF RECORD--Discharge records: October 1946 to September 1989, October 1995 to current year.

Water-quality records: water year 1954.

REVISED RECORDS--WDR NH-VT-97-1: 1994 (M), 1996 (M).

GAGE--Water-stage recorder. Elevation of gage is 640 ft above sea level, from topographic map.

REMARKS--Records good except those for estimated daily discharges, which are fair. Flow regulated since 1961 by Ball Mountain Reservoir.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 29,500 ft³/s, December 31, 1948, gage height, 14.87 ft, from rating curve extended above 9,800 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.94 ft³/s, September 23, 24, 1968. Maximum discharge since construction of Ball Mountain Dam in 1961, 5,840 ft³/s, April 23, 1996, gage height, 9.47 ft; maximum gage height, 11.72 ft, February 7, 1982 (ice jam).

EXTREMES FOR CURRENT YEAR--Maximum discharge, 5,900 ft³/s, April 6, gage height, 9.49 ft; minimum daily discharge, 22 ft³/s, September 22-25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	138	410	e130	e210	369	1620	174	742	311	70	43
2	62	239	538	e150	e215	391	1090	328	131	488	69	45
3	76	790	286	e200	e220	453	1370	476	95	549	69	45
4	78	1090	199	567	182	356	1820	341	90	451	52	43
5	78	1090	344	657	169	370	2700	412	75	225	43	43
6	111	864	234	448	141	335	4740	873	68	225	43	43
7	126	360	232	1390	181	252	5300	1510	67	268	43	47
8	123	229	330	3330	e160	198	4010	743	81	266	43	45
9	119	264	156	3920	e140	384	1320	545	155	266	42	46
10	84	641	e115	3130	117	1460	602	777	152	457	42	46
11	51	538	e120	2340	152	1290	597	1360	136	533	46	45
12	51	670	e128	1050	342	539	592	860	114	275	44	44
13	51	585	127	612	891	415	556	534	866	117	43	44
14	51	350	128	516	368	456	469	425	2410	98	43	43
15	43	149	e120	411	e190	370	449	338	1880	77	43	43
16	38	e140	e80	423	e200	327	428	269	2110	56	43	44
17	38	e132	121	414	e240	252	377	271	1600	67	43	43
18	39	209	181	378	186	255	342	293	2440	45	43	43
19	39	e230	e110	246	231	e290	343	185	2300	44	42	43
20	39	209	136	269	277	305	1120	167	2150	46	42	43
21	39	125	120	278	259	388	1110	156	1910	51	42	30
22	39	132	e42	e190	233	341	825	156	843	58	42	22
23	39	135	e70	e200	225	e290	602	154	256	62	42	22
24	39	191	e130	300	e230	225	382	114	223	71	44	22
25	40	244	e100	272	234	196	908	96	105	73	44	22
26	40	241	396	e212	178	279	995	93	625	73	44	633
27	58	262	327	e220	165	796	859	68	421	73	43	540
28	179	268	e165	e250	203	1710	553	59	366	72	43	34
29	349	269	e170	e260	---	3060	248	87	264	72	43	34
30	304	267	e160	e250	---	3650	230	43	244	71	43	34
31	183	---	e150	e215	---	3160	---	129	---	71	43	---
TOTAL	2646	11051	5925	23228	6539	23162	36557	12036	22919	5611	1421	2274
MEAN	85.4	368	191	749	234	747	1219	388	764	181	45.8	75.8
MAX	349	1090	538	3920	891	3650	5300	1510	2440	549	70	633
MIN	38	125	42	130	117	196	230	43	67	44	42	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1989, 1997 - 1998, BY WATER YEAR (WY)

	1946	1948	1965	1989	1997	1998
MEAN	243	357	353	274	277	559
MAX	916	787	862	749	1009	1486
(WY)	1988	1989	1984	1998	1981	1953
MIN	16.9	65.0	78.7	65.3	42.0	107
(WY)	1948	1965	1948	1981	1980	1956
						1985
						1964
						1964
						1965
						1965
						1948

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1946 - 1989, 1997 - 1998

ANNUAL TOTAL	131308	153369	
ANNUAL MEAN	360	420	
HIGHEST ANNUAL MEAN			377
LOWEST ANNUAL MEAN			611
HIGHEST DAILY MEAN	3560	Apr 29	5300
LOWEST DAILY MEAN	18	Aug 9	a 22
ANNUAL SEVEN-DAY MINIMUM	18	Aug 14	29
INSTANTANEOUS PEAK FLOW			5900
INSTANTANEOUS PEAK STAGE			9.49
10 PERCENT EXCEEDS	1090		943
50 PERCENT EXCEEDS	148		200
90 PERCENT EXCEEDS	19		43

a Also occurred September 23-25.

b From rating curve extended above 9,800 ft³/s on basis of slope-area measurement of peak flow.

e Estimated.

CONNECTICUT RIVER BASIN

01155910 WEST RIVER BELOW TOWNSHEND DAM NEAR TOWNSHEND, VT

LOCATION.--Lat 43°03'04", long 72°42'02", Windham County, Hydrologic Unit 01080107, on left bank, 150 ft below Townshend Dam, 1.9 mi northwest of Townshend, 2.2 mi upstream from Mills Brook, and 18.2 mi upstream from mouth.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--Discharge records: October 1994 to current year. Records for September 1919 to September 1923, October 1928 to September 1989, at site 5.5 mi downstream (station 01156000) are not equivalent because of difference in drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 463 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and those for the period of October 1 to June 23, which are fair. Flow regulated since 1961 by Ball Mountain Reservoir and Townshend Reservoir. These reservoirs have a combined usable capacity of about 3.84 billion ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,360 ft³/s, April 7, gage height, 8.66 ft; minimum daily discharge, 40 ft³/s, September 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	212	599	199	256	586	2200	282	e610	609	90	58
2	70	1230	727	179	253	720	640	415	e450	686	89	63
3	95	1420	440	255	268	782	1030	837	400	704	87	100
4	111	1450	319	460	247	696	2580	622	307	594	80	78
5	105	1380	463	925	238	649	4460	591	229	453	62	66
6	121	1140	361	830	229	536	6030	1730	183	356	61	62
7	144	538	342	2020	247	444	6570	2310	164	384	64	81
8	139	340	429	3860	225	425	6060	1140	211	387	66	90
9	134	645	258	4500	184	857	3190	908	262	403	62	79
10	115	1380	204	4840	180	2510	970	1090	261	533	61	82
11	65	915	210	4590	237	2270	893	2690	243	652	85	73
12	59	878	213	3520	473	924	842	1900	192	417	97	68
13	58	782	210	2130	1240	739	804	984	1140	197	77	65
14	58	526	199	913	616	749	686	756	2530	159	69	63
15	57	297	183	605	362	614	656	598	1850	141	72	65
16	49	277	112	561	349	519	636	469	1680	100	68	76
17	47	255	207	594	432	438	608	454	2900	104	66	76
18	45	290	216	568	336	434	527	476	4680	85	75	72
19	45	324	152	506	420	537	490	319	2270	75	81	67
20	45	325	206	424	491	580	1640	285	1540	80	68	64
21	45	223	176	430	460	662	1640	260	1430	87	63	59
22	44	254	65	351	408	550	1120	272	1090	89	61	45
23	43	256	103	270	368	495	850	251	640	103	60	48
24	44	277	205	336	373	383	621	218	508	146	71	43
25	49	327	151	414	385	416	1130	147	299	123	82	40
26	57	358	382	316	335	478	1150	179	687	109	83	637
27	191	569	399	254	346	1390	1070	126	859	104	73	575
28	272	477	311	286	391	3070	714	117	562	100	65	85
29	376	427	220	319	---	4660	374	109	446	97	61	57
30	356	405	238	313	---	5310	360	117	373	95	60	52
31	238	---	211	279	---	4540	---	e86	---	93	59	---
TOTAL	3349	18177	8511	36047	10349	37963	50541	20738	28996	8265	2218	3089
MEAN	108	606	275	1163	370	1225	1685	669	967	267	71.5	103
MAX	376	1450	727	4840	1240	5310	6570	2690	4680	704	97	637
MIN	43	212	65	179	180	383	360	86	164	75	59	40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1998, BY WATER YEAR (WY)

	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998
MEAN	371	714	638	939	501	919	1803	891	377	210	81.5	84.6
MAX	892	1134	1143	1163	832	1225	2602	1517	967	471	122	117
(WY)	1996	1996	1997	1998	1996	1998	1996	1996	1998	1996	1995	1996
MIN	108	277	246	744	234	571	474	269	113	51.7	41.7	35.4
(WY)	1998	1995	1996	1997	1995	1996	1995	1995	1997	1995	1997	1995

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	FOR 1995 CALENDAR YEAR	FOR 1996 WATER YEAR	FOR 1997 WATER YEAR	FOR 1998 WATER YEAR	WATER YEARS 1995 - 1998
ANNUAL TOTAL	211604	228243					
ANNUAL MEAN	580	625					627
HIGHEST ANNUAL MEAN							816
LOWEST ANNUAL MEAN							378
HIGHEST DAILY MEAN	5340	Apr 29	6570	Apr 7	6570	Apr 7	Apr 7 1998
LOWEST DAILY MEAN	24	Sep 26	40	Sep 25	e 2.3	Sep 9	Sep 9 1995
ANNUAL SEVEN-DAY MINIMUM	28	Jul 29	44	Oct 18	6.4	Sep 8	Sep 8 1995
INSTANTANEOUS PEAK FLOW			7360	Apr 7	8050	Apr 24	Apr 24 1996
INSTANTANEOUS PEAK STAGE			8.66	Apr 7	8.89	Apr 24	Apr 24 1996
10 PERCENT EXCEEDS	1830		1400		1730		
50 PERCENT EXCEEDS	249		319		276		
90 PERCENT EXCEEDS	36		64		44		

e Estimated.

CONNECTICUT RIVER BASIN

01158600 OTTER BROOK BELOW OTTER BROOK DAM NEAR KEENE, NH

LOCATION.--Lat 42°56'45", long 72°14'14", Cheshire County, Hydrologic Unit 01080201, on right bank, 450 ft downstream from Otter Brook Dam, 2.0 mi northeast of Keene, 2.4 mi upstream from Minnewawa Brook, and 4.9 mi upstream from mouth.

DRAINAGE AREA.--47.2 mi².

PERIOD OF RECORD.--Discharge records: May 1958 to September 1989, October 1995 to current year. Annual maximums and measurements, water years 1990-95.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 658.65 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to September 29, 1933, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Otter Brook Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 700 ft³/s, April 4, gage height, 8.60 ft; minimum daily discharge, 2.7 ft³/s, September 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	12	104	13	42	112	560	35	113	300	7.3	2.9
2	3.6	47	133	13	42	138	191	36	100	250	6.4	2.8
3	3.8	86	128	13	42	176	166	50	77	130	5.7	2.9
4	4.6	67	122	13	33	185	534	69	60	93	5.0	3.0
5	9.0	e63	114	45	29	182	607	68	46	108	5.6	2.8
6	17	e51	74	66	29	164	580	97	37	100	e4.1	2.7
7	16	39	56	114	29	145	595	155	33	75	e4.3	3.2
8	13	32	64	185	29	142	563	135	51	65	4.5	3.9
9	12	38	38	276	29	145	504	127	57	60	4.4	4.0
10	11	95	86	303	29	296	318	126	47	53	4.2	4.2
11	9.3	77	61	291	29	455	139	156	38	45	e4.8	4.2
12	8.1	56	23	226	29	481	91	168	31	39	e7.3	3.9
13	7.2	44	24	156	69	450	82	131	110	34	8.3	3.7
14	15	39	24	112	85	407	73	95	193	29	7.9	3.6
15	25	41	14	67	85	277	68	83	498	25	7.5	3.8
16	22	39	9.4	50	83	138	63	71	566	e21	7.0	4.1
17	18	34	9.8	51	82	74	67	64	437	e19	6.5	3.9
18	15	32	10	52	81	65	170	63	528	18	6.5	3.6
19	13	28	10	52	82	66	229	51	588	16	6.5	3.4
20	11	23	11	75	83	69	146	47	535	18	6.0	3.2
21	10	20	11	85	84	140	116	47	207	20	5.4	3.0
22	9.0	20	11	84	84	208	111	47	82	17	4.8	3.3
23	7.9	20	11	65	105	116	69	42	74	16	4.4	4.1
24	6.9	39	11	56	113	64	53	36	75	21	4.4	4.4
25	6.5	45	11	56	112	64	56	30	77	18	4.5	4.2
26	7.0	44	11	56	112	78	58	27	113	15	4.4	4.0
27	11	44	12	56	112	86	59	22	137	13	4.1	4.5
28	21	44	12	55	111	95	41	19	117	11	3.8	4.7
29	17	44	12	47	---	176	34	17	93	10	3.5	4.5
30	13	44	13	42	---	448	34	15	84	9.1	3.3	4.2
31	11	---	13	42	---	600	---	16	---	8.2	3.1	---
TOTAL	357.6	1307	1243.2	2817	1874	6242	6377	2145	5204	1656.3	165.5	110.7
MEAN	11.5	43.6	40.1	90.9	66.9	201	213	69.2	173	53.4	5.34	3.69
MAX	25	95	133	303	113	600	607	168	588	300	8.3	4.7
MIN	3.6	12	9.4	13	29	64	34	15	31	8.2	3.1	2.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1989, 1996 - 1998, BY WATER YEAR (WY)

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1996	1997	1998	
MEAN	46.6	75.9	80.2	64.6	72.1	133	256	119	60.8	29.0	21.1	21.5																								
MAX	158	242	272	185	223	368	447	256	312	120	157	103																								
(WY)	1978	1996	1997	1978	1984	1979	1987	1969	1984	1973	1986	1960																								
MIN	.86	3.20	12.8	8.97	14.3	29.8	88.6	40.2	3.78	2.65	2.21	.77																								
(WY)	1965	1965	1965	1981	1965	1965	1985	1964	1964	1965	1963	1964																								

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1958 - 1989, 1996 - 1998

ANNUAL TOTAL	24459.1	29499.3																																					
ANNUAL MEAN	67.0	80.8																																					
HIGHEST ANNUAL MEAN										81.6																													
LOWEST ANNUAL MEAN										126																													
HIGHEST DAILY MEAN	514	Apr 23					607	Apr 5		685																													
LOWEST DAILY MEAN	2.0	Aug 4					2.7	Sep 6		.30																													
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 30					2.9	Aug 31		.30																													
INSTANTANEOUS PEAK FLOW							700	Apr 4		a 752																													
INSTANTANEOUS PEAK STAGE							8.60	Apr 4		8.62																													
10 PERCENT EXCEEDS	175						178			211																													
50 PERCENT EXCEEDS	34						42			40																													
90 PERCENT EXCEEDS	3.7						4.3			5.8																													

a Includes bypass flow around gage through spillway of the dam structure.

e Estimated.

01160350 ASHUELOT RIVER AT WEST SWANZEY, NH

LOCATION.--Lat 42°52'16", long 72°19'42", Cheshire County, Hydrologic Unit 01080201, on left bank, 150 ft downstream of California/Main Street bridge in West Swanzey, 4.5 mi downstream from South Branch Ashuelot River, 5 mi southwest of Keene, and 14.2 mi upstream from mouth.

DRAINAGE AREA.--316 mi².

PERIOD OF RECORD.--Discharge records: April 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 452 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Surry Mountain Lake 20 mi upstream since 1942 and by Otter Brook Lake 16 mi upstream on Otter Brook since 1958. Some regulation by small hydro plants upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,350 ft³/s, June 18, gage height, 3.58 ft; minimum daily discharge, 47 ft³/s, August 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e75	e128	473	187	283	902	2340	335	586	1030	71	64
2	e58	285	659	206	279	989	2070	352	815	1390	66	64
3	e55	452	648	211	278	1100	1290	430	709	1030	64	74
4	e65	473	611	223	267	1200	1720	474	586	739	61	74
5	e74	473	578	323	257	1150	1900	464	464	702	60	144
6	e81	417	529	448	249	1060	1850	577	345	695	59	114
7	e74	352	470	680	247	913	1790	946	274	584	60	130
8	e60	300	408	1240	247	833	1750	962	277	494	61	122
9	e65	310	341	1920	e231	1170	1690	843	308	439	58	94
10	e68	525	287	2090	e231	2270	1530	772	290	382	51	80
11	e64	599	317	1890	e232	2870	1330	840	256	313	61	75
12	e72	501	232	1600	372	2490	1190	880	234	269	76	74
13	e70	410	221	1250	e580	e2070	1150	768	430	239	72	74
14	e52	350	211	971	e560	1870	1130	631	1270	214	70	78
15	e61	328	186	e718	e430	1650	1070	541	1890	197	75	155
16	e100	309	175	e588	e330	1340	696	469	2140	197	78	99
17	e118	272	175	598	e400	945	512	423	2650	200	67	77
18	e120	254	172	542	e520	763	533	400	3020	188	67	59
19	e140	237	164	504	e760	800	589	336	2490	189	68	51
20	e148	216	162	478	e820	898	790	301	2030	209	62	50
21	e130	188	151	463	e780	865	880	273	1710	197	55	48
22	e120	233	143	408	e730	850	816	267	1330	146	49	54
23	e127	282	153	e338	e700	769	648	257	1200	131	47	63
24	e130	271	158	380	e670	636	584	230	1120	167	48	62
25	e160	289	178	443	e900	607	568	209	1100	145	52	62
26	e170	275	205	400	885	610	531	189	1080	130	56	67
27	e200	324	213	337	852	722	484	172	1040	113	65	77
28	e218	331	210	359	845	1100	427	161	915	99	69	72
29	e180	314	189	350	---	1560	369	154	777	93	66	64
30	e150	307	229	307	---	1920	346	145	660	86	65	58
31	e130	---	223	294	---	2270	---	156	---	80	64	---
TOTAL	3335	10005	9071	20746	13935	39192	32573	13957	31996	11087	1943	2379
MEAN	108	334	293	669	498	1264	1086	450	1067	358	62.7	79.3
MAX	218	599	659	2090	900	2870	2340	962	3020	1390	78	155
MIN	52	128	143	187	231	607	346	145	234	80	47	48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1998, BY WATER YEAR (WY)

MEAN	379	688	734	802	605	915	1462	816	370	226	118	90.6
MAX	761	1539	1723	1076	1007	1264	2353	1511	1067	362	214	140
(WY)	1996	1996	1997	1996	1996	1998	1994	1996	1998	1996	1995	1996
MIN	108	160	293	568	396	708	518	316	140	110	62.7	47.8
(WY)	1998	1995	1998	1997	1995	1997	1995	1995	1997	1995	1998	1995

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1994 - 1998
ANNUAL TOTAL	166515	190219	
ANNUAL MEAN	456	521	581
HIGHEST ANNUAL MEAN			781
LOWEST ANNUAL MEAN			380
HIGHEST DAILY MEAN	2630	Apr 20	3340
LOWEST DAILY MEAN	40	Aug 2	28
ANNUAL SEVEN-DAY MINIMUM	44	Jul 30	29
INSTANTANEOUS PEAK FLOW			3620
INSTANTANEOUS PEAK STAGE		3.58	a 3.81
10 PERCENT EXCEEDS	1300	1240	1650
50 PERCENT EXCEEDS	264	309	317
90 PERCENT EXCEEDS	65	65	65

a Ice affected.
e Estimated.

CONNECTICUT RIVER BASIN

01161000 ASHUELOT RIVER AT HINSDALE, NH

LOCATION.--Lat 42°47'07", long 72°29'12", Cheshire County, Hydrologic Unit 01080201, on left bank, 40 ft upstream from highway bridge at Hinsdale, 0.2 mi downstream from dam, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--420 mi².

PERIOD OF RECORD.--Discharge records: March 1907 to December 1911, July 1914 to current year.

Water-quality records Water years 1953, 1958, 1968, 1994.

REVISED RECORDS.--WSP 661: Drainage area. WSP 781: 1907- 10, 1914-34. WSP 1301 1915(M), 1917-19(M),1921-33(M). WSP 1701 1920.

GAGE.--Water-stage recorder. Datum of gage is 201.32 ft above sea level (levels by U.S. Army Corps of Engineers).

Prior to Sep. 29, 1933, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges and those below 300 ft³/s, which are fair. Flow regulated by Surry Mountain Lake 33 mi upstream since 1942 and by Otter Brook Lake 29 mi upstream on Otter Brook since 1958. Regulation by small hydro plants upstream.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 16,600 ft³/s, March 19, 1936, by computation of peak flow over dam; maximum gage height, 20.2 ft, March 19, 1936, from floodmarks (backwater from the Connecticut River); minimum daily discharge, 12 ft³/s, September 15, 1929. Maximum discharge since at least 1859, that of March 19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,100 ft³/s, June 18, gage height, 7.54 ft; minimum daily discharge, 61 ft³/s, September 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	163	573	e300	400	1320	2860	457	609	1270	124	73
2	97	249	790	e300	405	1460	2790	473	932	1930	113	72
3	93	466	777	304	390	1580	2000	553	849	1530	105	71
4	100	585	727	310	379	1680	2010	641	714	1030	100	73
5	104	590	691	450	363	1610	2280	664	561	918	95	80
6	111	539	660	615	355	1480	2270	898	440	927	94	141
7	110	463	583	909	349	1280	2180	1470	355	777	98	122
8	102	403	525	2020	352	1150	2110	1480	333	671	99	142
9	100	422	463	2980	357	1980	2050	1250	362	628	97	124
10	92	691	362	2920	343	3900	1930	1140	355	565	91	105
11	90	776	415	2530	334	3940	1700	1200	324	472	101	90
12	88	669	329	2110	509	3450	1480	1200	293	407	118	82
13	92	551	309	1690	923	2770	1400	1080	431	354	117	79
14	89	496	291	1260	e820	2420	1350	908	1630	315	111	77
15	84	466	e280	770	e640	2190	1300	769	2630	275	113	98
16	88	435	e250	760	e620	1870	1040	672	3350	253	117	158
17	103	388	234	e755	604	1400	731	604	4260	279	114	106
18	111	352	231	761	763	1110	668	587	4690	241	110	88
19	114	331	218	701	1110	1160	740	514	4040	222	107	73
20	135	304	212	658	1200	1380	1040	447	3150	229	104	65
21	149	271	e200	643	1140	1270	1180	414	2590	254	98	61
22	168	310	e180	e580	1040	1220	1090	385	1950	215	91	65
23	152	465	205	e520	994	1160	918	360	1660	190	85	69
24	146	425	210	e600	967	959	794	332	1500	215	85	72
25	157	421	236	e620	1170	904	777	296	1370	213	83	70
26	174	402	311	e560	1290	894	726	265	1350	195	81	69
27	209	450	336	e500	1250	1030	671	238	1340	183	79	74
28	272	486	328	e530	1220	1500	602	217	1210	159	78	81
29	241	454	e290	474	---	2120	527	200	1030	148	79	75
30	208	428	326	438	---	2440	482	185	880	140	78	70
31	177	---	e330	408	---	2730	---	192	---	134	75	---
TOTAL	4063	13451	11872	28976	20287	55357	41696	20091	45188	15339	3040	2625
MEAN	131	448	383	935	725	1786	1390	648	1506	495	98.1	87.5
MAX	272	776	790	2980	1290	3940	2860	1480	4690	1930	124	158
MIN	84	163	180	300	334	894	482	185	293	134	75	61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 1911, 1914 - 1998, BY WATER YEAR (WY)

MEAN	344	594	662	609	605	1235	1890	998	520	279	224	237
MAX	1474	2248	2209	1539	2016	4392	3723	2175	2075	1182	1098	2394
(WY)	1976	1928	1997	1978	1984	1936	1960	1945	1984	1915	1990	1938
MIN	49.2	55.4	113	84.0	113	273	597	335	96.9	60.8	50.5	53.0
(WY)	1965	1965	1915	1981	1980	1940	1985	1985	1964	1965	1966	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1907 - 1911, 1914 - 1998

ANNUAL TOTAL	226215	261985										
ANNUAL MEAN	620	718								682		
HIGHEST ANNUAL MEAN										1093		1960
LOWEST ANNUAL MEAN										216		1965
HIGHEST DAILY MEAN				3230	Apr 20	4690	Jun 18		16500		Mar 19	1936
LOWEST DAILY MEAN				62	Aug 11	61	Sep 21		12		Sep 15	1929
ANNUAL SEVEN-DAY MINIMUM				72	Aug 6	67	Sep 20		32		Aug 16	1966
INSTANTANEOUS PEAK FLOW						5100	Jun 18		a 16600		Mar 19	1936
INSTANTANEOUS PEAK STAGE						7.54	Jun 18		b 20.20		Mar 19	1936
10 PERCENT EXCEEDS				1710		1690			1720			
50 PERCENT EXCEEDS				362		435			374			
90 PERCENT EXCEEDS				95		91			97			

a By computation of peak flow over dam from floodmarks (backwater from Connecticut River).

b From floodmarks.

e Estimated.

ST. LAWRENCE RIVER BASIN

0428000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank, 0.3 mi downstream from Carver Falls, 1.9 mi upstream from Hubbardton River, and 3.2 mi northwest of Fair Haven.

DRAINAGE AREA.--187 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year.

Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Elevation of gage is 105 ft above sea level, from topographic map.

REMARKS.--Records fair except for periods of estimated daily discharges, which are poor. Flow regulated by powerplant upstream and Lake Bomoseen.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s, July 20, 1945, gage height, 24.36 ft, from high-water mark in well, from rating curve extended above 2,600 ft³/s on basis of computations of flow over dam at gage heights 16.10 ft, 21.40 ft, and 24.36 ft; minimum daily discharge, 2.1 ft³/s, August 8, 1965, September 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	--	* 4,400	* c 18.86				
Minimum daily discharge, 19 ft ³ /s, October 19.				No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	e48	437	e110	e145	e370	e2200	209	79	327	52	94
2	30	e250	370	e115	e140	e400	e1700	221	56	377	46	95
3	29	e310	289	e120	e140	e365	e1100	348	64	445	41	63
4	45	e230	272	e150	e135	e320	e850	363	61	325	47	68
5	50	e260	308	238	e130	e300	e650	319	48	419	38	58
6	74	103	341	330	e130	e280	e450	476	42	419	46	64
7	48	87	254	780	e130	e290	e400	617	39	325	38	69
8	36	77	208	e2800	e125	e400	e350	496	56	274	41	69
9	38	95	183	e2000	e125	e600	e315	436	49	231	30	65
10	35	309	174	e1400	e125	e1050	e290	480	39	228	50	81
11	20	228	166	e1000	119	e470	e270	608	36	195	527	79
12	24	156	152	e800	251	e300	e250	429	41	168	682	56
13	37	126	149	e640	663	e400	e230	282	100	142	492	57
14	26	126	144	e500	405	e500	210	272	624	124	172	56
15	20	126	105	e380	e300	e400	201	289	981	108	147	59
16	22	130	121	e240	e270	e270	186	271	863	95	126	82
17	37	147	120	e230	259	e300	215	269	1180	89	106	80
18	25	142	112	e230	e290	e350	218	196	1350	82	101	65
19	19	136	110	e220	e270	581	195	162	1200	72	93	59
20	22	138	110	e210	e250	e500	560	108	744	70	77	61
21	24	124	101	e205	e240	e400	513	106	552	67	71	60
22	23	136	85	e200	e230	e300	380	69	562	60	66	43
23	23	142	82	e190	e210	e220	354	86	382	66	61	41
24	22	145	85	e190	e220	e230	535	71	211	82	136	54
25	24	134	108	e180	e230	e250	637	63	176	63	300	37
26	133	140	185	e175	e250	e500	538	64	681	53	450	42
27	150	284	199	e170	e280	e800	303	54	1070	49	177	41
28	158	268	172	e160	e290	e1200	269	53	995	43	140	44
29	149	227	117	e160	---	e2000	252	49	684	41	135	29
30	115	211	137	e155	---	e2400	231	45	287	50	124	45
31	e50	---	e120	e150	---	e2350	---	49	---	58	98	---
TOTAL	1546	5035	5516	14428	6352	19096	14852	7560	13252	5147	4710	1816
MEAN	49.9	168	178	465	227	616	495	244	442	166	152	60.5
MAX	158	310	437	2800	663	2400	2200	617	1350	445	682	95
MIN	19	48	82	110	119	220	186	45	36	41	30	29
CFSM	.27	.90	.95	2.49	1.21	3.29	2.65	1.30	2.36	.89	.81	.32
IN.	.31	1.00	1.10	2.87	1.26	3.80	2.95	1.50	2.64	1.02	.94	.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

MEAN	141	225	262	257	258	523	672	322	163	105	81.3	90.6
MAX	721	760	1018	897	800	1627	1441	902	776	639	629	666
(WY)	1978	1973	1984	1996	1984	1986	1977	1983	1947	1976	1976	1938
MIN	18.2	21.4	38.4	42.0	26.8	113	231	71.5	19.4	7.08	3.94	8.19
(WY)	1974	1965	1965	1931	1980	1940	1966	1941	1965	1965	1965	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1929 - 1998

ANNUAL TOTAL	79237	99310	
ANNUAL MEAN	217	272	258
HIGHEST ANNUAL MEAN			527
LOWEST ANNUAL MEAN			66.9
HIGHEST DAILY MEAN	2040	Mar 31	e 2800
LOWEST DAILY MEAN	12	Aug 20	19
ANNUAL SEVEN-DAY MINIMUM	15	Aug 7	22
INSTANTANEOUS PEAK FLOW			e 4400
INSTANTANEOUS PEAK STAGE			c 18.86
ANNUAL RUNOFF (CFSM)	1.16	1.45	d 24.36
ANNUAL RUNOFF (INCHES)	15.76	19.76	1.38
10 PERCENT EXCEEDS	479	570	612
50 PERCENT EXCEEDS	133	158	135
90 PERCENT EXCEEDS	22	42	28

- a Also occurred on September 13, 1977.
- b From rating curve extended above 2,600 ft³/s as explained above.
- c Ice jam.
- d From high-water mark in well.
- e Estimated.

ST. LAWRENCE RIVER BASIN

04280350 METTAWEE RIVER NEAR PAWLET, VT

LOCATION.--Lat 43°22'14", long 73°13'00", Rutland County, Hydrologic Unit 02010001, on left bank, 10 ft downstream from highway bridge, 1.0 mi southwest of Butternut Bend, and 2.5 mi northwest of Pawlet.

DRAINAGE AREA.--70.2 mi².

PERIOD OF RECORD.--Discharge records: October 1984 to current year.

REVISED RECORDS.--WDR NH-VT-97-1: 1993, 1994, 1996 (P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 525 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 08	0945	* 3,120	* 5.63	Mar. 28	1900	855	3.85
Mar. 10	0715	1,070	4.10	Apr. 01	2045	1,100	4.13

Minimum discharge, 14 ft³/s, September 29, gage height, 1.56 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	209	e49	e68	146	588	99	58	203	42	21
2	23	55	150	90	e63	177	702	109	37	153	38	21
3	26	94	125	96	e54	176	560	115	60	122	36	26
4	29	73	124	153	e54	163	422	105	41	111	33	21
5	45	89	128	172	e52	155	343	98	35	199	33	20
6	38	69	122	323	e50	143	290	164	32	141	32	18
7	30	60	111	599	e50	137	250	147	31	119	35	21
8	27	55	103	2480	e48	134	222	128	37	129	32	21
9	25	81	95	2040	e47	354	204	120	34	200	29	24
10	24	158	90	934	e46	802	184	143	30	347	28	27
11	22	113	85	574	49	405	165	140	28	208	106	22
12	22	91	81	404	242	280	151	120	30	172	81	20
13	21	80	78	351	200	235	139	108	85	145	50	19
14	21	77	73	264	124	216	130	98	231	124	40	18
15	22	72	68	e220	97	192	121	90	332	108	36	20
16	24	70	e68	203	e90	171	114	81	246	97	33	26
17	22	64	65	182	103	160	115	85	353	90	31	21
18	21	62	62	166	126	149	108	76	361	79	30	19
19	20	60	e58	153	133	217	106	68	292	70	28	18
20	20	59	e55	142	122	177	284	62	209	100	26	17
21	20	59	e53	130	115	161	195	57	163	97	25	17
22	19	72	e51	e115	105	150	165	54	136	75	24	16
23	19	69	e52	e110	99	135	151	50	124	123	23	16
24	19	69	e54	e105	99	125	147	46	107	136	43	16
25	20	63	81	e100	98	123	152	43	100	86	35	16
26	20	78	103	97	91	175	139	41	237	72	40	17
27	30	166	85	e90	90	431	129	38	161	62	29	19
28	32	117	74	e86	93	659	120	36	134	55	26	16
29	27	104	e65	82	---	776	111	35	114	56	24	15
30	26	108	e48	77	---	627	104	36	106	51	24	15
31	24	---	e40	e72	---	557	---	36	---	47	22	---
TOTAL	761	2411	2656	10659	2608	8508	6611	2628	3944	3777	1114	583
MEAN	24.5	80.4	85.7	344	93.1	274	220	84.8	131	122	35.9	19.4
MAX	45	166	209	2480	242	802	702	164	361	347	106	27
MIN	19	24	40	49	46	123	104	35	28	47	22	15
CFSM	.35	1.14	1.22	4.90	1.33	3.91	3.14	1.21	1.87	1.74	.51	.28
IN.	.40	1.28	1.41	5.65	1.38	4.51	3.50	1.39	2.09	2.00	.59	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1998, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	75.5	133	133	135	101	196	272	152	76.6	57.1	46.2	38.1		
MAX	286	233	317	344	182	274	559	371	141	169	101	99.3		
(WY)	1988	1989	1997	1998	1990	1998	1994	1996	1986	1996	1988	1987		
MIN	24.5	44.3	45.8	45.3	45.5	96.5	115	55.4	36.3	13.8	16.2	10.6		
(WY)	1998	1995	1990	1989	1987	1989	1995	1987	1988	1995	1997	1995		

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1985 - 1998

ANNUAL TOTAL	38662	46260		
ANNUAL MEAN	106	127	118	
HIGHEST ANNUAL MEAN			152	1996
LOWEST ANNUAL MEAN			75.9	1995
HIGHEST DAILY MEAN	684	Mar 30	2480	Jan 8 1998
LOWEST DAILY MEAN	10	Aug 20	a 15	Sep 29 1995
ANNUAL SEVEN-DAY MINIMUM	12	Aug 6	16	Sep 24 1995
INSTANTANEOUS PEAK FLOW			3120	Jan 8 1996
INSTANTANEOUS PEAK STAGE			5.63	Jan 8 1996
INSTANTANEOUS LOW FLOW			14	Sep 29 1985
ANNUAL RUNOFF (CFSM)	1.51	1.81		1.68
ANNUAL RUNOFF (INCHES)	20.49	24.51		22.82
10 PERCENT EXCEEDS	250	226	242	
50 PERCENT EXCEEDS	70	85	79	
90 PERCENT EXCEEDS	16	22	24	

a Also occurred Sept. 30.
 b Backwater from ice.
 e Estimated.

04282500 OTTER CREEK AT MIDDLEBURY, VT

LOCATION.--Lat 44°00'47", long 73°10'06", Addison County, Hydrologic Unit 02010002, on right bank, 150 ft upstream from highway bridge in Middlebury and 3.5 mi downstream from Middlebury River.

DRAINAGE AREA.--628 mi².

PERIOD OF RECORD.--Discharge records: April 1903 to April 1907, October 1910 to January 1920, October 1928 to current year.

Water-quality records: Water years 1954, 1967-74.

REVISED RECORDS.--WSP 434: 1903-04. WSP 684: 1913(M), drainage area. WSP 1114 1913. WSP 1207: 1929, 1931.

GAGE.--Water-stage recorder. Datum of gage is 335.75 ft above sea level. Nonrecording gage at site 1,800 ft upstream at datum 10 ft lower, April 1, 1903 to April 30, 1907, and October 5, 1910 to January 31, 1920, nonrecording gage at present site and datum, October 1, 1928 to October 17, 1933.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by Chittenden Reservoir, usable capacity, 819 million ft³ on East Creek.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 13,600 ft³/s, November 4, 1927, gage height, 13.3 ft, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,780 ft³/s, April 5, gage height, 7.04 ft; minimum daily discharge, 230 ft³/s, October 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	557	345	871	e320	e680	1010	3610	960	355	3150	390	407
2	488	455	1060	e370	e650	1400	4460	923	472	3190	358	384
3	385	1080	1030	e450	e620	1670	5290	953	532	2820	322	374
4	358	1280	926	e550	e590	1700	5680	1040	551	2690	360	384
5	402	1510	920	924	e580	1710	5710	1020	488	2860	364	375
6	490	1380	964	1310	e560	1670	5500	1060	411	2650	324	319
7	526	1210	863	1690	e550	1540	5100	1280	366	2520	302	286
8	487	933	759	2770	e540	1390	4610	1390	375	2420	322	486
9	396	770	682	3390	e530	1600	4080	1380	499	2380	315	525
10	326	1210	617	3500	e530	2600	3700	1320	560	2330	293	874
11	289	1370	e520	3980	e550	2490	3300	1310	587	2200	1710	789
12	265	1300	e480	4910	927	e2470	2960	1320	450	2040	2270	634
13	246	1090	e475	5280	1600	e2460	2640	1260	480	1820	2040	490
14	236	906	e460	5240	e1650	2450	2360	1110	1080	1550	1780	401
15	259	768	e455	e4500	e1430	2360	2130	925	1690	1260	1410	505
16	285	682	e420	e3900	e1180	2230	1920	783	1860	941	1070	1680
17	274	645	e425	e3500	e1050	2070	1750	699	1970	805	765	1270
18	253	628	e460	e3100	1020	1880	1610	679	2150	740	547	922
19	242	603	e455	e2800	1140	1740	1420	667	2270	614	479	668
20	233	572	e420	e2650	1250	1700	1480	602	2330	607	444	502
21	230	568	e375	e2300	1260	1670	1640	551	2350	651	381	435
22	260	579	e330	e2050	1210	1620	1710	518	2310	614	350	462
23	282	619	e315	e1730	1100	1520	1740	484	2230	585	327	497
24	279	636	e365	e1450	1020	1400	1730	452	2080	740	496	489
25	259	669	e435	e1280	941	1230	1660	407	1890	800	1170	456
26	236	661	e500	e1120	914	1160	1590	382	2180	622	1440	432
27	257	944	e560	e960	904	1630	1480	377	3270	515	1190	524
28	342	1090	e510	e890	885	2180	1390	377	2890	482	878	549
29	493	1040	e450	e820	---	2730	1290	362	2590	447	714	493
30	483	881	e370	e740	---	2800	1130	330	2510	429	600	437
31	408	---	e300	e700	---	3120	---	327	---	405	487	---
TOTAL	10526	26424	17772	69174	25861	59200	84670	25248	43776	45877	23898	17049
MEAN	340	881	573	2231	924	1910	2822	814	1459	1480	771	568
MAX	557	1510	1060	5280	1650	3120	5710	1390	3270	3190	2270	1680
MIN	230	345	300	320	530	1010	1130	327	355	405	293	286
CFSM	.54	1.40	.91	3.55	1.47	3.04	4.49	1.30	2.32	2.36	1.23	.90
IN.	.62	1.57	1.05	4.10	1.53	3.51	5.02	1.50	2.59	2.72	1.42	1.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903-07, 10-20, 28-98, BY WATER YEAR (WY)

MEAN	639	871	914	882	852	1514	2548	1529	823	546	460	480
MAX	2021	1897	2610	2509	2414	4538	4500	3717	3025	1833	2624	2411
(WY)	1988	1976	1984	1949	1981	1936	1960	1996	1947	1996	1976	1938
MIN	172	260	246	205	229	384	885	370	208	126	129	168
(WY)	1965	1965	1948	1948	1980	1940	1995	1903	1965	1965	1965	1982

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1903-07, 10-20, 28-98

ANNUAL TOTAL	343258	449475										
ANNUAL MEAN	940	1231							1003			
HIGHEST ANNUAL MEAN									1878			1976
LOWEST ANNUAL MEAN									397			1965
HIGHEST DAILY MEAN			3330	Apr 7		5710	Apr 5		11000	Mar 21	1936	
LOWEST DAILY MEAN			168	Aug 4		230	Oct 21		92	Aug 9	1965	
ANNUAL SEVEN-DAY MINIMUM			197	Jul 29		253	Oct 17		107	Jul 28	1965	
INSTANTANEOUS PEAK FLOW						5780	Apr 5		11000	Mar 20	1936	
INSTANTANEOUS PEAK STAGE							7.04	Apr 5		10.30	Mar 20	1936
ANNUAL RUNOFF (CFSM)		1.50					1.96			1.60		
ANNUAL RUNOFF (INCHES)		20.33					26.62			21.71		
10 PERCENT EXCEEDS		2430				2640			2330			
50 PERCENT EXCEEDS		575				878			631			
90 PERCENT EXCEEDS		238				353			260			

e Estimated.

ST. LAWRENCE RIVER BASIN

04282525 NEW HAVEN RIVER AT BROOKSVILLE NEAR MIDDLEBURY, VT

LOCATION.--Lat 44°03'42", long 73°10'16", Rutland County, Hydrologic Unit 02010002, on left bank, at downstream side of Dog Team Road bridge, 0.2 mi south of Brooksville, 0.6 mi upstream from mouth, 1.6 mi downstream of Muddy Branch, 3.4 mi north of Middlebury.

DRAINAGE AREA.-- 115 mi².

PERIOD OF RECORD.--Discharge records: October 1990 to current year.

REVISED RECORDS.--WDR NH-VT-97-1 1991(P), 1992(P), 1993(P), 1994(P), 1995(P), 1996(P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 275 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and for June 27, which are fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 08	1500	5,280	9.07	June 27	Unknown	*a 21,700	*b 14.18
Feb. 12	2345	1,810	6.69	July 01	1430	3,350	7.94
Mar. 10	0930	3,220	7.85	Aug. 11	0730	2,620	7.40
Mar. 28	2045	2,330	7.16	Aug. 24	2000	3,470	8.02
Apr. 01	2345	2,410	7.23	Sep. 16	0345	2,540	7.34

Minimum discharge, 39 ft³/s, January 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307	90	181	e47	e105	322	1290	156	84	1720	116	125
2	194	392	160	e62	e100	439	1390	178	69	928	96	117
3	149	526	152	e118	e97	427	1100	233	69	427	79	127
4	142	275	148	e255	e95	314	710	193	66	299	74	144
5	185	646	213	246	e90	307	502	203	63	701	81	113
6	154	292	204	858	e88	261	412	231	60	349	69	101
7	116	205	170	995	e88	221	356	244	61	269	78	100
8	94	167	153	3660	e88	207	309	256	70	283	80	324
9	90	235	e120	2510	e86	737	289	227	75	588	67	449
10	84	790	e112	1260	e86	2160	271	203	60	740	63	581
11	78	357	e105	643	e92	683	252	233	54	554	1080	268
12	71	238	e107	e375	e395	e380	239	176	55	390	1000	216
13	70	196	e105	e285	763	e315	229	150	86	276	315	179
14	67	178	e100	e250	e265	e270	225	131	374	240	226	151
15	75	171	80	e210	e185	e235	241	120	392	207	170	377
16	86	159	105	e195	e170	e220	230	109	336	172	143	1150
17	72	147	e102	e180	e160	e210	257	152	333	347	125	355
18	68	143	e98	e170	e220	e205	281	134	335	199	112	246
19	65	139	e94	e162	312	e240	222	104	469	157	105	200
20	64	135	e88	e155	261	261	456	97	300	175	99	177
21	66	136	78	e145	237	223	359	111	229	170	95	162
22	66	174	64	e138	190	207	268	125	152	133	89	163
23	66	154	e73	e122	175	192	238	105	123	168	82	154
24	66	153	e88	e120	160	181	260	92	108	301	1120	139
25	70	130	e100	e113	161	180	256	83	96	163	1080	126
26	66	144	e130	e110	154	254	233	76	842	130	380	122
27	93	543	e118	e110	152	948	205	72	6880	116	262	605
28	122	262	e100	e112	166	1580	191	67	874	103	200	451
29	95	200	e86	e112	---	1980	175	64	420	125	171	266
30	91	168	e96	e110	---	1350	164	73	297	115	173	205
31	89	---	e66	e108	---	1660	---	67	---	117	143	---
TOTAL	3121	7545	3596	13936	5141	17169	11610	4465	13432	10662	7973	7893
MEAN	101	252	116	450	184	554	387	144	448	344	257	263
MAX	307	790	213	3660	763	2160	1390	256	6880	1720	1120	1150
MIN	64	90	64	47	86	180	164	64	54	103	63	100
CFSM	.88	2.19	1.01	3.91	1.60	4.82	3.37	1.25	3.89	2.99	2.24	2.29
IN.	1.01	2.44	1.16	4.51	1.66	5.55	3.76	1.44	4.34	3.45	2.58	2.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1998, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	179	214	199	216	119	288	440	271	165
MAX	409	369	409	450	188	554	763	592	448
(WY)	1991	1991	1997	1998	1997	1998	1994	1996	1998
MIN	86.4	108	99.2	101	46.5	146	182	126	51.0
(WY)	1995	1995	1996	1994	1992	1996	1995	1995	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1991 - 1998

ANNUAL TOTAL	64719	106543		
ANNUAL MEAN	177	292		
HIGHEST ANNUAL MEAN				1998
LOWEST ANNUAL MEAN				1995
HIGHEST DAILY MEAN	1230	6880	Jun 27	1998
LOWEST DAILY MEAN	32	e 47	Jan 1	1995
ANNUAL SEVEN-DAY MINIMUM	41	62	Jun 6	1995
INSTANTANEOUS PEAK FLOW		a 21700	Jun 27	1998
INSTANTANEOUS PEAK STAGE		b 14.18	Jun 27	1998
INSTANTANEOUS LOW FLOW		39	Jan 1	1995
ANNUAL RUNOFF (CFSM)	1.54	2.54		1.73
ANNUAL RUNOFF (INCHES)	20.94	34.46		23.53
10 PERCENT EXCEEDS	377	565		420
50 PERCENT EXCEEDS	119	170		123
90 PERCENT EXCEEDS	61	74		52

a From rating curve extended above 5,300 ft³/s.
 b From floodmarks.
 c Also occurred on July 15, 1995.
 e Estimated.

04282650 LITTLE OTTER CREEK AT FERRISBURG, VT

LOCATION.--Lat 44°11'51", long 73°14'58", Addison County, Hydrologic Unit 02010002, on left bank, downstream side of highway bridge on Route 7, 0.5 mi south of Ferrisburg, 2.2 mi north of Vergennes, 2.6 mi downstream of Mud Creek.

DRAINAGE AREA.-- 57.1 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 145 ft above sea level, from topographic map. Prior to October 23, 1990, nonrecording gage at same site and datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 09	1600	* 1,730	* 5.01	June 28	1430	899	4.11

Minimum discharge, 4.4 ft³/s, June 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	8.4	71	e20	e22	e40	191	17	8.8	272	27	26
2	8.2	14	60	e23	e22	e45	244	19	8.8	313	22	21
3	6.2	82	68	e28	e22	e44	267	25	7.6	269	16	21
4	6.9	76	45	e44	e21	e43	259	27	6.5	217	13	20
5	12	90	51	e66	e21	e42	206	25	6.0	245	11	18
6	16	68	e52	e120	e20	e41	154	28	5.4	211	10	15
7	9.8	53	e48	e230	e20	e40	113	32	5.1	178	10	14
8	6.8	38	e46	884	e21	e45	83	26	5.6	138	11	26
9	6.1	58	e44	1620	e21	e117	65	23	6.5	281	11	36
10	5.7	276	e41	1190	e21	e210	54	27	5.2	305	10	85
11	5.2	303	e37	680	e22	e130	44	62	4.8	374	53	73
12	7.9	244	e30	479	e50	e98	39	42	4.8	261	245	50
13	8.1	129	e23	326	e60	e72	35	32	6.3	144	177	37
14	6.0	67	e26	e200	e42	e57	32	25	19	92	119	30
15	5.0	49	e33	e130	e38	e50	30	21	43	64	61	31
16	5.1	43	e26	e80	e35	e48	28	18	97	48	39	162
17	5.8	45	e24	e54	e33	e46	29	15	111	44	30	169
18	6.9	36	e22	e49	e34	e45	29	19	167	35	23	116
19	5.6	37	e20	e46	e35	e44	26	14	204	29	19	58
20	5.2	34	e19	e42	e33	e43	55	11	159	24	15	39
21	5.3	34	e19	e37	e31	e41	69	17	82	23	13	32
22	5.3	54	e19	e34	e30	e40	57	18	40	19	12	25
23	5.4	55	e18	e31	e28	e38	46	15	33	21	11	21
24	5.5	60	e18	e28	e27	e37	38	13	27	37	25	20
25	5.6	57	e18	e26	e26	e45	33	9.7	22	35	248	18
26	5.9	52	e17	e26	e25	e66	30	7.9	231	24	461	17
27	9.2	153	e18	e26	e26	343	26	7.0	542	19	345	200
28	18	132	e18	e25	e33	399	23	6.3	843	16	123	199
29	12	143	e18	e24	---	373	21	8.1	694	22	50	115
30	9.6	102	e18	e24	---	310	19	6.7	419	27	38	66
31	8.6	---	e18	e23	---	238	---	7.1	---	23	32	---
TOTAL	239.9	2592.4	985	6615	819	3230	2345	623.8	3814.4	3810	2280	1760
MEAN	7.74	86.4	31.8	213	29.3	104	78.2	20.1	127	123	73.5	58.7
MAX	18	303	71	1620	60	399	267	62	843	374	461	200
MIN	5.0	8.4	17	20	20	37	19	6.3	4.8	16	10	14
CFSM	.14	1.51	.56	3.74	.51	1.82	1.37	.35	2.23	2.15	1.29	1.03
IN.	.16	1.69	.64	4.31	.53	2.10	1.53	.41	2.49	2.48	1.49	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1998, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	55.7	80.5	71.3	90.6	37.0	104	155	64.9	37.2
MAX	178	174	226	259	69.4	193	332	203	127
(WY)	1991	1991	1997	1996	1996	1990	1993	1996	1998
MIN	5.73	19.2	24.2	22.0	18.0	35.6	34.8	15.3	4.16
(WY)	1995	1995	1996	1994	1992	1996	1995	1995	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1990 - 1998

ANNUAL TOTAL	17556.3	29114.5	
ANNUAL MEAN	48.1	79.8	62.5
HIGHEST ANNUAL MEAN			103
LOWEST ANNUAL MEAN			28.7
HIGHEST DAILY MEAN	831	Mar 30	1620
LOWEST DAILY MEAN	2.7	Jul 3	a 4.8
ANNUAL SEVEN-DAY MINIMUM	3.0	Sep 22	5.3
INSTANTANEOUS PEAK FLOW			1730
INSTANTANEOUS PEAK STAGE			5.01
INSTANTANEOUS LOW FLOW			4.4
ANNUAL RUNOFF (CFSM)	.84	1.40	1.09
ANNUAL RUNOFF (INCHES)	11.44	18.97	14.86
10 PERCENT EXCEEDS	109	213	159
50 PERCENT EXCEEDS	22	32	25
90 PERCENT EXCEEDS	4.6	8.0	5.6

a Also occurred June 12.
b Ice jam.
e Estimated.

ST. LAWRENCE RIVER BASIN

04282780 LEWIS CREEK NEAR NORTH FERRISBURG, VT

LOCATION.--Lat 44°14'57", long 73°13'44", Addison County, Hydrologic Unit 02010002, on right bank, 100 ft east of State Highway 7 crossing, 1.1 mi southwest of North Ferrisburg, 1.2 mi south of Mount Philo peak, 3.1 mi north of Ferrisburg.

DRAINAGE AREA.--77.2 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year. Published as "at North Ferrisburg" prior to October 1996.

GAGE.--Water-stage recorder. Elevation of gage is 105 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	unknown	* 2,530	*a 5.35	July 1	2030	1,190	4.32
Mar. 29	0445	1,150	4.28	Aug. 12	0245	887	4.00
June 27	0230	1,640	4.72				

Minimum discharge, 18 ft³/s, June 10, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	33	99	e38	e68	e115	418	54	33	601	53	52
2	53	70	92	e45	e68	e135	505	55	27	643	45	47
3	40	151	e84	e50	e66	e145	422	65	26	287	41	50
4	39	96	e80	e105	e64	e150	351	70	24	216	38	47
5	72	211	e80	e102	e63	e145	278	66	22	396	37	42
6	72	127	e77	e190	e62	e140	233	67	20	221	34	38
7	47	96	e75	e350	e62	e130	197	76	20	161	34	38
8	38	81	e68	e1700	e61	e125	170	73	20	181	34	51
9	33	118	e64	e1000	e61	e300	152	88	20	333	32	72
10	30	423	e62	808	e61	e680	136	83	19	295	33	147
11	30	211	e63	547	e68	e425	121	88	20	247	221	84
12	45	152	e62	e350	e140	e300	110	68	21	192	493	65
13	37	132	e60	e220	e185	e230	101	57	23	148	151	60
14	33	106	e58	e170	e130	e190	93	50	45	127	102	54
15	31	94	e59	e155	e118	e165	86	46	56	110	82	71
16	31	88	e60	e145	e110	e150	81	41	57	107	69	345
17	28	86	e61	e135	e102	e145	82	46	63	259	61	132
18	27	77	e56	e127	e98	e140	89	43	69	129	52	91
19	26	75	e53	e122	e105	e140	79	36	87	96	45	75
20	26	72	e52	e118	e108	e130	149	34	93	82	41	67
21	25	72	e47	e115	e103	e125	138	33	61	72	39	60
22	25	91	e47	e105	e93	e120	105	32	44	62	37	52
23	25	81	e47	e100	e90	e110	92	31	46	72	39	51
24	25	82	e49	e88	e90	e110	86	29	41	144	80	48
25	29	79	e48	e85	e88	e108	83	28	42	80	225	45
26	27	81	e52	e84	e85	e125	79	27	567	63	195	42
27	33	246	e49	e83	e85	573	71	25	1000	54	112	275
28	41	151	e47	e80	e95	765	67	24	425	47	85	288
29	36	119	e48	e76	---	986	61	24	215	89	73	157
30	35	107	e46	e74	---	571	57	26	164	78	71	115
31	35	---	e43	e70	---	519	---	26	---	65	59	---
TOTAL	1129	3608	1888	7437	2529	8192	4692	1511	3370	5657	2713	2761
MEAN	36.4	120	60.9	240	90.3	264	156	48.7	112	182	87.5	92.0
MAX	72	423	99	1700	185	986	505	88	1000	643	493	345
MIN	25	33	43	38	61	108	57	24	19	47	32	38
CFSM	.47	1.56	.79	3.11	1.17	3.42	2.03	.63	1.46	2.36	1.13	1.19
IN.	.54	1.74	.91	3.58	1.22	3.95	2.26	.73	1.62	2.73	1.31	1.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1998, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	88.1	118	122	128	81.2	168	249	122	65.1
MAX	247	238	300	259	133	275	446	349	151
(WY)	1991	1991	1997	1996	1996	1990	1993	1996	1998
MIN	22.6	47.5	41.6	42.1	32.8	69.8	77.1	45.3	15.7
(WY)	1995	1995	1993	1993	1993	1996	1995	1995	1995

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1990 - 1998

ANNUAL TOTAL	28988	45487	
ANNUAL MEAN	79.4	125	105
HIGHEST ANNUAL MEAN			152
LOWEST ANNUAL MEAN			54.2
HIGHEST DAILY MEAN	631	Mar 30	e 1700
LOWEST DAILY MEAN	15	Aug 10	19
ANNUAL SEVEN-DAY MINIMUM	18	Sep 22	20
INSTANTANEOUS PEAK FLOW			ab 2530
INSTANTANEOUS PEAK STAGE			a 5.35
INSTANTANEOUS LOW FLOW			d 18
ANNUAL RUNOFF (CFSM)	1.03		1.61
ANNUAL RUNOFF (INCHES)	13.97		21.92
10 PERCENT EXCEEDS	165		246
50 PERCENT EXCEEDS	55		77
90 PERCENT EXCEEDS	21		32

- a From high-water mark.
- b From rating curve extended above 550 ft³/s.
- c Ice jam.
- d Also occurred on June 11.
- e Estimated.

04282795 LAPLATTE RIVER AT SHELBURNE FALLS, VT

LOCATION.--Lat 44°22'12", long 73°13'00", Chittenden County, Hydrologic Unit 02010003, on left bank, 150 ft upstream of small right bank tributary, 300 ft upstream of Shelburne Falls bridge, at Shelburne Falls, 0.9 mi southeast of Shelburne, 1.3 mi upstream of Munroe Brook, 2.0 mi above mouth.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Nonrecording gage at site 100 ft downstream, March to October 23, 1990. Water-stage recorder, October 24, 1990, to current year. Elevation of gage is 150 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 598 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	2330	* 1,680	* 6.30	July 16	2345	622	4.22
June 27	1000	697	4.41	Aug. 12	0300	1,510	6.03
July 1	1400	1,330	5.71	Sep. 16	0100	622	4.22

Minimum discharge, 3.0 ft³/s, May 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	6.8	49	e20	e25	e43	186	14	23	727	25	19
2	14	26	48	e26	e24	e50	295	16	11	655	19	15
3	9.8	138	59	e30	e24	e54	256	48	42	242	15	16
4	8.0	61	36	e50	e24	e54	206	46	14	111	13	15
5	16	134	46	e74	e23	e55	137	30	7.7	217	11	12
6	22	64	66	e132	e23	e53	99	27	5.5	128	9.9	10
7	11	34	63	e250	e23	e50	78	28	4.9	74	9.7	9.2
8	7.6	24	52	1100	e22	e46	64	20	4.9	69	9.9	31
9	5.5	44	e50	1170	e22	e130	55	17	4.6	216	8.1	39
10	4.7	314	e47	e360	e23	e260	46	19	3.9	206	11	87
11	4.1	190	e42	e190	e25	e150	39	43	3.5	163	260	42
12	4.0	84	28	e108	e52	e113	34	27	4.1	95	890	24
13	4.0	54	23	e80	e70	e86	30	16	5.8	63	238	19
14	4.1	41	e22	e62	e48	e70	27	11	28	45	81	15
15	4.3	36	e21	e54	e44	e62	25	9.5	45	33	50	73
16	4.7	35	e21	e46	e42	e56	23	8.2	84	96	33	446
17	5.0	40	e20	e41	e38	e52	25	9.1	57	480	25	164
18	4.9	33	20	e37	e37	e51	30	9.7	47	256	20	66
19	4.8	39	20	e34	e39	e49	21	6.9	33	102	16	43
20	4.8	30	20	e32	e40	e48	91	6.1	29	70	14	33
21	5.2	32	16	e31	e38	e46	80	5.6	20	49	12	26
22	4.7	64	14	e30	e36	e44	51	5.4	14	36	12	22
23	4.5	56	14	e30	e34	e41	37	6.3	13	38	11	21
24	5.0	49	16	e30	e33	e40	30	4.7	10	112	62	18
25	5.0	48	e17	e29	e33	e40	27	4.6	14	49	238	15
26	5.0	36	e19	e29	e32	e75	24	4.4	450	30	231	13
27	8.3	185	e18	e29	e34	472	19	3.7	518	23	87	145
28	14	121	e18	e29	e37	401	18	3.7	273	19	50	207
29	10	69	e19	e27	---	446	17	4.1	102	47	35	105
30	8.3	66	e19	e27	---	306	17	6.7	57	53	34	63
31	7.3	---	e19	e26	---	237	---	5.4	---	37	25	---
TOTAL	238.6	2153.8	942	4213	945	3682	2087	466.1	1928.9	4541	2555.6	1813.2
MEAN	7.70	71.8	30.4	136	33.8	119	69.6	15.0	64.3	146	82.4	60.4
MAX	22	314	66	1170	70	472	295	48	518	727	890	446
MIN	4.0	6.8	14	20	22	40	17	3.7	3.5	19	8.1	9.2
CFSM	.17	1.61	.68	3.05	.76	2.66	1.56	.34	1.44	3.28	1.85	1.36
IN.	.20	1.80	.79	3.51	.79	3.07	1.74	.39	1.61	3.79	2.13	1.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1998, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	34.8	60.5	51.7	57.9	26.6	68.9	123	55.0	27.4
MAX	113	135	150	159	45.9	119	249	181	79.4
(WY)	1991	1991	1997	1996	1997	1998	1993	1996	1996
MIN	3.97	11.1	16.5	14.0	8.61	32.3	28.8	15.0	5.82
(WY)	1995	1995	1993	1993	1993	1996	1995	1998	1995

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1990 - 1998

ANNUAL TOTAL	13107.4	25566.2	
ANNUAL MEAN	35.9	70.0	47.0
HIGHEST ANNUAL MEAN			70.7
LOWEST ANNUAL MEAN			21.8
HIGHEST DAILY MEAN	360	Mar 30	1170
LOWEST DAILY MEAN	2.8	Aug 10	3.5
ANNUAL SEVEN-DAY MINIMUM	3.2	Aug 6	4.3
INSTANTANEOUS PEAK FLOW		a 1680	Jan 8
INSTANTANEOUS PEAK STAGE		6.30	Jan 8
INSTANTANEOUS LOW FLOW		3.0	May 29
ANNUAL RUNOFF (CFSM)	.81	1.57	1.05
ANNUAL RUNOFF (INCHES)	10.93	21.32	14.32
10 PERCENT EXCEEDS	82	172	111
50 PERCENT EXCEEDS	18	33	19
90 PERCENT EXCEEDS	4.7	6.2	4.0

a From rating curve extended above 750 ft³/s.
b Ice jam.
e Estimated.

ST. LAWRENCE RIVER BASIN

04285500 NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT

LOCATION.--Lat 44°17'58", long 72°34'45", Washington County, Hydrologic Unit 02010003, on right bank, at Wrightsville, 0.8 mi downstream from Wrightsville Detention Reservoir, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--69.2 mi².

PERIOD OF RECORD.--Discharge records: October 1933 to current year.

Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1237: 1937: 1934-39.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 550.53 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to November 21, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges and March 26 to July 11, which are fair. Discharge affected since 1935 by Wrightsville Detention Reservoir (Reservoirs in Winooski River Basin). Flow regulated by powerplant at Wrightsville Detention Reservoir since September 1985. Occasional diurnal fluctuation at low flow caused by small mill upstream; more frequent diurnal fluctuation prior to 1968. Maximum discharge since construction of Wrightsville Detention Reservoir in 1935, 1,100 ft³/s, July 5 and October 24, 1990, gage height 4.32 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 17,200 ft³/s, November 3, 1927, by computation of peak flow over dam 0.8 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft³/s, March 31, gage height, 3.68 ft; minimum daily discharge, 11 ft³/s, May 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	124	149	e44	e57	106	892	48	163	376	33	93
2	165	221	141	e39	e75	157	906	68	83	539	42	43
3	113	310	69	39	e57	189	901	103	56	245	25	65
4	140	239	73	80	50	181	878	84	58	180	25	74
5	232	448	53	133	e60	152	851	87	58	173	25	57
6	239	286	67	287	e56	140	965	119	44	159	25	45
7	160	200	58	689	e70	125	1000	167	35	95	25	35
8	81	149	92	947	e56	121	934	104	39	89	29	52
9	71	140	e55	992	e68	147	890	140	40	227	18	78
10	59	437	59	996	e47	702	802	119	37	673	14	63
11	44	300	e52	957	e62	751	279	131	27	760	184	52
12	44	205	46	903	95	291	176	82	24	659	774	52
13	50	153	54	802	204	192	158	79	73	265	584	33
14	40	111	54	e220	e175	161	139	41	485	194	215	29
15	49	105	e48	120	e130	134	119	28	426	113	110	57
16	37	100	e54	e164	e98	e108	111	28	386	104	89	306
17	50	90	e50	e112	94	e110	144	39	239	150	58	219
18	33	87	40	117	86	106	157	68	290	71	43	166
19	36	84	51	93	87	90	118	39	235	70	39	75
20	36	39	44	90	87	116	177	35	168	72	34	57
21	36	41	e50	e86	e82	77	188	35	108	81	67	49
22	36	67	e50	e96	81	87	160	26	70	48	50	58
23	36	66	40	86	76	106	121	21	229	123	34	41
24	36	133	37	81	72	e79	112	18	170	172	112	46
25	36	115	47	76	69	95	104	13	96	91	211	38
26	43	50	46	e67	67	65	97	13	170	57	160	25
27	69	84	42	e66	68	131	82	13	534	52	89	139
28	126	107	50	e70	80	798	81	12	395	44	55	462
29	96	111	48	e76	---	966	60	11	192	66	53	264
30	85	89	45	55	---	1010	71	16	228	83	66	201
31	92	---	44	55	---	1030	---	49	---	46	44	---
TOTAL	2522	4691	1808	8638	2309	8523	11673	1836	5158	6077	3332	2974
MEAN	81.4	156	58.3	279	82.5	275	389	59.2	172	196	107	99.1
MAX	239	448	149	996	204	1030	1000	167	534	760	774	462
MIN	33	39	37	39	47	65	60	11	24	44	14	25
MEAN(†)	81.0	160	53.8	279	82.7	397	260	63.4	176	191	107	99.7
CFSM(†)	1.17	2.31	0.78	4.03	1.20	5.74	3.76	0.92	2.54	2.76	1.55	1.44
IN(†)	1.35	2.59	0.90	4.65	1.24	6.61	4.19	1.06	2.84	3.18	1.78	1.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1998, BY WATER YEAR (WY)

MEAN	107	139	113	84.8	70.1	174	454	246	90.6	51.1	49.7	52.6
MAX	437	249	318	279	348	556	714	617	396	271	278	230
(WY)	1991	1984	1974	1998	1981	1936	1994	1972	1984	1973	1995	1938
MIN	6.00	25.9	28.0	17.5	14.6	21.4	121	47.3	15.8	7.91	8.47	5.10
(WY)	1964	1954	1948	1940	1980	1940	1995	1941	1949	1953	1942	1963

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1934 - 1998

ANNUAL TOTAL	53092.2	59541										
ANNUAL MEAN	145	163								136		
HIGHEST ANNUAL MEAN										226		1973
LOWEST ANNUAL MEAN										71.4		1965
HIGHEST DAILY MEAN	932	Apr 8	1030	Mar 31						1620	Apr 17	1934
LOWEST DAILY MEAN	9.2	Jul 1	11	May 29						.20	Aug 13	1941
ANNUAL SEVEN-DAY MINIMUM	20	Jul 29	14	May 24						2.8	Aug 14	1970
INSTANTANEOUS PEAK FLOW			1090	Mar 31					a	2170	Apr 12	1934
INSTANTANEOUS PEAK STAGE			3.68	Mar 31						6.53	Apr 12	1934
10 PERCENT EXCEEDS	366		390							401		
50 PERCENT EXCEEDS	76		84							61		
90 PERCENT EXCEEDS	29		36							14		

a From rating curve extended above 1030 ft³/s.

e Estimated.

(†) Adjusted for change in contents in Wrightsville Detention Reservoir.

NOTE: All statistics are based on unadjusted daily and monthly mean data.

RESERVOIRS IN WINOOSKI RIVER BASIN ABOVE MONTPELIER, VT

04283500 EAST BARRE DETENTION RESERVOIR.--Lat 44°09'18", long 72°26'42", Washington County, Hydrologic Unit 0201003, at dam on Jail Branch at East Barre, 4.5 mi upstream from mouth. **DRAINAGE AREA**, 38.8 mi². **PERIOD OF RECORD**, February 1936 (in WSP 1307), March and April 1936 (in WSP 798), May 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. **GAGE**, water-stage recorder. Datum of gage is above sea level (levels by U.S. Army Corps of Engineers). Prior to August 30, 1960, nonrecording gage, and August 30 to September 30, 1960, water-stage recorder, at present site at datum 1,127.9 ft above sea level. Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers in 1935 for flood control. Usable capacity, 525 million ft³ between elevation 1,124.9 ft (bottom of outlet opening) and 1,165.0 ft (crest of spillway). Dam has no gates; below elevation 1,165.0 ft, outflow from reservoir is dependent on capacity of outlet opening near base of dam. Outlet-opening enlargement and reservoir-construction modifications completed in November 1959. Size of opening since enlargement, height, 7 ft and average width, 3.7 ft. Figures given herein represent usable contents, determined from capacity tables furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,163.9 ft, present datum, March 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,148.31 ft April 2; minimum, not determined.

04285000 WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, Hydrologic Unit 0201003, at dam on North Branch Winooski River at Wrightsville, 0.3 mi downstream from Long Meadow Brook, and 4.2 mi upstream from mouth. **DRAINAGE AREA**, 66.5 mi². **PERIOD OF RECORD**, November 1935 to February 1936 (in WSP 1307), March to May 1936 (in WSP 798), June 1936 to August 1938 (in WSP 1307), September 1938 (in WSP 867), October 1938 to current year. **GAGE**, water-stage recorder. Datum of gage is 612.75 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 28, 1960, nonrecording gage at present site at datum 612.75 ft above sea level. Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers in 1935 for flood control; modification of intake-structure works to create a recreational pool completed in June 1965. Usable capacity for recreation, 22 million ft³ between elevations 612.75 ft (bottom of outlet opening) and 620.00 ft; for flood control, 851.5 million ft³ between elevations 620.00 ft and 685.00 ft (crest of spillway). Reservoir used for storage of water for power September 1985 to current year. Usable capacity for storage of water power 774 million ft³ between elevation 631.00 ft, sill of gate and 685.00 ft, crest of spillway. Total usable capacity 873.5 million ft³. Figures given herein represent usable contents, determined from capacity tables furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 676.4 ft, present datum, March 22, 1936, from graph based on gage readings; minimum observed, 613.00 ft, August 17, 1949, and August 17-19, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 667.01 ft, April 3; minimum, 633.06 ft, September 7 and 9.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

Date	Elevation (feet)	Contents (millions of cubic feet)	Change in contents	
			Millions of cubic feet	Equivalent, cubic feet per second
04283500 East Barre Detention Reservoir				
Sep. 30	1134.43	12.1	--	--
Oct. 31	1130.41	6.1	-6.0	-2.24
Nov. 30	1130.36	6.0	-0.1	-0.04
Dec. 31	1130.19	5.8	-0.2	-0.07
CAL YR 1997	--	--	-6.2	-0.20
Jan. 31	1130.72	6.5	+0.7	+0.26
Feb. 28	1131.53	7.6	+1.1	+0.45
Mar. 31	1147.38	120.1	+112.5	+42.0
Apr. 30	1131.10	7.0	-113.1	-43.6
May 31	1130.27	5.9	-1.1	-0.41
June 30	1132.84	9.5	+3.6	+1.39
July 31	1131.18	7.1	-2.4	-0.90
Aug. 31	1134.68	12.6	+5.5	+2.05
Sep. 30	1136.52	17.0	+4.4	+1.70
WTR YR 1998	--	--	+4.9	+0.16
04285000 Wrightsville Detention Reservoir				
Sep. 30	634.35	104.3	--	--
Oct. 31	634.24	103.4	-0.9	-0.34
Nov. 30	635.59	114.3	+10.9	+4.20
Dec. 31	634.09	102.2	-12.1	-4.52
CAL YR 1997	--	--	-2.9	-0.09
Jan. 31	634.13	102.6	+0.4	+0.15
Feb. 28	634.20	103.1	+0.5	+0.21
Mar. 31	662.63	429.5	+326.4	+122
Apr. 30	633.11	94.6	-334.9	-129
May 31	634.54	105.8	+11.2	+4.18
June 30	635.97	117.5	+11.7	+4.51
July 31	634.18	103.0	-14.5	-5.41
Aug. 31	633.89	100.7	-2.3	-0.86
Sep. 30	634.08	102.2	+1.5	+0.58
WTR YR 1998	--	--	-2.1	-0.07

ST. LAWRENCE RIVER BASIN

04287000 DOG RIVER AT NORTHFIELD FALLS, VT

LOCATION.--Lat 44°10'58", long 72°38'27", Washington County, Hydrologic Unit 02010003, on right bank, 1 mi downstream from Northfield Falls, and 1.2 mi downstream from Cox Branch.

DRAINAGE AREA.--76.1 mi².

PERIOD OF RECORD.--Discharge records: October 1934 to current year. October 1934 monthly discharge only, published in WSP 1307.

Water-quality records: Water year 1957.

REVISED RECORDS.--WSP 1237: 1935-37.

GAGE.--Water-stage recorder. Datum of gage is 603.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Infrequent diurnal fluctuation at low flow by powerplant upstream; regulation much greater prior to 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	1115	2,600	5.79	Apr. 1	2200	2,220	5.38
Mar. 28	1845	2,150	5.29	June 27	0845	* 3,530	* 6.66
Mar. 31	1745	2,670	5.86	Aug. 24	2145	2,790	5.98

Minimum discharge, 15 ft³/s, October 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	39	106	e42	74	117	1360	100	46	588	40	90
2	39	154	95	e50	e75	137	1120	116	37	360	36	84
3	33	185	90	59	70	151	775	124	37	219	34	94
4	36	153	88	117	68	147	521	115	35	164	32	86
5	46	290	91	115	66	145	400	131	33	208	31	74
6	44	150	89	206	63	137	337	210	31	147	29	66
7	35	112	85	475	e66	130	310	217	31	124	31	66
8	27	94	82	1760	e66	124	291	165	38	122	30	153
9	28	176	68	1200	e65	247	273	141	36	170	28	112
10	26	386	e69	524	e64	712	240	146	31	429	28	135
11	25	201	e70	358	61	e310	208	153	28	250	486	97
12	22	145	e68	e250	147	e245	188	128	27	177	292	85
13	23	120	e66	e200	188	e215	173	112	69	136	152	78
14	23	108	e64	e170	132	e192	161	101	339	116	101	70
15	24	106	e66	e160	122	e175	148	92	325	94	82	137
16	26	99	e68	e150	116	e153	137	84	344	82	80	405
17	24	91	70	e140	104	e148	146	86	251	84	71	175
18	23	88	66	e135	98	145	138	80	229	81	64	129
19	23	84	63	e125	107	137	121	68	237	65	56	109
20	22	82	63	119	107	127	267	63	211	92	49	96
21	23	85	56	110	100	122	198	62	140	99	47	89
22	23	106	56	100	92	124	156	59	107	68	45	82
23	22	99	56	e95	89	114	138	52	94	85	43	80
24	22	96	59	e90	88	106	192	46	79	142	649	73
25	23	85	57	e90	91	104	169	43	71	81	656	71
26	22	94	61	e87	86	118	148	41	303	67	316	67
27	41	181	60	e88	85	592	133	38	1690	60	197	250
28	59	132	54	e88	94	1470	123	34	468	52	146	199
29	43	125	e53	82	---	1850	114	40	281	50	129	129
30	39	108	e47	79	---	1600	106	52	216	48	120	108
31	39	---	e44	77	---	2020	---	38	---	46	100	---
TOTAL	943	3974	2130	7341	2584	12114	8791	2937	5864	4506	4200	3489
MEAN	30.4	132	68.7	237	92.3	391	293	94.7	195	145	135	116
MAX	59	386	106	1760	188	2020	1360	217	1690	588	656	405
MIN	22	39	44	42	61	104	106	34	27	46	28	66
CFSM	.40	1.74	.90	3.11	1.21	5.14	3.85	1.24	2.57	1.91	1.78	1.53
IN.	.46	1.94	1.04	3.59	1.26	5.92	4.30	1.44	2.87	2.20	2.05	1.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1998, BY WATER YEAR (WY)

	MEAN	72.0	107	112	91.8	88.4	210	419	194	81.8	42.7	38.6	39.0
MAX	301	245	349	264	439	831	785	463	357	176	219	259	
(WY)	1978	1996	1984	1996	1981	1936	1969	1972	1947	1973	1976	1938	
MIN	8.19	19.0	28.7	21.5	18.6	37.0	115	57.5	19.7	8.96	8.77	9.19	
(WY)	1964	1954	1948	1940	1940	1940	1995	1941	1965	1965	1965	1963	

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1935 - 1998

ANNUAL TOTAL	43771	58873	
ANNUAL MEAN	120	161	125
HIGHEST ANNUAL MEAN			205
LOWEST ANNUAL MEAN			51.6
HIGHEST DAILY MEAN	1040	Apr 7	4390
LOWEST DAILY MEAN	15	Aug 10	4.3
ANNUAL SEVEN-DAY MINIMUM	17	Aug 6	6.1
INSTANTANEOUS PEAK FLOW			b 10600
INSTANTANEOUS PEAK STAGE		b 3530	11.57
INSTANTANEOUS LOW FLOW		6.66	c 4.3
ANNUAL RUNOFF (CFSM)	1.58	2.12	1.64
ANNUAL RUNOFF (INCHES)	21.40	28.78	22.25
10 PERCENT EXCEEDS	321	290	274
50 PERCENT EXCEEDS	74	95	63
90 PERCENT EXCEEDS	23	35	17

a Also occurred on October 20,23,24,26.

b From rating curve extended above 1,500 ft³/s on basis of flow over dam at gage height 8.49 ft.

c Also occurred on September 7, 1942.

e Estimated.

04288500 WATERBURY RESERVOIR NEAR WATERBURY, VT

LOCATION.--Lat 44°22'54", long 72°46'13", Washington County, Hydrologic Unit 02010003, at dam on Little River 2.7 mi upstream from mouth and 3.5 mi north of Waterbury.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--Elevation: September 1937 to current year. September 1937 to September 1938 monthend contents only, published in WSP 1307.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Corps of Engineers). Prior to December 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good. Reservoir is formed by earthfill dam completed by U.S. Army Corps of Engineers during summer of 1937 for flood control and storage of water for power. Usable capacity for storage of water for power, 1.58 billion ft³ between elevations 500.0 ft and 592.0 ft, sill of taintor gate; for flood control, 1.23 billion ft³, between elevations 592.0 ft and 617.5 ft, crest of spillway; total usable capacity, 2.81 billion ft³.

500.0	0	560.0	658.8
510.0	34.8	570.0	891.9
520.0	92.6	580.0	1,168.5
530.0	180.8	590.0	1,505.0
540.0	302.7	600.0	1,913.4
550.0	461.7		

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 613.45 ft, May 4, 1940; minimum observed, 501.30 ft, October 16, 1938, July 3, 12, 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 597.20 ft, April 3; minimum elevation, 550.66 ft, March 24.

ELEVATION (SEA LEVEL), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

INSTANTANEOUS OBSERVATION AT 2400												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	589.98	591.35	578.22	580.21	581.00	556.95	593.90	589.32	590.59	590.08	589.77	588.63
2	590.93	592.29	578.56	579.71	580.86	556.93	596.25	589.84	590.17	590.14	589.98	588.67
3	590.85	592.18	578.86	579.75	580.20	557.04	596.49	590.13	590.75	589.51	589.80	588.61
4	590.42	591.86	579.25	579.36	578.99	556.92	595.10	590.34	590.88	589.66	589.59	588.73
5	589.87	592.05	579.66	579.61	578.36	556.21	594.04	590.29	591.30	590.54	589.23	588.98
6	590.33	591.56	580.09	582.00	577.33	555.22	593.02	590.93	591.48	590.43	589.38	589.20
7	590.26	590.87	580.47	583.81	576.01	554.13	592.38	590.80	591.29	590.21	589.54	589.41
8	589.55	590.08	580.82	590.12	574.68	552.99	591.97	590.85	590.74	590.02	589.69	589.60
9	589.69	589.66	581.09	593.71	573.70	553.27	591.65	590.90	590.47	590.07	589.82	589.68
10	589.69	589.89	581.77	593.73	572.57	558.49	591.20	590.46	590.18	591.80	590.18	589.64
11	589.88	589.36	582.01	592.94	571.46	559.03	590.67	590.51	589.84	593.07	591.66	589.48
12	590.08	588.63	582.30	592.25	570.82	558.69	590.12	590.49	589.52	592.63	593.71	589.22
13	589.70	585.04	582.61	591.78	570.68	557.98	589.61	590.41	589.63	592.04	592.71	589.18
14	589.50	582.69	582.91	591.04	569.59	557.29	589.19	590.16	590.48	591.37	591.88	588.79
15	589.34	580.24	582.83	590.42	568.32	556.52	589.10	589.97	591.19	590.03	591.04	589.47
16	589.19	577.68	582.70	589.74	567.05	555.59	588.66	589.79	592.50	589.51	590.27	590.81
17	589.36	574.97	582.87	588.97	565.80	554.57	589.03	590.04	592.25	590.12	589.36	590.36
18	589.52	572.11	583.14	588.12	564.88	553.52	589.04	589.79	593.07	590.62	588.89	589.68
19	589.68	571.75	583.41	587.28	564.98	553.01	588.69	589.57	593.21	590.31	588.90	588.97
20	589.86	571.97	583.70	586.39	563.95	551.94	589.05	589.29	592.55	589.88	588.80	589.26
21	590.08	572.49	583.88	585.47	562.88	551.83	589.02	589.11	591.88	589.47	588.72	589.03
22	590.04	573.11	583.39	584.42	561.73	551.98	588.72	589.05	591.25	589.16	588.93	588.84
23	590.18	573.61	582.90	583.40	561.30	551.65	588.45	589.21	591.05	589.15	589.14	588.68
24	590.33	574.07	582.46	583.01	560.44	550.68	588.39	589.35	590.34	589.06	589.46	588.65
25	590.52	574.45	582.05	583.43	559.61	551.46	588.35	589.47	589.65	589.37	589.11	588.45
26	590.73	574.97	581.69	582.87	558.68	552.36	588.31	589.51	589.73	589.62	588.57	588.66
27	591.15	576.14	582.01	582.91	557.77	556.34	588.40	589.60	591.25	589.35	588.21	589.28
28	591.09	576.72	582.26	581.82	557.13	566.51	588.37	589.69	590.99	589.28	588.51	590.52
29	591.10	577.28	581.75	581.52	---	576.03	588.55	589.95	590.38	589.48	588.81	590.10
30	591.45	577.75	580.84	581.26	---	582.30	588.92	590.23	589.92	589.55	589.10	589.51
31	591.58	---	580.67	581.08	---	590.04	---	590.22	---	589.50	588.87	---
MEAN	590.19	581.89	581.65	585.55	568.96	557.98	590.49	589.98	590.95	590.16	589.73	589.27
MAX	591.58	592.29	583.88	593.73	581.00	590.04	596.49	590.93	593.21	593.07	593.71	590.81
MIN	589.19	571.75	578.22	579.36	557.13	550.68	588.31	589.05	589.52	589.06	588.21	588.45
(†)	1566.30	1103.20	1189.70	1202.90	599.50	1506.50	1466.70	1513.50	1502.10	1487.30	1464.90	1487.60
(‡)	+31.10	-178.70	+32.30	+4.93	-249.40	+338.60	-15.40	+17.50	-4.40	-5.52	-8.36	+8.76
CAL YR 1997	MEAN 580.81	MAX 592.29	MIN 550.86									
WTR YR 1998	MEAN 583.98	MAX 596.49	MIN 550.68									

(†) Contents, in millions of cubic feet, at end of month.

(‡) Change in contents, equivalent in cubic feet per second.

04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT

LOCATION.--Lat 44°28'44", long 73°08'21", Chittenden County, Hydrologic Unit 02010003, on right bank, 0.5 mi downstream from Muddy Brook and 2 mi southwest of Essex Junction.

DRAINAGE AREA.--1,044 mi².

PERIOD OF RECORD.--Discharge records: October 1928 to current year.

Water-quality records: Water years 1953, 1976-79.

REVISED RECORDS.--WSP 714: 1930(M). WSP 894: Drainage area. WSP 1307: 1929(M).

GAGE.--Water-stage recorder. Elevation of gage is 185 ft above sea level, from topographic map; prior to October 1, 1964, datum was 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by powerplants upstream, by Peacham Pond and Mollys Falls Reservoir, combined usable capacity, 492 million ft³ by Waterbury Reservoir (station 04288500) since 1937, and by East Barre and Wrightsville Detention Reservoirs (Reservoirs in Winooski River Basin) since 1935. See table with station 04286000 for monthend contents in Peacham Pond and Mollys Falls Reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 113,000 ft³/s, November 4, 1927, gage height, 50.4 ft, present datum, from floodmarks, from rating curve extended above 27,000 ft³/s on basis of computations of flow over dam at gage heights 19.72, 24.54, and 51.4 ft, and slope-area measurements at gage height 51.4 ft, all at present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,700 ft³/s, January 9, gage height, 16.06 ft; minimum daily discharge, 414 ft³/s, May 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	1090	1220	e800	1220	1810	17100	1200	1320	6170	830	1080
2	1930	2470	1130	e930	1160	2490	14800	1120	1390	7830	693	1140
3	1540	3860	1230	928	1170	2630	11300	1360	984	4010	699	1190
4	1570	2590	1240	1450	1450	2500	9010	1450	900	2650	690	1100
5	1790	4660	1250	2350	e1400	2450	6610	1410	700	2400	814	1010
6	2110	3100	1240	e3700	1240	2410	5570	1580	581	2310	e580	691
7	1660	2360	1190	e6000	1310	2200	4910	2420	494	1960	e540	757
8	1100	2110	1090	16600	1440	2040	4210	2130	909	1710	e510	982
9	976	1900	882	23400	e1380	2660	3930	1790	791	2870	e480	1480
10	759	5560	871	11500	1200	11500	3540	1850	701	5150	477	1760
11	679	3690	985	7420	1230	6920	3080	1860	730	5400	4490	1450
12	640	2530	735	e4700	1730	3660	2650	1570	659	4390	9120	1100
13	538	2310	972	e3500	e2300	2590	2500	1260	744	2970	5850	1050
14	788	2450	949	e2700	e2270	2730	2410	1360	1970	2350	2870	966
15	783	2330	644	e2050	1970	2430	2150	1090	4170	2030	2160	1110
16	780	2250	780	e2100	1860	2250	2240	933	3950	1900	1750	7110
17	582	2140	1040	e2150	1860	2100	2370	883	3320	2850	1620	3380
18	533	2180	920	e2100	1770	2120	2660	854	3780	2890	1460	2190
19	491	2070	893	e2100	1630	2070	2160	899	4010	1770	920	1840
20	495	1320	900	e2100	1910	1980	3100	829	3350	1240	953	1310
21	486	1100	764	e1950	1860	1730	3290	998	2390	1550	864	1130
22	544	1290	651	e1750	1690	1660	2550	677	1780	1290	861	1180
23	580	1240	830	1560	1510	1430	2170	703	2020	1320	702	1090
24	458	1190	901	1380	1450	1670	1960	524	1930	2140	1060	898
25	548	1130	1090	1580	1460	1450	2010	519	1550	1610	7550	1090
26	487	1110	1070	1260	1510	1370	1940	488	3600	996	4010	710
27	595	2050	944	1240	1480	4230	1580	420	11600	954	2430	1800
28	1050	1860	835	1360	1530	13000	1460	414	8630	1090	1670	6930
29	1260	1550	726	1510	---	19800	1450	459	3350	1320	1210	3310
30	761	1260	952	1390	---	16100	1120	573	2740	1610	1160	2190
31	774	---	e1000	1260	---	19100	---	746	---	1230	1080	---
TOTAL	29187	66750	29924	114818	43990	143080	125830	34369	75043	79960	60103	53024
MEAN	942	2225	965	3704	1571	4615	4194	1109	2501	2579	1939	1767
MAX	2110	5560	1250	23400	2300	19800	17100	2420	11600	7830	9120	7110
MIN	458	1090	644	800	1160	1370	1120	414	494	954	477	691

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

MEAN	1138	1598	1496	1342	1243	2596	5137	2809	1309	790	737	707
MAX	4587	3525	4549	3704	4266	9642	9256	6826	5027	3368	3284	3096
(WY)	1946	1984	1974	1998	1981	1936	1933	1972	1947	1973	1976	1938
MIN	245	389	378	350	337	554	1477	846	364	297	225	231
(WY)	1964	1954	1930	1931	1940	1940	1995	1965	1936	1965	1934	1963

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1929 - 1998

ANNUAL TOTAL	641556	856078										
ANNUAL MEAN	1758	2345								1741		
HIGHEST ANNUAL MEAN										2751		1973
LOWEST ANNUAL MEAN										832		1965
HIGHEST DAILY MEAN	11100	Feb 23	23400	Jan 9	41600	Mar 19	1936					
LOWEST DAILY MEAN	324	Aug 10	414	May 28	24	Sep 7	1968					
ANNUAL SEVEN-DAY MINIMUM	426	Jul 31	485	May 24	54	Aug 5	1964					
INSTANTANEOUS PEAK FLOW			25700	Jan 9	45300	Mar 19	1936					
INSTANTANEOUS PEAK STAGE			16.06	Jan 9	24.54	Mar 19	1936					
10 PERCENT EXCEEDS	3680		4190		4000							
50 PERCENT EXCEEDS	1250		1510		1000							
90 PERCENT EXCEEDS	531		700		357							

e Estimated.

ST. LAWRENCE RIVER BASIN

04292000 LAMOILLE RIVER AT JOHNSON, VT

LOCATION.--Lat 44°37'22", long 72°40'50", Lamoille County, Hydrologic Unit 02010005, on right bank, above falls, 0.7 mi upstream from bridge in Johnson, and 0.8 mi upstream from Gihon River.

DRAINAGE AREA.--310 mi².

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.

REVISSED 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 sea level, by levels. Prior to December 31, 1913, nonrecording gage at bridge 0.7 mi downstream at different datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,400 ft³/s and maximum (*):

Table with 8 columns: Date, Time, Discharge (ft³/s), Gage height (ft), Date, Time, Discharge (ft³/s), Gage height (ft). It lists peak discharge events for Jan, Mar, and Apr.

Minimum daily discharge, 116 ft³/s, August 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

Large table with 12 columns: DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. It contains daily mean discharge values for each day of the year from 1997 to 1998, including summary statistics at the bottom.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1998, BY WATER YEAR (WY)

Summary table with 11 columns: MEAN, MAX, (WY), MIN, (WY) for each water year from 1912 to 1998.

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1912 - 1998

Summary statistics table with 4 main columns: 1997 Calendar Year, 1998 Water Year, and Water Years 1912-1998. It lists various metrics like annual total, mean, highest/lowest annual mean, etc.

e Estimated.

04292500 LAMOILLE RIVER AT EAST GEORGIA, VT

LOCATION.--Lat 44°40'45", long 73°04'23", Franklin County, Hydrologic Unit 02010005, on right bank, at East Georgia, 0.5 mi upstream from railroad bridge, and 1 mi downstream from Beaver Meadow Brook.

DRAINAGE AREA.--686 mi².

PERIOD OF RECORD.--Discharge records: August 1929 to current year. Prior to October 1937, published as "near Milton". Water-quality records: Water years 1955, 1967-74.

REVISED RECORDS.--WSP 894: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 285 ft above sea level, from topographic map. Prior to December 1, 1937, at site 3.5 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Low flow regulated by powerplants upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 8	0745	Ice Jam	* 12.92	June 30	1730	10,500	9.09
Jan. 9	----	*e 16,100	Ice Jam	Aug. 12	0230	10,900	9.22
Mar. 31	2000	15,600	10.46				

Minimum daily discharge, 270 ft³/s, May 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2470	1100	1110	e470	e750	e1020	14400	800	3620	6800	977	515
2	1750	1940	956	e480	e740	e1270	11900	852	1810	8900	790	438
3	1170	2740	989	e610	e720	e1490	8890	905	1540	4470	669	698
4	960	1950	955	e910	e700	e1400	5650	947	1430	2210	505	811
5	1020	3160	e900	e1350	e670	e1290	3780	820	1010	3450	524	697
6	1210	2500	e880	e2000	e660	e1240	2840	852	867	2870	525	617
7	960	1620	e830	e3600	e650	e1200	2430	1100	709	1780	501	777
8	802	1350	e780	e10000	e640	e1200	2310	1140	638	1630	484	1180
9	613	1350	e760	e14000	e630	e1800	2280	1070	683	3370	471	1480
10	662	4070	e700	e7500	e640	8330	2140	1050	658	6480	442	1760
11	563	3110	e640	e3900	e640	5920	1750	964	612	7080	2480	1190
12	523	1860	e620	e2100	e740	e2550	1550	888	521	5110	9450	868
13	486	1500	e620	e1780	e2150	e1730	1470	805	587	2670	6540	771
14	526	1330	e650	e1500	e1430	e1450	1430	657	1810	1960	2040	575
15	462	1160	e630	e1320	e1190	e1300	1370	550	2580	1420	1380	772
16	610	1160	e590	e1280	e1050	e1290	1340	565	2590	1130	1270	4390
17	583	1120	e650	e1250	e1000	e1220	1420	510	2610	3670	1180	2640
18	519	1030	e620	e1200	e950	e1210	1770	473	6050	2460	937	1280
19	468	1010	e560	e1190	e980	e1200	1380	551	4960	1460	814	906
20	495	998	e580	e1180	e1000	e1170	1760	496	3210	1070	665	794
21	455	1010	e560	e1170	e970	e1100	2520	434	2180	933	604	665
22	563	1060	e530	e1100	e930	e1050	1720	417	1490	879	617	612
23	541	1040	e490	e1100	e880	e1000	1320	461	2140	832	571	613
24	501	993	e520	e1080	e840	e970	1150	413	1640	1330	749	597
25	550	872	e500	e1000	e830	e960	1100	321	1130	1110	1380	522
26	598	882	e540	e920	e820	e1050	1070	334	2390	890	1120	512
27	727	2160	e530	e870	e820	3200	944	270	4930	841	922	911
28	1220	1570	e520	e850	e830	9180	894	331	4040	761	751	3390
29	1210	1410	e490	e830	---	14200	838	332	2230	896	592	2300
30	1000	1140	e480	e800	---	12900	729	610	4890	1160	629	1290
31	1020	---	e470	e780	---	14000	---	662	---	1260	610	---
TOTAL	25237	48195	20650	68120	24850	98890	84145	20580	65555	80882	41189	34571
MEAN	814	1607	666	2197	888	3190	2805	664	2185	2609	1329	1152
MAX	2470	4070	1110	14000	2150	14200	14400	1140	6050	8900	9450	4390
MIN	455	872	470	470	630	960	729	270	521	761	442	438
CFSM	1.19	2.34	.97	3.20	1.29	4.65	4.09	.97	3.19	3.80	1.94	1.68
IN.	1.37	2.61	1.12	3.69	1.35	5.36	4.56	1.12	3.55	4.39	2.23	1.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1998, BY WATER YEAR (WY)

	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	985	1302	1104	900	795	1645	3655	1846	970	641	610	627																																																										
MAX	3330	2695	3076	2197	4101	5622	6211	4022	2545	2609	1885	1987																																																										
(WY)	1946	1984	1974	1998	1981	1936	1933	1940	1973	1998	1976	1938																																																										
MIN	237	306	405	224	293	399	1253	638	293	223	198	218																																																										
(WY)	1954	1954	1948	1948	1962	1940	1995	1987	1988	1991	1934	1978																																																										

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1929 - 1998

ANNUAL TOTAL	449476	612864	
ANNUAL MEAN	1231	1679	1256
HIGHEST ANNUAL MEAN			1776
LOWEST ANNUAL MEAN			791
HIGHEST DAILY MEAN	13700	Jul 16	21700
LOWEST DAILY MEAN	267	Aug 6	74
ANNUAL SEVEN-DAY MINIMUM	302	Aug 5	122
INSTANTANEOUS PEAK FLOW			e 16100
INSTANTANEOUS PEAK STAGE			a 12.92
ANNUAL RUNOFF (CFSM)	1.80	2.45	1.83
ANNUAL RUNOFF (INCHES)	24.37	33.23	24.88
10 PERCENT EXCEEDS	2740	3270	2800
50 PERCENT EXCEEDS	775	1000	706
90 PERCENT EXCEEDS	394	521	298

a Ice jam.
e Estimated.

ST. LAWRENCE RIVER BASIN

04292700 STONE BRIDGE BROOK NEAR GEORGIA PLAINS, VT

LOCATION.--Lat 44°42'13", long 73°10'54", Franklin County, Hydrologic Unit 02010005, on left bank, 20 ft upstream from Lake Road culvert, 0.1 mi downstream of small left bank tributary, 1.0 mi upstream of large right bank tributary, 1.3 mi west of West Georgia, 1.5 mi southwest of Georgia Plains, and 2.8 mi upstream of mouth.

DRAINAGE AREA.--8.45 mi².

PERIOD OF RECORD.--Discharge records: February 1963 to September 1974, March 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 150 ft above sea level, from topographic map.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 9	0215	* 380	* 6.37	July 5	0845	76	4.25
Mar. 28	2130	240	5.61	Aug. 12	0945	89	4.38
Mar. 31	0215	84	4.33	Sep. 16	0915	95	4.44
July 1	2115	114	4.63				

Minimum discharge, 1.6 ft³/s, May 27 and 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	4.0	9.3	e4.8	e5.4	e8.8	46	4.8	7.6	78	8.0	4.7
2	10	8.7	9.2	e5.1	e5.2	e10	57	5.6	5.6	77	5.6	4.2
3	5.6	30	7.9	e6.4	e5.2	e14	49	7.6	6.0	29	4.1	5.8
4	4.3	19	7.4	e10	e4.9	e13	31	7.1	5.2	21	3.3	7.6
5	5.3	28	8.5	e15	e4.7	e12	22	6.8	4.1	62	3.1	6.2
6	5.8	17	12	e27	e4.4	e11	17	6.0	3.5	31	4.6	5.0
7	4.5	10	11	e45	e4.3	e10	14	5.8	3.2	15	13	4.2
8	3.4	7.6	11	156	e4.4	e9.6	12	5.2	3.1	14	7.1	6.4
9	2.8	7.7	e10	225	e4.5	e21	11	4.8	3.2	25	4.7	20
10	2.7	22	e7.4	e80	e4.6	e54	10	6.9	2.8	27	8.3	20
11	2.6	21	e7.0	e38	e5.1	e31	9.2	7.9	2.7	23	28	11
12	2.4	12	e5.6	e21	e11	e20	8.3	6.0	2.7	15	59	7.0
13	2.7	8.6	e5.6	e17	e14	e16	7.9	5.3	4.5	10	26	5.7
14	3.0	7.0	e5.5	e15	e10	e11	7.5	4.6	8.5	8.2	10	5.0
15	3.0	6.8	e5.3	e14	e8.8	e10	7.8	4.3	9.9	6.7	6.5	7.8
16	2.8	7.2	e5.0	e12	e8.3	e10	7.2	4.0	10	5.7	6.5	49
17	3.0	7.9	e4.8	e11	e7.8	e9.8	7.4	4.7	7.9	5.5	6.5	23
18	2.8	7.1	e4.7	e10	e7.7	e9.8	9.0	4.0	20	5.4	10	10
19	2.6	7.0	e4.4	e9.0	e8.0	e9.8	8.0	3.5	28	4.4	7.9	6.6
20	2.7	7.0	e4.1	e8.6	e8.2	e9.7	14	3.0	16	3.6	6.0	5.6
21	3.0	8.6	e3.9	e8.6	e8.0	e9.6	16	2.9	9.0	3.3	5.0	4.7
22	3.6	14	e3.6	e9.0	e7.4	e9.0	11	2.9	8.2	3.1	4.5	4.3
23	2.6	11	e3.6	e8.6	e7.1	e8.5	8.3	2.9	14	6.2	4.1	4.4
24	3.5	10	e3.6	e8.0	e7.0	e8.3	7.3	2.4	11	21	6.1	4.4
25	3.4	e9.8	e3.7	e7.6	e6.8	e8.2	6.6	2.2	7.6	13	8.2	4.4
26	3.3	8.0	e3.9	e7.4	e6.7	e12	6.2	2.0	24	6.4	9.1	3.8
27	8.1	23	e4.2	e7.0	e7.0	75	5.7	1.8	39	4.4	7.5	12
28	11	35	e4.1	e6.6	e7.5	151	5.5	1.9	23	4.0	5.7	23
29	7.3	e12	e4.0	e6.2	---	125	5.3	3.7	20	7.1	5.3	14
30	5.6	e11	e4.1	e5.8	---	70	5.0	4.8	49	8.1	5.9	8.2
31	4.6	---	e4.3	e5.6	---	68	---	5.6	---	8.7	5.6	---
TOTAL	144.0	388.0	188.7	810.3	194.0	845.1	432.2	141.0	359.3	551.8	295.2	298.0
MEAN	4.65	12.9	6.09	26.1	6.93	27.3	14.4	4.55	12.0	17.8	9.52	9.93
MAX	16	35	12	225	14	151	57	7.9	49	78	59	49
MIN	2.4	4.0	3.6	4.8	4.3	8.2	5.0	1.8	2.7	3.1	3.1	3.8
CFSM	.55	1.53	.72	3.09	.82	3.23	1.70	.54	1.42	2.11	1.13	1.18
IN.	.63	1.71	.83	3.57	.85	3.72	1.90	.62	1.58	2.43	1.30	1.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1974, 1990 - 1998, BY WATER YEAR (WY)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1990	1991	1992	1993	1994	1995	1996	1997	1998	
MEAN	6.13	10.1	9.86	7.65	5.38	14.3	23.0	10.3	5.15	5.06	4.26	3.48										
MAX	22.0	19.9	30.5	26.1	10.9	27.3	47.6	26.1	19.1	18.3	11.9	9.95										
(WY)	1991	1997	1974	1998	1996	1998	1994	1996	1973	1990	1973	1973										
MIN	1.79	2.95	3.81	2.79	1.75	2.64	5.98	3.85	1.23	.81	1.35	.88										
(WY)	1965	1967	1967	1967	1964	1965	1995	1995	1963	1966	1993	1964										

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1963 - 1974, 1990 - 1998

ANNUAL TOTAL	2811.38	4647.6																				
ANNUAL MEAN	7.70	12.7																				
HIGHEST ANNUAL MEAN																						1998
LOWEST ANNUAL MEAN																						1965
HIGHEST DAILY MEAN	100	Mar 30					225	Jan 9		312	Dec 2	1996										
LOWEST DAILY MEAN	.53	Aug 10					1.8	May 27		.12	Jul 12	1995										
ANNUAL SEVEN-DAY MINIMUM	.99	Aug 5					2.3	May 22		.17	Jul 10	1995										
INSTANTANEOUS PEAK FLOW							a 380	Jan 9		a 1030	Jan 19	1996										
INSTANTANEOUS PEAK STAGE							6.37	Jan 9		8.59	Jan 19	1996										
INSTANTANEOUS LOW FLOW							b 1.6	May 27		.10	Jul 12	1995										
ANNUAL RUNOFF (CFSM)	.91						1.51			1.02												
ANNUAL RUNOFF (INCHES)	12.38						20.46			13.93												
10 PERCENT EXCEEDS	17						23			19												
50 PERCENT EXCEEDS	4.4						7.4			4.7												
90 PERCENT EXCEEDS	1.7						3.5			1.4												

a From rating curve extended above 70 ft³/s.
 b Also occurred on May 29.
 e Estimated.

04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT

LOCATION.--Lat 44°57'30", long 72°41'55", Franklin County, Hydrologic Unit 02010007, on left bank, 1.7 mi north of intersection of State Highways 105 and 118 in East Berkshire, 1.7 mi upstream from Trout River, 3 mi south of Richford, and 3.8 mi downstream from North Branch.

DRAINAGE AREA.--479 mi².

PERIOD OF RECORD.--Discharge records: July 1911 to September 1923, October 1928 to current year. Monthly discharge only for some periods, published in WSP 1307. Prior to October 1977, published as "near Richford."
Water-quality records: Water years 1954, 1967-74.

REVISED RECORDS.--WSP 784: Drainage area. WSP 1237: 1913-14(M), 1922(M), 1923, 1929-30. WSP 1307: 1916(M). WSP 1437: 1912.

GAGE.--Water-stage recorder. Elevation of gage is 410 ft above sea level, from topographic map. Prior to August 1, 1915, nonrecording gage at site 0.2 mi downstream at datum 4.35 ft lower. August 1, 1915, to September 30, 1923, water-stage recorder at present site and datum. October 1, 1928, to September 30, 1929, nonrecording gage at former site at datum 4.6 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low flow prior to 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 45,000 ft³/s during flood of November 1927, gage height, 23.1 ft, from floodmarks, from rating curve extended above 14,100 ft³/s on basis of computation of peak flow over dam at gage height 14.70 ft, slope-area measurement at gage height 12.90 ft, and study of discharge per foot of width at measuring section.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 9	0600	15,100	14.54	Apr. 2	2300	7,880	10.26
Mar. 31	0415	* 20,400	* 17.09				

Minimum discharge, 140 ft³/s, September 25-27.

REVISIONS.--Revised maximum discharge for water year 1992, revised daily discharges, in cubic feet per second, for the months of March and April, revised monthly and yearly discharges, are given below. These figures supersede those published in the report for 1992.

Year	Date	Discharge (ft ³ /s)	Gage height (ft)
1992	Apr. 23	14,000	13.93

Daily Discharges:

Mar. 11	4,350	Mar. 19	780	Mar. 26	560	Apr. 2	1,250
Mar. 12	4,900	Mar. 20	715	Mar. 27	1,450	Apr. 3	1,210
Mar. 13	3,500	Mar. 21	660	Mar. 28	3,200	Apr. 4	1,160
Mar. 14	2,600	Mar. 22	605	Mar. 29	2,300	Apr. 5	1,180
Mar. 15	1,750	Mar. 23	590	Mar. 30	1,800	Apr. 6	1,020
Mar. 16	1,200	Mar. 24	540	Mar. 31	1,480	Apr. 7	1,200
Mar. 17	950	Mar. 25	460	Apr. 1	1,220	Apr. 8	1,850
Mar. 18	860						

Month	Total	Mean	Max	Min	CFSM	IN
March 1992	38600	1245	4900	250	2.60	3.00
April 1992	95150	3172	12700	1020	6.62	7.39
Wtr Yr 1992	305807	836	14000	81	1.74	23.75

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	976	801	e280	e450	e680	13400	432	1020	713	361	197
2	1260	1380	729	e355	e445	e770	8810	428	1400	1050	268	185
3	857	1920	e660	e500	e435	e940	6660	491	647	845	227	315
4	621	1410	e580	e1430	e430	e900	4600	531	806	493	205	413
5	554	2900	e535	e2000	e420	e800	2740	503	498	702	188	317
6	558	2210	e500	e3300	e400	e765	1920	557	384	778	174	255
7	477	1360	e490	e3100	e400	e720	1570	1310	326	469	176	246
8	408	1050	e455	8600	e390	e700	1420	1070	321	421	174	435
9	360	1010	e435	14700	e380	e1170	1350	1690	466	770	157	607
10	325	2290	e430	11700	e380	e2400	1230	1100	442	1270	183	699
11	298	2010	e415	5580	e395	e1900	1080	765	338	2940	535	530
12	279	1260	e420	3260	e580	e1400	946	607	335	2580	1740	388
13	264	1000	e425	2290	e1200	e1100	870	496	325	1300	1970	354
14	254	801	e400	1620	e790	e930	837	424	905	878	614	308
15	256	710	e385	1370	e640	e870	782	371	1220	613	363	265
16	252	713	e420	e1250	e610	e820	736	335	1150	488	304	288
17	249	685	e425	e1140	e580	e780	865	322	1550	542	485	486
18	236	689	e410	e960	e560	e760	1140	319	2560	954	306	306
19	236	675	e380	e850	e570	e720	866	296	2090	696	244	238
20	224	621	e355	e750	e580	e700	1210	255	1120	460	214	209
21	226	776	e330	e690	e560	e640	1630	269	1030	406	202	195
22	225	1250	e315	e610	e530	e630	1090	249	667	350	192	174
23	228	979	e330	e560	e500	e610	849	242	1110	312	186	161
24	249	772	e345	e530	e480	e580	716	223	1050	545	312	149
25	262	698	e340	e510	e475	e550	666	205	579	489	316	143
26	275	721	e350	e500	e475	e600	626	181	486	334	301	142
27	552	1840	e340	e480	e475	2810	573	177	819	276	263	267
28	1260	1380	e340	e480	e510	8840	554	161	794	258	303	1300
29	1090	1080	e345	e475	---	13000	505	169	498	292	274	1110
30	883	963	e320	e470	---	12100	461	231	809	345	244	499
31	900	---	e290	e460	---	18200	---	336	---	290	216	---
TOTAL	15898	36129	13295	70800	14640	78385	60702	14745	25745	22859	11697	11181
MEAN	513	1204	429	2284	523	2529	2023	476	858	737	377	373
MAX	1780	2900	801	14700	1200	18200	13400	1690	2560	2940	1970	1300
MIN	224	621	290	280	380	550	461	161	321	258	157	142
CFSM	1.07	2.51	.90	4.77	1.09	5.28	4.22	.99	1.79	1.54	.79	.78
IN.	1.23	2.81	1.03	5.50	1.14	6.09	4.71	1.15	2.00	1.78	.91	.87

ST. LAWRENCE RIVER BASIN

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1923, 1929 - 1998, BY WATER YEAR (WY)

MEAN	774	1032	847	655	518	1367	2982	1313	677	414	354	411
MAX	2295	2385	2330	2284	2439	4013	4882	3187	2129	1671	1528	1365
(WY)	1978	1984	1984	1998	1981	1936	1969	1940	1978	1974	1976	1954
MIN	87.4	241	270	157	115	240	923	453	178	86.0	63.3	57.5
(WY)	1949	1954	1956	1918	1980	1941	1995	1977	1988	1991	1934	1921

SUMMARY STATISTICS FOR 1997 CALENDAR YEAR FOR 1998 WATER YEAR WATER YEARS 1915-1923, 1929-1998

ANNUAL TOTAL	380077		376076		944		1974	
ANNUAL MEAN	1041		1030		1415		1965	
HIGHEST ANNUAL MEAN					18200		Mar 31 1998	
LOWEST ANNUAL MEAN					580		1965	
HIGHEST DAILY MEAN	12200	Jul 15	18200	Mar 31	18200	Mar 31	1998	
LOWEST DAILY MEAN	126	Aug 10	142	Sep 26	28	Aug 20	1919	
ANNUAL SEVEN-DAY MINIMUM	164	Aug 5	168	Sep 20	39	Aug 22	1934	
INSTANTANEOUS PEAK FLOW			20400	Mar 31	21200	Apr 18	1982	
INSTANTANEOUS PEAK STAGE			17.09	Mar 31	a 18.92	Mar 15	1946	
INSTANTANEOUS LOW FLOW			b 140	Sep 25	8.0	Jul 14,	1911	
ANNUAL RUNOFF (CFSM)	2.17		2.15		1.97			
ANNUAL RUNOFF (INCHES)	29.52		29.21		26.77			
10 PERCENT EXCEEDS	2700		1650		2230			
50 PERCENT EXCEEDS	500		542		466			
90 PERCENT EXCEEDS	236		240		143			

a Ice jam.
b Also occurred on September 26 and 27.
e Estimated.

ST. LAWRENCE RIVER BASIN

04294000 MISSISQUOI RIVER AT SWANTON, VT

LOCATION.--Lat 44°55'00", long 73°07'44", Franklin County, Hydrologic Unit 02010007, on left bank, at old railroad abutment, 0.3 mi upstream of dam and Depot Street (Route 78) bridge, 0.3 mi southwest of Post Office in Swanton, 1.1 mi west of Hwy 78 and Interstate 89 interchange, and 7.9 mi upstream of mouth.

DRAINAGE AREA.--850 mi².

PERIOD OF RECORD.--Discharge records: March 1990 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 105 ft above sea level, from topographic map. July 6, 1989, to February 28, 1990, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Low flows regulated by powerplants upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 07	0230	12,300	4.84	Mar. 31	1815	31,800	8.57
Jan. 09	1330	* 32,200	* 8.64				

Minimum daily discharge, 126 ft³/s, May 28.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. These values supersede figures published in the reports for 1991, and 1993-1996.

Water Year	Date	Discharge (ft ³ /s)	Gage height (ft)	Water Year	Date	Discharge (ft ³ /s)	Gage height (ft)
1990	Mar. 18, 1990	e25,000	--	1995	Jan. 16, 1995	14,600	5.34
1993	Apr. 11, 1993	15,100	5.46	1996	Jan. 20, 1996	37,700	9.50
1994	Apr. 16, 1994	23,700	7.16				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3740	1380	1590	e460	e740	e1100	e20000	620	1840	1420	529	235
2	2870	2240	1100	e495	e720	e1280	16900	486	2240	2820	382	215
3	1870	3750	1050	e640	e715	e1530	12100	637	1120	2540	340	357
4	989	2760	e940	e2000	e690	e1410	8780	901	1190	1200	317	652
5	1100	4820	e820	e3800	e660	e1300	5610	826	762	1500	214	566
6	1160	4460	e770	7690	e650	e1220	3850	707	524	1250	267	389
7	943	2660	e730	10900	e630	e1180	2820	1050	394	970	226	1520
8	661	1990	e715	14800	e615	e1160	2440	2240	409	634	134	1270
9	609	1730	e690	29500	e610	e1730	2190	1900	445	3130	154	1500
10	618	4760	e660	23000	e605	e3900	2010	1840	662	4440	196	2220
11	476	4840	e660	e9200	e690	e3100	1710	1260	418	6800	1220	1230
12	423	2790	e650	e5300	e960	e2500	1430	887	368	6180	5190	773
13	589	2050	e660	e3750	e1960	e2000	1190	614	335	3040	4510	639
14	325	1580	e640	e2700	e1300	e1770	1250	499	887	1840	2020	597
15	448	1330	e600	e2300	e1030	e1600	1200	458	1950	881	702	473
16	510	1330	e640	e2020	e1000	e1420	1070	434	1490	882	643	2420
17	428	1260	e680	e1730	e940	e1320	1210	393	1940	1200	691	1460
18	412	1250	e650	e1680	e910	e1250	1900	351	4670	2710	625	820
19	422	1200	e600	e1400	e915	e1180	1460	390	5030	1560	423	612
20	434	1170	e570	e1220	e900	e1120	1840	350	2410	820	294	408
21	283	1210	e520	e1120	e880	e1060	2920	275	1700	623	365	359
22	340	2330	e500	e1000	e850	e1020	1920	215	1160	525	269	367
23	326	1990	e510	e920	e800	e970	1410	276	1560	468	305	331
24	415	1560	e540	e870	e770	e930	1120	305	2090	1030	287	304
25	517	1230	e540	e850	e780	e890	868	268	1010	911	531	278
26	509	1260	e560	e820	e760	e950	944	215	1050	509	584	227
27	1020	3660	e540	e800	e780	e4600	945	188	1840	472	466	621
28	2130	2990	e540	e790	e920	e14500	785	126	1790	321	315	5310
29	2150	2210	e540	e780	---	e23000	633	177	960	468	268	3160
30	1660	1860	e510	e760	---	e19500	724	174	950	502	402	1290
31	1390	---	e480	e750	---	e27500	---	437	---	766	367	---
TOTAL	29767	69650	21195	134045	23780	127990	103229	19499	43194	52412	23236	30603
MEAN	960	2322	684	4324	849	4129	3441	629	1440	1691	750	1020
MAX	3740	4840	1590	29500	1960	27500	20000	2240	5030	6800	5190	5310
MIN	283	1170	480	460	605	890	633	126	335	321	134	215

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1998, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MEAN	1476	2007	1561	1823	902	2712	4708	1873	950
MAX	2507	3082	3894	4324	1670	5005	7078	3760	1440
(WY)	1991	1996	1997	1998	1996	1993	1996	1998	1997
MIN	295	1024	596	429	317	801	1527	629	375
(WY)	1995	1992	1993	1994	1993	1994	1995	1998	1992

SUMMARY STATISTICS

	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1990 - 1998
ANNUAL TOTAL	649653	678600	
ANNUAL MEAN	1780	1859	1660
HIGHEST ANNUAL MEAN			2200
LOWEST ANNUAL MEAN			1190
HIGHEST DAILY MEAN	17300	Jul 16	29500
LOWEST DAILY MEAN	106	Aug 9	126
ANNUAL SEVEN-DAY MINIMUM	203	Aug 6	208
INSTANTANEOUS PEAK FLOW			32200
INSTANTANEOUS PEAK STAGE		8.64	Jan 9
10 PERCENT EXCEEDS	4420	3360	4140
50 PERCENT EXCEEDS	881	930	845
90 PERCENT EXCEEDS	368	346	228
e Estimated.			

ST. LAWRENCE RIVER BASIN

0429500 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi south of Fort Montgomery ruins.

DRAINAGE AREA.--8,277 mi².

PERIOD OF RECORD.--October 1863 to December 1870 (maximum and minimum monthly gage heights at St. Johns, Quebec, published in WSP 97) and March 1871 to current year (daily gage heights prior to October 1970, elevations thereafter: those for 1871-1907 published in WSP 894). Gage heights prior to October 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point". Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Survey of Canada annual reports.

GAGE.--Water-stage recorder. Datum of gage is sea level. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft higher.

REMARKS.--Area of lake surface about 490 mi². Total volume below 92.5 ft elevation, reported by Lake Champlain Studies Center, 902.2 billion ft³. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.88 ft, Apr. 25, 1993; minimum observed, 92.17 ft, Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft, May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Congress, 2d session H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 101.71 ft, Apr. 5, 6; minimum, 94.65 ft, Oct. 26, 28.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.15	94.78	95.65	95.40	98.36	97.17	100.68	99.09	96.67	98.23	97.61	96.80
2	95.24	94.88	95.67	95.37	98.29	97.21	101.13	98.93	96.84	98.54	97.58	96.84
3	95.33	95.08	95.77	95.34	98.17	97.27	101.45	98.89	96.62	98.67	97.49	96.79
4	95.36	95.08	95.75	95.25	98.07	97.34	101.59	98.82	96.54	98.70	97.39	96.68
5	95.37	95.20	95.77	95.41	97.98	97.38	101.64	98.76	96.40	98.72	97.30	96.59
6	95.31	95.29	95.77	95.50	97.92	97.42	101.65	98.69	96.41	98.78	97.24	96.63
7	95.28	95.32	95.75	95.74	97.84	97.43	101.61	98.63	96.35	98.78	97.21	96.52
8	95.26	95.33	95.71	96.20	97.77	97.44	101.54	98.56	96.31	98.81	97.14	96.46
9	95.33	95.32	95.74	97.20	97.69	97.53	101.37	98.43	96.28	98.82	97.12	96.40
10	95.23	95.49	95.64	98.10	97.62	97.73	101.29	98.42	96.24	98.81	97.04	96.41
11	95.18	95.61	95.65	98.56	97.56	98.10	101.25	98.42	96.22	98.83	97.02	96.47
12	95.18	95.69	95.64	98.80	97.50	98.27	101.15	98.39	96.28	98.92	97.13	96.45
13	95.20	95.68	95.69	98.97	97.48	98.36	101.01	98.32	96.16	99.00	97.35	96.39
14	95.21	95.63	95.51	---	97.52	98.35	100.88	98.24	96.10	98.97	97.51	96.35
15	95.07	95.72	95.59	---	97.53	98.30	100.75	98.14	96.28	98.88	97.55	96.40
16	94.98	95.74	95.61	---	97.52	98.27	100.65	98.06	96.38	98.80	97.36	96.38
17	94.99	95.78	95.51	---	97.45	98.24	100.55	98.04	96.48	98.76	97.39	96.47
18	94.99	95.78	95.49	---	97.40	98.18	100.41	97.85	96.62	98.70	97.23	96.48
19	94.95	95.85	95.50	---	97.37	98.15	100.29	97.75	96.79	98.71	97.15	96.59
20	94.93	95.74	95.37	---	97.35	98.12	100.19	97.71	96.91	98.63	97.14	96.41
21	94.87	95.77	95.38	---	97.31	98.05	100.18	97.53	96.96	98.54	97.12	96.46
22	94.83	95.55	95.36	---	97.28	98.11	100.11	97.43	97.07	98.41	97.03	96.26
23	94.84	95.80	95.39	---	97.24	98.15	100.00	97.33	97.09	98.35	96.98	96.21
24	94.77	95.62	95.31	---	97.15	98.08	99.87	97.29	97.06	98.24	97.05	96.30
25	94.72	95.90	95.39	---	97.20	98.07	99.72	97.21	97.06	98.17	97.02	96.26
26	94.69	95.65	95.32	---	97.20	98.06	99.62	97.08	97.23	98.11	97.04	96.22
27	94.82	95.55	95.31	98.69	97.19	98.04	99.51	97.02	97.47	98.08	97.04	96.22
28	94.75	95.83	95.28	98.61	97.17	98.31	99.41	96.96	97.87	97.96	97.01	96.19
29	94.84	95.73	95.33	98.54	---	98.86	99.33	96.88	98.06	97.88	97.04	96.30
30	94.77	95.73	95.23	98.47	---	99.56	99.20	96.76	98.13	97.80	96.93	96.35
31	94.94	---	95.27	98.41	---	100.02	---	96.84	---	97.68	96.86	---
MEAN	95.04	95.54	95.53	---	97.58	98.05	100.60	97.95	96.76	98.53	97.20	96.44
MAX	95.37	95.90	95.77	---	98.36	100.02	101.65	99.09	98.13	99.00	97.61	96.84
MIN	94.69	94.78	95.23	---	97.15	97.17	99.20	96.76	96.10	97.68	96.86	96.19

04295500 LAKE MEMPHREMAGOG AT NEWPORT, VT

LOCATION.--Lat 44°56'15", long 72°12'21", Orleans County, Hydrologic Unit 01110000, on west side of bridge on U.S. Highway 5 at Newport.

PERIOD OF RECORD.--Gage heights: May 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft above sea level. Prior to July 21, 1934, nonrecording gage on highway bridge 0.1 mi southeast at same datum. July 21, 1934, to August 22, 1961, nonrecording gage on east side, and August 23, 1961, to Oct. 18, 1966, on west side of bridge at present site and datum.

REMARKS.--Elevation of lake regulated by powerplant and gates at Magog, Quebec.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 12.92 ft April 20, 1933; minimum recorded, 6.48 ft, November 2, 1968, affected by seiche; but may have been lower during period of use of nonrecording gage.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.44 ft, April 4, affected by seiche; minimum gage height, 7.48 ft, February 28, affected by seiche.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.38	8.22	9.75	8.73	8.42	7.51	10.59	9.30	9.42	9.47	9.12	8.89
2	8.35	8.28	9.79	8.67	8.35	7.52	11.01	9.28	9.42	9.47	9.08	8.86
3	8.34	8.32	9.75	8.61	8.28	7.54	11.32	9.24	9.52	9.45	9.06	8.85
4	8.36	8.40	9.75	8.60	8.22	7.55	11.42	9.21	9.56	9.47	9.03	8.85
5	8.39	8.54	9.76	8.61	8.18	7.58	11.37	9.18	9.55	9.55	9.01	8.84
6	8.42	8.65	9.78	8.72	8.13	7.60	11.25	9.24	9.46	9.52	8.99	8.79
7	8.39	8.73	9.79	8.83	8.07	7.60	11.07	9.30	9.41	9.53	8.96	8.80
8	8.39	8.80	9.80	9.14	8.00	7.59	10.88	9.35	9.40	9.51	8.94	8.82
9	8.38	8.88	9.79	9.84	7.95	7.64	10.70	9.44	9.38	9.50	8.91	8.84
10	8.38	9.00	9.79	10.30	7.90	7.83	10.53	9.48	9.37	9.51	8.90	8.84
11	8.37	9.12	9.78	10.46	7.85	8.02	10.30	9.48	9.37	9.61	9.00	8.82
12	8.32	9.19	9.73	10.45	7.84	8.13	10.10	9.47	9.32	9.61	9.06	8.81
13	8.30	9.25	9.68	10.36	7.83	8.16	9.91	9.47	9.37	9.59	9.06	8.80
14	8.27	9.30	9.64	10.24	7.84	8.17	9.73	9.47	9.43	9.54	9.08	8.79
15	8.29	9.33	9.59	10.08	7.83	8.15	9.58	9.47	9.44	9.46	9.09	8.76
16	8.30	9.35	9.53	9.97	7.82	8.12	9.54	9.47	9.47	9.40	9.15	8.80
17	8.24	9.35	9.47	9.82	7.79	8.08	9.55	9.44	9.49	9.42	9.14	8.77
18	8.21	9.35	9.42	9.65	7.78	8.03	9.59	9.49	9.59	9.49	9.20	8.75
19	8.19	9.34	9.36	9.51	7.76	7.99	9.59	9.48	9.64	9.45	9.17	8.72
20	8.17	9.35	9.32	9.37	7.74	7.96	9.66	9.44	9.61	9.42	9.11	8.73
21	8.16	9.35	9.26	9.22	7.70	7.91	9.69	9.46	9.53	9.40	9.10	8.69
22	8.14	9.44	9.20	9.09	7.67	7.91	9.68	9.46	9.42	9.37	9.10	8.73
23	8.09	9.41	9.14	8.96	7.65	7.86	9.64	9.45	9.47	9.34	9.06	8.70
24	8.08	9.47	9.08	8.94	7.63	7.80	9.62	9.40	9.50	9.35	9.04	8.60
25	8.07	9.44	9.04	8.88	7.59	7.74	9.58	9.35	9.49	9.32	9.06	8.56
26	8.05	9.47	9.01	8.82	7.56	7.71	9.51	9.35	9.45	9.28	9.06	8.54
27	8.11	9.60	8.96	8.77	7.52	7.82	9.46	9.31	9.50	9.21	9.05	8.57
28	8.17	9.60	8.93	8.72	7.51	8.03	9.43	9.27	9.46	9.18	9.03	8.66
29	8.17	9.65	8.86	8.65	---	8.47	9.38	9.26	9.41	9.16	8.98	8.68
30	8.19	9.68	8.83	8.58	---	9.03	9.34	9.31	9.43	9.13	8.96	8.70
31	8.18	---	8.77	8.50	---	9.94	---	9.26	---	9.14	8.92	---
MEAN	8.25	9.13	9.43	9.26	7.87	7.97	10.10	9.37	9.46	9.41	9.05	8.75
MAX	8.42	9.68	9.80	10.46	8.42	9.94	11.42	9.49	9.64	9.61	9.20	8.89
MIN	8.05	8.22	8.77	8.50	7.51	7.51	9.34	9.18	9.32	9.13	8.90	8.54

CAL YR 1997 MEAN 8.90 MAX 10.05 MIN 7.26
WTR YR 1998 MEAN 9.01 MAX 11.42 MIN 7.51

ST. LAWRENCE RIVER BASIN

04296000 BLACK RIVER AT COVENTRY, VT

LOCATION.--Lat 44°52'08", long 72°16'14", Orleans County, Hydrologic Unit 01110000, on right bank, 15 ft downstream from highway bridge, 800 ft upstream from Stony Brook, and 0.4 mi northwest of Coventry.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--Discharge records: October 1951 to current year.

Water-quality records: Water years 1977-94.

GAGE.--Water-stage recorder. Elevation of gage is 725 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation at low flow by mill upstream prior to 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Table with columns: Date, Time, Discharge (ft³/s), Gage height (ft), Date, Time, Discharge (ft³/s), Gage height (ft). Rows include Jan. 9, Mar. 31, and June 17, 2000.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 DAILY MEAN VALUES

Large table with columns: DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. Contains daily mean discharge values for each month from 1997 to 1998.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1998, BY WATER YEAR (WY)

Table with columns: MEAN, MAX, (WY), MIN, (WY) and rows for years 1952, 1954, 1960, 1979, 1984, 1988, 1991, 1995, 1997, 1998, 1999.

SUMMARY STATISTICS

FOR 1997 CALENDAR YEAR

FOR 1998 WATER YEAR

WATER YEARS 1952 - 1998

Summary statistics table comparing 1997 calendar year, 1998 water year, and historical data (1952-1998) for metrics like Annual Total, Mean, Highest/Lowest Annual Mean, etc.

a Also occurred on May 28.
b Also occurred on August 30 to September 1.
e Estimated.

04296500 CLYDE RIVER AT NEWPORT, VT

LOCATION.--Lat 44°56'22", long 72°11'23", Orleans County, Hydrologic Unit 01110000, on right bank, in Newport, just downstream from small right-bank tributary, and 1 mi upstream from mouth.

DRAINAGE AREA.--142 mi².

PERIOD OF RECORD.--Discharge records: May 1909 to September 1919; May 1920 to August 1922, October 1922 to September 1924, November 1928 to May 1936, September 1938 to current year. Prior to November 1928, published as "at West Derby."

Water-quality records: Water years 1975-77.

REVISED RECORDS.--WSP 744: 1913(M), drainage area. WSP 924: 1940. WSP 1307: 1913-15(M).

GAGE.--Water-stage recorder. Datum of gage is 682.36 ft above sea level. May 25, 1909, to September 20, 1915, nonrecording gage, and September 21, 1915, to September 30, 1924, November 16, 1928, to May 4, 1936, water-stage recorder, at site 0.65 mi upstream at different datum. March 6, 1957, to May 11, 1994, water-stage recorder and records of power generation.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by powerplant and reservoirs upstream. No instantaneous peak stage or discharge available for period of March 6, 1957 to May 11, 1994 due to diversion of flow around station through canal and penstock of Newport No. 11 powerplant.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,900 ft³/s, March 20, 1936, gage height, 5.76 ft, site and datum then in use; maximum daily, 3,610 ft³/s, March 20, 1936; minimum daily discharge, 2.6 ft³/s, June 18, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft³/s, April 2, gage height, 9.10 ft; minimum daily discharge, 74 ft³/s, May 24-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	177	221	e110	225	104	2110	283	281	317	194	117
2	99	176	183	144	217	194	2300	247	178	380	184	112
3	146	173	186	164	271	306	2180	204	253	311	184	98
4	196	183	196	165	e220	306	1890	203	293	209	184	95
5	190	293	196	187	e155	258	1560	203	214	209	184	96
6	117	354	196	263	e137	194	1270	204	214	224	156	95
7	99	375	196	287	e150	252	1070	205	254	266	115	98
8	94	381	182	367	e160	275	920	196	265	247	110	99
9	95	384	159	893	e166	225	816	189	260	209	115	135
10	96	383	158	1170	158	332	744	189	213	211	116	183
11	96	381	156	1220	158	437	690	189	214	321	144	151
12	96	379	156	1090	160	437	639	189	214	381	150	110
13	144	374	156	921	159	439	592	189	215	396	309	160
14	117	315	158	784	e200	440	570	189	198	522	312	175
15	83	210	166	677	e232	440	524	189	168	548	283	175
16	80	263	116	602	e236	433	492	192	180	525	334	159
17	80	281	135	520	e248	401	475	194	329	562	308	116
18	84	220	156	467	250	310	459	135	369	564	283	105
19	96	194	156	442	251	269	433	91	369	492	283	101
20	92	194	156	429	201	228	431	91	376	457	228	150
21	89	194	156	426	201	206	431	91	316	438	211	120
22	86	193	131	379	200	262	446	90	275	410	186	102
23	84	216	92	353	199	250	447	89	302	404	144	101
24	84	283	91	294	175	206	436	74	336	393	105	101
25	82	208	119	252	157	206	418	74	334	314	162	101
26	81	166	163	e260	157	206	394	74	351	219	183	91
27	92	186	161	e240	158	211	384	74	366	211	157	91
28	104	193	161	217	132	346	387	74	263	209	115	159
29	107	193	164	192	---	459	378	81	263	211	116	225
30	104	299	131	221	---	1140	313	93	273	210	115	283
31	142	---	104	267	---	1820	---	95	---	211	116	---
TOTAL	3239	7821	4857	14003	5333	11592	24199	4680	8136	10581	5786	3904
MEAN	104	261	157	452	190	374	807	151	271	341	187	130
MAX	196	384	221	1220	271	1820	2300	283	376	564	334	283
MIN	80	166	91	110	132	104	313	74	168	209	105	91
CFSM	.74	1.84	1.10	3.18	1.34	2.63	5.68	1.06	1.91	2.40	1.31	.92
IN.	.85	2.05	1.27	3.67	1.40	3.04	6.34	1.23	2.13	2.77	1.52	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909-24, 28-36, 38-98, BY WATER YEAR (WY)

	1909-24	28-36	38-98	1909-24	28-36	38-98	1909-24	28-36	38-98	1909-24	28-36	38-98
MEAN	178	234	222	186	159	280	692	496	241	150	130	129
MAX	576	560	599	452	477	1136	1192	1042	545	464	369	523
(WY)	1946	1919	1984	1998	1981	1936	1933	1972	1978	1973	1976	1924
MIN	50.7	79.5	80.4	62.9	19.1	72.8	186	151	74.0	47.2	39.6	41.9
(WY)	1962	1923	1923	1948	1979	1911	1979	1998	1988	1991	1909	1984

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR	FOR 1998 WATER YEAR	WATER YEARS 1909-24, 28-36, 38-98
ANNUAL TOTAL	92889	104131	
ANNUAL MEAN	254	285	256
HIGHEST ANNUAL MEAN			394
LOWEST ANNUAL MEAN			153
HIGHEST DAILY MEAN	910	Apr 9	2300
LOWEST DAILY MEAN	70	Aug 8	a 74
ANNUAL SEVEN-DAY MINIMUM	71	Aug 6	77
INSTANTANEOUS PEAK FLOW			2330
INSTANTANEOUS PEAK STAGE			9.10
ANNUAL RUNOFF (CFSM)	1.79	2.01	bc 3900
ANNUAL RUNOFF (INCHES)	24.33	27.28	bc 5.76
10 PERCENT EXCEEDS	549	459	1.81
50 PERCENT EXCEEDS	186	204	24.54
90 PERCENT EXCEEDS	92	96	63

a Also occurred May 25-28.

b No instantaneous peak stage or discharge available for period of March 6, 1957 to May 11, 1994.

c Site and datum then in use.

e Estimated.