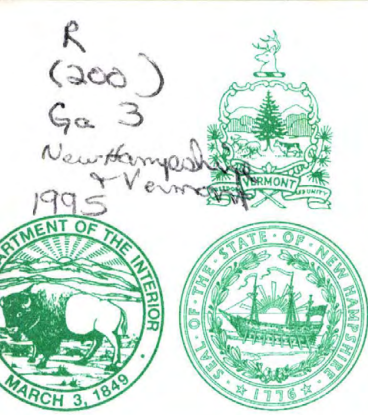




Water Resources Data New Hampshire and Vermont Water Year 1995



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-95-1
Prepared in cooperation with the States of New Hampshire and
Vermont and with other agencies

CALENDAR FOR WATER YEAR 1995

1994

[illegible]

1995

[illegible]

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1		1	2	3	4	5	6					1	2	3
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	
30																				

[illegible]



Water Resources Data New Hampshire and Vermont Water Year 1995

by R.E. Hammond, M.F. Coakley, Chandlee Keirstead, and R.G. Kiah



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NH-VT-95-1
Prepared in cooperation with the States of New Hampshire and
Vermont and with other agencies

U.S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, *Secretary*

U.S. GEOLOGICAL SURVEY

Gordon P. Eaton, *Director*

For additional information, write to:

**U.S. Geological Survey
Water Resources Division
361 Commerce Way
Pembroke, NH 03275**

1996

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE July 1996	3. REPORT TYPE AND DATES COVERED Annual-- Oct. 1, 1994 to Sept. 30, 1995	
4. TITLE AND SUBTITLE Water Resources Data for New Hampshire and Vermont, Water Year 1995			5. FUNDING NUMBERS	
6. AUTHOR(S) R.E. Hammond, M.F. Coakley, Chandlee Keirstead, and R. G. Kiah				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey Water Resources Division 361 Commerce Way Pembroke, NH 03275			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-NH-VT-95-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey Water Resources Division 361 Commerce Way Pembroke, NH 03275			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS/WDR-NH-VT-95-1	
11. SUPPLEMENTARY NOTES This report was prepared in cooperation with the States of New Hampshire and Vermont and with other agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restrictions on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 1995 water year for New Hampshire and Vermont consists of stage, discharge, and water quality of streams; contents of lakes and reservoirs; and ground-water levels. This report contains discharge records for 72 gaging stations, stage records for 5 lakes, monthend contents for 23 lakes and reservoirs, water quality for 9 gaging stations and water levels for 26 observation wells. Also included are data for 18 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program and are published as miscellaneous measurements. A few pertinent stations in bordering states are also included in this report. These data represent that portion of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Hampshire and Vermont.				
14. SUBJECT TERMS *New Hampshire, *Vermont, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels and analyses			15. NUMBER OF PAGES 220	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

PREFACE

This volume of the annual hydrologic data report of New Hampshire and Vermont is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

R.O. Brown

K. Taylor

S. Mazzerelli

J.C. Denner

S. Ward

B.O. Stock

G.S. Hilgendorf

G. Berwick

D. Kraemer

J. R. Mullaney

J.P. Nielson, and G.J. Stewart, Maine office, reviewed portions of the report.

Debra H. Foster coordinated the word processing and publishing phases of the report.

This report was prepared in cooperation with the States of New Hampshire and Vermont and with other agencies under the general supervision of Brian Mrazik, Chief, New Hampshire-Vermont District.

CONTENTS

	Page
Preface	iii
List of surface-water stations, in downstream order, for which records are published in this volume	vii
List of ground-water wells, by county, for which records are published in this volume	x
List of discontinued surface-water discharge stations	xi
List of discontinued continuous-record surface-water-quality stations	xiv
Introduction	1
Cooperation	3
Summary of hydrologic conditions	3
Streamflow	3
Floods and droughts	3
Reservoir storage	5
Water quality	5
Ground-water levels	5
Special networks and program	6
Explanation of the records	7
Station-identification number	8
Downstream order system	8
Latitude-longitude system	8
Records of stage and water discharge	9
Data collection and computation	9
Data presentation	10
Station Manuscript	11
Data table of daily mean values	12
Statistics of monthly mean data	12
Summary statistics	12
Identifying estimated daily discharge	14
Accuracy of the records	14
Other records available	14
Records of surface-water quality	14
Classification of record	14
Arrangement of records	15
On-site measurements and sample collection	15
Water temperature	16
Sediment	16
Laboratory measurements	16
Data presentation	16
Records of ground-water levels	17
Data collection and computation	17
Data presentation	18
Records of ground-water quality	18
Data collection and computation	19
Data presentation	19
Access to WATSTORE data	19
Definition of terms	20
Publications on Techniques of Water-Resources Investigations	27
Station records, surface water	31
Discharge at partial-record stations and miscellaneous sites	127
Crest-stage partial-record stations	127
Miscellaneous sites	130
Supplemental water-quality data for gaging stations	133
Supplemental National Water Quality Assessment Data for Gaging Stations in New Hampshire and Vermont	147

CONTENTS--Continued

Station records, ground water	Page 163
Ground-water levels in New Hampshire.....	163
Ground-water levels in Vermont.....	175
Supplemental National Water Quality Assessment Data for Ground Water Stations in New Hampshire and Vermont.....	189
Index	201

ILLUSTRATIONS

Figure	1. Map showing location of data-collection sites.....	2
	2. Comparison of discharge at two long-term index gaging stations during 1995 water year with median discharge for period 1961-90.....	4
	3. System for numbering wells and miscellaneous sites	9

**SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME**

vii

NOTE: Data for miscellaneous sites for both surface-water discharge and quality are published in separate sections of the data report. See references at the end of this list for page numbers for these sections.

[Letters after station name designate type of data collected: (d) discharge; (c) chemical; (b) biological; (s) sediment, (e) elevation, gage heights, or contents]

	Station number	Page
<u>NORTH ATLANTIC SLOPE BASINS</u>		
<u>ANDROSCOGGIN RIVER BASIN</u>		
Androscoggin River:		
Umbagog Lake:		
Magalloway River:		
Diamond River near Wentworth Location, N.H. (d).....	01052500.....	32
Androscoggin River at Errol, N.H. (d).....	01053500.....	33
Androscoggin River near Gorham, N.H. (d).....	01054000.....	34
<u>SACO RIVER BASIN</u>		
Saco River:		
Ellis River near Jackson, N.H. (d).....	01064300.....	35
Saco River near Conway, N.H. (d).....	01064500.....	36
Bear Camp River near South Tamworth, N.H. (d).....	01064801.....	37
<u>PISCATAQUA RIVER BASIN</u>		
Salmon Falls River (head of Piscataqua River) at Milton, N.H. (d).....	01072100.....	38
Piscataqua River:		
Cocheco River at Rochester, N.H. (d).....	01072800.....	39
Cocheco River at Dover, N.H. (d).....	01072880.....	40
Oyster River near Durham, N.H. (d).....	01073000.....	41
Lamprey River near Newmarket, N.H. (d).....	01073500.....	42
<u>MERRIMACK RIVER BASIN</u>		
Pemigewasset River (head of Merrimack River):		
East Branch Pemigewasset River at Lincoln, N.H. (d).....	01074520.....	43
Baker River:		
Stevens Brook near Wentworth, N.H. (d).....	01075800.....	44
Pemigewasset River at Plymouth, N.H. (d).....	01076500.....	45
Squam River at Ashland, N.H. (d).....	01077000.....	46
Smith River near Bristol, N.H. (d).....	01078000.....	47
Lake Winnepesaukee:		
Lake Winnepesaukee at Weirs Beach, N.H. (e).....	01080000.....	48
Lake Winnepesaukee outlet at Lakeport, N.H. (d).....	01080500.....	49
Winnepesaukee River at Tilton, N.H. (d).....	01081000.....	50
Merrimack River:		
Contoocook River:		
West Branch Warner River near Bradford, N.H. (d).....	01085800.....	51
Soucook River at Pembroke Road near Concord, N.H. (d).....	01089100.....	52
Merrimack River near Goffs Falls, below Manchester, N.H. (d).....	01092000.....	53
Souhegan River:		
Stony Brook:		
Stony Brook tributary near Temple, N.H. (d).....	01093800.....	54
Nashua River:		
Lyle Reed Brook at Nashua, N.H.(d).....	0109650657.....	55
Beaver Brook:		
Beaver Brook at North Pelham, N.H. (d).....	010965852.....	56
Reservoirs in Merrimack River basin.....		57

**SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME**

	Station number	Page
<u>NORTH ATLANTIC SLOPE BASINS--Continued</u>		
<u>CONNECTICUT RIVER BASIN</u>		
Connecticut River:		
Connecticut River below Indian Stream, near Pittsburg, N. H. (d).....	01129200.....	58
Mohawk Brook near Colebrook, N. H. (d)	01129440.....	59
Connecticut River at North Stratford, N.H. (dcs)	01129500.....	60
Upper Ammonoosuc River near Groveton, N.H. (d)	01130000.....	62
Connecticut River near Dalton, N.H. (dcs).....	01131500.....	63
Passumpsic River:		
Moose River at Victory, Vt. (dcs)	01134500.....	65
Pope Brook (site W-3) near North Danville, Vt., (d)	01135150.....	67
Sleepers River (site W-5) near St. Johnsbury, Vt. (dcs)	01135300.....	68
Passumpsic River at Passumpsic, Vt. (d)	01135500.....	71
Ammonoosuc River at Bethlehem Junction, N.H. (dcs).....	01137500.....	72
Connecticut River at Wells River, Vt. (d)	01138500.....	75
Wells River at Wells River, Vt. (dcs).....	01139000.....	76
Waits River:		
East Orange Branch at East Orange, Vt. (d)	01139800.....	78
Mink Brook near Etna, N.H. (d)	01141800.....	79
White River:		
Third Branch White River:		
Ayers Brook at Randolph, Vt. (d).....	01142500.....	80
White River at West Hartford, Vt. (dcs).....	01144000.....	81
Connecticut River at West Lebanon, N.H. (dc)	01144500.....	84
Mascoma River at Mascoma, N.H. (d)	01150500.....	85
Ottawaquechee River near West Bridgewater, Vt. (d).....	01150900.....	86
Ottawaquechee River at North Hartland, Vt. (d).....	01151500.....	87
Sugar River at West Claremont, N.H. (dcs)	01152500.....	88
Williams River near Rockingham, Vt. (d).....	01153550.....	90
Connecticut River at North Walpole, N.H. (d)	01154500.....	91
West River below Townshend Dam near Townshend, Vt. (d)	01155910.....	92
Ashuelot River at West Swanzey, N.H. (d).....	01160350.....	93
Ashuelot River at Hinsdale, N.H. (d).....	01161000.....	95
Reservoirs in Connecticut River basin		96
<u>HUDSON RIVER BASIN</u>		
Hudson River:		
Hoosic River:		
Walloomsac River near North Bennington, Vt. (d).....	01334000.....	97
<u>ST. LAWRENCE RIVER BASIN</u>		
St. Lawrence River:		
Lake Champlain (head of Richelieu River):		
Poultney River below Fair Haven, Vt. (d)	04280000.....	98
Mettawee River near Pawlet, Vt. (d)	04280350.....	99
Otter Creek at Center Rutland, Vt. (d)	04282000.....	100
Otter Creek at Middlebury, Vt. (d)	04282500.....	101
New Haven River at Brooksville near Middlebury, Vt. (d)	04282525.....	102
Little Otter Creek at Ferrisburg, Vt. (d)	04282650.....	103
Lewis Creek at N. Ferrisburg, Vt. (d).....	04282780.....	104
LaPlatte River at Shelburne Falls, Vt. (d)	04282795.....	105

**SURFACE-WATER AND WATER-QUALITY STATIONS, IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME**

ix

	Station number	Page
<u>NORTH ATLANTIC SLOPE BASINS</u>--Continued		
<u>ST. LAWRENCE RIVER BASIN</u>--Continued		
St. Lawrence River:		
Lake Champlain (head of Richelieu River):		
Winooski River:		
North Branch Winooski River at Wrightsville, Vt. (d)	04285500	106
Reservoirs in Winooski River basin above Montpelier, Vt.		107
Winooski River at Montpelier, Vt. (d)	04286000	108
Dog River at Northfield Falls, Vt., (d)	04287000	109
Mad River near Moretown, Vt. (d)	04288000	110
Waterbury Reservoir (head of Little River) near Waterbury, Vt. (e)	04288500	111
Little River near Waterbury, Vt. (d)	04289000	112
Winooski River near Essex Junction, Vt. (d)	04290500	113
Lamoille River at Johnson, Vt. (d)	04292000	114
Lamoille River at East Georgia, Vt. (d)	04292500	115
Stone Bridge Brook near Georgia Plains, Vt. (d)	04292700	116
Missisquoi River near North Troy, Vt. (d)	04293000	117
Missisquoi River near East Berkshire, Vt. (d)	04293500	118
Missisquoi River at Swanton, Vt. (d)	04294000	119
Lake Champlain at Burlington, Vt. (e)	04294500	120
Richelieu River (Lake Champlain) at Rouses Point, N. Y. (ecb)	04295000	121
St. Francis River:		
Lake Memphremagog (head of Magog River) at Newport, Vt. (e)	04295500	124
Black River at Coventry, Vt. (d)	04296000	125
Barton River:		
Clyde River at Newport, Vt. (d)	04296500	126

**GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS
ARE PUBLISHED IN THIS VOLUME**

NEW HAMPSHIRE

CHESHIRE COUNTY

Keene well KEW 2..... 163

COOS COUNTY

Errol well ETW 1..... 164

Lancaster well LCW 1..... 165

HILLSBOROUGH COUNTY

Milford well MOW 36..... 166

Nashua well NAW 218..... 167

MERRIMACK COUNTY

Concord well CVW 2..... 168

Concord well CVW 4..... 169

Franklin well FKW 1..... 170

Hooksett well HTW 5..... 171

New London well NLW 1..... 172

Warner well WCW 1..... 173

STRAFFORD COUNTY

Lee well LIW 1..... 174

VERMONT

BENNINGTON COUNTY

Pownal well PQW 1..... 175

CHITTENDEN COUNTY

Milton well MJW 3..... 176

ESSEX COUNTY

Brighton well BIW 1..... 177

FRANKLIN COUNTY

Berkshire well BKW 1..... 178

LAMOILLE COUNTY

Morristown well MPW 1..... 179

ORANGE COUNTY

West Fairlee well WOW 1..... 180

ORLEANS COUNTY

Glover well GLW 1..... 181

RUTLAND COUNTY

Pittsford well PFW 8..... 182

WASHINGTON COUNTY

Montpelier well MMW 2..... 183

Waitsfield well WAW 2..... 184

Waitsfield well WAW 3..... 185

WINDSOR COUNTY

Chester well CKW 1..... 186

Hartland well HLW 54..... 187

Rochester well RJW 1..... 188

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record streamflow stations in New Hampshire and Vermont have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Discontinued surface-water discharge stations

Station Name	Station Number	Drainage Area (mi ²)	Period of Record (water years)
SACO RIVER BASIN			
Lucy Brook near North Conway, N.H.	01064400	4.68	1964-92
Cold Brook at South Tamworth, N.H.	01064800	5.41	1963-73
Ossipee River at Effingham Falls, N.H.	01065000	330	1942-90
PISCATAQUA RIVER BASIN			
Mohawk Brook near Center Strafford, N.H.	01072850	8.87	1964-77
Dudley Brook near Exeter, N.H.	01073600	4.97	1962-85
MERRIMACK RIVER BASIN			
Pemigewasset River at North Woodstock, N.H.	01074000	28.6	1911-12
East Branch Pemigewasset River near Lincoln, N.H.	01074500	109	1928-53
Pemigewasset River at Woodstock, N.H.	01075000*	193	1940-77
Baker River at Wentworth, N.H.	01075500	58.8	1940-52
Baker River near Rumney, N.H.	01076000*	143	1929-77
Poorfarm Brook near Gilford, N.H.	01079600	5.0	1978-80
Merrimack River at Franklin Junction, N.H.	01081500*	1,507	1903-78
Contoocook River at Peterborough, N.H.	01082000*	68.1	1945-77
Nubanusit River near Peterborough, N.H.	01083000*	46.9	1921-31 1945-89
Contoocook River near Elmwood, N.H.	01083500	168	1917-24
North Branch Contoocook River near Antrim, N.H.	01084000	54.8	1924-70
Beards Brook near Hillsboro, N.H.	01084500	55.4	1945-70
Contoocook River near Henniker, N.H.	01085000*	368	1940-77
Contoocook River below Hopkinton Dam at West Hopkinton, N.H.	01085500*	427	1903-07, 1963-89
Warner River at Davisville, N.H.	01086000	146	1940-78
Blackwater River near Webster, N.H.	01087000*	129	1918-20, 1927-89
Contoocook River at Penacook, N.H.	01088000	766	1929-77
Merrimack River at Garvins Falls, N.H.	01088500	2,427	1904-15
Soucook River near Concord, N.H.	01089000	76.8	1951-87
Suncook River at North Chichester, N.H.	01089500	157	1918-27, 1928-70
Suncook River at East Pembroke, N.H.	01090000	270	1904-05
Merrimack River at Manchester, N.H.	01090500	2,854	1924-50
Piscataquog River below Everett Dam near East Weare, N.H.	01090800*	63.1	1963-89
South Branch Piscataquog River near Goffstown, N.H.	01091000	104	1940-78
Piscataquog River near Goffstown, N.H.	01091500*	202	1940-78
Sucker Brook at Auburn, N.H.	01093000	27.8	1938-70
Souhegan River at Merrimack, N.H.	01094000*	171	1909-76

WATER RESOURCES DATA FOR NEW HAMPSHIRE AND VERMONT

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Discontinued surface-water discharge stations--Continued

Station Name	Station Number	Drainage Area (mi ²)	Period of Record (water years)
CONNECTICUT RIVER BASIN			
Big Brook near Pittsburg, N.H.	01127880	6.36	1963-85
Connecticut River at First Connecticut Lake near Pittsburg, N.H.	01128500	83	1917-90
Halls Stream near East Hereford, Quebec, Canada	01129300	85	1963-92
East Branch Passumpsic River near East Haven, Vt.	01133000	53.8	1939-45, 1948-79
Passumpsic River near St. Johnsbury, Vt.	01133500	237	1909-19
Kirby Brook at Concord, Vt.	01134800	8.05	1963-74
Moose River at St. Johnsbury, Vt.	01135000	128	1928-83
Stevens River at West Barnet, Vt.	01136000	22.2	1939-45
Ammonoosuc River at Bretton Woods, N.H.	01136500	a34	1903-07
Ammonoosuc River near Bath, N.H.	01138000	395	1935-80
Connecticut River at South Newbury, Vt.	01139500	2,825	1918-50
South Branch Waits River near Bradford, Vt.	01140000	42.7	1940-51
Connecticut River at Orford, N.H.	01140500	3,100	1900-21
Ompompanoosuc River at Union Village, Vt.	01141500*	130	1940-89
White River near Bethel, Vt.	01142000	241	1931-55
Mascoma River at West Canaan, N.H.	01145000*	80.5	1939-78
Kent Brook near Shelburne, Vt.	01150800	3.31	1964-74
Ottawaquechee River at Woodstock, Vt.	01151000	126	1928-30
Black River at Covered Bridge at Weathersfield, Vt.	01152800	114	1976-82
Black River at North Springfield, Vt.	01153000*	158	1929-89
Williams River at Brockways Mills, Vt.	01153500	103	1940-84
Saxtons River at Saxtons River, Vt.	01154000	72.2	1940-82
Cold River at Drewsville, N.H.	01155000	82.7	1940-78
Sacketts Brook near Putney, Vt.	01155200	10.0	1963-74
Flood Brook near Londonderry, Vt.	01155300	9.25	1963-74
West River at Jamaica, Vt.	01155500*	179	1946-89
West River at Newfane, Vt.	01156000*	308	1919-23, 1928-89
Connecticut River at Vernon, Vt.	01156500	6,266	1936, 1938 1944-73
Ashuelot River near Gilsum, N.H.	01157000	71.1	1922-80
Ashuelot River below Surry Mountain Dam near Keene, N.H.	01158000*	101	1945-89
Otter Brook near Keene, N.H.	01158500	42.3	1923-58
Otter Brook below Otter Brook Dam near Keene, N.H.	01158600*	47.2	1958-89
Pratt Brook at Chesham, N.H.	01159000	11.2	1919-21
Minnewawa Brook at Marlborough, N.H.	01159500	31.7	1919-22
South Branch Ashuelot River at Webb near Marlborough, N.H.	01160000	36.0	1920-78
Beaver Brook at Wilmington, Vt.	01167800	6.38	1963-77
HUDSON RIVER BASIN			
Batten Kill at Arlington, Vt.	01329000	152	1929-84
ST. LAWRENCE RIVER BASIN			
Mettawee River Tributary near Pawlet, Vt.	04280300	2.95	1963-74
East Creek near Rutland, Vt.	04281000	a47	1911-13
East Creek at Rutland, Vt.	04281500	51.1	1940-77
Lewis Creek Tributary at Starksboro, Vt.	04282700	5.31	1963-74

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Discontinued surface-water discharge stations--Continued

Station Name	Station Number	Drainage Area (mi ²)	Period of Record (water years)
ST. LAWRENCE RIVER BASIN			
Mollys Brook near Marshfield, Vt.	04283000	a24	1920-23
Jail Branch at East Barre, Vt.	04284000	38.9	1920-23, 1933-92
Dog River at Northfield, Vt.	04286500	a52	1909-20, 1928-34
Sonny Brook near Montpelier, Vt.	04287300	2.31	1963-74
Winooski River at Richmond, Vt.	04289500	985	1903-07, 1910
Green River at Garfield, Vt.	04291000	a18	1915-21, 1922-32
Lamoille River at Cadys Falls, Vt.	04291500	268	1913-23
Stony Brook near Eden, Vt.	04292100	4.21	1963-74
Brownington Branch near Evansville, Vt.	04296200	2.15	1963-74

a approximately

WATER RESOURCES DATA FOR NEW HAMPSHIRE AND VERMONT
DISCONTINUED SURFACE-WATER-QUALITY DISCHARGE STATIONS

The following continuous-record surface-water-quality stations have been discontinued. Daily records of water temperature (wt), specific conductance (sc), and dissolved oxygen (do), were collected and published for the period of record shown for each station.

Discontinued continuous-record surface-water-quality stations

Station Name	Station Number	Drainage Area (mi ²)	Type of record	Period of record (water years)
Merrimack River at Concord, N.H.	01088400	2300	sc,wt	1980-1982
Connecticut River at Wells River, Vt.	01138500	2644	sc,wt	1980-1982
Connecticut River at N. Walpole, N.H.	01154500	5493	sc,wt	1981
Connecticut River at Walpole, N.H.	01155050	5612	sc,wt	1975-1980
West River at Newfane, Vt.	01156000	308	wt	1960-1965
South Branch Ashuelot River at Webb, near Marlborough, N.H.	01160000	36.0	wt, sc	1954-1978
Beaver Brook at Wilmington, Vt.	01167800	6.38	wt,sc	1972-1977
Winooski River above Chase Mill at Burlington, Vt.	04290550	--	wt,sc,do	1979-1981
Winooski River below Chase Mill at Burlington, Vt.	04290560	--	wt,sc,do	1979-1982
Black River at Coventry, Vt.	04296000	122	wt,sc	1978-1981
Clyde River at Newport, Vt.	04296500	142	wt,sc	1975-1978

Water Resources Data for New Hampshire and Vermont, 1995

By R.E. Hammond, M. F. Coakley, Chandlee Keirstead, and R.G. Kiah

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of New Hampshire and Vermont each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the States. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data-New Hampshire and Vermont."

This report series includes records of stage, discharge, and water quality of streams; contents of lakes and reservoirs; and water levels of ground-water wells. This volume contains records for water discharge at 72 gaging stations; stage records for 5 lakes; monthend contents for 23 lakes and reservoirs; water quality at 10 gaging stations; and water levels at 26 observation wells. Also included are data for 18 crest-stage partial record stations. Locations of these sites are shown in figure 1. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous discharge measurements. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Hampshire and Vermont.

This series of annual reports for New Hampshire and Vermont began with the 1961 water year with a report that contained only data relating to the quantities of surface water and published as "Water

Resources data for Massachusetts, New Hampshire, Rhode Island, and Vermont." For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Hampshire and Vermont were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 1A and 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1939 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identi-

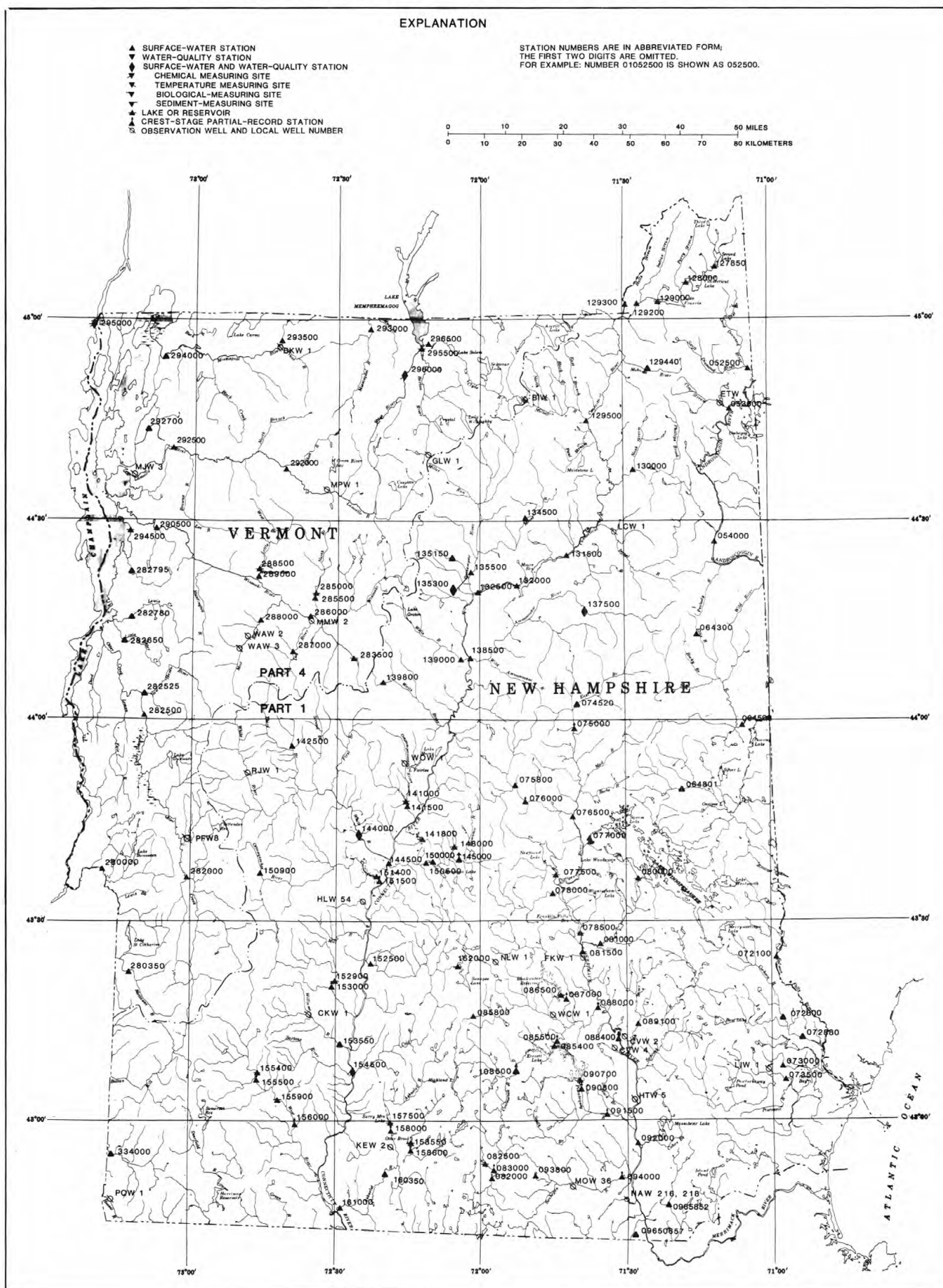


Figure 1.—Location of data-collection sites

fied as "U.S. Geological Survey Water-Data Report NH-VT-95-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (603) 226-7800.

COOPERATION

The U.S. Geological Survey and organizations of the States of New Hampshire and Vermont have had cooperative agreements for the systematic collection of Surface-water records since the early 1900's, and for groundwater records since the mid 60's. Organizations that assisted in collecting the data in this report through cooperative agreements with the Survey are:

New Hampshire Department of Environmental Services, State Resources Division,
Kenneth Stern, Chief Engineer.

Vermont Department of Environmental Conservation,
Barbara Ripley, Secretary.

City of Keene,
Patrick MacQueen, City Manager

City of Rochester,
Gary Stenhouse, City Manager

Assistance in the form of funds or services was provided by the Corps of Engineers, U.S. Army, in the collection of records for 19 gaging station published in this report. Organizations supplying data are acknowledged in the station descriptions.

The following organizations contributed funds and services through the requirements of the Federal Energy Regulatory Commission:

Green Mountain Power Company
Citizens Utilities Company

On waters adjacent to the international boundary, certain gaging stations are maintained by the United States (or Canada) under agreement with Canada (or the United States), and the records are obtained and compiled in a manner equally acceptable to both countries. These stations are designated as "international gaging stations."

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

Runoff for the 1995 water year was below-normal across the two-State area (above normal refers to the upper quartile of record, below normal refers to the lower quartile of record, and normal refers to the two middle quartiles). The basis of the normal range is a 30-year reference period (October 1960 through September 1990). An analysis of runoff from sixteen watersheds across the two States showed runoff averaging 70 percent of median during the water year. Index stations on the Pemigewasset River at Plymouth, New Hampshire and Dog River at Northfield Falls, Vermont recorded 1995 water-year runoff at 63 and 69 percent of median, respectively. These and other stations were used as indicators of monthly runoff across both States (fig. 1, 2). Monthly conditions are summarized below, by general trend and exceptions:

October	<u>Normal</u>
November	<u>Below-normal</u>
December	<u>Normal</u> ; <u>above-normal</u> along the southern border of New Hampshire and Vermont.
January	<u>Above-normal</u>
February	<u>Normal</u>
March	<u>Normal</u>
April	<u>Below-normal</u>
May	<u>Below-normal</u> ; <u>normal</u> in the Androscoggin River Basin of northeastern New Hampshire and Missisquoi River Basin in northern Vermont.
June	<u>Below-normal</u>
July	<u>Below-normal</u>
August	<u>Normal</u> ; <u>below-normal</u> along the eastern border of New Hampshire
September	<u>Below-normal</u>

Additional statistics for each gaging station contained in this report are provided in the tables of daily mean discharges.

Floods and Droughts

On August 6-8, flooding occurred in six counties across north-central Vermont due to heavy rainfall from remnants of Tropical Storm Dean. The orographic effects of the Green Mountains of northern Vermont contributed to the heavy rainfall. Storm damage to public facilities and infrastructure was estimated at approximately \$2.1 million. The Towns of Johnson and Wolcott (Lamoille County) and Hardwick (Caledonia County) experienced the greatest

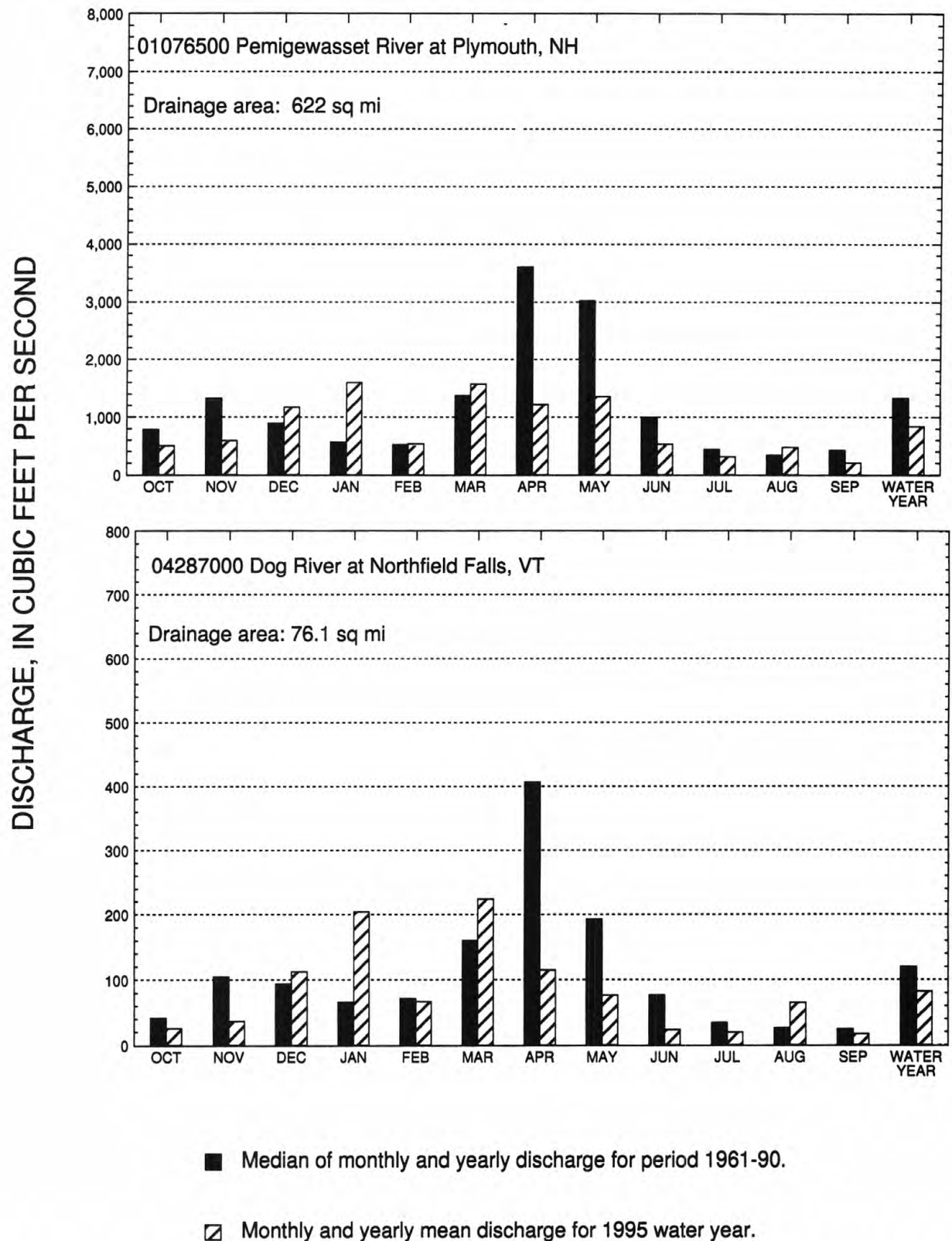


Figure 2. Comparison of discharge at two long-term index gaging stations during the 1995 water year with median discharge for period 1961-90.

concentration of flood damage (Federal Emergency Management Agency¹, 1995). The Lamoille River gage at Johnson, Vermont and the Moose River gage at Victory, Vermont recorded new maximum discharges [19,000 and 4,390 ft³/s (cubic feet per second)] respectively, for the period of record on August 6. The recurrence interval of these peaks recorded at the Lamoille and Moose River gages exceeded 100-years (peaks having a 1 in 100 chance of being equalled or exceeded in any given year).

Annual peak discharges occurred during the months of December, January, March, and August across the two States based on analysis of peak discharges from 16 watersheds in both States. The recurrence intervals of annual peak discharges at most gaging stations were less than 2 years (peaks having a 1 in 2 chance of being equalled or exceeded in any given year) and ranged from less than 2-year to greater than a 100-year recurrence interval with the greatest recurrence intervals occurring during the August 6-8 events in north-central Vermont.

Minimum flows occurred during the summer months of July and September, based on analysis of flows from 16 watersheds in the two States. By mid-September, runoff generally declined to 99-percent flow duration (percentage of time flows will be equalled or exceeded) across both States.

Reservoir Storage

The total combined usable storage of 5 major reservoirs in both States is 22,436 million cubic feet. At the beginning of the water year, the actual usable storage from these reservoirs was 17,092 million cubic feet or 76 percent of capacity. Average reservoir storage increased to 77 percent of capacity by the end of December, then began a steady seasonal decline to 42 percent of capacity by the end of February. Average reservoir storage then increased to 82 percent of capacity by the end of June. From June through September, average reservoir storage declined seasonally at a steady rate and at the end of September was at 69 percent of capacity for a combined usable storage of 15,376 million cubic feet.

Water Quality

Selected water-quality characteristics--temperature, specific conductance, pH, dissolved oxygen, alkalinity, bacteria (fecal coliform and fecal streptococci) counts, and concentrations of major inorganics, trace elements, major nutrients, and suspended sediment--were measured at several National Water-Quality Assessment (NAWQA) stations. The data collected are in the normal range, and no values exceeded the extremes for the period of record.

Ground-Water Levels

The ground-water observation well network in New Hampshire and Vermont consisted of 26 wells during the 1995 water year. Most wells are of small diameter and located in sandy material with relatively shallow depths to the water table. However, two wells in the network (Concord 2 in New Hampshire and Pittsford 8 in Vermont) are relatively deep, with depths to water between 35 to 45 feet.

Predominant ground-water conditions in New Hampshire and Vermont were: above-normal for only one month during the year; normal for four months; and below-normal for seven months. Monthly conditions are summarized below, by general trend and exceptions:

¹ Federal Emergency Management Agency, 1995, Mitigation Strategy Report, FEMA-1063-DR-Vermont, 31p.

October	Normal; below-normal in north-central Vermont, the Androscoggin River basin of northeastern New Hampshire, and the central portion of the Merrimack River basin of south-central New Hampshire; above-normal near the northern portion of Lake Champlain in northwestern Vermont and in the southern Merrimack River basin of New Hampshire.
November	Below-normal; normal in the western half of the Lamoille River basin of northwestern Vermont, the Otter Creek River basin of western Vermont, and in south-central New Hampshire.
December	Normal; below-normal in north-central Vermont, extreme southwestern Vermont, northern New Hampshire, and the central Merrimack River basin; above-normal in southwestern New Hampshire.
January	Above-normal; normal in the Missisquoi and Lamoille River basins of northwestern Vermont, central Vermont, extreme southwestern Vermont, the northern Androscoggin River and the central Merrimack River basins of New Hampshire;
February	Normal; below-normal across the eastern Missisquoi, Lamoille, and Winooski River basins of northern Vermont, the northern Otter Creek River basin, and extreme southwestern Vermont; above-normal in a small area of northeastern Vermont, central New Hampshire, and extreme south-central New Hampshire.
March	Normal; above-normal in northeastern Vermont and the northern Connecticut River basin of the two-State area.
April	Below-normal; normal in extreme north-central Vermont and extreme south-central New Hampshire.
May	Below-normal; normal in the Missisquoi River basin and northern Connecticut River basin.
June	Below-normal.
July	Below-normal; normal in the eastern Missisquoi River basin, the northern Connecticut River basin, the lower Connecticut River basin and southwestern New Hampshire.
August	Below-normal; normal across the eastern Missisquoi, Lamoille, and Winooski River basins, in northwestern Vermont, in southern Vermont through southwestern New Hampshire; above-normal in a small area of northeastern Vermont.
September	Below-normal; normal across the eastern Lamoille and Winooski River basins and in northeastern Vermont; above-normal in a small area of northeastern Vermont.

New monthly and period of record lows (the lowest water level recorded for a given month or period of record) were recorded at the following wells during the water year:

Concord (CVW 2) in New Hampshire for June and September, and a record low for the entire period of record for August.
 Errol (ETW 1) in New Hampshire for April, May, June, July, and September.
 Franklin (FKW 1) in New Hampshire for June, July, August, and September.
 Hooksett (HTW 5) in New Hampshire for July.
 Berkshire (BKW 1) in Vermont for October.
 Hartland (HLW 54) in Vermont for April, May, June, and July, and a record low for the entire period of record for January.
 Morristown (MPW 1) in Vermont for April, June, and July.
 Rochester (RJW 1) in Vermont for April and June.
 Waitsfield (WAW 2) in Vermont for October, April, May, July, August, and September, and a record low for the entire period of record for June.
 Waitsfield (WAW 3) in Vermont for October, December, April, and June.
 West Fairlee (WOW 1) in Vermont for April, May, June, July, and August, and a record low for the entire period of record for September.

New monthly highs (the highest water level recorded for a given month) were recorded at the following wells during the water year:

Brighton (BIW 1) in Vermont for January.
 Glover (GLW 1) in Vermont for March.

Hydrographs, for each of the ground-water station records contained in this report, provide additional information on water-level trends.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analysis on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 142 sites in NASQAN are generally located at the downstream ends of hydrologic accounting

units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

NASQAN was redesigned in 1995 and will be known as NASQAN II beginning in 1996. NASQAN II will focus on four of the largest river basins in the Nation-- the Mississippi, the Columbia, the Colorado, and the Rio Grande. The objective of NASQAN II is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-moni-

toring network of the National Atmospheric Program (NADP).

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in more than two-thirds of the study units and ultimately will be conducted in 60 study units (major drainage basins and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Radiochemical Programs is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium Network is a network of stations which have been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water and ground- water records published in this report are for the 1995 water year that began October 1, 1994, and ended September 30, 1995. A calendar of the water year is provided on the inside of the front cover. The records contain stream-flow data, stage and content data for lakes and

reservoirs, water-quality data for surface water, and ground- water-level data.

The locations of the stations and wells where the data were collected are shown in figure 1. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station-Identification Numbers

Each data station, whether streamgage or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream-order" system is used for surface-water stations and the "latitude-longitude" system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of identification shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between continuous-record stations and other types of stations; therefore, the station number for a continuous- record station

indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete station number (usually eight digits, but sometimes nine or more if needed) appears just to the left of the station name. The first two digits indicate the Part number (formerly used in Water-Supply Papers to designate major river systems) and the last six or more digits indicate the downstream order within the Part. For example, in the station number 01076500, "01" is the Part number for "North Atlantic Slope Basins" and "076500" is the downstream order number.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude is found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 3.)

A local well is also used in this report. The local well number consists of a 2-letter code for the town in which the well is located followed by a "W" signifying that it is a well, and a sequential number. The local

number is used to identify the location of observation wells on figure 3.

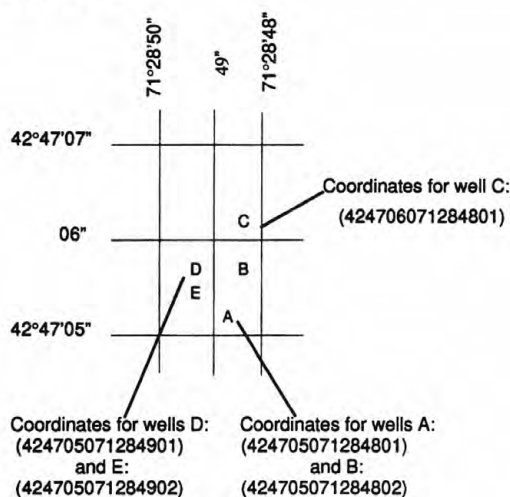


Figure 3.--System for numbering wells (latitude and longitude)

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with digital recorders that punch stage values on paper tapes at selected time intervals or with electronic data loggers which collect, store, and transmit data via satellite. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI's), Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharge is computed by applying the daily mean stage (gauge height) to the stage-discharge rating table or by applying each recorded

stage in the day to the rating table and computing the mean from the sum of the individual discharges. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross section area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If

the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as the lapsed time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, comparison with other station records from the same or nearby basins, and ESTWAT regression analysis. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical

data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the

instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may

wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large non-contributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS _ - _ , BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS _ - _," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the

REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for

partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e - Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. Discharges listed for partial-record stations and miscellaneous sites are generally shown to three significant figures.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the District Office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the New Hampshire-Vermont District Office at the address given on the back of the title page or by telephone (603) 226-7801.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less

than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records", as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory.

Procedures for onsite measurements and for

collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards. Detailed information on collecting, treating, and shipping samples may be obtained from the New Hampshire-Vermont District Office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, mean, maximum, and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C 1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado.

Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station.

Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain

all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Records of Ground-Water Levels

Only water-level data from a national network of 26 observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in New Hampshire and Vermont are shown in figure 1.

In New Hampshire, short-term networks of observation wells are established during areal assessments of ground-water resources. Water levels measured in these wells are included in the project reports. In Vermont, the Water Supply Division (Vermont Department of Environmental Conservation) monitors other wells in addition to the 14 wells that are in the basic network. Information about the availability of the data in the water-level file may be obtained from the Chief, New Hampshire-Vermont District (see address on back of title page).

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the municipality in which each well is located.

Water-level records are obtained from direct measurements with a steel or electric tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. Accordingly, most measurements are reported to a hundredth of a foot, but one is given to a tenth of a foot.

Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the water year, and the hydrograph showing water level fluctuations during the most recent three-year period. Hydrographs are based on end-of-month measurements. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence. A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum.

Records of Ground-water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground-water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled **QUALITY OF GROUND WATER** immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The **REMARK** codes listed for surface-water-quality record are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- * **Station Header File** - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.

- * **Daily Values File** - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.

- * **Peak Flow File** - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.

- * **Water Quality File** - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.

- * **Ground-Water Site Inventory Data Base** - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 ft³ or about 326,000 gallons or 1,233 m³.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass.

ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5° plus or minus 0.2° on M-F° medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35° plus or minus 1.0° on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in

milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500° for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter, and periphyton and benthic organisms in grams per square mile.

Dry mass refers to the mass of residue present after drying in an oven at 105° for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See "Bed material."

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters or liters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 ft³ passing a given point during 1 second and is equivalent to 7.48 gal/s or 448.8 gal/min or 0.02832 m³/s.

Cubic feet per second per square mile [(ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Dissolved refers to that material in a representative water sample which passes through a 0.45-mm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Network, is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram ($\mu\text{G/G}$, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L , mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929), is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly

called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN), is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust-particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter or liter. Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the Survey's computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and (or) water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters, of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024- 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants).

The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2\text{-time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3\text{-time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2\text{-time})$] for periphyton and macrophytes and [$\text{mg O}_2/(\text{m}^3\text{-time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a

given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea Level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Mean concentration (sediment), is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus sus-

pended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7Q10) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artifi-

cial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-mm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-mm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-ft of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sam-

ple, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year

ending September 30, 1995, is called the "1995 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W. E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong:

- USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greenson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.

- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L. J. Torak: USGS--TWRI Book 6, Chapter A5, 1993. 243 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

Printed Output	Remark
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

Dissolved Trace-Element Concentrations

Note: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network procedures

Note: Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone:303-491-5643).

ANDROSCOGGIN RIVER BASIN

01052500 DIAMOND RIVER NEAR WENTWORTH LOCATION, N.H.

LOCATION.--Lat 44°52'40", long 71°03'25" Coos County, Hydrologic Unit 01040001, on left bank 1.0 mi upstream from mouth and 1.6 mi north of Wentworth Location.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--July 1941 to current year.

Water-quality records: Water year 1954.

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,259 ft above sea level.

REMARKS.--Records good except for periods of ice effect, Nov. 25-29, Dec. 13-24, and Dec. 27 to Jan. 15, and Jan. 29 to Mar. 9, and periods of doubtful gage-height record, Jan 16-17 and Mar. 22-25, which are fair. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s, June 16, 1943, gage height, 10.66 ft, from rating curve extended above 4,300 ft³/s; maximum gage height, 12.23 ft, Feb. 21, 1981 (ice jam); minimum discharge, 6.8 ft³/s, Aug. 27, 28, 1949, Sept. 1, 1952, gage height, 0.81 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 17	Unknown	*4,340	*7.96	No other peaks greater than base discharge			
Minimum discharge, 13 ft ³ /s, Sept. 7 and 8, gage height, 0.92 ft.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	179	198	e118	e128	e76	322	666	493	33	41	17
2	155	264	159	e115	e124	e84	270	570	358	52	33	17
3	123	244	137	e112	e120	e80	256	526	394	38	30	16
4	125	201	151	e109	e117	e76	265	467	554	30	52	15
5	134	178	348	e106	e113	e74	172	426	351	26	90	14
6	129	184	1180	e105	e110	e72	183	406	292	24	251	14
7	130	310	1080	e108	e107	e70	206	356	251	23	166	13
8	114	268	511	e110	e104	e80	193	290	230	34	83	14
9	102	222	320	e104	e102	e466	224	259	192	54	56	17
10	113	200	307	e99	e100	849	198	239	164	35	43	22
11	121	167	256	e96	e98	824	218	230	152	28	35	23
12	101	147	175	e94	e96	578	276	264	191	27	39	19
13	92	137	e142	e93	e94	270	378	301	199	28	120	17
14	87	129	e131	e350	e92	571	618	287	149	23	79	22
15	80	125	e125	e1730	e94	866	392	510	136	21	69	51
16	76	118	e120	3540	e96	1420	298	1360	117	20	95	33
17	74	107	e118	3890	e96	1930	263	725	100	266	66	25
18	71	100	e118	1500	e93	1640	311	1300	91	396	44	21
19	70	110	e127	706	e89	1080	483	719	81	154	34	20
20	70	101	e139	527	e87	945	622	491	71	83	29	18
21	144	91	e130	1230	e85	1350	680	385	62	59	25	17
22	175	127	e127	773	e84	2940	1260	361	57	50	23	20
23	128	121	e130	517	e83	1840	1060	312	52	44	21	180
24	111	68	e137	357	e87	755	610	290	48	253	22	101
25	100	e70	240	317	e94	486	545	346	44	117	24	55
26	91	e68	214	255	e85	355	529	285	41	165	25	42
27	85	e67	e151	193	e79	306	483	301	37	157	23	50
28	82	e115	e140	161	e77	308	555	285	33	86	20	71
29	77	e256	e132	e144	---	349	666	359	31	71	18	54
30	74	281	e127	e137	---	425	861	1470	30	73	17	40
31	71	---	e121	e131	---	358	---	816	---	54	16	---
TOTAL	3345	4755	7491	17827	2734	21523	13397	15602	5001	2524	1689	1038
MEAN	108	158	242	575	97.6	694	447	503	167	81.4	54.5	34.6
MAX	240	310	1180	3890	128	2940	1260	1470	554	396	251	180
MIN	70	67	118	93	77	70	172	230	30	20	16	13
CFSM	.71	1.04	1.59	3.78	.64	4.57	2.94	3.31	1.10	.54	.36	.23
IN.	.82	1.16	1.83	4.36	.67	5.27	3.28	3.82	1.22	.62	.41	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1995, BY WATER YEAR (WY)

	MEAN	266	333	228	167	146	282	1061	931	308	157	139	150
MAX	869	733	739	575	783	853	1591	2115	804	472	492	836	
(WY)	1991	1964	1974	1995	1981	1946	1954	1972	1943	1958	1988	1954	
MIN	40.9	83.2	53.4	53.9	43.4	54.6	402	347	105	35.1	15.0	16.8	
(WY)	1953	1979	1979	1948	1942	1967	1972	1986	1963	1952	1952	1952	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1941 - 1995

ANNUAL TOTAL	121371	96926	
ANNUAL MEAN	333	266	
HIGHEST ANNUAL MEAN			348
LOWEST ANNUAL MEAN			500
HIGHEST DAILY MEAN	4750	Apr 28	7380
LOWEST DAILY MEAN	49	Aug 31	225
ANNUAL SEVEN-DAY MINIMUM	55	Aug 30	1965
INSTANTANEOUS PEAK FLOW			6.8
INSTANTANEOUS PEAK STAGE			9.0
INSTANTANEOUS LOW FLOW			8630
ANNUAL RUNOFF (CFSM)	2.19	1.75	12.23
ANNUAL RUNOFF (INCHES)	29.70	23.72	6.8
10 PERCENT EXCEEDS	932	591	2.29
50 PERCENT EXCEEDS	130	123	31.09
90 PERCENT EXCEEDS	72	26	836
			156
			51

e Estimated

a Also occurred September 8.

ANDROSCOGGIN RIVER BASIN

33

01053500 ANDROSCOGGIN RIVER AT ERROL, N.H.

LOCATION.--Lat 44°46'57", long 71°07'46", Coos County, Hydrologic Unit 01040001, on right bank 0.4 mi downstream from Errol Dam, 0.4 mi northeast of Errol, and 0.6 mi upstream from Clear Stream.

DRAINAGE AREA.--1,046 mi².

PERIOD OF RECORD.--Discharge: January 1905 to current year. November and December 1912, monthly discharges only, published in WSP 1301. Prior to 1922, published as "at Errol Dam." Records for water years 1923-44 have not been published but are available in the files of the U.S. Geological Survey.

Water-quality records: Water years 1955, 1958.

REVISED RECORDS.--WRD ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,227.30 ft above sea level. Prior to Dec. 8, 1943, nonrecording gage at Errol Dam at datum 5.0 ft higher.

REMARKS.--Records good. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Aziscohos, and Umbagog Lakes (Reservoirs in Androscoggin River Basin), combined usable capacity, 28 billion ft³, with final regulation at Errol Dam, 0.4 mi upstream. Telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s, May 22, 1969, gage height, 9.40 ft; minimum daily discharge, leakage only at various times when gates in dam were closed in water years 1918, 1919, 1923, 1924, 1928, and 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4350 ft³/s, Feb. 1, gage height, 4.33 ft; minimum daily discharge, 836 ft³/s, Jan. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	1450	1130	1320	2240	2220	1160	923	1870	1290	1380	1130
2	1650	1400	1140	1230	2010	2240	1160	924	1310	1290	1430	1130
3	1650	1410	1170	1180	1950	2280	1160	930	1210	1290	1240	1130
4	1650	1410	1160	1150	2030	2280	1150	943	1470	1290	1240	1130
5	1650	1420	1170	1170	2080	2280	1190	942	1290	1270	1240	1130
6	1770	1410	948	1210	2130	2280	1200	940	1220	1240	1220	1120
7	1880	1360	875	1240	2190	2280	1200	962	1260	1240	1240	1130
8	1880	1310	921	1230	2230	2280	1230	1020	1280	1230	1240	1120
9	1880	1200	1100	1210	2220	2410	1240	1090	1260	1240	1240	1120
10	1880	1360	1130	1270	2190	2030	1220	1140	1260	1240	1240	1120
11	1880	1470	1130	1330	2190	2260	1170	1130	1260	1240	1240	1110
12	1880	1420	1150	1300	2190	2390	1130	1130	1260	1240	1240	1110
13	1880	1410	1220	1230	2220	2260	1090	1110	1250	1240	1240	1110
14	1960	1370	1250	1200	2260	2210	1020	1060	1260	1240	1240	1110
15	2260	1350	1180	1110	2260	2210	967	1030	1230	1240	1240	1110
16	2250	1350	1190	836	2250	2050	966	1040	1210	1240	1240	1110
17	2250	1340	1210	870	2250	2020	1030	1130	1210	1240	1240	1110
18	2250	1340	1200	1690	2250	2010	1060	2000	1240	1240	1240	1110
19	2250	1350	1170	2770	2240	2010	1020	2400	1300	1240	1240	1110
20	1740	1350	1150	2750	2240	1800	977	2400	1320	1240	1240	1110
21	1530	1390	1130	2750	2240	1610	900	2100	1300	1240	1240	1110
22	1530	1420	1130	2740	2240	1610	904	1790	1290	1240	1240	1110
23	1530	1420	1130	2720	2240	1610	917	1700	1290	1240	1240	1110
24	1480	1420	1130	2190	2230	1620	923	1490	1290	1230	1180	1110
25	1450	1420	1140	1870	2230	1610	923	1350	1290	1240	1130	1110
26	1450	1400	1000	1840	2230	1630	923	1340	1290	1240	1130	1110
27	1450	1390	1000	1920	2230	1560	923	1340	1290	1240	1130	1110
28	1450	1400	1040	2100	2230	1560	972	1340	1290	1240	1130	1110
29	1450	1340	1070	2180	---	1430	972	1340	1290	1230	1130	1110
30	1450	1240	1220	2180	---	1200	942	1750	1290	1240	1130	1110
31	1450	---	1310	2130	---	1160	---	2310	---	1240	1130	---
TOTAL	54360	41320	34894	51916	61490	60400	31639	42094	38880	38640	37920	33460
MEAN	1754	1377	1126	1675	2196	1948	1055	1358	1296	1246	1223	1115
MAX	2260	1470	1310	2770	2260	2410	1240	2400	1870	1290	1430	1130
MIN	1450	1200	875	836	1950	1160	900	923	1210	1230	1130	1110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 1995, BY WATER YEAR (WY)

MEAN	1596	1533	1696	1781	1827	1821	2088	3069	2255	1740	1678	1691
MAX	3949	3745	4722	3589	3392	5454	4280	8192	7129	3324	2265	4738
(WY)	1955	1908	1974	1970	1991	1936	1976	1974	1917	1973	1990	1954
MIN	921	759	844	760	718	592	770	1027	763	808	840	902
(WY)	1922	1922	1909	1909	1911	1948	1940	1941	1911	1915	1915	1911

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1906 - 1995
ANNUAL TOTAL	707634	527013	
ANNUAL MEAN	1939	1444	1899
HIGHEST ANNUAL MEAN			2923
LOWEST ANNUAL MEAN			1046
HIGHEST DAILY MEAN	8510	2770	16100
LOWEST DAILY MEAN	875	836	a 0
ANNUAL SEVEN-DAY MINIMUM	1040	916	152
INSTANTANEOUS PEAK FLOW		4350	16500
INSTANTANEOUS PEAK STAGE		4.33	9.40
10 PERCENT EXCEEDS	2660	2230	2580
50 PERCENT EXCEEDS	1750	1240	1690
90 PERCENT EXCEEDS	1190	1070	1130

a As explained under Extremes for Period of Record.

ANDROSCOGGIN RIVER BASIN

01054000 ANDROSCOGGIN RIVER NEAR GORHAM, N.H.

LOCATION.--Lat 44°26'10", long 71°11'27", Coos County, Hydrologic Unit 01040001, on right bank at Pulsifer Rips, 2.2 mi downstream from Dead River, and 4.0 mi upstream from Gorham.

DRAINAGE AREA.--1,361 mi².

PERIOD OF RECORD.--October 1913 to current year. October 1922 to September 1928, monthly discharge only, published in WSP 1301. Discharges for water year 1918 not used in long-term statistics because of unknown discharge on Dec. 25, 1917. Prior to October 1928, published as "at Berlin."

REVISED RECORDS.--WDR ME-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 832.88 ft above sea level. Prior to Sept. 30, 1922, nonrecording gage showing head and tailwater elevations at site 3 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Rangeley, Mooselookmeguntic, Richardson, Azis-cohos, and Umbagog Lakes. These reservoirs have a combined usable capacity of about 28.1 billion ft³ with final regulation at Errol Dam 35 mi upstream. Diurnal fluctuations caused by powerplant 0.8 mi upstream. Satellite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 20,000 ft³/s, June, 1917, Apr. 30, 1923; minimum daily, 795 ft³/s, Mar. 15, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,900 ft³/s, Mar. 23, gage height, 6.35 ft; minimum daily discharge, 1,260 ft³/s, Aug. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	1780	1620	1740	2610	2560	1980	1980	2830	1540	1450	1270
2	2030	1810	1500	1680	2730	2550	1870	1910	1980	1580	1810	1280
3	2010	1750	1490	1550	2390	2580	1830	1830	1760	1520	1430	1300
4	2020	1750	1520	1530	2320	2590	1860	1720	2510	1530	1490	1320
5	2010	1750	1650	1440	2390	2590	1770	1650	2340	1540	1470	1290
6	2010	1780	2680	1470	2300	2610	1660	1590	1910	1430	1740	1280
7	2220	1880	2320	1570	2460	2640	1710	1570	1660	1410	1960	1280
8	2230	1870	1810	1570	2640	2780	1690	1520	1750	1500	1660	1310
9	2240	1690	1600	1530	2670	2960	1820	1510	1650	1450	1480	1320
10	2240	1580	1700	1490	2620	2940	1760	1610	1660	1430	1450	1330
11	2240	1790	1640	1510	2630	2770	1750	1610	1620	1410	1470	1290
12	2220	1790	1500	1620	2560	2890	1750	1680	1620	1440	1510	1300
13	2210	1740	1490	1700	2520	2960	1810	1720	1640	1400	1480	1340
14	2210	1720	1660	1630	2660	2880	2080	1690	1610	1420	1450	1340
15	2430	1670	1680	1890	2620	2940	1990	1820	1610	1400	1450	1340
16	2640	1620	1550	3070	2680	3140	1690	2930	1580	1400	1470	1310
17	2610	1660	1580	4470	2620	3280	1610	2410	1540	1570	1490	1340
18	2570	1650	1610	3620	2610	3330	1630	2910	1530	2100	1460	1310
19	2580	1660	1570	3880	2620	3320	1700	3500	1470	1660	1460	1300
20	2390	1640	1510	3990	2620	3270	1760	3410	1550	1590	1450	1290
21	1840	1640	1500	4890	2640	2900	1760	3210	1520	1540	1450	1300
22	2040	1760	1490	4610	2620	4030	2210	2730	1510	1510	1400	1330
23	1890	1750	1480	4060	2600	5930	2330	2430	1510	1440	1380	1440
24	1870	1690	1510	3620	2620	4140	1950	2260	1500	1590	1390	1450
25	1750	1710	1870	2830	2580	2810	1680	2000	1460	1640	1330	1430
26	1760	1720	1870	2520	2550	2620	1630	1940	1540	1530	1290	1350
27	1750	1660	1500	2360	2530	2430	1610	1940	1420	1680	1300	1330
28	1760	1710	1520	2320	2570	2410	1620	1950	1480	1560	1260	1370
29	1760	1950	1400	2620	---	2420	1830	1920	1460	1530	1280	1370
30	1750	1810	1340	2760	---	2170	1930	2010	1470	1580	1320	1380
31	1760	---	1580	2690	---	2060	---	2950	---	1500	1290	---
TOTAL	65160	51980	50740	78230	71980	91500	54270	65910	50690	47420	45320	39890
MEAN	2102	1733	1637	2524	2571	2952	1809	2126	1690	1530	1462	1330
MAX	2640	1950	2680	4890	2730	5930	2330	3500	2830	2100	1960	1450
MIN	1750	1580	1340	1440	2300	2060	1610	1510	1420	1400	1260	1270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	2052	2074	2133	2129	2124	2446	3871	4251	2782	2025	1927	1975
MAX	4894	4292	5811	4044	3555	7684	6474	10050	10560	3895	2792	6387	
(WY)	1955	1991	1974	1970	1991	1936	1976	1937	1917	1973	1990	1954	
MIN	1374	1413	1257	1276	1299	1376	1755	1746	1545	1524	1462	1330	
(WY)	1942	1922	1953	1953	1922	1922	1965	1941	1915	1980	1995	1995	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
ANNUAL TOTAL	943380	713090	
ANNUAL MEAN	2585	1954	2487
HIGHEST ANNUAL MEAN			3675
LOWEST ANNUAL MEAN			1689
HIGHEST DAILY MEAN	12000	Apr 18	5930
LOWEST DAILY MEAN	1340	Dec 30	1260
ANNUAL SEVEN-DAY MINIMUM	1520	Dec 18	1290
INSTANTANEOUS PEAK FLOW			6900
INSTANTANEOUS PEAK STAGE			6.35
10 PERCENT EXCEEDS	4020		2740
50 PERCENT EXCEEDS	2150		1710
90 PERCENT EXCEEDS	1680		1390

a Also occurred April 30, 1923.

01064300 ELLIS RIVER NEAR JACKSON, N.H.

LOCATION.--Lat 44°13'12", long 71°15'00", Carroll County, Hydrologic Unit 01060002, in White Mountain National Forest, on right bank 0.4 mi upstream from small left-bank tributary, 1.3 mi upstream from bridge on State Highway 16, and 6 mi northwest of Jackson.

DRAINAGE AREA.--10.9 mi².

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,500 ft above sea level, from topographic map. Prior to Oct. 14, 1969, at site 0.3 mi downstream at different datum.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 20	2400	* 374	* 3.11
Minimum discharge, 7.8 ft ³ /s, Sept. 5-8, 12, 13, 20, and 21, gage height, 0.90 ft.			

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	15	e19	e19	e16	e10	18	27	36	16	11	9.0
2	25	23	e18	e22	e14	e9.6	17	26	31	13	11	8.5
3	23	18	e17	e18	e13	e8.9	16	27	30	11	12	8.4
4	21	17	e18	e16	e12	e9.0	16	31	47	11	14	8.3
5	20	18	e35	e15	e13	e8.9	e14	31	31	11	23	8.5
6	18	21	e80	e13	e14	e9.0	e15	29	26	10	109	8.6
7	18	26	e64	14	e13	e9.2	e16	22	25	10	30	8.3
8	18	20	e42	13	e13	e35	e15	19	25	12	20	8.4
9	18	19	e29	12	e13	91	14	20	22	11	17	11
10	18	17	e26	e11	14	e27	14	22	20	9.8	15	9.7
11	17	15	e21	e10	e13	e21	14	24	22	9.8	15	8.6
12	16	15	e17	e11	e12	17	14	52	23	9.7	15	8.2
13	16	15	e15	e14	e12	16	47	84	21	9.1	13	8.6
14	15	14	e26	e28	e11	19	28	51	19	8.8	13	10
15	15	15	e21	e78	e12	42	20	127	21	22	15	9.7
16	14	14	e18	191	e11	39	17	113	18	11	14	8.6
17	14	13	e17	145	e11	34	17	63	17	47	12	8.9
18	14	14	e16	56	e10	28	18	86	16	44	12	8.9
19	14	14	e16	38	e10	26	20	51	15	20	11	8.3
20	15	13	e18	65	e10	24	29	39	15	15	11	8.2
21	18	14	e17	131	e11	45	37	35	14	15	11	8.1
22	15	26	e16	49	e11	70	69	60	14	14	10	14
23	14	17	e15	35	e10	34	37	40	13	13	10	19
24	14	e14	e29	31	e9.8	25	25	59	13	14	11	11
25	14	e13	e59	e27	e9.6	21	22	53	13	13	10	10
26	13	e12	e33	e24	e9.8	20	22	35	12	15	9.9	11
27	13	e11	e25	e22	e9.3	19	21	31	12	14	9.8	12
28	13	e16	e20	e20	e9.5	19	26	28	12	13	9.4	10
29	12	e39	e17	e18	---	19	25	61	11	14	9.3	9.5
30	12	e24	e13	e17	---	19	29	90	11	13	8.9	9.2
31	12	---	e14	e18	---	19	---	47	---	11	9.0	---
TOTAL	509	522	791	1181	327.0	793.6	692	1483	605	460.2	501.3	290.5
MEAN	16.4	17.4	25.5	38.1	11.7	25.6	23.1	47.8	20.2	14.8	16.2	9.68
MAX	30	39	80	191	16	91	69	127	47	47	109	19
MIN	12	11	13	10	9.3	8.9	14	19	11	8.8	8.9	8.1
CFSM	1.51	1.60	2.34	3.50	1.07	2.35	2.12	4.39	1.85	1.36	1.48	.89
IN.	1.74	1.78	2.70	4.03	1.12	2.71	2.36	5.06	2.06	1.57	1.71	.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	MEAN	29.2	33.5	25.1	16.4	15.1	26.0	70.3	83.6	39.7	21.3	20.2	18.7
	MAX	61.5	90.1	104	57.6	109	67.5	150	159	99.3	53.9	62.5	41.7
	(WY)	1992	1970	1974	1986	1981	1979	1987	1984	1973	1969	1990	1981
	MIN	9.15	9.29	6.54	4.34	3.07	6.05	23.1	45.7	16.1	10.5	7.46	6.98
	(WY)	1970	1979	1979	1977	1977	1969	1995	1993	1970	1980	1980	1978

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1964 - 1995

ANNUAL TOTAL	9692.5	8155.6	
ANNUAL MEAN	26.6	22.3	33.5
HIGHEST ANNUAL MEAN			49.1
LOWEST ANNUAL MEAN			21.6
HIGHEST DAILY MEAN	280	Apr 16	1160
LOWEST DAILY MEAN	7.8	Feb 17	a 2.2
ANNUAL SEVEN-DAY MINIMUM	8.3	Mar 18	2.3
INSTANTANEOUS PEAK FLOW			bc 4500
INSTANTANEOUS PEAK STAGE			18.90
INSTANTANEOUS LOW FLOW			f
ANNUAL RUNOFF (CFSM)	2.44		3.07
ANNUAL RUNOFF (INCHES)	33.08		41.76
10 PERCENT EXCEEDS	61		69
50 PERCENT EXCEEDS	15		18
90 PERCENT EXCEEDS	9.1		8.0

a Also on Mar. 3, 4, 1980

b From rating curve extended above 390 ft³/s on basis of slope-area measurements at gage heights 10.34 ft.

c Gage height 10.34 ft from recorder, affected by drawdown 18.9 ft from floodmarks, site and datum then in use.

d Also occurred Sept. 5-8, 12, 13, 20, 21.

e Estimated

f Minimum not determined, occurred during ice effect in March 1980.

LOCATION.--Lat 43°59'27", long 71°05'29", Carroll County, Hydrologic Unit 01060002, on left bank at Odell Falls 1.8 mi downstream from Swift River and Conway.

PERIOD OF RECORD.--August 1903 to December 1909, January 1910 to June 1912 (gage heights only), February 1929 to current year. Monthly discharge only for some periods, published in WSP 1301. Prior to 1912, published as "at Center Conway."

REVISED RECORDS.--WSP 1301: 1908-09. WDR ME-81-1: Drainage area. WRD ME-87-1: 1936 (M), 1951 (M), 1953 (M), 1960 (M), 1977 (M).

GAGE.--Water-stage recorder. Datum of gage is 418.19 ft above sea level. Aug. 26, 1903, to June 30, 1912, nonrecording gage at site 0.8 mi downstream at different datum.

REMARKS.--Records good except for periods of ice effect, Nov. 25-27, Dec. 9-11, 13, 15, 16, 18, 19, 30, 31, Jan. 3-6, 8-16, Jan. 24 to Feb. 25, and Feb. 28 to Mar. 8, and periods of doubtful gage-height record, May 10 to July 12, which are fair. Sattallite gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,200 ft³/s, Mar. 27, 1953, gage height, 17.20 ft, maximum gage height, 19.03 ft, Mar. 7, 1979, (ice jam); minimum discharge, 40 ft³/s, Mar. 16, 1932, gage height, 1.61 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 16	0800	Ice Jam	* 8.17	Jan. 17	0600	* 5,710	6.81

Minimum discharge, 93 ft³/s, Sept. 7 and 8, gage height, 1.92 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	806	314	503	758	e585	e345	1030	1090	654	177	171	105
2	651	500	448	733	e580	e335	921	970	575	287	162	104
3	565	595	436	e589	e560	e325	858	914	537	245	162	101
4	509	443	432	e533	e530	e320	850	902	605	201	181	99
5	479	412	651	e456	e480	e320	758	914	603	184	231	97
6	437	393	2480	e437	e450	e345	742	878	504	174	899	96
7	404	481	1710	609	e445	e360	763	798	466	175	757	94
8	391	485	1220	e496	e440	e400	700	708	466	195	421	94
9	373	424	e950	e374	e440	2240	693	656	441	234	313	98
10	361	392	e845	e306	e450	1530	668	664	404	224	259	114
11	354	364	e770	e277	e440	985	651	672	391	187	227	121
12	331	341	703	e345	e410	848	663	1020	427	190	234	107
13	315	332	e665	e461	e390	727	855	1100	440	184	227	102
14	307	320	627	e715	e370	722	1100	1080	402	163	199	104
15	297	315	e595	e1230	e360	823	899	1150	430	156	183	108
16	284	307	e565	e2340	e400	1200	796	2030	436	245	185	108
17	276	293	545	4360	e380	1250	727	1350	378	253	178	105
18	271	284	e525	2310	e365	1240	706	1640	344	833	164	110
19	265	298	e500	1580	e370	1340	763	1370	315	492	154	111
20	266	301	485	1350	e375	1290	838	1110	287	312	144	105
21	386	286	486	4090	e375	1340	901	975	267	246	139	101
22	410	573	492	2730	e370	3340	1450	1020	255	221	133	109
23	348	582	497	1930	e365	2270	1350	950	244	202	125	240
24	326	420	1150	e1440	e375	1760	1040	838	234	199	125	243
25	293	e374	2970	e1170	e355	1440	913	893	226	199	119	170
26	290	e370	1740	e970	323	1250	852	784	218	197	116	148
27	296	e304	1210	e843	312	1160	831	723	211	304	118	142
28	273	350	1030	e749	e330	1110	829	665	204	249	116	140
29	285	695	914	e690	---	1080	959	676	199	222	113	130
30	264	625	e620	e630	---	1110	1020	927	178	218	110	122
31	329	---	e572	e600	---	1060	---	804	---	195	106	---
TOTAL	11442	12173	27336	36101	11625	33865	26126	30271	11341	7563	6771	3628
MEAN	369	406	882	1165	415	1092	871	976	378	244	218	121
MAX	806	695	2970	4360	585	3340	1450	2030	654	833	899	243
MIN	264	284	432	277	312	320	651	656	178	156	106	94
CFM	.96	1.05	2.29	3.02	1.08	2.84	2.26	2.54	.98	.63	.57	.31
IN.	1.11	1.18	2.64	3.49	1.12	3.27	2.52	2.92	1.10	.73	.65	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1995, BY WATER YEAR (WY)

MEAN	619	927	756	557	502	948	2613	2247	813	417	360	384
MAX	2369	2493	2656	1887	3170	5986	4564	4609	2189	2043	1685	1794
(WY)	1978	1908	1974	1986	1981	1936	1987	1940	1952	1973	1990	1954
MIN	114	211	152	144	124	146	871	614	300	158	129	102
(WY)	1948	1909	1956	1940	1940	1940	1995	1941	1964	1991	1936	1948

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1904 - 1995

ANNUAL TOTAL	311831		218242						
ANNUAL MEAN	854		598				929		
HIGHEST ANNUAL MEAN							1463		1973
LOWEST ANNUAL MEAN							489		1965
HIGHEST DAILY MEAN	7700	Apr 16	4360	Jan 17		33900		Mar 19	1936
LOWEST DAILY MEAN	186	Sep 22	94	Sep 7			66	Aug 4	1959
ANNUAL SEVEN-DAY MINIMUM	215	Sep 17	97	Sep 3			74	Aug 3	1959
INSTANTANEOUS PEAK FLOW			5710	Jan 17		47200		Mar 27	1953
INSTANTANEOUS PEAK STAGE			a 8.17	Jan 16			a 19.03	Mar 7	1979
INSTANTANEOUS LOW FLOW			b 93	Sep 7			40	Mar 16	1932
ANNUAL RUNOFF (CFSM)	2.22		1.55				2.41		
ANNUAL RUNOFF (INCHES)	30.13		21.09				32.79		
10 PERCENT EXCEEDS	2340		1160			2170			
50 PERCENT EXCEEDS	432		432			450			
90 PERCENT EXCEEDS	267		141			181			

a Ice jam.

b Also on Sept. 8.

Estimated.

01064801 BEAR CAMP RIVER NEAR SOUTH TAMWORTH, N.H.

LOCATION.--Lat 43°49'48", long 71°17'18", Carroll County, Hydrologic Unit 01060002, on right bank 0.2 mi east of the fire station in South Tamworth on State Highway 25.

DRAINAGE AREA.--67.6 mi².

PERIOD OF RECORD.--April 1993 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 490 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 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan.15	1815	ice jam	* 6.91	Mar. 9	1315	1020	5.93
Jan.17	0230	* 1100	6.00	Mar. 22	0145	1050	5.96

Minimum discharge, 4.4 ft³/s, Sept. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	55	100	e94	e100	e46	172	156	114	13	12	6.0
2	73	101	86	e97	e92	e40	149	132	87	13	10	5.7
3	60	88	79	e86	e80	e37	132	119	75	12	9.9	5.3
4	52	66	82	e76	e66	e39	128	108	70	11	15	5.2
5	47	58	240	e64	e61	e39	117	100	60	10	43	5.0
6	43	54	556	e56	e64	e41	108	96	52	11	102	4.8
7	39	67	348	e62	e58	e45	112	85	47	12	70	4.5
8	36	65	233	e70	e62	e60	112	76	47	14	37	e4.7
9	34	58	170	e62	e62	e680	108	70	46	e17	25	e5.8
10	35	53	e120	e56	e66	491	105	66	40	e16	19	e6.3
11	e33	49	e100	e54	e61	378	99	67	40	e13	16	e5.3
12	e32	45	e90	e52	e58	296	95	192	53	e11	26	e5.3
13	e46	43	e80	e56	e55	250	131	148	52	e10	25	e5.5
14	e40	42	e74	e66	e52	251	157	126	50	e9.7	18	e6.3
15	e35	40	e78	e140	e56	287	131	163	141	13	16	e6.2
16	e31	39	e70	e420	e50	314	116	248	84	18	16	6.1
17	e28	37	e68	772	e52	293	104	197	57	28	14	6.6
18	e27	35	e70	445	e48	306	97	242	46	58	12	7.9
19	e27	38	e65	295	e49	353	108	194	38	36	11	7.1
20	e28	38	e58	248	e50	338	136	157	32	23	9.7	6.3
21	e51	37	e60	613	e50	421	139	132	27	18	9.0	6.0
22	e65	147	e58	588	e49	763	242	125	23	16	8.3	7.8
23	e50	121	e56	392	e48	492	192	106	22	14	7.6	45
24	e41	e82	e200	274	e47	355	151	93	20	14	7.4	25
25	37	e65	757	e180	e44	264	129	85	18	13	6.9	16
26	34	e56	426	e130	e45	215	117	80	18	16	6.5	14
27	31	e50	259	e105	e43	191	110	74	16	18	7.1	15
28	30	e70	192	e92	e44	177	112	67	14	15	7.3	17
29	29	165	147	e86	---	165	125	103	13	20	6.7	13
30	46	121	113	e80	---	161	149	211	13	20	6.3	11
31	44	---	e100	e76	---	172	---	154	---	15	6.0	---
TOTAL	1298	1985	5135	5887	1612	7960	3883	3972	1415	527.7	585.7	285.7
MEAN	41.9	66.2	166	190	57.6	257	129	128	47.2	17.0	18.9	9.52
MAX	94	165	757	772	100	763	242	248	141	58	102	45
MIN	27	35	56	52	43	37	95	66	13	9.7	6.0	4.5
CFSM	.62	.98	2.45	2.81	.85	3.80	1.91	1.90	.70	.25	.28	.14
IN.	.71	1.09	2.83	3.24	.89	4.38	2.14	2.19	.78	.29	.32	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	52.1	145	172	122	54.3	172	456	139	52.8	26.7	35.2	29.9
MAX	62.3	224	177	190	57.6	257	632	211	58.5	35.7	52.5	46.8
(WY)	1994	1994	1994	1995	1995	1995	1993	1994	1994	1994	1993	1994
MIN	41.9	66.2	166	55.0	51.0	87.6	129	77.4	47.2	17.0	18.9	9.52
(WY)	1995	1995	1995	1994	1994	1994	1995	1993	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

a WATER YEARS 1993 - 1995

ANNUAL TOTAL	44358	34546.1	116
ANNUAL MEAN	122	94.6	137
HIGHEST ANNUAL MEAN			94.6
LOWEST ANNUAL MEAN			1994
HIGHEST DAILY MEAN	1790	772	3400
LOWEST DAILY MEAN	13	4.5	4.5
ANNUAL SEVEN-DAY MINIMUM	16	5.0	5.0
INSTANTANEOUS PEAK FLOW		1100	b 4320
INSTANTANEOUS PEAK STAGE		c 6.91	7.56
INSTANTANEOUS LOW FLOW		d 4.4	4.4
ANNUAL RUNOFF (CFSM)	1.80	1.40	1.71
ANNUAL RUNOFF (INCHES)	24.41	19.01	23.30
10 PERCENT EXCEEDS	265	222	271
50 PERCENT EXCEEDS	56	56	58
90 PERCENT EXCEEDS	22	10	15

a Statistics for period April 1993 to current year.

b From rating curve extended above 1100 ft³/s.

c Ice jam.

d Also occurred September 8.

e Estimated

PISCATAQUA RIVER BASIN

01072100 SALMON FALLS RIVER AT MILTON, N.H.

LOCATION.--Lat 43°24'50", long 70°19'15", Strafford County, Hydrologic Unit 01060003, on right bank just downstream from Milton Pond at Milton.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 405 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Great East and Lovell Lakes and Horn, Willson, and Milton (also controls Northeast and Town House) Ponds. These reservoirs have a combined usable capacity of about 1.28 billion ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 871 ft³/s, Dec. 26, gage height, 4.59 ft; minimum daily 18 ft³/s, Sept. 16-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	205	110	265	211	128	240	84	109	34	34	28
2	69	195	155	267	210	128	237	84	105	35	33	27
3	77	185	155	262	203	128	224	92	100	35	32	27
4	81	153	155	246	200	128	219	98	99	35	32	26
5	79	130	155	223	197	128	225	97	96	35	34	24
6	79	130	189	222	193	128	183	98	94	35	34	24
7	79	130	231	243	190	128	163	96	95	35	36	24
8	81	130	231	269	160	128	166	94	95	35	37	24
9	79	109	182	274	132	202	167	66	92	36	37	25
10	104	90	137	253	132	327	169	49	85	36	37	24
11	124	90	137	224	132	356	128	52	83	36	36	24
12	134	90	137	208	131	327	93	58	81	36	36	24
13	145	90	137	215	131	268	93	60	86	41	35	24
14	154	80	137	229	132	245	95	63	93	41	34	22
15	155	71	113	227	132	248	97	67	95	41	34	19
16	154	70	84	333	132	258	97	82	97	40	33	18
17	185	70	84	426	132	281	97	161	97	34	33	18
18	198	70	84	420	132	337	97	203	96	30	32	23
19	187	69	84	378	131	386	88	193	92	32	32	28
20	206	69	84	365	130	399	82	185	86	32	31	27
21	228	69	84	424	130	404	83	170	68	32	31	27
22	213	69	84	523	130	491	83	161	57	32	30	27
23	197	69	84	539	128	538	84	115	55	32	29	26
24	189	69	128	476	128	507	84	92	52	32	29	26
25	186	69	623	402	128	430	84	96	45	32	27	26
26	184	69	854	344	128	362	84	95	45	32	27	26
27	182	69	696	277	128	319	84	96	40	33	27	26
28	181	69	529	244	128	274	84	94	37	33	27	26
29	181	69	414	239	---	240	84	94	35	33	27	26
30	180	69	316	228	---	229	84	106	35	33	27	25
31	192	---	276	219	---	234	---	110	---	34	28	---
TOTAL	4558	2916	6869	9464	4171	8686	3798	3211	2345	1072	991	741
MEAN	147	97.2	222	305	149	280	127	104	78.2	34.6	32.0	24.7
MAX	228	205	854	539	211	538	240	203	109	41	37	28
MIN	69	69	84	208	128	128	82	49	35	30	27	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995, BY WATER YEAR (WY)

	MEAN	168	185	225	177	189	309	433	223	124	61.0	63.1	80.5
MAX	499	357	604	384	439	720	908	431	453	143	143	165	145
(WY)	1978	1984	1984	1978	1970	1979	1969	1984	1984	1973	1982	1981	1981
MIN	81.4	77.9	40.5	59.7	60.8	108	103	55.4	40.4	26.1	24.9	22.3	22.3
(WY)	1969	1987	1979	1977	1977	1993	1985	1985	1985	1991	1993	1993	1993

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1969 - 1995

ANNUAL TOTAL	59056	48822											
ANNUAL MEAN	162	134											
HIGHEST ANNUAL MEAN													
LOWEST ANNUAL MEAN													
HIGHEST DAILY MEAN	854	Dec 26	854	Dec 26	3220	Mar 15	1977						
LOWEST DAILY MEAN	23	Sep 6	a 18	Sep 16	18	Sep 16	1995						
ANNUAL SEVEN-DAY MINIMUM	24	Sep 5	21	Sep 12	20	Sep 24	1993						
INSTANTANEOUS PEAK FLOW			871	Dec 26	4000	Apr 6	1984						
INSTANTANEOUS PEAK STAGE			4.59	Dec 26	6.70	Apr 6	1984						
10 PERCENT EXCEEDS	320		268		391								
50 PERCENT EXCEEDS	125		95		132								
90 PERCENT EXCEEDS	30		28		38								

a Also occurred September 17.

PISCATAQUA RIVER BASIN

39

01072800 COCHECO RIVER AT ROCHESTER, N.H.

LOCATION.--Lat 43°16'26", long 70°58'27", Strafford County, Hydrologic Unit 01060003, on right bank 0.6 mi south by southeast of Gonic, 2.5 mi south of Rochester City Hall, approximately 3.3 mi upstream from mouth of Isinglass River, directly behind Rochester Country Club, and approximately 12.6 mi above mouth.

DRAINAGE AREA.--87.4 mi².

PERIOD OF RECORD.--Discharge: March to September 1995.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 125 ft above sea level, from topographic map.

REMARKS.--Records good. Some regulation by small hydro plants, Sunrise and Baxter Lakes, City Dam No. 1, and the Rochester Reservoirs.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 701 ft³/s, Mar. 10, gage height, 6.38 ft; minimum daily, 2.2 ft³/s, Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	113	203	77	61	10	9.9	2.6
2	---	---	---	---	---	97	169	73	50	11	9.0	2.6
3	---	---	---	---	---	91	145	69	44	11	8.1	2.4
4	---	---	---	---	---	85	147	65	61	10	10	2.2
5	---	---	---	---	---	83	185	60	68	9.8	19	2.4
6	---	---	---	---	---	105	147	58	49	9.7	20	2.5
7	---	---	---	---	---	132	178	56	57	9.8	25	2.6
8	---	---	---	---	---	173	152	56	48	9.2	23	6.4
9	---	---	---	---	---	568	135	48	52	12	20	4.8
10	---	---	---	---	---	592	134	46	49	11	17	3.8
11	---	---	---	---	---	405	121	46	41	11	14	3.5
12	---	---	---	---	---	276	111	60	41	13	11	3.1
13	---	---	---	---	---	210	154	63	43	12	10	3.0
14	---	---	---	---	---	235	166	59	43	10	8.3	3.2
15	---	---	---	---	---	233	137	67	45	8.9	8.0	3.3
16	---	---	---	---	---	262	120	106	58	8.6	7.8	2.9
17	---	---	---	---	---	288	106	117	56	9.8	7.2	4.8
18	---	---	---	---	---	409	97	127	44	18	6.2	12
19	---	---	---	---	---	418	91	118	37	17	5.0	9.3
20	---	---	---	---	---	356	97	111	31	15	4.3	6.4
21	---	---	---	---	---	316	96	92	25	12	4.6	4.7
22	---	---	---	---	---	437	142	86	22	12	4.6	4.2
23	---	---	---	---	---	399	156	84	19	11	4.0	8.4
24	---	---	---	---	---	293	124	70	18	10	3.6	7.5
25	---	---	---	---	---	240	104	61	17	9.9	3.4	6.3
26	---	---	---	---	---	205	94	56	16	10	2.9	6.8
27	---	---	---	---	---	184	84	45	15	16	2.9	7.1
28	---	---	---	---	---	168	87	42	12	14	3.2	6.3
29	---	---	---	---	---	155	90	48	11	14	3.2	5.4
30	---	---	---	---	---	147	84	81	12	13	3.0	4.9
31	---	---	---	---	---	183	---	81	---	11	2.9	---
TOTAL	---	---	---	---	---	7858	3856	2228	1145	359.7	281.1	145.4
MEAN	---	---	---	---	---	253	129	71.9	38.2	11.6	9.07	4.85
MAX	---	---	---	---	---	592	203	127	68	18	25	12
MIN	---	---	---	---	---	83	84	42	11	8.6	2.9	2.2

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

MEAN	---	---	---	---	---	253	129	71.9	38.2	11.6	9.07	4.85
MAX	---	---	---	---	---	253	129	71.9	38.2	11.6	9.07	4.85
(WY)	---	---	---	---	---	1995	1995	1995	1995	1995	1995	1995
MIN	---	---	---	---	---	253	129	71.9	38.2	11.6	9.07	4.85
(WY)	---	---	---	---	---	1995	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS

a FOR 1995 WATER YEAR

ANNUAL TOTAL	15873.2
ANNUAL MEAN	74.2
HIGHEST DAILY MEAN	592 Mar 10
LOWEST DAILY MEAN	2.2 Sep 4
ANNUAL SEVEN-DAY MINIMUM	2.5 Sep 1
INSTANTANEOUS PEAK FLOW	701 Mar 10
INSTANTANEOUS PEAK STAGE	6.38 Mar 10
10 PERCENT EXCEEDS	183
50 PERCENT EXCEEDS	42
90 PERCENT EXCEEDS	3.7

a Statistics for period from March 1 to September 30, 1995.

PISCATAQUA RIVER BASIN

01072880 COCHECO RIVER AT DOVER, N.H.

LOCATION.--Lat 43°12'21", long 70°53'47", Strafford County, Hydrologic Unit 01060003, on right bank approximately 100 ft downstream from bridge on Spaulding Turnpike, 1.2 mi northwest of the Dover post Office, 1.5 mi north of interchange 8, and approximately 4 mi above mouth.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--Discharge: October 1991 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by small hydro plants, Sunrise, Baxter, and Bow Lakes, Ayers, Round, and Nippo Ponds, and the Rochester Reservoirs.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,380 ft³/s, Dec. 25, gage height, 8.56 ft; minimum daily, 7.8 ft³/s, Sept. 13.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	135	236	e390	e235	e225	383	173	126	29	24	9.5
2	96	160	192	556	e220	e195	344	164	115	29	21	9.3
3	84	161	168	552	e205	e180	304	142	105	31	24	9.4
4	74	141	153	458	190	e170	294	151	127	26	41	9.6
5	70	131	222	349	174	e165	352	134	135	33	51	9.2
6	65	118	529	e310	e190	e210	305	120	102	25	55	9.1
7	48	122	511	e380	e170	e265	325	116	106	29	63	9.2
8	68	117	407	e440	e180	e370	297	113	105	27	55	10
9	53	113	319	e360	e170	1120	278	106	102	35	48	14
10	63	108	275	e310	e175	1120	282	92	96	29	39	13
11	74	105	344	e270	e170	827	265	93	86	34	29	10
12	115	101	374	e260	e170	603	238	136	84	39	37	8.5
13	116	93	272	e265	176	e430	328	131	89	42	27	7.8
14	109	86	253	e290	169	e460	370	125	86	28	31	8.4
15	102	80	222	389	166	e450	331	143	88	28	24	8.9
16	99	82	195	708	180	e520	289	229	94	18	24	10
17	94	e80	196	877	207	e560	255	238	99	25	21	38
18	126	e70	229	728	200	829	239	263	90	49	13	44
19	137	e69	251	546	193	908	220	252	68	44	20	11
20	121	e68	214	501	203	e710	229	235	50	34	12	14
21	117	e70	182	967	203	e620	213	201	54	29	14	17
22	115	e100	186	1100	e190	e880	285	188	44	30	12	19
23	112	127	196	931	e170	e790	310	183	39	29	12	26
24	111	115	698	719	267	e600	261	152	39	26	12	37
25	100	102	1940	e520	331	e490	230	141	33	30	12	24
26	137	90	1790	e450	311	e410	218	130	31	41	11	20
27	209	85	975	e390	245	e375	202	104	27	50	12	21
28	207	137	702	e340	247	e350	177	94	30	39	12	18
29	185	313	562	e300	---	306	189	112	28	39	12	8.7
30	165	291	472	e275	---	298	191	218	26	44	11	16
31	132	---	e440	e255	---	333	---	147	---	30	9.6	---
TOTAL	3427	3570	13705	15186	5707	15769	8204	4826	2304	1021	788.6	469.6
MEAN	111	119	442	490	204	509	273	156	76.8	32.9	25.4	15.7
MAX	209	313	1940	1100	331	1120	383	263	135	50	63	44
MIN	48	68	153	255	166	165	177	92	26	18	9.6	7.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	170	269	397	289	163	546	609	235	96.7	37.1	41.6	51.0
MAX	334	451	564	490	204	941	1186	391	150	64.1	80.7	105
(WY)	1992	1992	1994	1995	1995	1994	1993	1994	1992	1992	1992	1994
MIN	108	119	220	172	94.9	338	273	156	74.3	22.5	25.4	15.7
(WY)	1994	1995	1993	1994	1993	1992	1995	1995	1993	1993	1995	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1992 - 1995
ANNUAL TOTAL	97441	74977.2	
ANNUAL MEAN	267	205	243
HIGHEST ANNUAL MEAN			285
LOWEST ANNUAL MEAN			205
HIGHEST DAILY MEAN	2070	Mar 24	3320
LOWEST DAILY MEAN	12	Aug 8	7.8
ANNUAL SEVEN-DAY MINIMUM	17	Aug 6	9.3
INSTANTANEOUS PEAK FLOW			2380
INSTANTANEOUS PEAK STAGE			8.56
10 PERCENT EXCEEDS	707		520
50 PERCENT EXCEEDS	141		159
90 PERCENT EXCEEDS	27		26

e Estimated.

PISCATAQUA RIVER BASIN

41

01073000 OYSTER RIVER NEAR DURHAM, N.H.

LOCATION.--Lat 43°08'55", long 70°57'56", Strafford County, Hydrologic Unit 01060003, on left bank 200 ft upstream from highway bridge, 2.5 mi west of Durham, and 7 mi upstream from mouth.

DRAINAGE AREA.--12.1 mi².

PERIOD OF RECORD.--October 1934 to current year. October and November 1934 monthly discharge only, published in WSP 1301.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 70 ft above sea level, from topographic map. Prior to Oct. 1, 1964, at datum 1.00 ft higher.

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 170 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 24	2215	* 263	* 3.76	Mar. 9	0900	178	3.11

Minimum daily discharge, 0.26 ft³/s, Sept. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e3.6	12	e33	16	e10	24	10	6.8	1.4	e1.5	e.30
2	8.8	e3.9	11	e40	16	e11	21	9.7	5.5	1.3	e1.5	e.29
3	6.7	e3.7	10	e37	e15	e10	19	9.1	5.7	1.3	e1.6	e.29
4	5.6	e3.3	9.8	e32	e14	e10	22	8.4	6.8	1.1	e2.8	e.29
5	4.7	e3.2	26	27	e14	e11	22	7.8	6.0	1.0	e3.7	e.30
6	4.1	e3.3	47	23	e13	e12	18	7.1	4.6	.99	e4.1	e.31
7	3.1	e3.4	26	e30	e13	e20	18	6.0	5.2	.92	e4.1	e.32
8	3.2	e3.2	e19	e42	e13	39	16	6.0	6.3	.91	e3.0	e.33
9	2.6	e3.1	19	e35	e13	153	16	5.8	6.0	1.8	e2.3	e.34
10	e3.5	e2.9	17	26	e13	89	19	5.6	4.4	1.5	e1.9	e.32
11	e3.0	e2.8	e27	19	e12	54	16	6.3	3.8	1.3	e1.6	e.30
12	e2.8	e2.6	e25	18	12	38	14	14	4.1	1.6	e1.8	e.28
13	e2.5	e2.4	21	19	e12	36	32	11	4.6	1.3	e2.0	e.26
14	e2.2	e2.3	e15	21	e11	42	25	9.8	4.9	1.1	e1.7	e.27
15	e2.4	e2.2	e13	31	e11	41	20	16	5.1	1.1	e1.4	e.29
16	e2.5	e3.0	e12	e43	e11	44	17	24	5.4	1.1	e1.3	e.30
17	e2.6	e2.8	e12	e62	e11	49	16	21	3.9	2.9	e1.3	e.56
18	e2.6	e2.7	e15	e45	e11	69	17	23	3.3	6.8	e1.2	e.62
19	e3.1	e4.4	e16	e33	e11	64	18	18	2.8	3.6	e1.1	e.83
20	e4.1	3.9	e15	e31	e12	53	20	15	2.3	2.1	e1.2	e.96
21	e5.0	3.7	e14	e46	e11	55	18	13	2.3	1.7	e1.0	e.92
22	e4.5	5.5	e14	e72	e11	74	23	13	4.7	1.8	e.90	e.81
23	e3.4	5.1	e14	e60	e10	56	19	12	4.0	1.5	e.84	e1.0
24	e3.0	4.2	e100	e44	e10	46	17	9.3	4.6	1.3	e.76	e.97
25	e2.6	3.9	e212	e37	e10	38	14	11	3.2	1.3	e.63	e1.0
26	e2.8	3.6	e100	33	e13	32	13	9.4	2.8	e1.4	e.55	e1.1
27	e3.1	3.2	72	25	e11	29	13	8.0	3.1	e3.9	e.48	e1.1
28	e3.5	12	51	21	e10	27	12	6.9	3.1	e2.7	e.41	e1.0
29	e3.2	24	36	18	---	24	12	7.4	2.3	e1.9	e.37	e.93
30	e3.0	15	30	16	---	24	11	12	1.9	e1.8	e.33	e.80
31	e3.3	---	24	16	---	28	---	8.9	---	e1.6	e.30	---
TOTAL	118.5	142.9	1034.8	1035	340	1288	542	344.5	129.5	56.02	47.67	17.39
MEAN	3.82	4.76	33.4	33.4	12.1	41.5	18.1	11.1	4.32	1.81	1.54	.58
MAX	11	24	212	72	16	153	32	24	6.8	6.8	4.1	1.1
MIN	2.2	2.2	9.8	16	10	10	11	5.6	1.9	.91	.30	.26
CFSM	.32	.39	2.76	2.76	1.00	3.43	1.49	.92	.36	.15	.13	.05
IN.	.36	.44	3.18	3.18	1.05	3.96	1.67	1.06	.40	.17	.15	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

	MEAN	6.58	18.0	22.3	19.0	21.0	47.9	49.1	24.9	11.9	4.97	3.58	4.40
MAX	33.2	62.7	52.9	58.1	84.5	122	104	97.5	47.5	33.7	22.7	52.6	
(WY)	1963	1952	1987	1958	1981	1936	1956	1954	1982	1938	1991	1954	
MIN	.89	1.58	2.73	2.25	3.47	13.5	15.2	8.85	2.07	.65	.61	.58	
(WY)	1942	1979	1966	1981	1980	1967	1985	1957	1936	1949	1949	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1935 - 1995

ANNUAL TOTAL	6851.81	5096.28	
ANNUAL MEAN	18.8	14.0	19.4
HIGHEST ANNUAL MEAN			32.3
LOWEST ANNUAL MEAN			9.09
HIGHEST DAILY MEAN	286	Mar 23	557
LOWEST DAILY MEAN	.50	Aug 11	.26
ANNUAL SEVEN-DAY MINIMUM	.71	Aug 6	.29
INSTANTANEOUS PEAK FLOW			862
INSTANTANEOUS PEAK STAGE			8.45
INSTANTANEOUS LOW FLOW			.13
ANNUAL RUNOFF (CFSM)	1.55	1.15	1.60
ANNUAL RUNOFF (INCHES)	21.07	15.67	21.80
10 PERCENT EXCEEDS	52	35	48
50 PERCENT EXCEEDS	7.0	6.8	9.9
90 PERCENT EXCEEDS	1.2	.97	1.2

a Not determined
e estimated

LOCATION.--Lat 43°06'09", long 70°57'11", Rockingham County, Hydrologic Unit 01060003, on right bank 200 ft upstream from Packers Falls, 2 mi northwest of Newmarket, and 4.6 mi upstream from mouth.

PERIOD OF RECORD.--Discharge: July 1934 to current year. Water-quality records: Water year 1954.

REVISID RECORDS.--WSP 1231: 1936-37.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation by Pawtuckaway and Mendums Ponds. These reservoirs have a usable capacity of about 600 million ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft³/s Dec. 26, gage height, 6.59 ft; minimum daily, 1.6 ft³/s Sep. 15.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	82	239	e450	e230	e130	e340	130	125	17	13	e2.0
2	108	92	214	e560	e220	e125	e310	128	111	16	12	e1.9
3	87	103	212	e580	e210	e130	e270	120	101	15	10	e2.0
4	75	116	204	e510	e200	e125	e250	111	102	14	18	e2.2
5	69	103	236	e450	180	e125	e280	109	98	13	47	e2.2
6	62	93	409	e380	e180	e130	e243	103	87	12	73	e2.1
7	56	88	427	e370	e170	e150	239	98	81	11	87	e2.1
8	52	84	433	e460	e175	e240	225	96	80	12	79	2.3
9	49	98	382	e500	e170	e650	220	85	75	15	68	2.4
10	44	91	346	e440	e170	e920	235	80	65	15	55	e2.3
11	42	89	390	e350	e165	e880	225	82	57	13	e38	e2.1
12	40	77	407	e330	e160	e700	214	123	52	13	e30	e1.9
13	35	71	e300	e330	e155	e520	281	144	53	12	e25	1.8
14	45	66	e260	e350	e150	e490	305	148	52	10	21	e1.8
15	79	69	e255	408	146	e480	288	162	53	9.1	17	e1.6
16	81	95	247	600	e145	e520	260	217	55	7.9	14	2.2
17	84	91	241	705	e140	e560	238	232	51	10	13	3.8
18	79	86	251	696	e135	e680	213	251	46	14	12	4.2
19	85	91	277	620	e135	e740	188	237	42	25	11	5.4
20	110	87	259	590	e140	e680	228	217	41	22	8.7	6.3
21	126	80	264	901	e145	e660	225	191	39	16	7.0	e4.2
22	91	102	268	950	e135	e740	241	173	35	14	5.9	5.4
23	75	130	252	936	e125	e760	234	154	31	13	e5.0	6.5
24	72	122	325	826	e150	e640	219	137	27	13	e4.8	6.2
25	70	119	e1300	685	e150	e510	195	157	25	12	e3.6	6.8
26	69	113	e1600	567	e140	e450	176	156	23	15	e3.0	7.1
27	65	105	e1550	e500	e140	e400	163	141	21	22	e2.7	7.0
28	76	148	e1200	e400	e130	e350	159	120	19	24	e2.5	6.7
29	107	232	e900	e340	---	e320	156	111	18	22	e2.4	6.0
30	95	245	e640	e300	---	e300	136	120	17	18	e2.2	5.3
31	84	---	e550	e270	---	e350	---	124	---	15	e2.1	---
TOTAL	2346	3168	14838	16354	4491	14455	6956	4457	1682	460.0	692.9	113.8
MEAN	75.7	106	479	528	160	466	232	144	56.1	14.8	22.4	3.79
MAX	134	245	1600	950	230	920	340	251	125	25	87	7.1
MIN	35	66	204	270	125	125	136	80	17	7.9	2.1	1.6
CFSM	.41	.58	2.62	2.88	.88	2.55	1.27	.79	.31	.08	.12	.02
IN.	.48	.64	3.02	3.32	.91	2.94	1.41	.91	.34	.09	.14	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1995, BY WATER YEAR (WY)

MEAN	119	259	332	282	299	608	696	353	182	94.7	75.3	73.9
MAX	404	742	761	796	811	1866	1756	1400	717	599	621	650
(WY)	1978	1952	1984	1956	1970	1936	1987	1954	1982	1938	1938	1954
MIN	11.1	15.9	45.9	46.4	49.7	210	170	105	29.8	12.2	7.56	3.44
(WY)	1948	1942	1942	1944	1980	1989	1985	1985	1964	1993	1965	1957

(W17)	1940	1942	1942	1944	1960	1969	1969	1969	1969	1964	1993	1969	1997
SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR					FOR 1995 WATER YEAR				WATER YEARS 1934 - 1995			

	WATER YEAR 1987		WATER YEAR 1988		WATER YEAR 1989		WATER YEAR 1990	
ANNUAL TOTAL	94308.46		70013.7					
ANNUAL MEAN	258		192		281			
HIGHEST ANNUAL MEAN					441		1984	
LOWEST ANNUAL MEAN					137		1965	
HIGHEST DAILY MEAN	2100	Mar 25	1600	Dec 26	7360		Apr 7	1987
LOWEST DAILY MEAN	a .66	Jul 27	1.6	Sep 15	a .66		Jul 27	1994
ANNUAL SEVEN-DAY MINIMUM	11	Jul 15	2.0	Sep 10	2.0		Sep 10	1995
INSTANTANEOUS PEAK FLOW			1670	Dec 26	7570		Apr 7	1987
INSTANTANEOUS PEAK STAGE			6.59	Dec 26	15.14		Apr 7	1987
ANNUAL RUNOFF (CFSM)	1.41		1.05		1.53			
ANNUAL RUNOFF (INCHES)	19.17		14.23		20.83			
10 PERCENT EXCEEDS	717		504		649			
50 PERCENT EXCEEDS	130		116		170			
90 PERCENT EXCEEDS	20		6.6		24			

a During refilling after repairs at Wiswall Dam.
e Estimated.

01074520 EAST BRANCH PEMIGEWASSET RIVER AT LINCOLN N.H.

LOCATION.--Lat 44°02'51", long 71°39'37", Grafton County, Hydrologic Unit 01070001, on right bank at old crib dam, locally known as "the old hole", 800 ft upstream of bridge, 1900 ft downstream of Pollard Brook, 1.8 miles above mouth, east of the center of Lincoln, N.H. (Revised)

DRAINAGE AREA.--115 mi².

PERIOD OF RECORD.--March 1993 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 830 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 3,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan.17	0015	*3460	*5.05

Minimum discharge, 51 ft³/s, Sept. 4,5,7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	110	135	e140	e215	e86	219	431	293	78	80	56
2	251	195	127	e160	e180	e76	200	406	273	83	75	53
3	224	180	123	e140	e140	e72	188	425	277	72	81	52
4	209	148	127	e125	e120	e70	189	461	350	68	169	52
5	197	142	292	e110	e110	e70	155	472	291	66	212	51
6	182	138	654	e94	e115	e72	170	453	253	66	577	53
7	168	195	473	e100	e105	e74	169	384	235	64	333	52
8	160	164	329	e115	e110	e110	156	328	225	87	214	60
9	152	150	e240	e100	e105	e500	153	313	207	110	169	80
10	175	139	e230	e88	e115	402	148	337	190	75	143	87
11	154	128	e185	e78	e110	299	145	356	200	68	129	62
12	142	124	162	e92	e105	141	154	463	231	137	166	56
13	136	122	e155	e120	e98	128	232	436	219	81	133	64
14	130	118	e210	e195	e92	143	255	410	187	68	119	76
15	125	114	e200	e460	e98	253	200	650	224	78	113	83
16	121	110	e180	e1200	e88	311	179	745	190	80	109	63
17	118	106	e165	1810	e90	325	165	532	166	301	95	61
18	115	104	e155	775	e86	315	174	648	153	407	84	64
19	113	116	e150	568	e85	274	227	503	141	192	78	62
20	116	108	e160	529	e86	266	280	429	130	130	74	57
21	153	106	e145	1290	e90	349	377	388	122	113	71	56
22	136	226	e140	695	e90	840	691	476	115	103	68	75
23	128	164	135	526	e86	479	495	386	108	90	65	314
24	121	e110	285	429	e82	374	380	375	101	98	65	124
25	114	e100	448	367	e78	317	345	424	96	86	63	91
26	110	e96	265	298	e80	281	340	351	92	197	63	82
27	106	e93	e170	238	e76	259	331	323	85	180	62	83
28	103	142	e120	e175	e78	247	363	293	82	119	60	80
29	100	258	e80	e170	---	243	401	350	78	133	57	72
30	97	158	e70	e200	---	250	430	386	75	121	55	68
31	96	---	e98	e240	---	235	---	332	---	93	55	---
TOTAL	4553	4164	6408	11627	2913	7861	7911	13266	5389	3644	3837	2289
MEAN	147	139	207	375	104	254	264	428	180	118	124	76.3
MAX	301	258	654	1810	215	840	691	745	350	407	577	314
MIN	96	93	70	78	76	70	145	293	75	64	55	51
CFSM	1.28	1.21	1.80	3.26	.90	2.21	2.29	3.72	1.56	1.02	1.08	.66
IN.	1.47	1.35	2.07	3.76	.94	2.54	2.56	4.29	1.74	1.18	1.24	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	186	262	258	245	97.2	174	806	576	224	126	150	142
MAX	225	386	309	375	104	254	1093	888	252	157	167	193
(WY)	1994	1994	1994	1995	1995	1995	1993	1994	1993	1994	1994	1994
MIN	147	139	207	116	90.5	95.2	264	412	180	105	124	76.3
(WY)	1995	1995	1995	1994	1994	1994	1995	1993	1995	1993	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	106608	73862	
ANNUAL MEAN	292	202	265
HIGHEST ANNUAL MEAN			328
LOWEST ANNUAL MEAN			202
HIGHEST DAILY MEAN	3500	Apr 16	6280
LOWEST DAILY MEAN	70	Dec 30	51
ANNUAL SEVEN-DAY MINIMUM	75	Feb 27	53
INSTANTANEOUS PEAK FLOW		a 3460	a 9770
INSTANTANEOUS PEAK STAGE		5.05	7.21
INSTANTANEOUS LOW FLOW		b 51	b 51
ANNUAL RUNOFF (CFSM)	2.54	1.76	2.30
ANNUAL RUNOFF (INCHES)	34.49	23.89	31.31
10 PERCENT EXCEEDS	710	408	605
50 PERCENT EXCEEDS	140	141	165
90 PERCENT EXCEEDS	85	70	76

a From rating curve extended above 1300 ft³/s.

e Estimated

b Also occurred September 5,7, 1995.

MERRIMACK RIVER BASIN

01075800 STEVENS BROOK NEAR WENTWORTH, N.H.

LOCATION.--Lat 43°50'12", long 71°53'07", Grafton County, Hydrologic Unit 01070001, on left bank 150 ft upstream from highway bridge, 0.2 mi upstream from mouth, and 2.5 mi southeast of Wentworth.

DRAINAGE AREA.--2.94 mi².

PERIOD OF RECORD.--May 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 595 ft above sea level, from topographic map.

REMARKS.--Records good except those for periods of estimated daily discharges, which are fair, and those below 1.0 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s, June 30, 1973, gage height, 6.36 ft, from rating curve extended above 320 ft³/s; minimum discharge, several days in 1963-65, 1971, 1975, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 90 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 24	1845	* 78	2.72	(c)	unknown	Ice jam	* 3.30

Minimum discharge, .02 ft³/s, Sept. 2, 4-7, gage height 1.15 ft

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.3	2.2	e1.8	e1.9	e.75	2.9	4.6	2.2	.05	.07	.02
2	1.4	2.1	1.8	e1.9	e1.4	e.66	2.5	3.4	1.5	.05	.06	.02
3	1.2	2.6	1.7	e1.6	e1.2	e.55	2.3	2.6	1.5	.04	.07	.02
4	1.0	2.0	2.2	e1.3	e1.1	e.61	2.1	2.2	1.8	.03	.22	.02
5	.91	1.6	17	e1.1	e1.0	e.63	3.1	2.0	1.3	.04	.18	.02
6	.80	1.6	25	e.95	e1.1	e.68	3.1	2.0	.98	.04	.78	.02
7	.73	3.2	11	e1.1	e1.0	e.73	1.4	1.8	.81	.04	.85	.02
8	.67	2.8	5.7	e1.3	e1.1	e.87	1.3	1.8	.79	.14	.38	.02
9	.64	2.2	e3.2	e1.1	e1.1	e35	1.2	1.6	.69	.20	.20	.04
10	.75	1.7	e2.5	e.96	e1.2	e25	1.2	1.5	.57	.10	.14	.09
11	.82	1.5	e2.8	e.90	e1.1	e9.0	1.1	1.7	.67	.09	.20	.06
12	.82	1.3	1.9	e.92	e.95	e4.8	1.0	2.8	2.0	.09	.36	.05
13	.80	1.2	e1.6	e1.0	e.91	e5.6	3.0	2.5	1.8	.07	.19	.09
14	.73	1.1	e1.4	e1.3	e.86	e6.8	2.7	2.1	1.1	.05	.13	.13
15	.69	1.0	e1.5	e7.0	e.94	e10	1.9	13	.96	.09	.11	.11
16	.64	.91	e1.3	e20	e.80	e20	1.4	15	.71	.08	.10	.08
17	.62	.82	e1.2	e29	e.82	e26	1.2	7.7	.54	.85	.07	.08
18	.58	.82	e1.3	e14	e.78	e21	1.2	7.0	.43	.33	.06	.09
19	.58	.82	e1.2	e7.0	e.78	e14	2.0	4.9	.34	.21	.05	.09
20	.62	.79	e1.0	14	e.84	e9.4	3.6	3.6	.26	.15	.04	.08
21	.98	.79	1.1	43	e.84	e21	4.3	2.8	.20	.21	.03	.08
22	1.1	1.7	1.1	21	e.86	32	7.7	2.6	.18	.17	.03	.25
23	1.1	1.9	e1.0	13	e.76	15	3.1	2.0	.15	.13	.03	.36
24	.90	1.4	25	8.5	e.73	9.4	1.5	1.8	.13	.11	.03	.15
25	.82	1.0	33	6.1	e.70	6.3	1.4	1.9	.13	.09	.03	.14
26	.81	1.0	14	e4.6	e.74	4.8	1.4	1.6	.12	.16	.03	.17
27	.73	.70	e7.0	e3.8	e.66	4.1	1.3	1.6	.09	.16	.03	.19
28	.69	1.2	e4.2	e3.1	e.68	3.8	3.3	1.3	.08	.16	.03	.18
29	.69	3.8	e2.9	e2.5	---	3.4	4.4	4.4	.07	.32	.03	.18
30	.69	2.8	e2.0	e2.1	---	3.5	4.7	10	.06	.16	.03	.18
31	.75	---	e1.9	e1.8	---	3.4	---	4.3	---	.10	.03	---
TOTAL	26.06	47.65	180.7	217.73	26.85	298.78	73.3	118.1	22.16	4.51	4.59	3.03
MEAN	.84	1.59	5.83	7.02	.96	9.64	2.44	3.81	.74	.15	.15	.10
MAX	1.8	3.8	33	43	1.9	35	7.7	15	2.2	.85	.85	.36
MIN	.58	.70	1.0	.90	.66	.55	1.0	1.3	.06	.03	.03	.02
CFSM	.29	.54	1.98	2.39	.33	3.28	.83	1.30	.25	.05	.05	.03
IN.	.33	.60	2.29	2.75	.34	3.78	.93	1.49	.28	.06	.06	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

	3.33	5.12	4.42	3.16	3.31	8.38	15.1	7.64	2.79	1.27	1.30	1.10
MEAN	3.33	5.12	4.42	3.16	3.31	8.38	15.1	7.64	2.79	1.27	1.30	1.10
MAX	13.6	12.3	18.1	13.2	21.0	21.4	32.8	14.8	15.8	7.54	13.4	7.66
(WY)	1978	1970	1974	1978	1981	1979	1969	1971	1973	1973	1990	1981
MIN	.093	.33	.77	.22	.16	1.42	2.44	2.36	.42	.079	.029	.048
(WY)	1965	1972	1989	1989	1980	1980	1995	1977	1985	1964	1965	1963

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1963 - 1995
ANNUAL TOTAL	1530.97	1023.46	
ANNUAL MEAN	4.19	2.80	4.75
HIGHEST ANNUAL MEAN			7.56
LOWEST ANNUAL MEAN			2.13
HIGHEST DAILY MEAN	67	43	270
LOWEST DAILY MEAN	.14	a .02	.01
ANNUAL SEVEN-DAY MINIMUM	.15	.02	.01
INSTANTANEOUS PEAK FLOW		78	b 1120
INSTANTANEOUS PEAK STAGE		3.30	c 6.36
INSTANTANEOUS LOW FLOW		d .02	.01
ANNUAL RUNOFF (CFSM)	1.43	.95	1.62
ANNUAL RUNOFF (INCHES)	19.37	12.95	21.95
10 PERCENT EXCEEDS	10	6.9	11
50 PERCENT EXCEEDS	1.4	1.0	1.6
90 PERCENT EXCEEDS	.28	.07	.15

a Also occurred on Sept. 2-8.

b From rating curve extended above 320 ft³/s.

c Ice jam, sometime during period of Feb. 6 to Mar. 16.

d Also occurred on Sept. 4-7.

e Estimated

f Several days in 1963-65, 1971, 1975, 1977, 1978.

LOCATION.--Lat 43°45'33", long 71°41'10", Grafton County, Hydrologic Unit 01070001, on right bank 150 ft downstream from bridge at Plymouth and 0.3 mi downstream from Baker River.

DRAINAGE AREA. - - 622 mi².

PERIOD OF RECORD.--Discharge: October 1903 to current year. Records for April 1886 to September 1903, published in WSP 124, are unreliable and should not be used.

Water-quality records: Water years 1953, 1967-74, 1976-79.

REVISED RECORDS.--WSP 471: 1912-14. WSP 726: Drainage area. WSP 1231: 1904-11, 1913-14, 1917-18, 1919(M), 1920-25, 1926-27(M), 1929-31(M). WSP 1721: 1959(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 457.07 ft above sea level. Prior to Jan. 1, 1910, nonrecording gage at sites 150 ft and 200 ft upstream at present datum or datum 1.11 ft lower. Jan. 1, 1910, to Sept. 30, 1926, nonrecording gage at site 200 ft upstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some diurnal fluctuation during period 1940-52 caused by powerplants upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 17	0815	*e 9500	*c 9.92.				
Minimum discharge, 114 ft ³ /s, Sept. 6, 7.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1090	416	e750	e830	e870	e410	1420	1490	1020	187	261	136
2	872	787	e600	e870	e750	e370	1210	1320	850	198	223	132
3	742	1050	e550	e800	e600	e320	1070	1270	804	186	200	127
4	655	760	559	e650	e560	e340	1050	1260	1040	175	275	124
5	600	638	1020	e570	e530	e340	954	1260	926	168	1070	120
6	562	568	4640	e500	e550	e360	866	1210	743	164	3320	118
7	519	698	2870	e560	e510	e380	926	1070	641	166	1860	118
8	487	772	1910	e630	e540	e430	851	908	610	179	894	123
9	467	648	1470	e560	e540	e1200	838	827	563	282	585	144
10	498	572	1240	e460	e560	e1500	828	831	521	231	455	217
11	531	509	e830	e420	e540	e1200	799	866	518	183	393	185
12	469	467	e420	e460	e520	e910	813	1300	655	191	604	154
13	442	455	e460	e530	e480	e770	1080	1260	783	221	538	147
14	420	436	e700	e610	e460	e820	1460	1130	608	173	403	179
15	399	418	e750	e1500	e490	e1100	1200	1620	638	173	353	233
16	375	405	e700	e5500	e440	e1700	1030	3590	611	196	343	201
17	363	385	e650	e5600	e450	e2100	919	2250	502	380	308	170
18	350	373	e660	2860	e420	e2700	889	2320	452	1160	267	169
19	348	378	e610	2180	e430	2760	1040	1940	412	611	231	168
20	361	384	e530	5760	e450	2500	1310	1550	379	411	206	157
21	592	369	e570	4490	e450	2600	1470	1300	340	328	189	145
22	626	727	e550	2920	e460	6170	2750	1310	318	299	179	154
23	522	824	e530	2130	e420	4000	2250	1170	298	262	171	748
24	471	e600	1450	1790	e420	2830	1660	1020	281	239	169	499
25	432	e510	4130	1530	e380	2120	1380	1150	265	232	162	321
26	402	e560	2340	1190	e410	1730	1260	1010	250	280	158	266
27	377	e450	1560	e910	e360	1520	1200	921	232	724	162	240
28	365	e600	1330	e660	e380	1420	1200	829	214	435	158	237
29	355	1120	1020	e730	---	1360	1470	989	205	425	149	207
30	345	e900	e420	e710	---	1400	1470	1800	195	423	142	185
31	341	---	e550	e650	---	1410	---	1340	---	333	137	---
TOTAL	15378	17779	36369	49560	13970	48770	36663	42111	15874	9615	14564	6124
MEAN	496	593	1173	1599	499	1573	1222	1358	529	310	470	204
MAX	1090	1120	4640	5760	870	6170	2750	3590	1040	1160	3320	748
MIN	341	369	420	420	360	320	799	827	195	164	137	118
CFSM	.80	.95	1.89	2.57	.80	2.53	1.96	2.18	.85	.50	.76	.33
IN.	.92	1.06	2.18	2.96	.84	2.92	2.19	2.52	.95	.58	.87	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1995, BY WATER YEAR (WY)

MEAN	948	1312	1129	840	720	1722	3932	2785	1135	620	514	589
MAX	3423	4578	4588	2276	4379	9266	7206	5304	3878	3103	3345	3813
(WY)	1978	1928	1974	1978	1981	1936	1969	1940	1917	1973	1990	1938
MIN	129	308	216	148	138	205	1222	806	283	160	111	107
(WY)	1948	1979	1948	1931	1931	1940	1995	1921	1921	1923	1923	1923

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1904 - 1995

ANNUAL TOTAL	438269			306777					
ANNUAL MEAN	1201			840				1354	
HIGHEST ANNUAL MEAN								1971	1973
LOWEST ANNUAL MEAN								735	1965
HIGHEST DAILY MEAN	13000	Apr 16		6170	Mar 22		57300		Mar 19 1936
LOWEST DAILY MEAN	193	Aug 13		a 118	Sep 6		45		Sep 20 1923
ANNUAL SEVEN-DAY MINIMUM	225	Aug 8		123	Sep 2		66		Oct 11 1923
INSTANTANEOUS PEAK FLOW				e 9500	Jan 17		b 65400		Mar 19 1936
INSTANTANEOUS PEAK STAGE				c 9.92	Jan 17		b 29.00		Mar 19 1936
INSTANTANEOUS LOW FLOW				a 114	Sep 6		d 39		Oct 1 1948
ANNUAL RUNOFF (CFSM)	1.93			1.35			2.18		
ANNUAL RUNOFF (INCHES)	26.21			18.35			29.58		
10 PERCENT EXCEEDS	2860			1580			3160		
50 PERCENT EXCEEDS	592			560			666		
90 PERCENT EXCEEDS	344			184			235		

a Also occurred on September 7.

b From flood marks, from rating curve extended above 43,000 ft³/s.

c Ice jam.

d Also on October 3, 1948.

d Also on Co
e Estimated

MERRIMACK RIVER BASIN

01077000 SQUAM RIVER AT ASHLAND, N.H.

LOCATION.--Lat 43°42'19", long 71°37'49", Grafton County, Hydrologic Unit 01070001, on right bank 200 ft upstream from highway bridge, 0.7 mi north of Ashland, and 1.4 mi downstream from Little Squam Lake.

DRAINAGE AREA.--57.6 mi².

PERIOD OF RECORD.--Discharge: August 1939 to current year (discontinued).

Water-quality records: Water year 1957.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 545 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by powerplant upstream and by Squam and Little Squam Lakes.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 149 ft³/s, July 6, gage height, 10.81 ft; minimum daily 12 ft³/s, July 1-2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	86	61	86	122	60	64	69	63	12	61	60
2	59	84	62	85	101	61	64	67	62	12	61	60
3	59	83	61	86	82	63	64	63	61	26	61	60
4	59	84	61	86	82	63	65	61	63	13	62	59
5	59	83	63	86	82	63	65	61	62	13	63	59
6	59	80	63	86	82	63	65	62	63	36	63	59
7	60	82	63	86	82	63	65	62	62	63	63	59
8	60	84	64	86	82	64	64	61	61	62	62	59
9	60	84	64	86	82	66	65	61	61	61	62	59
10	59	84	61	86	82	64	65	61	61	61	61	59
11	77	84	62	86	82	64	66	62	61	61	61	58
12	87	83	64	86	82	64	66	63	61	61	61	58
13	87	83	64	86	82	64	66	61	62	61	61	59
14	87	71	64	86	82	64	64	62	63	61	61	37
15	87	61	64	86	82	65	64	64	64	61	61	13
16	86	62	63	87	69	62	64	65	64	61	61	13
17	86	62	64	87	61	56	64	63	64	63	61	13
18	85	61	66	87	61	54	66	64	64	64	61	45
19	86	61	63	102	61	53	66	63	64	64	61	57
20	86	63	60	121	61	57	65	63	64	63	61	58
21	85	63	61	124	61	62	65	64	64	64	61	37
22	86	63	63	124	61	63	66	64	64	64	61	13
23	86	63	63	124	61	62	66	65	64	63	60	13
24	86	63	66	124	61	61	68	64	64	63	60	14
25	85	63	66	124	60	62	65	66	63	63	60	50
26	86	63	64	124	60	66	65	64	63	63	61	64
27	85	65	75	124	61	66	66	65	63	63	60	64
28	86	65	86	124	61	65	67	62	63	63	60	41
29	84	65	86	124	---	64	68	63	63	64	60	13
30	84	62	86	122	---	64	68	63	44	62	60	13
31	85	---	86	121	---	64	---	62	---	61	60	---
TOTAL	2385	2160	2059	3132	2088	1932	1961	1960	1865	1672	1892	1326
MEAN	76.9	72.0	66.4	101	74.6	62.3	65.4	63.2	62.2	53.9	61.0	44.2
MAX	87	86	86	124	122	66	68	69	64	64	63	64
MIN	59	61	60	85	60	53	64	61	44	12	60	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	72.2	79.8	88.9	94.4	94.2	92.8	120	106	97.0	72.4	75.6	67.5
MAX	118	202	204	265	234	285	351	295	326	485	240	111
(WY)	1955	1982	1984	1974	1952	1952	1969	1954	1984	1973	1990	1951
MIN	44.5	29.4	22.2	20.8	53.0	16.8	7.93	22.6	51.0	6.81	6.44	6.82
(WY)	1981	1966	1966	1966	1942	1966	1989	1966	1980	1980	1980	1980

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1939 - 1995

ANNUAL TOTAL	28837	24432	
ANNUAL MEAN	79.0	66.9	88.3
HIGHEST ANNUAL MEAN			154
LOWEST ANNUAL MEAN			39.5
HIGHEST DAILY MEAN	166	May 17	986
LOWEST DAILY MEAN	15	Jul 4	1.0
ANNUAL SEVEN-DAY MINIMUM	19	Jul 2	1.1
INSTANTANEOUS PEAK FLOW			1090
INSTANTANEOUS PEAK STAGE			14.29
10 PERCENT EXCEEDS	117	86	130
50 PERCENT EXCEEDS	67	63	73
90 PERCENT EXCEEDS	59	59	58

a Also occurred July 2.

01078000 SMITH RIVER NEAR BRISTOL, N.H.

LOCATION.--Lat 43°34'04", long 71°44'54", Merrimack County, Hydrologic Unit 01070001, on right bank in Hill, 1.5 mi upstream from mouth, and 1.8 mi southwest of Bristol.

DRAINAGE AREA.--85.8 mi².

PERIOD OF RECORD.--Discharge: May 1918 to current year.

Water-quality records: Water years 1957, 1976-79.

REVISED RECORDS.--WSP 711: Drainage area. WSP 781: 1934. WSP 1231: 1919, 1920-21(M), 1922-31, 1932-33(M), 1941-43.

GAGE.--Water-stage recorder. Datum of gage is 449.80 ft above sea level (levels by U.S. Army Corps of Engineers).

Prior to Nov. 25, 1933, nonrecording gage at site 1.5 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Prior to 1954, some diurnal fluctuation caused by small mill upstream; greater fluctuation prior to 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Mar. 19, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 25	0045	Ice jam	* 4.77	Dec. 25	2015	* 728	4.73

Minimum discharge, 5.0 ft³/s, Sept. 5-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	31	76	e74	e78	e35	172	98	93	14	24	6.6
2	48	48	64	e78	e66	e32	149	89	69	13	19	5.9
3	41	49	58	e70	e58	e28	130	83	62	12	17	5.5
4	36	43	57	e60	51	e30	138	77	98	11	33	5.5
5	34	38	143	e52	e46	e30	178	70	88	12	57	5.2
6	35	36	379	e45	e48	e32	148	67	63	11	73	5.2
7	33	41	299	e50	e45	e34	142	61	53	11	83	5.1
8	30	49	191	e55	e48	e40	122	57	50	12	52	5.4
9	27	44	122	e50	e48	e46	115	55	47	13	36	6.4
10	29	39	e90	e45	e51	392	116	53	42	12	28	6.8
11	26	35	e80	e43	e48	259	110	59	39	11	23	5.9
12	26	33	e70	e42	e45	177	105	119	61	10	20	5.9
13	38	31	e63	e45	e43	151	140	107	67	9.5	19	6.1
14	34	30	e58	e54	e41	167	169	87	54	8.9	20	7.0
15	29	29	62	e110	e43	201	143	139	55	9.7	18	6.5
16	26	28	56	e330	e38	340	129	246	55	9.0	17	6.3
17	23	27	e54	519	e39	454	120	189	44	28	16	9.1
18	22	26	e56	368	e37	502	112	177	36	53	15	11
19	22	26	e50	219	e37	458	113	143	31	38	13	8.7
20	23	26	e45	e200	e39	365	126	125	27	27	11	8.0
21	46	27	e48	e400	e39	383	127	114	24	21	10	7.8
22	58	52	e46	435	e40	550	204	108	22	17	9.2	8.7
23	43	64	e44	310	e37	447	201	94	20	16	8.2	14
24	35	e45	e150	e200	e36	318	154	81	19	15	7.7	21
25	31	e38	e500	e140	e34	239	126	78	18	13	7.1	16
26	29	e32	609	e90	e35	198	110	77	20	15	7.0	13
27	27	e27	325	e80	e32	176	101	72	24	18	8.0	11
28	26	38	214	e70	e33	162	101	64	19	22	7.8	9.7
29	25	78	158	e65	---	150	113	78	16	30	7.0	8.8
30	25	94	e88	e60	---	145	106	166	15	48	6.7	8.5
31	25	---	e82	e58	---	164	---	138	---	33	6.3	---
TOTAL	1012	1204	4337	4417	1235	7127	4020	3171	1331	573.1	679.0	250.6
MEAN	32.6	40.1	140	142	44.1	230	134	102	44.4	18.5	21.9	8.35
MAX	60	94	609	519	78	550	204	246	98	53	83	21
MIN	22	26	44	42	32	28	101	53	15	8.9	6.3	5.1
CFSM	.38	.47	1.63	1.66	.51	2.68	1.56	1.19	.52	.22	.26	.10
IN.	.44	.52	1.88	1.92	.54	3.09	1.74	1.37	.58	.25	.29	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1995, BY WATER YEAR (WY)

	MEAN	69.5	128	133	99.1	96.5	251	481	226	102	50.9	37.4	40.2
MAX	267	379	393	253	578	1242	1077	504	353	387	340	457	
(WY)	1978	1928	1974	1986	1981	1936	1969	1954	1922	1973	1990	1938	
MIN	8.45	24.9	22.3	19.2	20.6	29.7	134	71.5	20.5	9.00	4.54	7.62	
(WY)	1948	1972	1923	1940	1980	1940	1995	1941	1964	1965	1965	1948	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1918 - 1995

ANNUAL TOTAL	45245	29356.7	
ANNUAL MEAN	124	80.4	143
HIGHEST ANNUAL MEAN			223
LOWEST ANNUAL MEAN			64.7
HIGHEST DAILY MEAN	1320	Apr 15	609
LOWEST DAILY MEAN	12	Aug 17	5.1
ANNUAL SEVEN-DAY MINIMUM	14	Aug 11	5.4
INSTANTANEOUS PEAK FLOW			728
INSTANTANEOUS PEAK STAGE			b 4.77
INSTANTANEOUS LOW FLOW			c 5.0
ANNUAL RUNOFF (CFSM)	1.44	.94	1.66
ANNUAL RUNOFF (INCHES)	19.62	12.73	22.60
10 PERCENT EXCEEDS	287	177	345
50 PERCENT EXCEEDS	55	45	66
90 PERCENT EXCEEDS	20	9.6	17

a From floodmarks, from rating curve extended above 2,700 ft³/s on basis of contracted-opening measurement of peak flow.

b Ice effected

c Also occurred on September 6,7.

e Estimated

MERRIMACK RIVER BASIN

01080000 LAKE WINNIPESAUKEE AT WEIRS BEACH, N.H.

LOCATION.--Lat 43°36'27", long 71°27'30", Belknap County, Hydrologic Unit 01070002, 1,300 ft north of highway bridge at Weirs Beach.

DRAINAGE AREA.--363 mi², at outlet at Lakeport.

PERIOD OF RECORD.--Gage heights: September 1933 to current year. Prior to November 1937, monthend contents only, published in WSP 1301. Prior to October 1970, published as "at The Weirs."

REVISED RECORDS.--WDR NH-VT-78-1: 1938-77 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 499.92 ft above sea level. Prior to November 1937, nonrecording gage at lake outlet at Lakeport at datum 0.63 ft, corrected, higher. Nov. 24, 1937 to Nov. 7, 1965, water-stage recorder at site 500 ft south at present datum.

REMARKS.--Lake used for recreation and conservation for development of water power. Usable capacity, 7.22 billion ft³ between elevations 500.57 ft and 504.24 ft above sea level. Stage regulated at outlet and by Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes. Contents given herein are computed from gage height at 2400 on last day of month, eliminating the effect of seiche and wind action.

Capacity table (gage height, in feet, and contents, in millions of cubic feet), furnished by State of New Hampshire, Department of Environmental Services

2.0	13,880
3.0	15,840
4.0	17,840
5.0	19,850

EXTREMES FOR PERIOD OF RECORD.--Maximum daily gage height, 5.94 ft, June 4, 1984; minimum daily, 0.63 ft, Dec. 11, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum daily gage height, 4.15 ft, June 15; minimum daily, 2.63 ft, Nov. 26.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.47	3.08	2.75	3.09	3.21	2.83	3.49	3.86	4.06	3.92	3.75	3.15
2	3.45	3.00	2.75	3.11	3.18	2.81	3.51	3.86	4.07	3.92	3.75	3.13
3	3.40	2.98	2.75	3.11	3.16	2.79	3.52	3.86	4.08	3.90	3.74	3.11
4	3.38	2.99	2.75	3.09	3.16	2.77	3.54	3.86	4.13	3.90	3.75	3.09
5	3.36	2.97	2.80	3.07	3.20	2.75	3.51	3.85	4.12	3.88	3.79	3.07
6	3.35	2.98	2.87	3.06	3.18	2.75	3.53	3.83	4.13	3.86	3.81	3.05
7	3.33	2.90	2.89	3.09	3.16	2.74	3.56	3.80	4.14	3.84	3.79	3.02
8	3.31	2.92	2.86	3.09	3.14	2.74	3.57	3.80	4.13	3.88	3.76	3.02
9	3.30	2.90	2.90	3.08	3.11	2.85	3.57	3.81	4.13	3.92	3.74	3.00
10	3.29	2.84	2.90	3.07	3.09	2.89	3.57	3.80	4.13	3.91	3.73	2.95
11	3.27	2.80	2.92	3.06	3.07	2.92	3.60	3.81	4.13	3.90	3.71	2.93
12	3.27	2.81	2.92	3.07	3.03	2.94	3.61	3.85	4.12	3.89	3.70	2.91
13	3.26	2.79	2.94	3.06	3.01	2.95	3.64	3.86	4.13	3.87	3.67	2.90
14	3.26	2.78	2.93	3.04	2.98	2.97	3.65	3.87	4.13	3.85	3.67	2.87
15	3.25	2.75	2.91	3.04	2.95	2.99	3.65	3.91	4.15	3.83	3.67	2.86
16	3.23	2.73	2.89	3.07	2.94	3.01	3.66	3.93	4.14	3.84	3.65	2.85
17	3.23	2.72	2.88	3.10	2.92	3.06	3.67	3.95	4.13	3.88	3.64	2.86
18	3.22	2.71	2.90	3.12	2.90	3.09	3.68	3.97	4.13	3.90	3.63	2.86
19	3.23	2.68	2.86	3.12	2.88	3.12	3.69	3.97	4.12	3.86	3.60	2.86
20	3.25	2.67	2.85	3.15	2.86	3.16	3.70	3.97	4.11	3.84	3.56	2.83
21	3.28	2.68	2.83	3.24	2.84	3.20	3.72	3.99	4.11	3.83	3.53	2.81
22	3.25	2.70	2.83	3.31	2.82	3.28	3.76	4.02	4.08	3.83	3.47	2.82
23	3.25	2.68	2.82	3.33	2.80	3.31	3.77	4.02	4.07	3.83	3.43	2.82
24	3.24	2.65	2.90	3.34	2.81	3.34	3.78	4.01	4.05	3.79	3.36	2.82
25	3.21	2.66	3.03	3.32	2.81	3.35	3.79	4.02	4.04	3.79	3.31	2.81
26	3.19	2.63	3.09	3.31	2.79	3.36	3.79	4.03	4.05	3.81	3.30	2.80
27	3.15	2.64	3.13	3.28	2.79	3.36	3.80	4.02	4.02	3.83	3.29	2.78
28	3.12	2.72	3.14	3.26	2.83	3.37	3.82	4.03	3.98	3.85	3.27	2.74
29	3.10	2.75	3.07	3.27	---	3.40	3.83	4.05	3.94	3.83	3.24	2.73
30	3.08	2.76	3.04	3.26	---	3.42	3.85	4.06	3.93	3.79	3.20	2.72
31	3.06	---	3.08	3.24	---	3.47	---	4.06	---	3.77	3.19	---
MEAN	3.26	2.80	2.91	3.16	2.99	3.06	3.66	3.93	4.09	3.86	3.57	2.91
MAX	3.47	3.08	3.14	3.34	3.21	3.47	3.85	4.06	4.15	3.92	3.81	3.15
MIN	3.06	2.63	2.75	3.04	2.79	2.74	3.49	3.80	3.93	3.77	3.19	2.72
(†)	15,960	15,310	16,000	16,280	15,550	16,780	17,580	17,960	17,660	17,340	16,160	15,270
(‡)	-321	-251	+258	+105	-302	+459	+309	+142	-116	-119	-441	-343

CAL YR 1994 MEAN 3.44 MAX 4.52 MIN 2.27(†) -14.0
WTR YR 1995 MEAN 3.35 MAX 4.15 MIN 2.63(†) -36.5

(†) Millions of cubic feet at 2400 on last day of month.

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

01080500 LAKE WINNIPESAUKEE OUTLET AT LAKEPORT, N.H.

LOCATION.--Lat 43°32'57", long 71°27'54", Belknap County, Hydrologic Unit 01070002, 100 ft upstream from highway bridge across Paugus Bay at Lakeport.

DRAINAGE AREA.--363 mi².

PERIOD OF RECORD.--Discharge: January 1860 to December 1911 (monthly gage heights only, published in WSP 301), June 1933 to September 1983. October 1987 to current year.

Water-quality records: Water years 1954-55.

GAGE.--Acoustic velocity meter and measuring flume. Datum of gage is 500.55 ft above sea level. January 1860 to December 1911, nonrecording gage at site 150 ft downstream at same datum. June 1, 1933, to Sept. 30, 1936, nonrecording gage and continuous-recording current meter at present site and datum. Oct. 1, 1936, to May 23, 1944, discharge computed from flow over spillway and through gates and wheels at site 150 ft downstream. May 24, 1944 and September 1983, record obtained from water-stage recorder, deflection meter, and measuring flume.

REMARKS.--Records excellent except those for estimated daily discharges, which are fair. Flow completely regulated by Winnepesaukee (station 01080000), Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes. Daily discharge computed from the acoustic velocity meter.

EXTREMES FOR CURRENT YEAR.--Maximum Daily discharge, 1020 ft³/s, Jan 22-27, 31 and Feb. 1, 2; minimum daily, 14 ft³/s, Oct. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	612	360	699	1020	699	345	283	180	178	192	339
2	172	542	368	e659	1020	699	350	280	183	177	361	258
3	275	543	169	730	1000	698	353	280	178	277	294	252
4	274	545	169	818	e916	696	348	280	179	271	348	239
5	274	289	272	814	916	694	340	279	176	281	173	243
6	329	333	170	814	902	694	347	169	176	283	172	253
7	477	421	361	667	893	685	347	156	175	283	269	260
8	171	427	495	669	901	572	351	271	273	178	273	254
9	170	426	454	822	897	574	339	279	306	177	188	169
10	325	422	170	898	898	376	280	278	174	281	243	169
11	17	328	168	891	894	342	279	276	175	280	313	252
12	18	331	513	898	888	343	283	274	279	283	173	255
13	18	330	518	899	895	343	285	170	273	284	172	256
14	15	419	517	900	892	344	280	175	279	286	e245	239
15	15	363	641	895	876	344	221	281	279	207	243	261
16	15	366	825	900	881	344	332	282	282	170	265	167
17	18	365	369	903	879	342	283	277	178	242	247	163
18	14	365	372	901	670	343	283	286	179	249	295	221
19	69	168	713	902	666	346	281	284	292	276	171	260
20	244	168	682	898	673	349	279	177	284	279	171	259
21	510	365	487	841	696	553	281	176	282	283	340	260
22	323	364	558	1020	698	556	176	284	287	178	426	273
23	148	364	712	1020	690	554	172	288	288	178	376	175
24	431	169	301	1020	639	564	280	288	182	260	405	163
25	564	366	255	1020	574	672	279	368	182	292	308	216
26	573	167	256	1020	697	670	282	177	280	293	328	256
27	537	168	680	1020	694	478	278	176	358	294	323	253
28	532	188	756	948	697	344	275	175	377	291	371	245
29	479	220	837	958	---	347	172	179	377	195	352	248
30	480	169	858	922	---	347	175	178	284	175	340	164
31	625	---	702	1020	---	348	---	177	---	278	341	---
TOTAL	8285	10303	14708	27386	22962	15260	8576	7503	7397	7659	8718	7022
MEAN	267	343	474	883	820	492	286	242	247	247	281	234
MAX	625	612	858	1020	1020	699	353	368	377	294	426	339
MIN	14	167	168	659	574	342	172	156	174	170	171	163

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1995, BY WATER YEAR (WY)

	344	373	516	681	769	652	686	734	539	373	365	368
MEAN	344	373	516	681	769	652	686	734	539	373	365	368
MAX	909	993	1245	1671	1672	1550	2596	2043	1548	1368	783	868
(WY)	1978	1982	1955	1955	1958	1951	1936	1954	1954	1973	1967	1951
MIN	149	149	49.3	45.0	67.7	33.2	92.8	75.2	147	161	185	202
(WY)	1990	1942	1942	1942	1942	1942	1942	1957	1957	1957	1957	1957

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1934 - 1995	
ANNUAL TOTAL	192950		145779			
ANNUAL MEAN	529		399			
HIGHEST ANNUAL MEAN					531	
LOWEST ANNUAL MEAN					858	
HIGHEST DAILY MEAN	1050		b 1020		174	
LOWEST DAILY MEAN	14		14		2890	
ANNUAL SEVEN-DAY MINIMUM	16		16		a .00	
10 PERCENT EXCEEDS	979		880		2.0	
50 PERCENT EXCEEDS	480		292		1080	
90 PERCENT EXCEEDS	179		172		355	
					230	

a Dam closed.

b Also Jan. 23-27, 31, and Feb. 1, 2.

e Estimated

MERRIMACK RIVER BASIN

01081000 WINNIPESAUKEE RIVER AT TILTON, N.H.

LOCATION.--Lat 43°26'31", long 71°35'20", Belknap County, Hydrologic Unit 01070002, on right bank at Tilton and 0.3 mi upstream from Packer Brook.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--Discharge: January 1937 to current year.

Water-quality records: Water year 1953.

REVISED RECORDS.--WSP 1901: 1960.

GAGE.--Water-stage recorder. Datum of gage is 441.87 ft above sea level.

REMARKS.--Records good except for estimated daily discharges which are fair. Flow regulated by powerplants prior to 1967 and by Winnepesaukee (station 01080000), Winnisquam 4.5 mi upstream, Wentworth, Merrymeeting (Reservoirs in Merrimack River basin), and other lakes upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1330 ft³/s, Jan 22 gage height 4.80 ft; minimum daily, 74 ft³/s, Oct. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382	542	514	772	1130	766	584	492	317	270	264	230
2	379	533	398	761	1090	766	572	327	307	272	263	226
3	372	539	380	826	1010	763	558	302	305	234	282	227
4	337	537	378	975	1010	761	559	298	317	259	308	229
5	275	535	432	946	1010	760	562	297	314	264	299	229
6	269	529	684	845	1090	764	564	294	305	262	307	228
7	267	478	679	854	1010	720	556	299	301	268	302	229
8	268	382	601	857	992	670	551	298	299	284	286	234
9	265	360	578	849	991	928	550	288	299	293	279	232
10	259	353	571	840	991	853	494	285	295	283	274	230
11	139	350	579	834	990	745	379	285	295	281	269	226
12	e86	349	574	873	987	694	364	308	296	275	268	238
13	e80	348	563	973	982	648	361	332	296	270	265	237
14	e78	348	557	985	927	607	328	387	296	266	262	226
15	e78	321	554	1020	836	609	310	388	302	267	262	225
16	e76	276	554	1170	838	631	301	375	300	265	264	226
17	e74	281	555	1200	837	658	294	390	295	285	266	236
18	e76	273	562	1120	835	708	288	396	292	286	264	233
19	152	272	558	1070	834	718	288	399	288	278	263	227
20	e210	271	553	1070	834	741	290	392	286	264	262	227
21	e360	273	542	1180	834	861	294	387	281	266	260	227
22	e270	292	541	1320	812	1040	324	421	279	267	257	233
23	e260	293	542	1300	770	1140	331	442	278	264	260	244
24	e330	287	622	1250	774	1100	329	424	275	261	263	237
25	482	283	904	1220	780	1070	370	414	275	259	262	232
26	506	280	1140	1200	771	1050	435	377	271	273	262	229
27	520	292	1090	1140	766	918	543	311	258	289	263	227
28	532	322	1050	1030	768	606	556	299	266	301	262	224
29	533	408	1020	1010	---	566	560	310	265	295	261	220
30	533	557	907	1040	---	564	558	331	263	282	260	220
31	531	---	780	1130	---	576	---	330	---	272	255	---
TOTAL	8979	11164	19962	31660	25499	24001	13053	10878	8716	8455	8374	6888
MEAN	290	372	644	1021	911	774	435	351	291	273	270	230
MAX	533	557	1140	1320	1130	1140	584	492	317	301	308	244
MIN	74	271	378	761	766	564	288	285	258	234	255	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

	MEAN	429	506	714	833	924	951	1137	959	711	439	408	412
MAX	1257	1304	2209	1855	1889	2043	2745	2605	2821	1767	897	954	
(WY)	1978	1976	1984	1952	1958	1983	1953	1954	1984	1973	1986	1938	
MIN	219	235	136	145	158	418	420	217	201	179	181	182	
(WY)	1958	1972	1942	1942	1942	1989	1948	1957	1957	1957	1957	1957	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1937 - 1995	
ANNUAL TOTAL	237341		177629			
ANNUAL MEAN	650		487		697	
HIGHEST ANNUAL MEAN					1229	
LOWEST ANNUAL MEAN					304	
HIGHEST DAILY MEAN	1770	Apr 15	1320	Jan 22	4480	May 31 1984
LOWEST DAILY MEAN	e 74	Oct 17	e 74	Oct 17	48	Aug 31 1941
ANNUAL SEVEN-DAY MINIMUM	78	Oct 12	78	Oct 12	78	Oct 12 1994
INSTANTANEOUS PEAK FLOW			1330	Jan 22	4580	May 31 1984
INSTANTANEOUS PEAK STAGE			4.80	Jan 22	8.68	May 31 1984
10 PERCENT EXCEEDS	1120		990		1420	
50 PERCENT EXCEEDS	542		332		529	
90 PERCENT EXCEEDS	264		235		269	

e Estimated.

a About, from rating curve extended above 210 ft³/s.
b Could also be on May 30, 1984.
c Estimated

MERRIMACK RIVER BASIN

01089100 SOUCCOOK RIVER AT PEMBROKE ROAD NEAR CONCORD, N.H.

LOCATION.--Lat 43°12'47", long 71°28'49", Merrimack County, Hydrologic Unit 01070002, on left bank 500 ft east of U.S. Highway 106, 1.4 mi downstream from U.S. Highways 4, 202, and 9.

DRAINAGE AREA.--81.9 mi².

PERIOD OF RECORD.--Discharge: March 1988 to current year. October 1951 to September 1987, at site 0.9 mi upstream (station 01089000).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 270 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 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 25	unknown	900	8.18	Mar. 9	1400	* 1,150	* 8.93

Minimum discharge, 6.2 ft³/s, Sept. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	23	e96	e120	e115	e68	193	86	81	14	17	7.5
2	25	34	e81	e160	e110	e67	160	80	66	13	16	7.3
3	22	30	e76	e165	e100	e62	139	76	60	12	17	7.0
4	19	25	e80	e135	e90	e61	139	73	66	12	26	6.9
5	18	24	e120	e110	e82	e61	160	68	62	11	36	6.8
6	16	25	e340	e90	e88	e64	133	67	52	11	40	6.7
7	16	29	e270	e90	e80	e76	129	59	48	11	42	6.6
8	15	28	e210	e130	e82	e80	116	54	48	11	35	6.7
9	14	26	e160	e110	e80	e580	112	54	47	16	28	6.9
10	21	24	e130	e92	e82	893	121	51	42	19	23	7.1
11	17	23	e120	e80	e80	622	120	53	40	16	19	6.9
12	16	21	e145	e76	e78	385	108	110	43	19	18	6.5
13	14	20	e125	e80	e75	252	143	110	44	17	22	6.6
14	13	19	e100	e88	e72	241	168	94	42	14	19	6.7
15	13	18	e94	e140	e70	243	141	135	45	13	17	6.4
16	12	18	e86	378	e70	274	122	192	45	13	16	6.7
17	13	17	e80	374	e74	296	109	157	40	15	15	8.8
18	13	16	e80	287	e70	392	99	150	35	23	15	11
19	12	16	e90	226	e70	359	96	130	32	21	13	11
20	19	16	e80	199	e72	303	104	116	29	17	15	9.0
21	32	16	e78	313	e74	285	102	100	26	15	12	8.2
22	31	27	e73	352	e72	408	158	101	23	15	12	8.9
23	28	40	e70	317	e69	346	167	95	20	14	12	13
24	25	35	e135	264	e67	278	139	88	19	13	10	12
25	22	31	e680	e210	e87	235	122	80	18	12	9.2	11
26	19	30	e600	e180	e82	206	106	73	19	17	8.6	11
27	23	e29	e360	e155	e68	190	94	84	18	34	8.7	11
28	26	37	e280	e135	e64	177	91	65	16	28	8.5	10
29	23	90	e240	e115	---	158	93	62	15	33	8.3	8.2
30	21	e130	e170	e105	---	145	89	122	14	26	8.0	7.6
31	23	---	e140	e100	---	187	---	111	---	20	7.7	---
TOTAL	612	917	5389	5376	2223	7994	3773	2896	1155	525	554.0	250.0
MEAN	19.7	30.6	174	173	79.4	258	126	93.4	38.5	16.9	17.9	8.33
MAX	32	130	680	378	115	893	193	192	81	34	42	13
MIN	12	16	70	76	64	61	89	51	14	11	7.7	6.4
CFSM	.24	.37	2.12	2.12	.97	3.15	1.54	1.14	.47	.21	.22	.10
IN.	.28	.42	2.45	2.44	1.01	3.63	1.71	1.32	.52	.24	.25	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1995, BY WATER YEAR (WY)

	MEAN	83.7	136	139	97.7	86.3	191	256	157	68.8	31.8	42.8	37.0
MAX	168	214	226	173	182	278	429	309	154	66.7	95.4	91.3	
(WY)	1992	1992	1991	1995	1990	1990	1993	1989	1989	1988	1990	1991	
MIN	19.7	30.6	56.9	35.8	34.6	134	126	74.1	31.1	11.6	17.9	8.33	
(WY)	1995	1995	1990	1989	1993	1992	1995	1993	1991	1993	1995	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1988 - 1995

ANNUAL TOTAL	33171.5	31664.0	110
ANNUAL MEAN	90.9	86.8	130
HIGHEST ANNUAL MEAN			86.8
LOWEST ANNUAL MEAN			1310
HIGHEST DAILY MEAN	680	893	Mar 31 1993
LOWEST DAILY MEAN	8.7	6.4	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	10	6.7	Sep 10 1995
INSTANTANEOUS PEAK FLOW		1150	Mar 9
INSTANTANEOUS PEAK STAGE		8.93	Mar 9
INSTANTANEOUS LOW FLOW		b 6.2	Sep 15
ANNUAL RUNOFF (CFSM)	1.11	1.06	a 14.50
ANNUAL RUNOFF (INCHES)	15.07	14.38	a 1.5
10 PERCENT EXCEEDS	223	195	1.35
50 PERCENT EXCEEDS	51	61	18.31
90 PERCENT EXCEEDS	13	11	247
			70
			17

a At site located 0.9 mi upstream (station 01089000)

b Also occurred on Sept. 16.

c Estimated

01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, N.H.

LOCATION.--Lat 42°56'54", long 71°27'52", Hillsborough County, Hydrologic Unit 01070002, on right bank 600 ft upstream from bridge on Interstate Highway 193, 0.8 mi downstream from Bowman Brook, 1.3 mi north of Goffs Falls, and 2.3 mi downstream from Piscataquog River.

DRAINAGE AREA.--3,092 mi².

PERIOD OF RECORD.--Discharge: October 1936 to current year. October 1936 monthly discharge only, published in WSP 1301. Water-quality records: Water years 1952-53, 1957, 1971.

REVISED RECORDS.--WSP 1231: 1937. WSP 1271: 1937(M, m).

GAGE.--Water-stage recorder. Datum of gage is 109.27 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by powerplants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs upstream (Reservoirs in Merrimack River basin).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1722, 150,000 ft³/s, Mar. 20, 1936, gage height, 35.19 ft, from floodmarks, from rating curve extended above 48,000 ft³/s on basis of computation of flow over dam at gage heights 25.87 ft and 35.19 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,400 ft³/s, Dec. 26, gage height, 8.68 ft; minimum daily, 250 ft³/s, Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4090	1700	3990	6410	5720	3430	6130	4790	4640	909	1670	800
2	3660	2070	3260	7020	5220	3110	6090	4460	3620	937	1620	581
3	3140	2150	3590	7100	4840	3140	5530	3850	3050	1010	1400	250
4	2330	2950	2720	6380	4050	2960	4370	3470	2760	948	2180	445
5	2150	2310	3340	5100	3150	2950	5180	3430	3410	888	2260	608
6	2010	2210	5680	4430	4220	3000	4740	3050	3210	874	3060	672
7	1850	2430	10200	5510	3950	3180	4380	3420	2510	675	4820	649
8	1760	2090	9280	6240	3820	3300	4520	2990	2470	946	5140	711
9	1380	2280	7740	6060	4060	8670	3890	2310	2240	936	3100	713
10	1680	2130	5980	5070	3900	12000	4370	2340	1920	959	2260	667
11	1950	1890	5250	3750	4010	11500	3960	2110	2230	1040	1350	645
12	1760	1670	4900	3590	4110	9850	4260	3510	2020	991	1410	651
13	1390	1660	4190	3850	3230	8280	3290	4070	1920	898	1520	650
14	1110	1910	3740	4750	3360	7010	4800	4310	2260	977	1670	670
15	1190	1830	3900	5070	2880	7290	4910	4580	2070	941	1790	668
16	1130	1680	4190	8040	3400	7650	4450	5570	2260	736	1240	630
17	1120	1760	3300	13500	2920	8780	4150	7290	2030	1180	1260	721
18	1120	1370	3950	16500	3280	11100	3720	7320	2020	1280	951	854
19	1140	1390	3130	14600	3290	11700	3800	6380	1830	2000	854	1050
20	1430	1430	3660	11400	3380	11700	3840	5960	1450	1330	1020	629
21	1900	1450	2880	11600	3310	11200	4290	5400	1250	1110	894	650
22	2080	1780	2680	15900	3060	12400	4620	4560	1550	1010	1080	1350
23	2090	2010	3100	16600	3280	15300	5950	4090	1230	1090	854	910
24	2110	2550	5840	14800	3340	13800	6360	4420	886	1370	818	1450
25	1870	1690	15700	11900	4010	11500	5260	3600	914	1040	902	1200
26	1940	1860	19900	9840	3670	9560	4450	3340	1180	991	906	987
27	1910	1650	16800	8130	2910	8570	4340	3330	1190	1370	866	957
28	1900	1900	13600	5220	2170	7270	3980	2980	937	2080	797	683
29	2130	3130	11700	5200	---	6440	4290	2650	775	2040	806	613
30	1920	3680	7730	5220	---	6240	4440	3260	788	2800	802	683
31	1800	---	6470	4950	---	6200	---	5180	---	2350	799	---
TOTAL	59040	60610	202390	253730	102540	249080	138360	128020	60620	37706	50099	22747
MEAN	1905	2020	6529	8185	3662	8035	4612	4130	2021	1216	1616	758
MAX	4090	3680	19900	16600	5720	15300	6360	7320	4640	2800	5140	1450
MIN	1110	1370	2680	3590	2170	2950	3290	2110	775	675	797	250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

	MEAN	2918	4546	5234	4401	4642	7861	13930	8649	4410	2346	1985	2091
MAX	10380	10210	13690	10840	11370	18240	25660	18250	16480	11470	8576	14500	
(WY)	1978	1952	1984	1978	1970	1953	1969	1954	1984	1973	1990	1938	
MIN	771	1341	1458	1410	1354	2141	4612	3059	1354	808	782	745	
(WY)	1965	1979	1979	1948	1980	1940	1995	1957	1964	1991	1965	1957	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1937 - 1995

ANNUAL TOTAL	1839171	1364942		
ANNUAL MEAN	5039	3740	5220	
HIGHEST ANNUAL MEAN			8400	1984
LOWEST ANNUAL MEAN			2248	1965
HIGHEST DAILY MEAN	26900	Apr 17	19900	Dec 26
LOWEST DAILY MEAN	843	Aug 17	250	Sep 3
ANNUAL SEVEN-DAY MINIMUM	1030	Sep 1	559	Sep 2
INSTANTANEOUS PEAK FLOW			20400	Dec 26
INSTANTANEOUS PEAK STAGE			8.68	Dec 26
10 PERCENT EXCEEDS	12900		7730	12000
50 PERCENT EXCEEDS	3080		2980	3360
90 PERCENT EXCEEDS	1210		881	1200

a From rating curve extended above 48,000 ft³/s as explained above.

MERRIMACK RIVER BASIN

01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, N.H.

LOCATION---Lat 42°51'36", long 71°50'00", Hillsborough County, Hydrologic Unit 01070002, on left bank 150 ft downstream from highway bridge, 2.9 mi north of Temple, and 5.5 mi upstream from mouth.

DRAINAGE AREA---3.60 mi².

PERIOD OF RECORD---May 1963 to current year.

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 fair.

EXTREMES FOR PERIOD OF RECORD---Maximum discharge, 508 ft³/s, Apr. 5, 1987, gage height, 5.32 ft, from rating curve extended above 230 ft³/s; maximum gage height, 7.81 ft, Feb. 3, 1970, Dec. 21, 1973 (ice jams); no flow for part of Sept. 26, 1976.

EXTREMES FOR CURRENT YEAR---Peak discharges greater than base discharge of 110 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 24	1430	* 386	* 4.95	No other peak greater than base discharge.			

Minimum discharge, .01 ft³/s, Sept. 6, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.9	6.8	14	e5.6	5.1	6.0	4.3	2.4	.51	.15	.14
2	2.3	3.5	5.8	13	e6.0	3.6	5.5	4.0	2.2	.54	.32	.09
3	1.9	3.2	5.0	e11	e5.2	3.3	5.1	3.9	2.5	.47	.85	.09
4	1.4	2.9	5.2	8.8	e5.0	3.4	6.2	3.6	17	.44	1.5	.10
5	1.3	2.4	23	e7.2	e4.2	3.4	5.8	3.6	7.1	.42	1.1	.08
6	1.2	2.4	23	e6.0	e4.5	4.1	5.7	3.4	4.4	.40	3.0	.05
7	1.2	3.2	13	e11	e4.2	4.2	5.0	3.2	4.7	.36	1.6	.05
8	1.1	3.2	10	e12	e4.0	25	4.7	3.1	4.7	.44	.82	.18
9	1.1	2.9	8.0	e8.7	e4.0	50	5.0	3.0	3.5	.48	.56	.30
10	1.7	2.7	6.8	e7.2	e4.0	36	5.6	3.0	3.0	.38	.44	.26
11	1.8	2.3	12	e6.4	e4.2	15	4.8	5.5	2.9	.40	.36	.18
12	1.4	2.3	e10	e5.7	e3.7	9.1	4.8	8.3	3.0	.44	.34	.14
13	1.2	2.3	e7.2	e8.8	e3.3	10	13	5.8	3.0	.37	.31	.14
14	1.2	2.1	e6.4	e11	e3.2	12	9.0	4.9	2.7	.30	.27	.19
15	1.2	2.0	e5.9	e14	e3.0	14	6.9	11	2.9	.38	.28	.11
16	1.2	2.0	e5.7	15	e4.5	16	5.9	11	2.5	.40	.26	.10
17	1.1	2.0	5.8	15	e4.2	15	5.4	8.0	2.0	.93	.21	.77
18	1.0	2.0	6.0	12	4.0	14	5.0	7.9	1.7	.95	.16	.57
19	1.1	2.0	5.9	11	4.1	12	7.4	6.5	1.2	.63	.15	.30
20	1.7	2.0	5.2	17	4.0	11	7.4	5.8	1.1	.46	.11	.27
21	4.2	2.2	5.0	27	4.0	12	6.9	5.3	1.0	.42	.09	.24
22	3.1	7.2	5.1	21	3.9	13	8.1	5.2	.93	.43	.06	.57
23	2.6	4.7	5.6	16	3.9	11	6.5	4.4	.85	.41	.08	1.1
24	2.6	3.5	153	13	e9.3	9.0	5.7	4.0	.75	.38	.09	.37
25	2.3	3.2	57	11	e7.4	7.8	5.2	4.5	.87	.45	.09	.26
26	2.3	2.7	25	e9.8	e5.8	7.2	4.8	4.0	1.0	.62	.11	.43
27	2.1	2.4	17	9.0	e4.3	6.7	4.6	3.5	.92	.76	.22	.33
28	1.8	13	14	e7.4	e4.9	6.3	4.9	3.2	.72	.47	.23	.22
29	1.8	17	e13	e6.6	---	5.9	4.7	4.0	.61	.50	.15	.17
30	1.8	9.9	e10	e6.3	---	6.1	4.6	3.6	.54	.32	.14	.14
31	1.8	---	e9.2	e6.0	---	6.7	---	2.9	---	.22	.13	---
TOTAL	55.4	116.1	490.6	347.9	128.4	357.9	180.2	154.4	82.69	14.68	14.18	7.94
MEAN	1.79	3.87	15.8	11.2	4.59	11.5	6.01	4.98	2.76	.47	.46	.26
MAX	4.2	17	153	27	9.3	50	13	11	17	.95	3.0	1.1
MIN	1.0	2.0	5.0	5.7	3.0	3.3	4.6	2.9	.54	.22	.06	.05
CFSM	.50	1.07	4.40	3.12	1.27	3.21	1.67	1.38	.77	.13	.13	.07
IN.	.57	1.20	5.07	3.59	1.33	3.70	1.86	1.60	.85	.15	.15	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

MEAN	3.75	7.26	8.27	5.91	6.69	13.9	19.1	9.30	4.84	1.83	1.55	1.56
MAX	13.4	17.5	19.0	16.4	19.0	30.9	38.9	28.6	17.1	7.26	6.51	8.50
(WY)	1980	1984	1974	1978	1970	1983	1987	1984	1968	1968	1986	1975
MIN	.34	.65	1.34	1.09	1.59	3.65	4.10	2.64	.66	.28	.18	.11
(WY)	1965	1979	1979	1977	1977	1989	1985	1985	1964	1966	1966	1964

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1963 - 1995

	1994	1995	1963-1995
ANNUAL TOTAL	2534.70	1950.39	
ANNUAL MEAN	6.94	5.34	7.02
HIGHEST ANNUAL MEAN			10.9
LOWEST ANNUAL MEAN			2.58
HIGHEST DAILY MEAN	153	153	306
LOWEST DAILY MEAN	.28	.05	.05
ANNUAL SEVEN-DAY MINIMUM	.35	.09	.07
INSTANTANEOUS PEAK FLOW		386	a 508
INSTANTANEOUS PEAK STAGE		4.95	b 7.81
INSTANTANEOUS LOW FLOW		c .01	d .00
ANNUAL RUNOFF (CFSM)	1.93	1.48	1.95
ANNUAL RUNOFF (INCHES)	26.19	20.15	26.49
10 PERCENT EXCEEDS	17	12	17
50 PERCENT EXCEEDS	3.4	3.5	3.4
90 PERCENT EXCEEDS	.63	.26	.45

a From rating curve extended above 250 ft³/s.

b Ice jam, also occurred on Dec. 21, 1973.

c Also on Sept. 7.

d No flow for part of Sept. 26, 1976.

e Estimated

0109650657 LYLE REED BROOK AT NASHUA, N.H.

LOCATION.--Lat 42°43'25", long 71°31'54", Hillsborough County, Hydrologic Unit 01070004, on left bank upstream from dam approximately 1,000 ft from the Nashua River on State Highway 111 west.

DRAINAGE AREA.--2.14 mi², revised.

PERIOD OF RECORD.--October 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 170 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharge which are poor. Flow is affected by treatment plant upstream.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 24	1900	21	2.21	Jan. 20	2345	11	1.81
Mar. 09	0500	* 24	2.27	Aug. 10	1645	Beaver Dam	* 2.57

Minimum daily discharge, 0.37 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.6	2.2	5.5	3.2	3.0	3.1	2.1	1.4	.83	e1.0	e.54
2	1.9	1.8	2.0	6.8	3.3	2.8	2.9	2.0	1.8	.82	e1.1	e.49
3	1.8	1.4	2.2	5.6	3.0	2.7	2.8	2.0	1.4	.78	e1.3	e.47
4	1.7	1.3	1.9	4.4	2.8	2.6	2.9	1.9	3.3	.74	e1.6	e.48
5	1.6	1.2	4.5	3.5	3.0	2.6	2.9	1.8	2.3	.73	e1.3	e.45
6	1.5	1.2	6.6	3.1	2.8	3.5	2.7	1.9	1.7	.73	e1.9	e.40
7	1.4	1.2	4.1	6.2	2.7	3.2	2.6	1.8	1.7	.71	e1.5	e.37
8	1.4	1.2	3.5	5.1	2.6	6.6	2.5	1.8	2.0	.76	e1.1	e.52
9	1.4	1.1	3.0	3.9	2.6	16	2.6	1.8	1.5	.78	e1.0	e.56
10	1.3	1.1	2.8	3.3	2.7	7.2	2.7	1.9	1.3	.73	e.92	e.54
11	1.3	1.0	5.1	2.9	2.7	5.1	2.5	2.2	1.3	.73	e.82	e.52
12	1.3	1.0	4.3	2.8	2.6	4.5	2.4	2.9	1.3	.73	e.86	e.50
13	1.2	1.0	3.1	3.0	2.4	4.7	4.2	2.2	1.4	.71	e.82	e.48
14	1.2	1.0	2.8	3.7	2.3	5.0	3.4	2.0	1.3	.69	e.78	e.52
15	1.2	1.0	2.6	6.1	2.2	4.9	2.7	3.6	1.3	.71	e.75	e.50
16	1.2	1.0	2.5	7.4	2.8	4.9	2.8	3.5	1.2	.67	e.70	e.60
17	1.1	1.0	2.4	6.2	2.8	5.0	2.5	2.7	1.1	.82	e.66	e.98
18	1.1	1.0	3.2	5.1	2.7	5.0	2.4	2.4	1.1	e1.0	e.63	e.96
19	1.1	1.1	3.0	4.5	2.7	4.5	3.2	2.4	1.0	e.93	e.60	e.76
20	1.1	1.1	2.6	6.0	2.8	4.1	3.5	2.2	1.0	e.80	e.55	e.80
21	1.5	1.0	2.4	9.7	2.7	4.5	3.0	2.0	.97	e.74	e.52	e.94
22	1.3	1.5	2.4	7.5	2.7	5.0	3.1	1.8	.95	e.70	e.48	e1.1
23	1.2	1.3	2.4	6.2	2.6	4.3	2.8	1.8	.91	e.70	e.51	e1.5
24	1.3	1.1	12	5.4	4.4	3.9	2.5	1.5	.88	e.72	e.53	e1.1
25	1.3	1.1	12	4.9	3.9	3.9	2.3	2.5	1.0	e.75	e.50	e.95
26	1.2	1.1	7.0	4.5	3.0	3.5	2.2	2.1	1.1	e.84	e.54	e1.1
27	1.1	1.0	5.5	4.0	2.5	3.3	2.1	1.8	.99	e1.5	e.63	e1.0
28	1.3	3.0	5.0	3.4	2.8	3.2	2.1	1.6	.94	e1.2	e.63	e.98
29	1.1	3.7	4.5	3.1	---	3.0	2.1	1.8	.89	e1.1	e.58	e.94
30	1.1	2.7	3.6	3.1	---	3.1	2.1	1.9	.86	e.90	e.56	e.88
31	1.1	---	3.2	3.1	---	3.3	---	1.6	---	e.80	e.53	---
TOTAL	41.4	40.8	124.4	150.0	79.3	138.9	81.6	65.5	39.89	25.35	25.90	21.93
MEAN	1.34	1.36	4.01	4.84	2.83	4.48	2.72	2.11	1.33	.82	.84	.73
MAX	2.1	3.7	12	9.7	4.4	16	4.2	3.6	3.3	1.5	1.9	1.5
MIN	1.1	1.0	1.9	2.8	2.2	2.6	2.1	1.5	.86	.67	.48	.37
CFSM	.27	.27	.80	.97	.57	.89	.54	.42	.27	.16	.17	.15
IN.	.31	.30	.92	1.11	.59	1.03	.61	.49	.30	.19	.19	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	1.14	1.83	3.42	3.44	2.39	5.37	6.57	3.44	1.58	.93	.94	1.03	
MAX	1.34	2.08	4.01	4.84	2.83	7.28	9.79	5.19	1.90	1.22	1.36	1.62	
(WY)	1995	1994	1995	1995	1995	1994	1993	1994	1994	1994	1994	1994	
MIN	1.02	1.36	2.33	2.58	1.92	4.34	2.72	2.11	1.33	.74	.61	.73	
(WY)	1993	1995	1993	1994	1993	1993	1995	1995	1995	1993	1993	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	1142.71	834.97	
ANNUAL MEAN	3.13	2.29	
HIGHEST ANNUAL MEAN			2.67
LOWEST ANNUAL MEAN			3.16
HIGHEST DAILY MEAN	14	16	22
LOWEST DAILY MEAN	.81 Aug 16	e .37 Sep 7	e .37 Mar 30 1993
ANNUAL SEVEN-DAY MINIMUM	.83 Aug 11	.45 Sep 2	.45 Sep 2 1995
INSTANTANEOUS PEAK FLOW		24 Mar 9	25 Mar 29 1993
INSTANTANEOUS PEAK STAGE		c 2.57 Aug 10	c 2.57 Aug 10 1995
INSTANTANEOUS LOW FLOW		a	b .46 Aug 31 1993
ANNUAL RUNOFF (CFSM)	1.46	1.07	1.25
ANNUAL RUNOFF (INCHES)	19.86	14.51	16.97
10 PERCENT EXCEEDS	7.0	4.5	5.5
50 PERCENT EXCEEDS	2.2	1.8	1.9
90 PERCENT EXCEEDS	1.0	.71	.71

a Minimum not determined.

b Minimum recorded. May have been less during period of backwater from beaver dam July 18 to Sept.30.

c Backwater from Beaver Dam.

e Estimated

010965852 BEAVER BROOK AT NORTH PELHAM, N.H.

LOCATION.--Lat 42°46'59", long 71°21'14", Rockingham County, Hydrologic Unit 01070002, on right bank 10 ft downstream from highway bridge at the Windham-Pelham town line.

DRAINAGE AREA.--47.8 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 170 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 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 25	1345	*636	*9.43	Mar. 09	1945	499	8.89

Minimum discharge, 0.84 ft³/s, Sept. 6, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	10	e56	e120	67	82	85	44	30	5.0	9.2	1.7
2	32	15	e44	182	67	71	75	42	25	5.3	8.2	1.5
3	24	16	e37	e170	e66	68	67	43	28	7.3	7.9	1.3
4	19	13	e36	e150	83	e65	66	41	41	6.6	13	1.2
5	16	12	e78	e120	80	62	71	38	35	5.3	11	1.3
6	15	11	e130	e100	e74	82	62	38	28	4.7	14	1.3
7	14	11	e100	e140	e71	88	60	34	25	4.3	17	1.2
8	20	12	70	e130	e70	114	59	33	24	4.3	12	1.3
9	26	13	55	e120	e67	396	56	31	22	4.1	9.5	1.4
10	24	18	54	e100	65	389	63	29	19	3.9	7.8	1.2
11	19	19	91	e90	64	283	58	31	17	3.8	6.6	1.2
12	15	19	104	e80	61	193	55	49	17	3.2	5.9	1.3
13	19	18	e90	e80	56	150	82	50	18	3.1	5.1	1.3
14	22	17	69	89	53	138	89	46	18	5.6	4.5	1.5
15	24	16	e60	137	50	128	77	64	17	2.7	4.0	2.8
16	24	15	e56	196	58	123	68	83	16	2.1	3.6	7.6
17	21	14	52	e196	63	127	61	68	14	2.6	3.2	9.6
18	19	13	66	e178	61	156	56	66	13	3.3	3.0	13
19	18	e12	71	154	60	157	64	59	12	4.1	2.7	7.5
20	18	e11	62	150	62	142	82	63	10	4.2	2.3	6.6
21	18	e11	57	236	61	134	74	e59	9.2	4.0	2.0	10
22	18	e17	55	258	61	145	83	e44	8.6	3.1	2.0	12
23	16	e15	51	244	59	132	74	e38	7.4	3.0	1.9	21
24	16	e13	180	203	89	117	64	e34	6.9	3.0	1.9	15
25	15	e13	579	162	e100	107	63	e48	6.6	3.1	2.0	11
26	14	e12	520	e120	e96	99	60	e54	6.8	3.8	2.0	11
27	13	e12	348	e100	e98	90	58	e46	6.6	70	2.4	10
28	11	e40	243	e88	e90	79	54	e40	6.3	35	2.3	8.4
29	10	e88	184	e78	---	71	49	e40	5.8	25	2.1	7.3
30	10	e74	e120	e71	---	69	46	e43	5.3	16	2.1	6.4
31	9.7	---	e105	e68	---	89	---	35	---	12	1.7	---
TOTAL	575.7	580	3823	4310	1952	4146	1981	1433	498.5	263.5	172.9	177.9
MEAN	18.6	19.3	123	139	69.7	134	66.0	46.2	16.6	8.50	5.58	5.93
MAX	36	88	579	258	100	396	89	83	41	70	17	21
MIN	9.7	10	36	68	50	62	46	29	5.3	2.1	1.7	1.2
CFSM	.39	.40	2.58	2.91	1.46	2.80	1.38	.97	.35	.18	.12	.12
IN.	.45	.45	2.98	3.35	1.52	3.23	1.54	1.12	.39	.21	.13	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	MEAN	43.2	79.4	105	73.1	75.7	143	168	91.9	39.5	18.9	28.5	26.2
MAX	102	142	228	139	126	281	406	145	81.9	48.4	80.1	86.5	
(WY)	1991	1992	1987	1995	1990	1994	1987	1989	1989	1988	1991	1991	
MIN	11.9	19.3	27.8	27.5	41.4	56.5	66.0	46.2	16.6	3.53	2.24	5.47	
(WY)	1994	1995	1990	1989	1987	1989	1995	1995	1995	1993	1993	1993	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1987 - 1995

ANNUAL TOTAL	27454.4	19913.5	
ANNUAL MEAN	75.2	54.6	74.4
HIGHEST ANNUAL MEAN			94.0
LOWEST ANNUAL MEAN			54.6
HIGHEST DAILY MEAN	720	Mar 24	1500
LOWEST DAILY MEAN	5.0	Aug 17	1.2
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 11	1.3
INSTANTANEOUS PEAK FLOW			1850
INSTANTANEOUS PEAK STAGE			12.88
INSTANTANEOUS LOW FLOW			b .84
ANNUAL RUNOFF (CFSM)	1.57	1.14	1.56
ANNUAL RUNOFF (INCHES)	21.37	15.50	21.14
10 PERCENT EXCEEDS	183	127	156
50 PERCENT EXCEEDS	52	35	51
90 PERCENT EXCEEDS	7.0	3.1	7.9

a Also occurred on Sept. 4, 7, 10, 11

b Also occurred on Sep. 10, 1995.

e Estimated.

RESERVOIRS IN MERRIMACK RIVER BASIN

- 01077500 **NEWFOUND LAKE** on Newfound River, 1.7 mi north of Bristol, N.H., used for recreation and for storage of water for power, has usable capacity of 1.69 billion ft³. Records provided by New Hampshire Water Resources Board.
- 01078500 **FRANKLIN FALLS RESERVOIR** on Pemigewasset River, 2 mi north of Franklin, N.H., completed in 1942, used for flood control, has usable capacity of 6.7 billion ft³. Records provided by U.S. Army Corps of Engineers.
- 01080000 **LAKE WINNIPESAUKEE** on Winnepesaukee River (see station 01080000).
- 01082500 **EDWARD MACDOWELL RESERVOIR** on Nubanusit Brook, at West Peterborough, N.H., 2 mi northwest of Peterborough, completed in 1950, used for flood control, has usable capacity of 558 million ft³. Records provided by U.S. Army Corps of Engineers.
- 01086500 **BLACKWATER RESERVOIR** on Blackwater River, at Swett's Mills, 1 mi south of Webster, N.H., completed in 1941, used for flood control, has usable capacity of 2.004 billion ft³. Records provided by U.S. Army Corps of Engineers.
- 01090700 **EVERETT LAKE** on Piscataquog River, 1.3 mi southeast of East Weare, N.H., completed in 1962, used for flood control and recreation, has usable capacity of 3.768 billion ft³. Records provided by U.S. Army Corps of Engineers.
- Hopkinton and Everett Lakes, connected by a canal, are operated as a unit above elevation 400.00 ft. Diversion from Hopkinton Lake to Everett Lake in March 1968, April 1969, March 1977, March 1979, May and June 1984, and April 1987.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	Newfound Lake	Franklin Falls Reservoir	Edward MacDowell Reservoir
Sept. 30, 1994.....	1344	91.5	12.2
Oct. 31.....	1059	117.6	7.3
Nov. 30.....	980	122.0	13.0
Dec. 31.....	1150	122.0	17.5
Jan. 31, 1995.....	1044	124.1	20.8
Feb. 28.....	938	117.6	21.6
Mar. 31.....	1150	137.2	17.5
Apr. 30.....	1295	133.0	9.4
May 31.....	1501	137.2	10.1
June 30.....	1413	111.1	5.5
July 31.....	1342	115.4	7.3
Aug. 31.....	1233	100.2	4.3
Sept. 30.....	1154	113.3	5.5

	Blackwater Reservoir	Everett Lake
Sept. 30, 1994.....	1.8	49.2
Oct. 31.....	0.3	48.1
Nov. 30.....	2.7	50.4
Dec. 31.....	2.9	61.7
Jan. 31, 1995.....	2.0	50.4
Feb. 28.....	0.8	50.4
Mar. 31.....	2.9	50.9
Apr. 30.....	2.0	45.8
May 31.....	1.5	49.2
June 30.....	1.2	45.8
July 31.....	2.1	58.8
Aug. 31.....	0.02	45.8
Sept. 30.....	0.05	45.3

CONNECTICUT RIVER BASIN

01129200 CONNECTICUT RIVER BELOW INDIAN STREAM, NEAR PITTSBURG, N.H.

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: 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.--Record 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 (Reservoirs in Connecticut River basin).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft³/s, Nov. 29, 1959, gage height, 7.07 ft, from rating curve extended above 2,600 ft³/s; minimum, daily 30 ft³/s, Aug. 6, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft³/s, June 4, 1995, gage height 5.01 ft; minimum daily discharge, 117 ft³/s, June 26, 1995.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	681	344	200	508	761	748	255	238	288	172	187	174
2	631	477	250	512	756	716	211	221	239	174	182	172
3	611	534	293	572	754	741	189	212	766	166	184	171
4	609	433	312	628	743	741	192	215	1360	163	186	169
5	602	393	464	622	738	741	157	188	448	163	191	168
6	445	424	1160	618	734	741	236	168	317	158	291	165
7	350	455	795	616	734	741	150	164	252	157	281	166
8	426	418	438	615	728	771	140	149	212	170	219	167
9	422	340	366	610	725	803	147	141	188	182	200	172
10	445	278	347	607	721	826	136	136	160	188	188	171
11	453	246	314	602	721	831	135	130	159	209	185	169
12	437	225	313	599	721	817	150	130	294	209	210	172
13	344	214	355	611	718	810	229	132	290	207	361	172
14	297	200	421	640	715	833	353	134	198	205	264	171
15	293	194	493	1050	712	908	271	172	163	207	251	172
16	289	189	469	1690	742	1010	221	465	145	212	248	172
17	286	181	469	1230	774	1060	193	334	132	309	216	448
18	283	172	473	621	774	964	200	679	124	431	201	424
19	282	175	468	388	769	778	268	390	118	375	190	159
20	284	176	452	311	768	749	373	284	123	272	186	158
21	312	138	461	423	768	975	358	244	134	223	181	157
22	362	169	457	366	768	1370	533	259	129	212	181	210
23	329	182	450	285	766	858	460	220	126	206	174	420
24	321	153	451	228	761	821	307	209	124	212	175	360
25	314	157	451	202	761	819	257	247	119	204	177	329
26	221	159	446	282	761	779	236	211	117	203	178	320
27	155	142	440	450	756	743	229	263	140	262	175	315
28	151	153	437	518	749	451	239	262	162	216	174	312
29	149	205	431	517	---	236	319	282	162	211	e172	315
30	146	228	475	646	---	258	267	506	161	203	e170	310
31	144	---	506	761	---	255	---	423	---	194	e175	---
TOTAL	11074	7754	13857	18328	20898	23894	7411	7808	7350	6675	6353	6960
MEAN	357	258	447	591	746	771	247	252	245	215	205	232
MAX	681	534	1160	1690	774	1370	533	679	1360	431	361	448
MIN	144	138	200	202	712	236	135	130	117	157	170	157

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1995, BY WATER YEAR (WY)

	MEAN	562	563	743	787	776	554	605	478	376	385	434	456
MAX	1342	1056	1485	1175	1325	1088	1030	1691	863	783	1043	1095	
(WY)	1978	1978	1960	1960	1974	1979	1974	1974	1974	1984	1974	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1957 - 1995

ANNUAL TOTAL	189094	138362	
ANNUAL MEAN	518	379	559
HIGHEST ANNUAL MEAN			789
LOWEST ANNUAL MEAN			379
HIGHEST DAILY MEAN	2150	Apr 17	3660
LOWEST DAILY MEAN	123	Mar 22	30
ANNUAL SEVEN-DAY MINIMUM	134	Mar 28	33
INSTANTANEOUS PEAK FLOW			a 4080
INSTANTANEOUS PEAK STAGE			7.07
10 PERCENT EXCEEDS	783	5.01	1020
50 PERCENT EXCEEDS	469		514
90 PERCENT EXCEEDS	203		146

a From rating curve extended above 2,600 ft³/s.

e Estimated

01129440 MOHAWK RIVER NEAR COLEBROOK, N.H.

LOCATION.--Lat 44°52'28", Long 71°24'38", Coos County, Hydrologic Unit 01080101, on right bank of the intersection of State Highway 26 and Bungy Road, 5 mi east of Colebrook.

DRAINAGE AREA.--36.7 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 1,220 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. 16	2315	* 940	6.66	Feb. 4	Unkown	Ice jam	* 7.56
Jan. 21	0245	579	6.15	Mar. 21	2315	731	6.40

Minimum discharge, 5.2 ft³/s, Sept. 4-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	66	e30	e29	e52	e24	70	99	66	12	9.0	6.5
2	28	46	25	e35	e47	e21	61	80	52	13	8.2	6.3
3	26	40	23	e29	e35	e18	57	72	79	10	8.4	5.8
4	28	32	e26	e27	e31	e20	57	64	75	9.2	16	5.5
5	29	32	e60	e23	e28	e20	43	60	51	8.7	20	5.3
6	26	38	184	e20	e31	e20	59	63	51	8.3	106	5.5
7	27	53	115	e24	e27	e21	47	55	42	8.0	25	5.6
8	24	40	66	e26	e28	e41	41	50	37	8.6	16	8.2
9	23	36	e35	e21	e28	e270	45	47	29	9.9	14	8.3
10	43	32	e45	e19	e31	e100	45	42	26	8.8	13	9.0
11	32	28	e31	e18	e29	e88	46	41	26	16	14	7.8
12	26	27	e26	e22	e27	e50	49	48	44	14	27	6.4
13	24	24	e27	e29	e26	50	121	50	38	9.1	28	6.0
14	23	23	e45	e47	e25	79	84	42	29	7.9	18	19
15	22	23	e30	e115	e27	125	61	113	28	9.0	34	14
16	22	23	e30	e260	e24	148	53	144	25	7.9	23	9.0
17	22	23	e33	403	e25	151	56	93	23	66	16	7.7
18	23	24	e27	147	e23	135	66	121	22	29	14	7.9
19	23	26	e28	102	e24	108	80	73	21	16	12	7.2
20	23	23	e32	105	e23	105	93	59	20	12	11	6.6
21	40	22	e26	314	e24	232	100	52	18	10	10	6.4
22	33	29	e26	127	e25	378	154	49	18	8.9	8.0	22
23	28	24	e25	95	e23	164	103	44	17	9.6	7.5	54
24	27	26	e35	77	e22	115	74	50	16	47	7.5	15
25	24	29	50	69	e21	95	67	55	16	15	7.8	11
26	23	21	36	e52	e24	82	67	53	15	41	7.8	10
27	22	30	31	e46	e20	78	65	59	13	31	6.9	15
28	22	45	e25	e41	e23	80	88	47	12	17	6.4	19
29	22	e66	e22	e42	---	87	105	93	10	18	5.9	13
30	21	e40	e18	e50	---	84	169	212	9.9	14	5.7	11
31	20	---	e22	e60	---	76	---	97	---	10	5.8	---
TOTAL	813	991	1234	2474	773	3065	2226	2227	928.9	504.9	511.9	334.0
MEAN	26.2	33.0	39.8	79.8	27.6	98.9	74.2	71.8	31.0	16.3	16.5	11.1
MAX	43	66	184	403	52	378	169	212	79	66	106	54
MIN	20	21	18	18	20	18	41	41	9.9	7.9	5.7	5.3
CFSM	.71	.90	1.08	2.17	.75	2.69	2.02	1.96	.84	.44	.45	.30
IN.	.82	1.00	1.25	2.51	.78	3.11	2.26	2.26	.94	.51	.52	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	60.0	71.7	55.2	41.6	25.5	85.2	197	89.5	50.1
MAX	122	110	127	79.8	45.3	156	296	177	73.1
(WY)	1991	1989	1991	1995	1990	1990	1994	1989	1990
MIN	26.2	33.0	25.9	25.8	13.4	23.0	74.2	66.7	26.7
(WY)	1995	1995	1990	1994	1993	1994	1995	1988	1992

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1987 - 1995

ANNUAL TOTAL	23801	16082.7	
ANNUAL MEAN	65.2	44.1	
HIGHEST ANNUAL MEAN			81.2 1991
LOWEST ANNUAL MEAN			44.1 1995
HIGHEST DAILY MEAN	1460	Apr 16	403 Jan 17
LOWEST DAILY MEAN	15	Aug 30	5.3 Sep 5
ANNUAL SEVEN-DAY MINIMUM	17	Aug 29	5.8 Sep 1
INSTANTANEOUS PEAK FLOW			a 940 Jan 16
INSTANTANEOUS PEAK STAGE			bc 7.56 Feb 4
INSTANTANEOUS LOW FLOW			d 5.2 Sep 4
ANNUAL RUNOFF (CFSM)	1.78		1.20
ANNUAL RUNOFF (INCHES)	24.13		16.30
10 PERCENT EXCEEDS	151		95
50 PERCENT EXCEEDS	30		28
90 PERCENT EXCEEDS	20		8.9

a From rating curve extended above 600 ft³/s.

b About

c Ice jam

d Also occurred on Sept. 5-7.

e Estimated

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.

PERIOD OF RECORD.--Discharge: August 1930 to current year.

Water-quality records: Water year 1957, 1995.

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 (Reservoirs in Connecticut River basin) 36 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,650 ft³/s, Jan. 17, 1995, gage height 8.17 ft; maximum gage height, 8.81 ft, Feb. 6, 1995, ice jam; minimum daily discharge, 238 ft³/s, Sept. 7, 1995.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	884	854	e800	1470	e930	1310	1610	1250	300	366	259
2	1150	1800	753	e900	1410	e900	1120	1320	957	390	328	259
3	1040	1760	812	e1000	1300	e920	1020	1170	1220	341	306	249
4	1010	1420	859	e1020	e1150	e860	1010	1060	3450	295	392	244
5	991	1190	1530	e920	e1060	e860	828	962	1880	272	883	239
6	964	1330	4690	e870	e1040	e880	689	931	1220	260	4180	239
7	742	1550	3860	e830	e1030	e880	829	909	967	252	2340	238
8	747	1450	2260	e880	e1020	e880	752	794	804	252	1250	255
9	756	1220	1350	e860	e1000	e1300	781	724	688	282	805	275
10	844	1050	1420	e800	e990	1890	711	672	592	292	603	301
11	892	912	1210	e770	e1050	1730	711	644	540	289	481	277
12	812	814	871	e800	e1000	1590	766	656	736	323	527	260
13	765	761	e790	e880	e970	1500	1130	668	988	307	971	255
14	640	712	e840	e1000	e950	1780	1570	662	735	292	815	291
15	601	684	e950	e1900	e920	2440	1260	870	593	288	765	399
16	584	647	e1000	e5100	e980	3280	1040	2320	514	284	889	314
17	570	607	e960	7680	e960	3920	936	1740	453	802	615	282
18	562	581	e960	4450	e950	4000	985	2950	418	1230	442	645
19	554	589	e980	2500	e950	3020	1190	2110	388	795	412	390
20	559	568	e920	1910	e940	2670	1550	1470	356	647	371	263
21	703	526	e880	2880	e960	3170	1600	1180	331	467	343	253
22	829	570	e920	2460	e980	6920	2450	1100	322	401	321	340
23	762	649	e920	1830	e980	5080	2260	985	308	363	305	1330
24	713	487	e920	1390	e950	3130	1560	907	293	800	303	899
25	670	510	1060	1200	e940	2430	1270	1110	278	537	302	641
26	631	543	1050	948	e920	2150	1140	978	267	523	292	565
27	508	434	e900	e820	e910	1890	1090	1000	252	767	285	615
28	469	541	e750	e760	e900	1750	1160	1010	263	598	274	789
29	450	988	e670	e820	--	1370	1510	1010	272	624	263	645
30	435	1060	594	1150	--	1390	1950	2310	266	618	258	557
31	424	---	e720	1410	---	1330	---	1830	---	437	253	---
TOTAL	22697	26837	37253	51538	28680	66840	36178	37662	21601	14328	20940	12568
MEAN	732	895	1202	1663	1024	2156	1206	1215	720	462	675	419
MAX	1320	1800	4690	7680	1470	6920	2450	2950	3450	1230	4180	1330
MIN	424	434	594	760	900	860	689	644	252	252	253	232

MEAN	1295	1610	1532	1321	1204	1626	3881	2538	1259	851	846	928
MAX	3445	3119	3095	2398	3295	6254	7348	6018	3724	2074	2475	3203
(WY)	1978	1960	1974	1973	1981	1936	1934	1972	1943	1973	1976	1954
MIN	355	583	643	549	350	271	1206	847	472	292	220	357
(WY)	1949	1948	1948	1948	1940	1940	1995	1977	1962	1955	1940	1949

ANNUAL TOTAL	562948		377122				
ANNUAL MEAN	1542		1033			1574	
HIGHEST ANNUAL MEAN						2246	1974
LOWEST ANNUAL MEAN						1033	1995
HIGHEST DAILY MEAN	16900	Apr 17	7680	Jan 17		28000	Mar 19 1936
LOWEST DAILY MEAN	424	Oct 31	238	Sep 7		108	Sep 29 1960
ANNUAL SEVEN-DAY MINIMUM	512	Oct 25	246	Sep 2		128	Aug 16 1975
INSTANTANEOUS PEAK FLOW			8650	Jan 17	a	28700	Jun 16 1943
INSTANTANEOUS PEAK STAGE			b 8.81	Feb 6		bc 20.60	Mar 6 1979
10 PERCENT EXCEEDS	3030		1850			3000	
50 PERCENT EXCEEDS	960		870			1110	
90 PERCENT EXCEEDS	662		292			450	

a From rating curve extended above 15,000 ft³/s.

b Ice jam.

c From floodmarks in well.

e Estimated

CONNECTICUT RIVER BASIN

61

01129500 CONNECTICUT RIVER AT NORTH STRATFORD, N.H.-- continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water-quality records: Water years 1957, 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 30...	0915	260	79	6.5	14.0	15.0	741	9.4	96 27

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L (00300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 30...	18	0.2	24	4.4	48	0.70	7.5	76	23	120

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 30...	10	8.3	1.6	3.9	2.8	4.8	<0.10	<0.010	<0.010	0.340

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 30...	<0.015	<0.010	<0.20	<0.20	0.030	3.2	0.20	6	20

CONNECTICUT RIVER BASIN

01130000 UPPER AMMONOOSUC RIVER NEAR GROVETON, N.H.

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: 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)
Jan. 16	2230	*3,540	*a 6.50	No other peak greater than base discharge.			
Minimum discharge, 38 ft ³ /s, Sept. 4-6.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	127	220	e200	e305	e120	498	723	334	94	113	45
2	182	168	175	e230	e270	e110	436	617	279	122	96	43
3	157	159	164	e200	e210	e96	392	577	412	121	95	41
4	148	142	169	e180	e180	e98	389	553	936	97	102	40
5	147	136	304	e160	e160	e100	276	529	651	85	160	38
6	142	155	1110	e130	e170	e100	331	510	463	79	848	40
7	136	314	993	e140	e155	e105	330	473	361	75	560	40
8	130	314	594	e160	e150	e180	299	404	317	75	262	46
9	126	218	e300	e140	e150	e940	319	359	278	80	175	51
10	136	182	e320	e120	e160	e800	308	341	239	79	e125	66
11	135	158	e250	e115	e155	e600	314	338	225	73	e94	62
12	126	146	e190	e130	e150	e370	340	370	264	89	e120	53
13	120	139	e180	e170	e140	e325	577	425	281	102	e96	51
14	116	136	e280	e270	e130	e420	789	438	231	81	e86	75
15	114	132	e230	e640	e140	e580	557	572	225	72	e82	94
16	122	129	e200	e1600	e130	e720	457	1260	215	63	e76	72
17	118	125	e230	3180	e130	e800	399	884	180	226	e68	61
18	112	122	e200	2250	e120	e740	411	1090	163	517	e62	55
19	109	125	e190	1210	e120	e560	499	822	151	259	e56	51
20	108	121	e205	876	e120	e520	577	619	140	154	e54	51
21	138	116	e180	1670	e125	e830	660	518	130	135	e51	49
22	159	133	e165	1370	e130	e1650	1190	478	125	125	e50	62
23	141	142	e160	942	e125	e1500	1090	435	120	115	e48	254
24	131	e120	e240	e640	e120	1110	752	391	115	199	e48	159
25	124	e110	e450	e500	e110	733	610	439	110	168	e47	114
26	116	e100	e350	e350	e120	603	549	380	107	148	e46	94
27	111	e95	e230	e280	e110	518	506	435	100	218	e46	104
28	108	e220	e180	e240	e115	506	571	421	92	162	e45	217
29	106	e365	e150	e235	---	526	737	392	90	151	e42	155
30	104	324	e120	e270	---	575	786	475	86	145	43	117
31	100	---	e130	e330	---	528	---	423	---	124	44	---
TOTAL	4052	4973	8859	18928	4200	17363	15949	16691	7420	4233	3840	2400
MEAN	131	166	286	611	150	560	532	538	247	137	124	80.0
MAX	230	365	1110	3180	305	1650	1190	1260	936	517	848	254
MIN	100	95	120	115	110	96	276	338	86	63	42	38
CFSM	.56	.71	1.23	2.63	.65	2.41	2.29	2.32	1.07	.59	.53	.34
IN.	.65	.80	1.42	3.04	.67	2.78	2.56	2.68	1.19	.68	.62	.38
(†)	1.84	1.92	2.01	3.16	3.42	2.82	2.82	2.02	1.83	1.55	.66	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

	MEAN	307	447	348	247	207	450	1415	1138	445	226	202	202
MAX	1057	1128	994	748	851	1374	2416	2695	1115	600	572	1427	
(WY)	1991	1970	1974	1978	1970	1945	1954	1972	1947	1973	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1940 - 1995

ANNUAL TOTAL	157874	108908	
ANNUAL MEAN	433	298	470
HIGHEST ANNUAL MEAN			696
LOWEST ANNUAL MEAN			297
HIGHEST DAILY MEAN	5350	Apr 17	8350
LOWEST DAILY MEAN	95	Nov 27	32
ANNUAL SEVEN-DAY MINIMUM	110	Oct 25	41
INSTANTANEOUS PEAK FLOW			3540
INSTANTANEOUS PEAK STAGE			a 6.50
INSTANTANEOUS LOW FLOW			d 38
ANNUAL RUNOFF (CFSM)	1.86	1.29	2.02
ANNUAL RUNOFF (INCHES)	25.31	17.46	27.50
10 PERCENT EXCEEDS	1070	640	1100
50 PERCENT EXCEEDS	190	160	240
90 PERCENT EXCEEDS	118	72	94

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

a Ice jam.

b From rating curve extended above 5,600 ft³/s on basis of contracted-opening measurement of peak flow, caused by failure of dam on Nash stream.

c From floodmarks.

d Also occurred Sep. 5, 6.

e Estimated

01131500 CONNECTICUT RIVER NEAR DALTON, N.H.

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: 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 to current year.

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 Sept. 30, 1935, nonrecording gage at bridge 10.5 mi downstream at mean sea level. Jan. 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, which are fair. Flow regulated by powerplants and by First Connecticut and Second Connecticut Lakes, Lake Francis (Reservoirs in Connecticut River basin), and other reservoirs. These reservoirs have a combined usable capacity of about 8.3 billion ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,900 ft³/s, Jan. 17, gage height, 20.73 ft, from peak-stage indicator; minimum daily discharge, 294 ft³/s, Aug. 19.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	924	1890	e1200	2210	e1400	2970	3750	2700	493	672	386
2	1910	1800	1630	1410	2190	e1400	2420	3330	1980	525	1020	379
3	1790	2690	1450	1510	e1900	e1450	2480	3060	1830	597	787	373
4	1700	2450	1300	1450	e1700	e1350	2220	2600	3610	603	496	391
5	1570	1990	1780	1430	1560	e1350	2200	2440	4800	567	800	384
6	1530	1830	4610	1430	1680	e1400	1490	2150	2980	534	4540	365
7	1380	2190	6410	1360	1730	e1400	1900	2260	2170	509	6450	352
8	1230	2630	5080	1460	e1700	e1400	1950	1990	1880	481	2970	347
9	1150	2160	3050	1410	e1600	2470	1820	1730	1580	473	1930	375
10	1350	1910	2350	1370	e1600	3600	1840	1660	1440	471	1220	418
11	1360	1640	2370	1320	e1620	3300	1610	1490	1290	482	879	463
12	1340	1400	2050	1230	e1600	2910	1770	1720	1380	475	957	439
13	1160	1360	1250	1370	e1550	2620	2010	1540	1720	486	1060	430
14	1280	1320	1330	1670	e1500	2720	3060	1810	1650	505	1330	439
15	1040	1160	1490	2900	e1450	3280	3190	1840	1380	509	1120	554
16	1070	1180	1720	7420	e1500	4690	2730	3540	1240	497	1250	568
17	856	1080	1590	13200	e1550	6120	2190	4530	1160	563	1150	541
18	995	1040	1590	14500	e1500	6780	2200	4280	1010	2020	1020	625
19	938	1050	1670	8550	e1500	6700	2300	4990	884	2140	294	768
20	969	1000	1550	5420	e1450	6080	2740	3440	820	1310	720	477
21	1050	1000	1430	5930	e1500	5760	3170	3030	719	1050	421	448
22	1360	922	1540	6740	e1550	9490	4140	2430	691	649	523	435
23	1360	1100	1520	5200	e1550	11100	4950	2250	689	683	519	1270
24	1290	1010	1510	3970	e1500	8460	4220	1880	669	1160	502	1900
25	1150	665	2160	3320	e1500	5630	3180	2220	543	1310	491	1500
26	1080	1020	2320	2520	e1450	4760	2580	2020	549	990	481	894
27	1010	633	1980	1720	e1400	4160	2510	2070	507	1090	477	1030
28	960	928	e1600	1180	e1420	3770	2490	2170	465	1290	477	749
29	691	1320	e1400	e1400	---	3450	2920	1900	471	1040	442	1420
30	804	2080	e1200	e1700	---	3180	3680	2450	479	1120	423	905
31	822	---	e960	2050	---	3120	---	3280	---	845	404	---
TOTAL	38155	43482	63780	107340	44960	125300	78930	79850	43286	25467	35825	19625
MEAN	1231	1449	2057	3463	1606	4042	2631	2576	1443	822	1156	654
MAX	1960	2690	6410	14500	2210	11100	4950	4990	4800	2140	6450	1900
MIN	691	633	960	1180	1400	1350	1490	1490	465	471	294	347
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1995, BY WATER YEAR (WY)												
MEAN	2180	2866	2484	2047	1776	2892	7740	5534	2478	1494	1412	1529
MAX	6129	7331	5786	4178	6093	12140	15380	11890	5915	4229	3662	7140
(WY)	1978	1928	1974	1932	1981	1936	1934	1972	1947	1973	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1927 - 1995
ANNUAL TOTAL	1006041	706000	
ANNUAL MEAN	2756	1934	2874
HIGHEST ANNUAL MEAN			4005
LOWEST ANNUAL MEAN			1934
HIGHEST DAILY MEAN	25700	Apr 18	46500
LOWEST DAILY MEAN	633	Nov 27	115
ANNUAL SEVEN-DAY MINIMUM	897	Nov 22	265
INSTANTANEOUS PEAK FLOW			29900
INSTANTANEOUS PEAK STAGE			a 20.73
10 PERCENT EXCEEDS	5600		3640
50 PERCENT EXCEEDS	1600		1490
90 PERCENT EXCEEDS	1120		495
			806

a From peak-stage indicator.
e Estimated

CONNECTICUT RIVER BASIN

01131500 CONNECTICUT RIVER NEAR DALTON, N.H.--Continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water-quality records: Water years 1953, 1971, 1994 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE OF WATER (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 29...	1400	429	87	6.5	23.0	20.5	739	8.6	99	29
DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, AT 180 DEG. C SOLVED AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB AS (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED AS FE) (01046)
AUG 1995 29...	28	0.4	31	5.8	60	1.1	7.1	92	27	190
DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS STO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 29...	7	8.8	1.7	5.4	5.5	6.4	0.10	<0.010	<0.010	0.130
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)	
AUG 1995 29...	<0.015	<0.010	0.30	0.30	0.020	4.5	0.20	7	87	

CONNECTICUT RIVER BASIN

01134500 MOOSE RIVER AT VICTORY, VT.-- continued.

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1957, 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 29...	1145	15	52	6.9	19.5	16.5	733	9.3	99	22

DATE	SODIUM PERCENT (00932)	BICAR- SODIUM AD- SORP- TION RATIO (00931)	BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB AS (US/CM) (90095)	ALKA- LITY LAB AS (MG/L CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 29...	12	0.1	17	0.50	41	0.70	7.3	54	21	290

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 29...	19	7.2	0.96	8.7	1.4	3.5	<0.10	<0.010	<0.010	0.060

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SED. SUSP. SIEVE DIAM. % FINER THAN (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (MG/L) (70331)
AUG 1995 29...	<0.015	<0.010	<0.20	<0.20	<0.010	3.9	0.20	3	71

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 1.1 mi upstream of North Brook and 0.3 mi north of Pope Cemetery, 1.7 mi northwest of North Danville, VT.

DRAINAGE AREA.--3.25 mi².

PERIOD OF RECORD.--December 1990 to current year.

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

REMARKS.--Records excellent between 3 and 100 ft³/s, good between 1 and 3 ft³/s, and fair less than 1 ft³/s and those for estimated discharges.

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 35 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 5	1725	46	1.63	Mar. 21	2110	52	1.70
Aug. 6	0250	*126	*2.33	Sept. 22	1910	38	1.52

Minimum discharge, 0.80 ft³/s, July 14, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.8	2.8	e2.8	5.2	2.5	8.2	6.0	2.9	1.1	.97	1.1
2	2.7	3.4	2.5	e2.7	4.6	2.5	7.5	5.4	2.7	3.7	.98	.97
3	2.4	2.9	2.5	2.7	3.9	2.5	7.1	5.0	3.5	1.3	1.0	.94
4	2.5	2.5	3.1	2.7	4.0	2.5	7.7	4.7	3.0	1.2	3.9	.92
5	2.4	2.8	16	2.5	4.3	2.6	5.8	4.5	2.5	1.2	29	.92
6	2.3	3.2	11	2.4	e3.8	2.6	5.8	4.4	2.3	1.1	50	.93
7	2.2	5.4	6.7	2.5	e3.6	2.5	6.3	4.0	2.2	1.1	6.9	1.0
8	2.1	3.2	4.4	2.5	3.3	5.7	5.9	3.8	2.2	1.7	4.1	1.2
9	2.2	2.8	4.6	2.4	3.2	6.0	6.1	3.6	2.1	1.5	3.1	1.7
10	2.9	2.5	4.0	2.3	3.2	3.6	5.9	3.5	1.9	1.2	2.6	1.4
11	2.2	2.4	3.8	e2.3	3.2	e3.2	6.0	3.6	2.1	1.1	2.8	1.1
12	2.1	2.3	2.9	e2.4	3.2	3.0	6.2	3.8	3.0	1.0	3.6	1.0
13	2.0	2.3	e3.0	2.9	3.0	3.7	10	3.6	2.5	.98	2.5	1.3
14	2.0	2.2	3.5	4.3	2.9	4.6	7.5	3.4	2.0	.91	2.1	2.4
15	1.9	2.2	3.5	19	2.9	8.7	6.5	11	1.8	.96	2.7	1.5
16	1.9	2.1	3.3	18	2.9	10	6.1	7.9	1.6	.88	2.2	1.2
17	1.8	2.0	3.3	15	2.9	12	6.3	6.9	1.6	8.6	1.8	1.2
18	1.8	2.1	3.4	7.4	2.9	8.9	6.8	6.9	1.5	2.9	1.6	1.2
19	2.0	2.1	3.4	6.5	2.9	9.1	7.3	5.0	1.4	1.7	1.5	1.1
20	2.9	1.9	3.2	9.3	3.0	9.0	7.1	4.4	1.3	1.3	1.4	1.0
21	3.2	2.0	3.1	15	2.9	19	7.8	4.1	1.3	1.5	1.3	1.0
22	2.3	2.3	3.1	9.1	2.8	19	10	3.8	1.2	1.2	1.2	5.8
23	2.1	2.0	3.0	7.3	2.8	13	7.5	3.6	1.2	2.2	1.2	3.5
24	2.1	e1.9	4.6	e6.6	2.9	10	6.3	4.3	1.1	2.9	1.4	1.7
25	2.0	e1.9	9.1	6.0	2.8	8.9	5.8	4.2	1.1	1.4	1.3	1.4
26	1.9	1.9	5.3	5.0	e2.6	8.3	5.6	3.6	1.1	1.5	1.2	2.0
27	1.9	2.0	3.5	4.4	e2.4	8.7	5.6	3.7	1.0	1.3	1.2	3.6
28	1.8	6.8	3.1	4.4	e2.5	9.0	7.0	3.3	1.0	1.2	1.1	2.1
29	1.8	5.5	2.6	e4.3	---	9.9	6.9	4.5	1.0	2.2	1.1	1.6
30	1.8	3.3	3.0	e4.4	---	9.0	7.4	5.5	.97	1.4	1.0	1.4
31	1.8	---	e2.9	e4.8	---	9.7	---	3.5	---	1.1	1.1	---
TOTAL	68.1	83.7	134.2	183.9	90.6	229.7	206.0	145.5	55.07	53.33	137.85	48.18
MEAN	2.20	2.79	4.33	5.93	3.24	7.41	6.87	4.69	1.84	1.72	4.45	1.61
MAX	3.2	6.8	16	19	5.2	19	10	11	3.5	8.6	50	5.8
MIN	1.8	1.9	2.5	2.3	2.4	2.5	5.6	3.3	.97	.88	.97	.92
CFSM	.68	.86	1.33	1.83	1.00	2.28	2.11	1.44	.56	.53	1.37	.49
IN.	.78	.96	1.54	2.10	1.04	2.63	2.36	1.67	.63	.61	1.58	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	3.40	4.18	4.08	4.40	2.73
MAX	5.26	5.47	4.34	5.93	3.51
(WY)	1992	1993	1994	1995	1991
MIN	2.20	2.79	3.43	2.50	1.98
(WY)	1995	1995	1993	1994	1993

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1991 - 1995

	2004.4	1436.13	4.97	1994
ANNUAL TOTAL	2004.4	1436.13	4.97	1994
ANNUAL MEAN	5.49	3.93	5.73	1995
HIGHEST ANNUAL MEAN			3.93	1995
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	80	Apr 16	85	Apr 17 1993
LOWEST DAILY MEAN	1.3	Aug 12	.88	Aug 3 1991
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 6	.97	Jul 28 1991
INSTANTANEOUS PEAK FLOW		a 126	Aug 6	Apr 16 1994
INSTANTANEOUS PEAK STAGE		2.33	Aug 6	Apr 16 1994
INSTANTANEOUS LOW FLOW		b .80	Jul 14	Aug 2 1991
ANNUAL RUNOFF (CFSM)	1.69	1.21	1.53	
ANNUAL RUNOFF (INCHES)	22.94	16.44	20.77	
10 PERCENT EXCEEDS	11	7.6	9.7	
50 PERCENT EXCEEDS	2.7	2.9	3.1	
90 PERCENT EXCEEDS	1.9	1.2	1.4	

a From rating curve extended above 84 ft³/s on basis of theoretical weir formula.

b Also occurred on July 16.

e Estimated

CONNECTICUT RIVER BASIN

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, VT, and 2.6 mi above mouth.

DRAINAGE AREA.--42.9 mi².

PERIOD OF RECORD.--October 1990 to current year. Water-quality records: Water year 1992 to current year.

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

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

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)
Dec. 5	1930	568	2.52	Jan. 17	0200	351	2.08
Mar. 21	2330	442	2.28	Aug. 6	0345	*1,820	*4.01

Minimum discharge, 3.30 ft³/s, Jun.30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	37	37	e27	44	24	91	70	27	7.6	6.6	5.5
2	26	65	30	e26	42	23	75	59	24	34	5.6	4.9
3	23	43	28	e26	31	e23	71	54	34	12	5.5	4.5
4	22	31	33	25	28	e23	81	50	37	7.7	23	4.2
5	21	33	192	e24	e30	e24	e66	46	24	6.2	210	4.0
6	20	36	194	e23	e30	24	e56	45	21	6.0	814	4.1
7	19	66	90	24	e29	24	e60	41	19	5.5	100	4.5
8	18	43	49	24	e29	67	e60	38	18	8.6	48	7.2
9	18	33	33	e23	e28	e88	61	36	17	15	32	8.9
10	26	28	43	e23	e28	e56	66	35	15	8.8	25	12
11	21	24	41	e22	e28	e42	60	36	17	6.6	22	8.1
12	18	23	24	22	e27	38	63	41	31	5.7	41	6.4
13	18	23	26	26	e27	42	110	40	24	4.9	27	7.1
14	17	22	34	40	e27	62	88	36	18	4.2	20	13
15	16	21	36	e250	e27	e100	70	149	15	3.8	22	17
16	16	20	32	271	e26	e170	64	122	13	3.7	21	9.5
17	15	19	33	237	e26	e190	62	83	12	88	16	8.3
18	15	19	34	99	e26	160	70	104	11	53	13	8.1
19	16	20	34	77	e25	130	78	60	9.6	23	11	6.7
20	20	18	29	86	e26	128	78	49	8.1	14	10	6.1
21	39	18	30	207	e27	194	90	43	7.1	13	9.4	6.1
22	25	22	30	125	27	267	136	39	6.7	11	8.1	19
23	22	19	29	90	26	155	91	36	6.2	10	7.7	59
24	20	15	41	71	27	116	68	40	5.8	42	8.7	20
25	18	18	114	62	e26	101	60	49	5.4	17	7.7	14
26	17	18	55	47	e25	88	57	37	4.9	13	7.1	15
27	16	14	38	38	e24	89	57	37	4.3	14	7.3	34
28	16	47	35	34	e24	93	85	32	3.8	10	6.6	25
29	16	100	28	e34	---	97	86	38	3.6	15	6.0	16
30	15	53	e29	e36	---	99	95	56	3.5	14	5.5	13
31	15	---	e28	e40	---	102	---	36	---	8.4	5.2	---
TOTAL	620	948	1509	2159	790	2839	2255	1637	446.0	485.7	1552.0	371.2
MEAN	20.0	31.6	48.7	69.6	28.2	91.6	75.2	52.8	14.9	15.7	50.1	12.4
MAX	39	100	194	271	44	267	136	149	37	88	814	59
MIN	15	14	24	22	24	23	56	32	3.5	3.7	5.2	4.0
CFSM	.47	.74	1.13	1.62	.66	2.13	1.75	1.23	.35	.37	1.17	.29
IN.	.54	.82	1.31	1.87	.68	2.46	1.95	1.42	.39	.42	1.35	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	MEAN	57.7	64.1	64.8	50.7	30.0	81.4	204	77.7	34.1	22.1	27.9	25.0
MAX	128	124	143	69.6	42.9	107	302	120	53.3	50.0	50.1	31.8	
(WY)	1991	1991	1991	1995	1991	1991	1994	1994	1993	1994	1995	1993	
MIN	20.0	31.6	36.4	24.5	19.8	39.1	75.2	52.8	14.9	8.47	16.1	12.4	
(WY)	1995	1995	1993	1994	1993	1994	1995	1995	1995	1991	1993	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1991 - 1995

ANNUAL TOTAL	23302	15611.9	
ANNUAL MEAN	63.8	42.8	61.7
HIGHEST ANNUAL MEAN			79.9
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	903	814	903
LOWEST DAILY MEAN	12	3.5	2.3
ANNUAL SEVEN-DAY MINIMUM	14	4.5	3.4
INSTANTANEOUS PEAK FLOW		a 1820	a 1970
INSTANTANEOUS PEAK STAGE		4.01	4.14
INSTANTANEOUS LOW FLOW		3.3	2.0
ANNUAL RUNOFF (CFSM)	1.49	1.00	1.44
ANNUAL RUNOFF (INCHES)	20.20	13.53	19.52
10 PERCENT EXCEEDS	154	90	134
50 PERCENT EXCEEDS	29	27	35
90 PERCENT EXCEEDS	18	6.9	10

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

e Estimated

CONNECTICUT RIVER BASIN

69

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

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT- SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1994										
15...	0940	21	267	6.4	13.0	5.5	746	11.0	89	130
DEC										
28...	0830	31	244	7.2	-5.5	0.5	742	14.2	101	110
JAN 1995										
23...	1430	85	205	7.3	-2.0	1.0	738	14.1	102	99
FEB										
22...	0915	27	256	6.8	-5.5	0.5	746	14.2	100	130
MAR										
21...	1130	135	174	6.8	8.5	0.5	733	14.1	102	85
APR										
18...	1030	65	201	6.6	3.5	3.0	749	13.2	100	96
MAY										
09...	0900	36	232	6.8	9.0	5.5	749	12.1	98	110
JUN										
06...	0915	21	230	6.7	19.0	15.5	742	9.6	99	120
JUL										
11...	1245	6.6	272	6.0	19.5	17.5	745	9.0	96	140
AUG										
09...	1000	34	242	7.3	16.5	16.0	750	9.0	92	110
SEP										
12...	1400	6.6	272	6.8	29.5	14.5	750	11.0	110	140

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 1994										
15...	7	0.2	134	6.6	160	2.1	7.8	273	118	31
DEC										
28...	6	0.1	123	5.7	147	1.8	7.7	250	104	21
JAN 1995										
23...	6	0.1	104	5.9	120	1.6	7.7	208	85	19
FEB										
22...	5	0.1	136	5.4	150	1.7	7.8	261	109	18
MAR										
21...	5	0.1	97	4.1	115	1.5	7.4	192	78	22
APR										
18...	5	0.1	105	4.5	118	1.6	7.7	209	87	16
MAY										
09...	6	0.1	126	5.3	141	1.9	7.4	243	105	19
JUN										
06...	6	0.1	134	5.0	145	2.2	7.8	258	115	16
JUL										
11...	7	0.2	133	7.3	177	2.6	8.0	292	134	18
AUG										
09...	8	0.2	124	6.4	155	2.0	7.9	253	107	25
SEP										
12...	8	0.2	151	8.5	174	0.20	8.0	300	135	15

CONNECTICUT RIVER BASIN

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

(National water quality assessment program station)

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 1994										
15...	13	47	2.0	6.0	4.2	12	<0.10	<0.010	<0.010	0.240
DEC										
28...	12	42	1.8	6.1	3.4	11	0.20	<0.010	<0.010	0.400
JAN 1995										
23...	10	37	1.5	5.6	2.8	9.4	<0.10	0.010	<0.010	0.430
FEB										
22...	12	47	2.0	6.3	3.3	11	<0.10	<0.010	<0.010	0.490
MAR										
21...	18	32	1.3	4.9	2.2	8.2	<0.10	0.010	<0.010	0.520
APR										
18...	9	36	1.5	5.2	2.4	9.8	<0.10	<0.010	<0.010	0.420
MAY										
09...	14	42	1.8	5.0	3.1	10	<0.10	0.010	<0.010	0.330
JUN										
06...	19	46	1.8	5.0	3.5	9.9	<0.10	<0.010	<0.010	0.170
JUL										
11...	22	53	2.2	5.0	5.1	13	0.10	<0.010	<0.010	0.070
AUG										
09...	20	43	1.7	6.6	4.5	11	<0.10	<0.010	<0.010	0.180
SEP										
12...	13	52	2.2	4.7	5.7	13	<0.10	<0.010	<0.010	0.100

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1994									
15...	<0.015	0.010	<0.20	<0.20	<0.010	1.8	0.10	2	67
DEC									
28...	<0.015	0.020	<0.20	<0.20	0.020	1.8	0.10	2	86
JAN 1995									
23...	<0.015	<0.010	<0.20	<0.20	<0.010	2.5	0.20	4	80
FEB									
22...	0.030	0.010	<0.20	<0.20	<0.010	1.2	0.10	0	100
MAR									
21...	0.020	<0.010	<0.20	0.60	0.130	2.2	>2.0	133	94
APR									
18...	<0.015	<0.010	<0.20	<0.20	<0.010	1.9	0.30	3	87
MAY									
09...	<0.015	<0.010	<0.20	<0.20	<0.010	1.6	0.10	2	75
JUN									
06...	0.020	<0.010	<0.20	<0.20	<0.010	2.2	0.10	1	50
JUL									
11...	<0.015	<0.010	<0.20	<0.20	<0.010	2.3	0.10	5	38
AUG									
09...	<0.015	<0.010	<0.20	<0.20	<0.010	3.9	0.10	6	69
SEP									
12...	<0.015	<0.010	<0.20	<0.20	<0.010	1.8	0.10	--	--

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: 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. 16	1215	7,450	11.97	Aug. 6	1345	*11,800	*16.75

Minimum daily discharge, 107 ft³/s, Jul. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	329	519	e320	e480	e270	957	1130	442	170	171	130
2	384	802	413	e310	e450	e265	775	880	389	475	163	135
3	323	825	397	e300	e370	e265	713	766	420	291	138	132
4	314	553	392	e285	e320	e265	740	691	823	196	191	127
5	303	460	740	e275	e335	e270	621	626	579	158	628	123
6	294	513	2190	e260	e335	e270	672	590	408	144	9720	117
7	272	637	1500	e265	e330	e270	638	563	361	138	4570	113
8	236	590	949	e270	e325	e470	576	487	327	134	1470	123
9	234	475	663	e260	e315	e960	616	460	306	195	780	150
10	337	437	e590	e255	e315	e680	562	451	276	196	554	223
11	364	347	e520	e250	e315	e500	553	453	267	151	435	185
12	289	349	e390	e250	e310	e440	600	483	381	136	471	155
13	268	335	e350	e290	e305	e475	840	492	472	132	496	141
14	253	324	e370	e400	e305	e600	1070	469	331	121	390	174
15	228	314	e410	1740	e305	e1000	820	727	248	117	346	310
16	229	296	e365	5200	e290	2000	706	1620	228	107	397	223
17	222	284	e360	3750	e290	3500	633	1060	238	558	326	173
18	223	278	e375	2080	e280	3700	697	1510	192	1130	246	160
19	218	286	e385	1290	e280	2490	769	1070	194	563	196	154
20	216	273	e370	1030	e290	1530	890	785	175	344	211	143
21	411	261	e340	1910	e300	1570	904	663	161	261	195	129
22	396	291	e370	1610	e310	3240	1420	598	148	214	182	152
23	312	312	e340	1180	e300	2440	1300	546	143	192	171	969
24	296	225	e330	828	e300	1550	930	518	145	502	170	493
25	306	233	e600	e740	e295	1120	773	652	140	392	171	290
26	228	278	660	e615	e285	1020	702	556	129	262	167	255
27	242	357	481	e390	e280	901	678	537	125	452	162	361
28	233	292	444	e380	e270	898	735	507	120	289	158	410
29	230	870	374	e400	---	897	1000	479	115	280	151	333
30	223	738	e360	e400	---	967	1290	638	112	361	140	255
31	220	---	e340	e440	---	935	---	553	---	232	137	---
TOTAL	8791	12564	16887	27973	8885	35758	24180	21560	8395	8893	23703	6838
MEAN	284	419	545	902	317	1153	806	695	280	287	765	228
MAX	487	870	2190	5200	480	3700	1420	1620	823	1130	9720	969
MIN	216	225	330	250	270	265	553	451	112	107	137	113
CFSM	.65	.96	1.25	2.07	.73	2.65	1.85	1.60	.64	.66	1.75	.52
IN.	.75	1.07	1.44	2.39	.76	3.05	2.06	1.84	.72	.76	2.02	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

	MEAN	520	697	593	473	409	932	2262	1345	642	388	333	347
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1929 - 1995
ANNUAL TOTAL	287106	204427	
ANNUAL MEAN	787	560	744
HIGHEST ANNUAL MEAN			1153
LOWEST ANNUAL MEAN			472
HIGHEST DAILY MEAN	8690	Apr 17	15400
LOWEST DAILY MEAN	168	Jan 21	13
ANNUAL SEVEN-DAY MINIMUM	171	Jan 18	75
INSTANTANEOUS PEAK FLOW		11800	18200
INSTANTANEOUS PEAK STAGE		16.75	23.49
ANNUAL RUNOFF (CFSM)	1.80	1.28	1.71
ANNUAL RUNOFF (INCHES)	24.50	17.44	23.20
10 PERCENT EXCEEDS	1790	1000	1680
50 PERCENT EXCEEDS	424	349	418
90 PERCENT EXCEEDS	228	155	165

e Estimated

CONNECTICUT RIVER BASIN

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, N.H.

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: August 1939 to current year. Water-quality records: Water years 1967-74, 1992 to current year.

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 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)
Jan. 17	0100	*1,930	*5.82				
Minimum discharge, 29 ft ³ /s, Sept. 6, 7.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	62	89	e90	140	e54	147	247	219	41	53	33
2	129	99	83	e100	120	e50	129	219	185	83	49	32
3	117	123	79	e86	94	e43	121	218	183	55	49	31
4	118	96	81	e76	e78	e44	125	231	334	45	59	31
5	119	94	163	e68	e70	e45	98	236	231	41	92	31
6	112	97	376	e59	e72	e46	102	229	178	38	249	30
7	102	113	306	e64	e66	e47	109	187	154	37	131	30
8	100	104	193	e74	e69	e80	98	160	150	40	84	38
9	94	95	134	e62	e68	e500	101	147	137	62	69	40
10	123	88	e120	e56	e72	e340	100	161	119	48	60	48
11	110	80	e100	e51	e69	e200	98	180	116	58	56	40
12	96	76	79	e58	e66	164	105	233	148	108	73	33
13	90	75	e74	e75	e62	145	225	259	148	52	60	35
14	87	73	e110	e120	e59	187	217	238	116	43	53	54
15	82	71	e98	e290	e62	255	152	380	153	146	52	63
16	78	69	e86	e740	e57	321	130	504	123	104	52	44
17	76	66	e82	1230	e58	355	119	312	101	186	46	38
18	73	65	e78	507	e55	341	130	337	91	306	43	37
19	72	69	e74	331	e54	250	176	263	83	137	40	34
20	70	66	e86	297	e54	233	252	215	75	88	39	33
21	82	63	80	1010	e56	387	259	192	68	76	38	31
22	84	125	74	461	e57	937	469	341	65	69	36	33
23	83	99	72	317	e56	418	325	241	61	60	36	150
24	83	e58	137	243	e52	288	225	250	57	92	38	69
25	75	e54	279	204	e50	223	197	362	54	71	38	49
26	70	e52	155	160	e52	191	189	243	51	96	38	44
27	68	e50	100	130	e48	170	180	220	47	105	38	44
28	66	e78	e80	107	e50	161	204	190	45	94	36	44
29	64	184	e65	107	---	157	240	216	43	85	34	41
30	62	113	e58	124	---	164	259	511	42	79	33	39
31	60	---	e62	147	---	157	---	291	---	61	33	---
TOTAL	2804	2557	3653	7444	1866	6953	5281	8013	3577	2606	1807	1299
MEAN	90.5	85.2	118	240	66.6	224	176	258	119	84.1	58.3	43.3
MAX	159	184	376	1230	140	937	469	511	334	306	249	150
MIN	60	50	58	51	48	43	98	147	42	37	33	30
CFSM	1.03	.97	1.35	2.74	.76	2.56	2.01	2.95	1.36	.96	.67	.49
IN.	1.19	1.09	1.55	3.16	.79	2.95	2.24	3.40	1.52	1.11	.77	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	152	214	166	112	103	185	513	512	201	100	95.2	97.9
MAX	416	524	590	315	712	691	896	1054	462	253	273	550
(WY)	1978	1960	1974	1986	1981	1953	1969	1940	1973	1973	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1939 - 1995
ANNUAL TOTAL	61306	47860	
ANNUAL MEAN	168	131	205
HIGHEST ANNUAL MEAN			293
LOWEST ANNUAL MEAN			131
HIGHEST DAILY MEAN	2360	Apr 16	6300
LOWEST DAILY MEAN	44	Jul 25	21
ANNUAL SEVEN-DAY MINIMUM	50	Jul 24	31
INSTANTANEOUS PEAK FLOW			1930
INSTANTANEOUS PEAK STAGE		5.82	Jan 17
INSTANTANEOUS LOW FLOW		29	Sep 6
ANNUAL RUNOFF (CFSM)	1.92	1.50	2.34
ANNUAL RUNOFF (INCHES)	26.03	20.32	31.73
10 PERCENT EXCEEDS	386	259	457
50 PERCENT EXCEEDS	82	86	105
90 PERCENT EXCEEDS	54	41	45

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

e Estimated

CONNECTICUT RIVER BASIN

73

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, N.H.--Continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-74, 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
NOV 1994									
14...	1100	73	36	6.1	5.5	2.5	737	12.2	8
DEC									
27...	1430	92	37	6.5	-1.0	0.5	732	13.3	8
JAN 1995									
23...	1200	314	28	6.5	-2.5	0.5	724	13.6	6
FEB									
21...	1100	a 56	39	7.4	1.0	0.0	721	15.0	10
MAR									
21...	0830	232	33	8.0	4.0	1.5	722	12.8	7
APR									
17...	1030	108	40	6.7	9.5	1.5	732	13.2	8
MAY									
08...	1115	162	29	7.4	14.0	4.0	732	12.2	7
JUN									
05...	1145	232	25	7.9	22.0	12.0	730	10.5	6
JUL									
11...	0945	42	45	4.7	18.5	15.5	731	9.0	10
AUG									
09...	1300	68	41	6.9	22.0	19.5	734	9.8	9
SEP									
13...	1145	35	63	7.2	16.5	14.0	730	9.3	12

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
NOV 1994										
14...	45	0.5	13	4.1	31	0.40	7.7	40	6.8	96
DEC										
27...	46	0.5	6	3.9	34	0.40	6.3	41	5.7	96
JAN 1995										
23...	40	0.4	8	2.4	25	0.30	6.1	29	3.4	70
FEB										
21...	47	0.6	14	4.8	33	0.40	7.5	45	6.3	72
MAR										
21...	43	0.4	9	2.8	30	0.30	5.9	32	4.2	61
APR										
17...	45	0.5	11	3.9	29	0.60	6.4	39	5.3	69
MAY										
08...	43	0.4	6	3.0	27	0.30	7.1	32	4.5	70
JUN										
05...	40	0.4	16	2.1	16	0.40	7.1	28	4.2	68
JUL										
11...	49	0.6	0	6.6	36	0.50	8.0	53	8.8	110
AUG										
09...	48	0.6	12	4.6	35	0.40	7.7	43	7.1	150
SEP										
13...	49	0.7	13	7.5	36	0.60	7.9	58	11	120

CONNECTICUT RIVER BASIN

01137500 AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, N.H.--Continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
	NOV 1994									
	14...	19	2.4	0.56	8.4	3.3	4.0	0.30	<0.010	<0.010
DEC										
27...	23	2.4	0.57	8.7	3.4	3.5	<0.10	<0.010	<0.010	0.160
JAN 1995										
23...	18	1.9	0.39	7.0	2.1	3.0	0.20	<0.010	<0.010	0.150
FEB										
21...	25	2.8	0.65	9.5	4.1	3.2	0.30	<0.010	<0.010	0.210
MAR										
21...	17	2.1	0.43	7.2	2.6	3.6	0.20	0.010	<0.010	0.190
APR										
17...	17	2.4	0.53	8.1	3.3	3.8	0.30	<0.010	<0.010	0.170
MAY										
08...	13	2.0	0.44	7.1	2.5	3.4	0.20	<0.010	<0.010	0.110
JUN										
05...	11	1.9	0.40	6.9	2.1	3.3	0.20	<0.010	<0.010	0.070
JUL										
11...	18	2.9	0.69	8.7	4.7	3.9	0.30	<0.010	<0.010	0.130
AUG										
09...	16	2.5	0.55	8.7	3.8	3.2	0.20	<0.010	<0.010	0.110
SEP										
13...	20	3.3	0.80	8.3	5.4	3.9	0.30	<0.010	<0.010	0.110
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
NOV 1994										
14...	<0.015	0.010	<0.20	<0.20	<0.010	1.5	0.10	1	67	
DEC										
27...	<0.015	0.010	<0.20	<0.20	<0.010	2.5	0.10	2	40	
JAN 1995										
23...	<0.015	<0.010	<0.20	<0.20	<0.010	3.9	0.10	0	100	
FEB										
21...	<0.015	<0.010	<0.20	<0.20	<0.010	1.3	0.10	1	67	
MAR										
21...	0.020	<0.010	<0.20	<0.20	<0.010	3.2	0.10	1	50	
APR										
17...	<0.015	<0.010	<0.20	<0.20	0.020	2.3	0.20	6	56	
MAY										
08...	<0.015	<0.010	<0.20	<0.20	<0.010	2.1	0.10	6	50	
JUN										
05...	<0.015	<0.010	<0.20	<0.20	<0.010	3.1	0.20	1	50	
JUL										
11...	<0.015	<0.010	<0.20	<0.20	<0.010	1.6	0.10	8	19	
AUG										
09...	<0.015	0.020	<0.20	<0.20	<0.010	2.5	0.10	9	23	
SEP										
13...	<0.015	<0.010	<0.20	<0.20	<0.010	1.3	0.10	10	10	

a Estimated mean daily discharge

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.--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 RECORD.--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 (Reservoirs in Connecticut River basin), 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 152 ft³/s, Aug. 28, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,400 ft³/s, Jan. 17, gage height, 8.25 ft; minimum daily, 611 ft³/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	831	1910	1770	3410	e3600	6260	6560	4550	737	2290	1520
2	2200	3400	1920	2220	4460	3400	4930	6330	4320	1220	1530	1290
3	2320	2920	2090	2250	3920	3060	4520	5730	4790	1770	1790	1220
4	3530	2800	1270	2660	2960	3930	3410	3660	4170	1370	1680	1030
5	2620	3020	2860	2210	2790	3330	4580	4660	4540	1160	1600	2000
6	2680	3090	5360	2390	e4500	4550	3070	4500	5250	1040	11000	2080
7	2630	3160	8920	2330	e4200	4320	2780	3420	5170	1240	11500	883
8	2710	2900	11400	2530	e3700	e5300	2850	4330	2270	1320	7710	924
9	2360	3890	6870	2800	3360	e4800	2580	4190	2920	1300	4150	1110
10	2490	4230	4900	2480	3450	e4500	2840	3800	1750	1310	4700	1040
11	2220	2960	3800	2520	3230	e4550	2930	3210	1720	1270	3180	1360
12	2310	3230	4020	2530	2690	e5500	2300	3330	2060	1010	1850	1430
13	2320	1300	3910	2380	3870	5860	3180	3160	2670	1190	1670	1060
14	1840	3510	3200	2440	3880	6740	3100	2440	3160	1450	2140	1610
15	2990	1750	3240	5790	3790	6160	2690	3980	1770	1140	2450	1110
16	2250	1060	2890	9640	4000	9260	2360	5720	2990	1190	2430	1560
17	1870	2200	2750	19600	4080	10800	2440	6560	1610	1500	3560	1210
18	1690	1420	2720	19100	2970	11600	2610	7270	1250	3350	3690	1090
19	1960	1740	2380	15800	3290	10800	2750	6870	2270	1550	1660	793
20	2260	1780	2480	12700	3390	10500	2970	6630	3830	1490	1640	1040
21	1920	1820	2340	13400	3090	10800	3290	3650	769	1430	1780	611
22	2160	1890	2880	13100	3060	15200	4570	5810	1570	1330	1360	1020
23	1890	2160	3110	10600	3080	15800	5050	4610	1210	1460	629	1450
24	2100	2750	2540	8170	3490	14900	4210	3430	1360	1600	1130	2080
25	2180	1720	2210	6870	3200	11500	4720	4520	1030	1320	1710	1140
26	2020	1820	2160	5470	3230	10500	3840	4300	2240	1510	1010	968
27	1520	1210	2920	5150	e3700	10500	3670	4070	907	2360	1010	869
28	1170	1500	3620	3530	e3200	8690	3770	3340	857	2530	1150	1090
29	1800	2730	3250	2810	---	7700	5190	4320	1210	1130	1150	1340
30	897	2650	2760	3700	---	7240	5550	4690	1270	1090	1070	1090
31	1200	---	2410	3620	---	6820	---	5220	---	1860	1070	---
TOTAL	66227	71441	109090	192560	97990	242210	109010	144310	75483	45227	84589	37018
MEAN	2136	2381	3519	6212	3500	7813	3634	4655	2516	1459	2729	1234
MAX	3530	4230	11400	19600	4500	15800	6260	7270	5250	3350	11500	2080
MIN	897	831	1270	1770	2690	3060	2300	2440	769	737	629	611

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1995, BY WATER YEAR (WY)

	MEAN	3723	4756	4609	3576	3734	5822	12580	8333	4356	2645	2490	2510
MAX	9801	9815	11320	6212	10050	13420	20110	17120	10320	8418	6709	10810	
(WY)	1978	1960	1974	1995	1981	1979	1954	1972	1984	1973	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1950 - 1995
ANNUAL TOTAL	1867071	1275155	
ANNUAL MEAN	5115	3494	4932
HIGHEST ANNUAL MEAN			7157
LOWEST ANNUAL MEAN			3211
HIGHEST DAILY MEAN	36100	19600	50600
LOWEST DAILY MEAN	831	611	152
ANNUAL SEVEN-DAY MINIMUM	1350	1030	522
INSTANTANEOUS PEAK FLOW		22400	57100
INSTANTANEOUS PEAK STAGE		8.25	a 17.35
10 PERCENT EXCEEDS	9940	6590	10300
50 PERCENT EXCEEDS	3640	2750	3500
90 PERCENT EXCEEDS	1870	1150	1270

a 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: 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)
Mar. 22	0300	* 718	* 3.90

Minimum daily discharge, 9.0 ft³/s, Sept. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	47	76	e50	e91	e39	172	168	86	17	24	12
2	75	70	65	e48	e82	e36	152	142	72	42	21	11
3	65	65	61	e47	e78	e36	140	126	71	33	20	11
4	58	53	62	e46	e74	e35	148	112	77	24	37	9.4
5	53	50	143	e44	e73	e35	153	103	63	19	128	9.0
6	51	54	344	e45	e71	e36	128	100	54	18	402	9.9
7	48	71	190	e44	e70	e38	129	93	48	16	220	11
8	47	65	127	e43	e68	e150	124	83	46	17	111	15
9	46	57	99	e43	e65	523	106	77	44	30	74	19
10	62	53	105	e43	e62	322	101	72	39	27	52	26
11	58	49	98	e45	e58	174	94	73	38	22	42	21
12	50	46	89	e60	e54	135	100	85	47	20	103	17
13	47	43	e86	e100	e53	128	144	85	57	21	72	18
14	45	42	e82	176	e51	187	149	81	46	20	49	35
15	44	41	e78	368	e49	293	135	186	41	20	40	41
16	42	41	76	412	e50	437	124	284	37	34	36	29
17	39	39	72	480	e46	485	123	180	33	79	31	25
18	40	39	73	278	e45	464	132	159	31	208	26	24
19	40	63	72	209	e44	356	129	129	29	100	24	21
20	45	67	73	182	e43	341	138	111	27	60	20	19
21	60	60	72	536	e42	382	131	99	24	48	18	18
22	55	67	66	434	e41	586	200	90	22	41	17	50
23	50	63	67	321	e40	434	173	81	20	33	16	92
24	45	49	73	227	e41	343	138	78	19	32	15	48
25	43	49	188	188	e37	265	122	97	19	30	15	37
26	42	50	126	142	e35	228	112	94	17	52	14	37
27	41	46	95	127	e34	205	110	107	17	74	14	64
28	40	58	87	128	e36	194	128	90	15	45	14	49
29	39	116	74	e113	---	185	171	94	14	45	13	36
30	39	94	e48	e103	---	185	200	175	14	43	12	30
31	38	---	e51	e96	---	181	---	108	---	31	12	---
TOTAL	1541	1707	3018	5178	1533	7438	4106	3562	1167	1301	1692	844.3
MEAN	49.7	56.9	97.4	167	54.7	240	137	115	38.9	42.0	54.6	28.1
MAX	94	116	344	536	91	586	200	284	86	208	402	92
MIN	38	39	48	43	34	35	94	72	14	16	12	9.0
CFSM	.51	.58	.99	1.70	.56	2.44	1.39	1.17	.40	.43	.55	.29
IN.	.58	.65	1.14	1.96	.58	2.81	1.55	1.35	.44	.49	.64	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

	MEAN	93.2	125	117	90.9	91.2	186	447	255	132	69.7	60.7	57.0
MAX	337	279	395	232	349	467	763	589	449	449	323	305	196
(WY)	1982	1990	1984	1978	1981	1953	1952	1972	1973	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1940 - 1995

ANNUAL TOTAL	47321	33087.3	
ANNUAL MEAN	130	90.7	144
HIGHEST ANNUAL MEAN			239
LOWEST ANNUAL MEAN			66.5
HIGHEST DAILY MEAN	1490	Apr 16	2960
LOWEST DAILY MEAN	24	Aug 13	8.3
ANNUAL SEVEN-DAY MINIMUM	34	Jan 21	10
INSTANTANEOUS PEAK FLOW			718
INSTANTANEOUS PEAK STAGE			3.90
ANNUAL RUNOFF (CFSM)	1.32		.92
ANNUAL RUNOFF (INCHES)	17.89		12.51
10 PERCENT EXCEEDS	279		186
50 PERCENT EXCEEDS	62		58
90 PERCENT EXCEEDS	37		20

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

e Estimated

CONNECTICUT RIVER BASIN

77

01139000 WELLS RIVER AT WELLS RIVER, VT.-- continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-58, 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 1995 28...	1700	14	206	7.3	21.5	17.5	766	9.2	96	88
DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINEITY LAB AS CACO3 (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 28...	17	0.4	76	14	122	1.5	7.8	219	80	170
DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 28...	54	32	2.0	6.4	8.7	6.9	<0.10	<0.010	<0.010	0.230
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995 28...	0.020	<0.010	<0.20	<0.20	<0.010	2.6	0.20	4	70	

CONNECTICUT RIVER BASIN

01139800 EAST ORANGE BRANCH AT EAST ORANGE, VT.

LOCATION.--Lat 44°05'34", long 72°20'10", Orange County, Hydrologic Unit 01080103, on left bank 0.3 mi east of East Orange, 1.6 mi upstream from mouth, and 5 mi southwest of Orange.

DRAINAGE AREA.--8.95 mi².

PERIOD OF RECORD.--June 1958 to current year.

REVISED RECORDS.--WDR MA-NH-RI-VT-72-1: 1960-64(P), 1969- 71(P).

GAGE.--Water-stage recorder. Elevation of gage is 1,180 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 caused by mill upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 15	1115	* 84	3.22	Jan. 15	2230	Ice jam	* 4.02

Minimum discharge, 0.60 ft³/s, Sept. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	6.0	7.4	e7.2	e14	e6.5	21	14	7.5	1.6	1.6	.89
2	e6.8	6.6	e6.4	e7.0	e12	e6.5	21	13	7.3	2.0	1.4	.80
3	e6.1	4.7	e6.8	e7.0	e10	e6.5	20	12	8.8	1.6	1.7	.69
4	e6.4	4.3	e7.8	e7.0	e10	e6.5	e18	11	7.4	1.4	14	.67
5	e6.0	4.4	27	e6.6	e11	e6.8	e15	11	7.1	1.3	7.2	.69
6	e5.8	4.8	18	e6.3	e9.8	e6.8	e15	11	e6.3	1.3	20	1.1
7	e5.6	7.4	14	e6.5	e9.2	e6.6	e16	10	e6.0	1.2	5.5	.99
8	e5.3	5.0	e13	e6.5	e8.6	e15	e15	9.7	e6.0	3.6	3.4	1.8
9	e5.5	4.4	e12	e6.2	e8.3	e16	e16	9.5	e5.8	3.5	2.5	3.2
10	e7.2	4.3	11	e6.0	e8.2	12	e15	9.4	e5.2	2.0	2.1	2.5
11	e5.2	4.1	9.6	e6.0	e8.2	11	e16	10	e5.8	1.7	3.2	1.6
12	4.5	4.0	e9.0	e6.2	e8.2	8.3	16	11	9.0	1.6	7.7	1.3
13	4.3	4.0	e9.4	e7.5	e7.8	12	23	10	6.7	1.3	3.2	2.3
14	4.3	4.0	e10	e10	e7.5	14	17	9.6	e5.7	1.1	2.4	5.5
15	4.2	4.0	e10	e52	e7.5	23	16	28	6.5	6.2	2.1	2.9
16	4.2	3.9	11	38	e7.5	26	15	18	e5.6	2.8	2.1	1.8
17	4.2	3.8	10	25	e7.5	30	15	13	e4.8	16	1.6	2.1
18	4.2	3.9	9.2	16	e7.5	22	15	13	e4.2	6.3	1.4	2.2
19	4.3	3.9	8.7	15	e7.5	22	16	11	e3.8	3.7	1.3	1.6
20	5.2	3.8	e8.3	26	e7.8	22	15	11	e3.5	2.5	1.2	1.4
21	5.6	3.9	8.1	37	e7.6	40	18	9.9	e3.3	3.2	1.1	1.4
22	4.5	5.1	7.7	25	e7.2	35	18	9.5	3.4	2.8	.97	7.4
23	4.3	e4.3	7.6	e19	e7.2	27	15	9.1	2.6	2.0	.94	7.9
24	4.3	e4.0	18	e17	e7.6	25	14	9.4	2.6	3.1	.99	2.8
25	4.1	e4.0	16	e16	e7.2	25	13	9.7	2.2	2.1	.91	2.2
26	4.0	4.0	e12	e13	e6.8	24	13	10	2.1	8.3	.92	2.3
27	3.9	4.9	e9.0	e12	e6.2	24	14	11	1.9	4.3	1.2	3.5
28	3.9	10	e8.0	e11	e6.5	24	16	8.9	1.7	4.8	1.1	2.5
29	3.9	16	e6.8	e11	---	25	17	12	1.6	4.4	.91	1.9
30	3.9	9.2	e7.4	e11	---	24	16	10	1.6	3.2	.88	1.9
31	3.9	---	e7.6	e12	---	23	---	8.3	---	2.0	.79	---
TOTAL	153.2	156.7	326.8	452.0	234.4	575.5	490	353.0	146.0	102.9	96.31	69.83
MEAN	4.94	5.22	10.5	14.6	8.37	18.6	16.3	11.4	4.87	3.32	3.11	2.33
MAX	7.6	16	27	52	14	40	23	28	9.0	16	20	7.9
MIN	3.9	3.8	6.4	6.0	6.2	6.5	13	8.3	1.6	1.1	.79	.67
CFSM	.55	.58	1.18	1.63	.94	2.07	1.82	1.27	.54	.37	.35	.26
IN.	.64	.65	1.36	1.88	.97	2.39	2.04	1.47	.61	.43	.40	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995, BY WATER YEAR (WY)

	MEAN	10.1	13.4	12.9	9.52	9.18	17.9	50.2	34.1	13.7	6.76	5.46	5.15
MAX	35.5	33.1	41.0	26.6	46.0	47.0	91.2	75.7	41.1	41.0	25.5	14.9	
(WY)	1976	1990	1984	1978	1981	1976	1969	1971	1973	1973	1990	1976	
MIN	1.14	3.41	2.91	2.53	1.90	5.02	16.3	11.4	4.87	1.63	1.15	.40	
(WY)	1964	1979	1964	1971	1964	1971	1995	1995	1995	1963	1970	1963	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1958 - 1995

	ANNUAL TOTAL	4806.0	3156.64	
ANNUAL MEAN	13.2	8.65	15.7	
HIGHEST ANNUAL MEAN			29.1	1976
LOWEST ANNUAL MEAN			6.71	1965
HIGHEST DAILY MEAN	118	Apr 16	260	May 4 1971
LOWEST DAILY MEAN	3.8	Nov 17	.67	Sep 3 1963
ANNUAL SEVEN-DAY MINIMUM	3.9	Nov 15	.77	Sep 6 1963
INSTANTANEOUS PEAK FLOW			84	Jan 15 1990
INSTANTANEOUS PEAK STAGE			c 4.02	Jan 15 1959
INSTANTANEOUS LOW FLOW			d .60	Sep 4 1963
ANNUAL RUNOFF (CFSM)	1.47	.97	1.76	
ANNUAL RUNOFF (INCHES)	19.98	13.12	23.87	
10 PERCENT EXCEEDS	31	18	39	
50 PERCENT EXCEEDS	6.8	6.8	8.0	
90 PERCENT EXCEEDS	4.3	1.6	2.2	

a From rating curve extended above 160 ft³/s on basis of slope-area measurement of peak flow.

b From flood marks.

c Ice jam.

d Also occurred on Sept. 5.

e Estimated

f Also on Sept. 19, 1963.

01141800 MINK BROOK NEAR ETNA, N.H.

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.--August 1962 to current year.

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

REMARKS.--Records good 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)
Dec. 5	1730	63	2.33	Mar. 10	1300	127	2.64
Jan. 16	2045	63	2.33	Mar. 17	0515	73	2.39
Mar. 8	2030	Ice jam	* 3.49	Mar. 21	1745	68	2.36
Mar. 8	2145	* 398	3.45				

Minimum discharge, 0.02 ft³/s, Sept. 3-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.5	3.2	e6.0	e5.2	2.8	8.6	3.7	2.1	.17	.16	.03
2	3.7	5.0	3.0	e6.2	e4.4	2.6	7.2	3.5	1.9	.18	.13	.02
3	3.3	3.5	3.0	e5.2	e3.9	2.6	7.9	3.2	2.6	.13	.55	.02
4	3.0	3.0	4.1	e4.4	e3.6	2.6	9.8	3.0	2.5	.12	3.0	.02
5	2.9	3.0	24	e3.7	e3.4	2.6	8.5	3.0	1.9	.11	1.9	.02
6	2.6	3.5	19	e3.4	e3.5	2.6	8.5	2.9	1.6	.11	2.9	.03
7	2.5	3.4	11	e4.1	e3.5	2.8	5.3	2.7	1.7	.10	1.4	.03
8	2.4	3.0	7.7	e4.2	e3.5	e4.0	5.2	2.6	1.7	.51	.76	.03
9	2.3	2.7	e6.7	e3.5	e3.4	193	5.3	2.6	1.5	.38	.40	.11
10	3.6	2.6	6.0	e3.1	e3.5	45	5.5	2.6	1.4	.23	.27	.06
11	2.6	2.5	6.5	e2.8	3.3	11	4.7	3.0	1.8	.20	.19	.03
12	2.3	2.3	e5.6	e3.0	e3.1	6.2	4.5	3.3	3.4	.16	.62	.03
13	2.1	2.2	e5.0	e3.3	e3.0	8.1	9.2	2.9	2.4	.11	.50	.04
14	2.1	2.2	e4.4	e3.8	e2.9	9.3	6.2	2.7	1.8	.08	.25	.06
15	2.0	2.2	e4.2	e1.1	3.0	e1.2	5.5	1.1	1.7	.13	.22	.05
16	1.9	2.2	e3.9	3.2	3.3	33	5.1	7.4	1.5	.12	.19	.03
17	1.9	2.0	e3.7	27	3.1	41	4.7	5.9	1.2	2.4	.13	.04
18	1.8	2.0	e3.7	15	3.1	30	4.4	5.6	.98	1.1	.10	.04
19	1.8	2.0	e3.5	12	3.2	24	5.0	4.5	.74	.49	.07	.03
20	2.5	2.0	e3.1	16	3.2	22	4.6	4.3	.54	.27	.06	.03
21	3.7	2.2	e3.3	21	3.2	34	5.8	3.7	.41	.29	.05	.02
22	2.7	3.4	e3.4	18	3.0	32	7.3	3.5	.38	.24	.04	.32
23	2.4	2.5	e3.3	13	3.0	26	5.2	3.1	.33	.16	.04	.60
24	2.1	e2.0	e1.1	e1.1	3.2	20	4.4	3.2	.29	.16	.04	.14
25	2.0	e2.1	23	9.1	3.0	15	4.2	3.5	.29	.14	.03	.09
26	2.0	e1.9	12	e8.0	e2.9	14	3.9	3.4	.27	1.6	.03	.12
27	1.9	e1.6	e1.0	e6.8	3.1	12	3.8	3.0	.21	1.2	.06	.14
28	1.9	7.4	8.0	e5.8	3.2	11	4.8	2.7	.18	.85	.04	.14
29	1.9	7.4	e8.0	e5.2	---	9.4	4.4	3.5	.16	1.3	.03	.17
30	1.9	3.6	e7.0	e5.0	---	9.6	4.0	3.2	.15	.42	.03	.18
31	2.4	---	6.4	e4.9	---	11	---	2.5	---	.28	.03	---
TOTAL	76.6	92.9	226.7	277.5	93.7	687.2	173.5	115.7	37.63	13.74	14.16	2.67
MEAN	2.47	3.10	7.31	8.95	3.35	22.2	5.78	3.73	1.25	.44	.46	.089
MAX	4.4	7.5	24	32	5.2	193	9.8	11	3.4	2.4	3.0	.60
MIN	1.8	1.6	3.0	2.8	2.9	2.6	3.8	2.5	.15	.08	.03	.02
CFSM	.54	.67	1.59	1.95	.73	4.82	1.26	.81	.27	.10	.10	.02
IN.	.62	.75	1.83	2.24	.76	5.56	1.40	.94	.30	.11	.11	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995, BY WATER YEAR (WY)

	MEAN	5.31	7.13	6.94	4.49	4.82	13.8	23.5	11.7	4.47	2.22	2.00	1.73
MAX	23.2	17.9	22.4	16.4	22.4	48.7	49.4	27.9	13.8	10.4	15.0	7.66	
(WY)	1976	1976	1984	1986	1984	1977	1969	1976	1973	1973	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1962 - 1995

ANNUAL TOTAL	2444.55	1812.00	
ANNUAL MEAN	6.70	4.96	
HIGHEST ANNUAL MEAN			7.36
LOWEST ANNUAL MEAN			14.0
HIGHEST DAILY MEAN	105	Apr 13	261
LOWEST DAILY MEAN	.41	Aug 17	b .02
ANNUAL SEVEN-DAY MINIMUM	.56	Aug 11	c .02
INSTANTANEOUS PEAK FLOW			d 629
INSTANTANEOUS PEAK STAGE			f 4.28
INSTANTANEOUS LOW FLOW			g .01
ANNUAL RUNOFF (CFSM)	1.46		1.60
ANNUAL RUNOFF (INCHES)	19.77		21.73
10 PERCENT EXCEEDS	13		18
50 PERCENT EXCEEDS	2.7		3.1
90 PERCENT EXCEEDS	1.4		.36

a Also occurred on Sept. 3-5, 21.

b Also occurred on Sept. 3-5, 21, 1995.

c Also occurred on Aug. 30, 1995.

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

e Estimated

f Ice jam.

g Also occurred on Sept. 4, 5.

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.--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 Oct. 1, 1964, at site 140 ft downstream at datum 2.25 ft higher and Oct. 1, 1964, to Sept. 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)
Jan. 21	Unknown	* 285	* 4.48
Minimum discharge, 2.2 ft ³ /s, Sept. 4, 5.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	14	26	e24	e48	e22	e53	46	23	4.7	7.9	2.8
2	17	16	24	e26	46	e20	e50	43	21	7.3	5.3	2.7
3	15	15	23	e24	36	e18	e45	40	23	5.8	6.3	2.5
4	14	13	25	e22	34	e19	e48	37	26	4.7	15	2.4
5	13	13	94	e21	e35	e20	e47	36	20	4.6	13	2.5
6	13	13	131	e22	36	e21	e43	34	18	4.8	47	2.7
7	12	18	90	e23	e37	23	e43	32	16	5.1	28	e3.2
8	12	16	65	e22	e38	46	e42	31	15	8.7	14	e5.2
9	11	15	64	e20	e36	89	e40	30	15	12	9.5	e5.2
10	11	14	53	e18	e35	41	e39	29	14	9.2	7.4	e6.1
11	10	14	50	20	e33	34	e36	30	14	8.6	6.6	3.7
12	9.9	12	43	23	e31	33	e41	36	17	8.0	25	3.3
13	9.9	13	30	25	e31	41	e47	32	16	7.3	11	3.1
14	9.7	13	e33	e52	e30	59	e60	30	13	6.4	7.9	5.2
15	9.5	13	e32	e145	e28	109	e54	52	12	15	6.9	5.6
16	9.3	12	31	e200	e29	e210	e47	51	11	15	6.6	4.0
17	9.5	12	30	e160	e27	e200	e46	40	10	37	5.8	3.7
18	10	12	31	e96	e26	e180	e45	41	10	26	4.6	4.0
19	11	13	29	e80	e25	e160	e47	36	9.2	16	4.0	3.3
20	13	12	29	e110	e26	e135	e46	37	8.4	12	3.6	3.1
21	15	12	29	e270	e25	e145	e46	34	7.4	16	3.4	2.9
22	14	17	27	e160	e24	e160	e50	31	7.2	17	3.1	3.8
23	13	15	26	e120	e24	e130	e51	29	6.7	11	2.9	15
24	13	13	32	e94	e23	e105	e46	28	6.7	15	2.9	7.4
25	12	e12	61	e80	e22	e88	e44	29	6.7	13	2.9	5.5
26	12	e12	43	e72	20	e74	e42	27	6.0	14	2.7	5.3
27	12	11	38	e60	18	e70	41	27	5.5	19	3.1	9.3
28	12	16	e29	e58	e19	e64	51	24	5.2	19	3.5	8.2
29	11	43	e22	e56	---	e62	62	29	4.8	23	3.0	6.1
30	11	32	e19	e52	---	e59	50	34	4.4	18	2.8	4.9
31	11	---	e22	e50	---	e56	---	26	---	11	2.6	---
TOTAL	374.8	456	1281	2205	842	2493	1402	1061	372.2	394.2	268.3	142.7
MEAN	12.1	15.2	41.3	71.1	30.1	80.4	46.7	34.2	12.4	12.7	8.65	4.76
MAX	19	43	131	270	48	210	62	52	26	37	47	15
MIN	9.3	11	19	18	18	18	36	24	4.4	4.6	2.6	2.4
CFSM	.40	.50	1.35	2.33	.99	2.64	1.53	1.12	.41	.42	.28	.16
IN.	.46	.56	1.56	2.69	1.03	3.04	1.71	1.29	.45	.48	.33	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

	MEAN	26.6	38.3	41.0	33.1	32.9	74.5	162	78.5	37.8	18.9	14.9	14.7
MAX	102	102	151	82.5	136	189	289	173	142	85.5	64.0	48.9	
(WY)	1946	1960	1984	1978	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1939 - 1995

	ANNUAL TOTAL	17487.2	11292.2	
ANNUAL MEAN	47.9		30.9	47.6
HIGHEST ANNUAL MEAN				78.4
LOWEST ANNUAL MEAN				16.7
HIGHEST DAILY MEAN	801	Apr 16	270	Jan 21
LOWEST DAILY MEAN	9.2	Aug 13	2.4	Sep 4
ANNUAL SEVEN-DAY MINIMUM	9.7	Oct 11	2.6	Aug 31
INSTANTANEOUS PEAK FLOW			285	Jan 21
INSTANTANEOUS PEAK STAGE			4.48	Jan 21
INSTANTANEOUS LOW FLOW			b 2.2	Sep 4
ANNUAL RUNOFF (CFSM)	1.57		1.01	
ANNUAL RUNOFF (INCHES)	21.33		13.77	
10 PERCENT EXCEEDS	101		60	109
50 PERCENT EXCEEDS	20		21	26
90 PERCENT EXCEEDS	12		4.8	6.6

a From rating curve extended above 320 ft³/s on basis of contracted-opening measurement of peak flow.

b Also occurred on Sept. 5.

e Estimated

f About

CONNECTICUT RIVER BASIN

01144000 WHITE RIVER AT WEST HARTFORD, VT.--Continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1953, 1967-74, 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE	PH WATER WHOLE FIELD (STAND- ARD	TEMPER- ATURE AIR	TEMPER- ATURE WATER	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS TOTAL (MG/L AS CACO3)	SODIUM PERCENT (00932)	
		(US/CM) (00095)	(UNITS) (00400)	(DEG C) (00020)	(DEG C) (00010)	(00025)	(00300)	(00301)	(00900)		
NOV 1994											
15...	1320	171	6.9	16.5	7.5	754	12.9	109	64	15	
DEC											
28...	1330	129	6.0	3.0	0.5	745	14.0	99	52	12	
JAN 1995											
24...	0730	106	5.8	-5.5	1.0	748	14.8	106	49	12	
FEB											
16...	0830	167	5.9	2.5	0.0	750	14.2	99	--	--	
MAR											
22...	0845	95	5.6	5.5	3.0	737	13.0	100	40	12	
APR											
25...	1430	77	6.1	11.5	6.0	749	12.2	100	32	12	
MAY											
09...	1315	156	6.5	20.5	13.0	755	10.6	102	67	13	
JUN											
06...	1300	159	6.6	27.5	21.0	748	8.7	99	69	13	
JUL											
12...	0900	206	6.7	17.5	21.5	754	8.0	92	90	15	
AUG											
08...	1330	118	7.1	23.0	21.0	759	8.9	100	49	13	
SEP											
12...	0830	193	6.9	7.0	14.5	761	8.8	86	83	17	
DATE		SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 1994											
15...	0.3	69	8.5	91	1.0	7.6	165	59	65	17	
DEC											
28...	0.2	53	5.3	75	0.80	7.3	130	46	22	9	
JAN 1995											
24...	0.2	54	5.2	61	0.80	7.2	104	40	18	7	
FEB											
16...	--	87	--	--	--	--	--	--	--	--	
MAR											
22...	0.2	43	4.0	62	0.70	6.8	103	35	27	4	
APR											
25...	0.2	33	4.8	50	0.80	7.4	85	27	16	2	
MAY											
09...	0.3	68	8.1	89	0.80	7.0	158	58	29	15	
JUN											
06...	0.3	72	7.9	90	1.1	7.4	169	63	32	18	
JUL											
12...	0.3	97	13	124	1.7	8.1	227	83	16	9	
AUG											
08...	0.2	53	5.5	74	0.70	7.4	121	44	36	11	
SEP											
12...	0.4	81	14	124	1.5	7.9	218	78	24	8	

CONNECTICUT RIVER BASIN

83

01144000 WHITE RIVER AT WEST HARTFORD, VT.--Continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 1994									
15...	22	2.3	3.6	5.2	8.6	<0.10	<0.010	<0.010	0.270
DEC									
28...	18	1.8	4.2	3.4	6.7	0.20	<0.010	<0.010	0.310
JAN 1995									
24...	17	1.6	4.0	3.1	6.2	<0.10	0.020	0.020	0.750
FEB									
16...	--	--	--	--	--	--	<0.010	<0.010	0.420
MAR									
22...	14	1.3	3.5	2.5	5.6	<0.10	0.010	0.010	0.430
APR									
25...	11	1.2	5.7	2.1	6.5	<0.10	<0.010	<0.010	0.070
MAY									
09...	23	2.2	3.2	4.7	7.5	<0.10	<0.010	<0.010	0.260
JUN									
06...	24	2.3	3.7	5.0	7.4	<0.10	<0.010	<0.010	0.230
JUL									
12...	31	3.0	3.2	7.5	10	0.10	<0.010	<0.010	0.210
AUG									
08...	17	1.7	3.6	3.5	6.5	<0.10	<0.010	<0.010	0.150
SEP									
12...	28	3.1	2.9	8.2	10	<0.10	<0.010	<0.010	0.230

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1994									
15...	<0.015	<0.010	<0.20	<0.20	<0.010	1.0	0.20	11	68
DEC									
28...	<0.015	<0.010	<0.20	<0.20	<0.010	1.1	0.10	2	71
JAN 1995									
24...	0.030	0.020	<0.20	<0.20	0.030	1.4	0.20	11	96
FEB									
16...	<0.015	<0.010	<0.20	<0.20	0.020	--	0.10	1	50
MAR									
22...	0.020	<0.010	<0.20	0.30	0.080	1.7	>2.0	77	95
APR									
25...	<0.015	<0.010	<0.20	<0.20	<0.010	1.1	0.10	9	52
MAY									
09...	0.020	<0.010	<0.20	<0.20	<0.010	1.1	0.10	8	50
JUN									
06...	0.040	<0.010	<0.20	<0.20	<0.010	1.4	0.20	1	67
JUL									
12...	0.020	<0.010	<0.20	<0.20	<0.010	1.3	0.20	7	55
AUG									
08...	<0.015	<0.010	<0.20	<0.20	<0.010	2.4	0.20	7	15
SEP									
12...	<0.015	<0.010	<0.20	<0.20	<0.010	1.0	0.10	9	57

CONNECTICUT RIVER BASIN

01144500 CONNECTICUT RIVER AT WEST LEBANON, N.H.

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: 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 Nov. 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 (Reservoirs in Connecticut River basin), 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, Nov. 4 1927, gage height, 35.0 ft, present site, from rating curve extended above 70,000 ft³/s; minimum daily 82 ft³/s, Aug. 8, 1965.

Stage and discharge of flood Nov. 4, 1927, are the greatest since at least 1760.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,500 ft³/s Jan.17, gage height, 13.78; maximum gage height 17.33 ft Mar. 18 (ice jam); minimum daily, 930 ft³/s, June 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3610	3220	3820	3010	5720	e4750	8770	7890	5110	1280	2130	1320
2	3280	1970	3050	3310	5680	e4950	6590	7840	5470	1280	1650	1140
3	3740	2850	3090	3470	5580	e4650	5630	7020	4930	1310	1880	1030
4	4610	3380	1780	3220	4590	e4930	6330	5510	5540	1290	1750	1160
5	3260	3200	4720	3710	4380	e4500	5470	5860	5490	1440	2050	1160
6	3080	2640	11700	4300	e5100	e5380	5210	4820	6020	1160	10600	1140
7	2900	3700	10800	3170	e5230	e5170	4410	5010	5200	1340	13800	2030
8	3420	4110	13600	2560	e3660	e5980	5190	4580	3590	1510	7780	1220
9	3820	4010	10300	e3600	e4670	e13300	4020	4800	2930	1570	6780	1330
10	4130	4180	6840	e3800	e4450	e9300	4660	4820	2550	1560	4930	1330
11	4360	4030	6480	e4000	e4600	e7300	4500	4160	2310	1470	3120	1450
12	2290	3480	5610	e4200	e4140	e6370	4310	4230	2220	1490	1900	1510
13	1570	2520	5000	e4000	e4500	e7350	5390	4750	3490	1480	2040	1400
14	2000	3560	4750	e3900	e4520	e7900	5980	3600	3250	1480	3110	1330
15	1770	2330	4160	7740	e4730	e11700	4820	5770	2570	1450	3250	1250
16	1740	2170	3970	15700	e4980	e14300	4170	7030	3000	1520	3060	1310
17	2790	3240	3820	25400	e4970	e17000	4140	9040	2010	1330	3220	1180
18	2110	2290	3940	25600	e4520	e19400	4170	7880	1840	2500	2800	1260
19	2680	2410	3650	22800	e4550	e16500	4440	8210	2980	2600	2100	1140
20	2610	2390	3290	15700	e4400	e15200	5080	7870	3790	1510	1400	1180
21	2560	2500	4190	20700	e3950	15600	5370	6200	1220	1410	1610	1870
22	2540	2090	4170	20000	e3620	21900	6840	5760	1690	1420	1300	1030
23	2330	2650	5910	15200	e4240	22400	7890	5960	1870	1520	1140	1200
24	2850	2570	4030	11400	e4230	20000	6950	4940	1870	1980	999	1830
25	2760	1460	3770	10400	e4280	15800	6480	4710	1670	1720	1550	1300
26	2020	2360	3350	8340	e4000	13400	5340	5150	1880	1740	1290	1370
27	2300	1790	4830	6720	e4680	13200	5000	4580	1330	3020	1280	1310
28	2030	2340	5210	6100	e4730	12900	5900	4700	943	3060	1250	1370
29	2050	3680	5200	3840	---	10100	6530	5100	930	2050	1180	1510
30	1690	4120	4140	5090	---	9340	6490	5350	1230	1750	1150	1390
31	1760	---	2850	5370	---	9760	---	6200	---	1720	1060	---
TOTAL	84660	87240	162020	276350	128700	350330	166070	179340	88923	51960	93159	40050
MEAN	2731	2908	5226	8915	4596	11300	5536	5785	2964	1676	3005	1335
MAX	4610	4180	13600	25600	5720	22400	8770	9040	6020	3060	13800	2030
MIN	1570	1460	1780	2560	3620	4500	4020	3600	930	1160	999	1030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1995, BY WATER YEAR (WY)

MEAN	4738	6750	6226	4949	4740	9192	20250	13020	6209	3617	3023	3212
MAX	12990	24860	16890	10680	17650	35510	32900	25890	16870	14050	8904	12900
(WY)	1982	1928	1984	1913	1981	1936	1934	1972	1947	1973	1990	1954
MIN	1314	2313	1795	1627	1419	1626	5536	4556	1946	1393	1072	1007
(WY)	1948	1948	1948	1948	1940	1940	1995	1987	1921	1921	1942	1921

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1912 - 1995

ANNUAL TOTAL	2727090	1708802	
ANNUAL MEAN	7471	4682	7097
HIGHEST ANNUAL MEAN			10700
LOWEST ANNUAL MEAN			4101
HIGHEST DAILY MEAN	54000	25600	129000
LOWEST DAILY MEAN	1410	930	82
ANNUAL SEVEN-DAY MINIMUM	2040	1140	731
INSTANTANEOUS PEAK FLOW		28500	a 136000
INSTANTANEOUS PEAK STAGE		b 17.33	35.00
10 PERCENT EXCEEDS	13300	8880	15900
50 PERCENT EXCEEDS	4970	3820	4540
90 PERCENT EXCEEDS	2350	1330	1660

a From rating curve extended above 70,000 ft³/s.

b Ice jam.

e Estimated.

01150500 MASCOMA RIVER AT MASCOMA, N.H.

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

DRAINAGE AREA.--153 mi².

PERIOD OF RECORD.--August 1923 to present; August 1923 to Jan. 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 good except those for estimated daily discharges, which are fair. Flow regulated by Mascoma and Crystal Lakes and Goose and Grafton Ponds (Reservoirs in Connecticut River basin).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 881 ft³/s, Apr. 8, gage height, 4.55 ft; minimum daily, 29 ft³/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	140	126	223	90	79	104	155	130	42	35	33
2	144	83	161	213	90	79	108	134	119	40	35	32
3	124	85	159	146	90	79	115	124	107	39	35	32
4	110	86	157	92	91	78	126	124	111	38	35	32
5	102	87	157	92	92	78	125	121	111	38	35	32
6	97	88	211	92	91	77	159	111	100	37	36	32
7	92	109	263	92	91	77	170	101	94	37	36	32
8	88	132	267	92	90	78	587	100	89	37	37	32
9	85	133	267	92	86	82	462	98	86	36	37	32
10	84	132	264	92	81	183	96	95	85	36	37	32
11	131	132	261	e91	83	265	97	96	84	36	37	31
12	175	131	256	91	83	264	98	93	86	35	37	31
13	176	129	249	90	82	258	100	99	91	35	37	31
14	181	129	172	90	82	225	109	105	95	35	37	31
15	179	113	103	91	81	193	129	120	94	34	36	30
16	178	91	104	262	81	204	143	231	93	34	36	30
17	178	91	104	489	81	391	157	322	90	34	36	30
18	177	91	105	547	81	630	166	282	87	34	36	30
19	174	91	105	538	81	648	172	254	83	34	35	30
20	173	91	106	488	81	557	172	219	78	34	35	30
21	173	91	105	468	81	485	189	195	73	34	35	29
22	172	92	105	492	80	612	211	176	57	34	35	29
23	171	93	105	498	79	728	267	148	45	34	35	30
24	212	93	105	361	79	604	253	137	45	34	34	30
25	245	92	109	258	79	476	210	132	44	34	34	30
26	237	92	282	256	79	437	188	137	44	34	34	30
27	228	92	395	251	79	306	177	130	42	34	33	30
28	221	93	389	246	79	205	170	127	40	34	33	30
29	212	93	310	234	---	209	164	121	37	34	33	30
30	206	94	239	162	---	150	167	127	40	35	33	30
31	200	---	231	89	---	100	---	128	---	35	33	---
TOTAL	5110	3089	5972	7318	2343	8837	5391	4542	2380	1101	1092	923
MEAN	165	103	193	236	83.7	285	180	147	79.3	35.5	35.2	30.8
MAX	245	140	395	547	92	728	587	322	130	42	37	33
MIN	84	83	103	89	79	77	96	93	37	34	33	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1995, BY WATER YEAR (WY)

MEAN	136	179	189	154	167	310	630	343	178	113	97.3	92.5
MAX	461	560	607	368	550	1222	1338	763	493	658	443	591
(WY)	1976	1928	1984	1978	1981	1936	1969	1937	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	30.8
(WY)	1964	1965	1979	1981	1980	1931	1995	1957	1985	1985	1985	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1923 - 1995

ANNUAL TOTAL	76089	48098	216
ANNUAL MEAN	208	132	359
HIGHEST ANNUAL MEAN			84.4
LOWEST ANNUAL MEAN			1973
HIGHEST DAILY MEAN	2470	728	5090
LOWEST DAILY MEAN	29	29	2.0
ANNUAL SEVEN-DAY MINIMUM	32	30	16
INSTANTANEOUS PEAK FLOW		881	b 5840
INSTANTANEOUS PEAK STAGE		4.55	b 7.50
10 PERCENT EXCEEDS	367	259	460
50 PERCENT EXCEEDS	105	93	124
90 PERCENT EXCEEDS	48	34	50

a Also occurred on Sept. 22.

b From gage located 900 ft. downstream of present site at different datum.

e Estimated.

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.--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)
Mar. 17	0300	* 318	* 4.38
Minimum discharge, 3.2 ft ³ /s, Sept. 3-9.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	21	34	e27	34	e18	41	44	28	4.8	8.0	4.0
2	69	25	29	e25	33	18	37	42	24	5.3	6.7	3.9
3	55	27	26	e24	53	17	34	40	33	4.8	14	3.6
4	46	23	30	e23	29	17	45	38	46	4.7	92	3.5
5	42	21	114	e23	e32	16	41	36	33	4.6	48	3.5
6	43	27	237	22	e34	17	52	35	27	5.2	42	3.4
7	37	64	144	22	e35	20	38	31	22	5.0	33	3.3
8	32	43	95	23	e34	75	36	27	21	5.4	22	3.5
9	30	35	79	22	e33	e80	35	26	20	6.7	16	4.5
10	33	30	59	19	e32	e58	36	26	17	5.4	13	5.5
11	30	27	56	19	e30	e56	35	30	17	4.8	11	5.0
12	28	24	61	23	e29	53	35	37	20	4.7	12	5.1
13	27	22	33	74	e28	57	60	34	20	4.5	26	e5.8
14	25	20	33	136	e28	80	51	31	17	4.2	15	e6.6
15	24	19	33	201	e28	149	44	40	15	13	12	e6.7
16	23	17	31	259	e29	252	42	45	14	9.4	11	e6.4
17	22	16	30	221	e26	292	39	37	12	31	9.3	e6.0
18	21	17	30	124	e25	234	41	35	11	27	8.2	e5.4
19	22	17	28	94	24	139	46	32	11	15	7.3	e5.0
20	23	16	25	106	23	119	49	38	9.7	11	6.5	e4.5
21	25	16	25	194	21	132	56	34	9.0	11	6.0	e4.6
22	23	23	24	135	20	157	81	31	8.4	14	5.2	e7.1
23	22	19	27	100	19	111	62	27	8.6	11	4.9	e15
24	21	16	40	77	e19	87	51	31	8.3	8.6	7.0	e10
25	20	16	77	64	e19	70	46	43	7.2	7.4	5.4	e7.9
26	18	16	57	59	e18	59	44	34	7.2	30	4.7	e7.8
27	18	14	e41	47	e17	53	42	33	6.2	34	4.7	e13
28	18	28	e35	85	e19	49	51	29	5.3	19	4.6	e11
29	17	61	e29	34	---	45	54	34	4.9	15	4.3	e7.5
30	17	43	e23	34	---	45	48	43	4.9	13	4.1	e6.7
31	17	---	e24	33	---	46	---	34	---	10	3.8	---
TOTAL	943	763	1609	2349	771	2621	1372	1077	487.7	349.5	467.7	185.8
MEAN	30.4	25.4	51.9	75.8	27.5	84.5	45.7	34.7	16.3	11.3	15.1	6.19
MAX	95	64	237	259	53	292	81	45	46	34	92	15
MIN	17	14	23	19	17	16	34	26	4.9	4.2	3.8	3.3
CFSM	1.30	1.09	2.22	3.24	1.18	3.61	1.95	1.48	.69	.48	.64	.26
IN.	1.50	1.21	2.56	3.73	1.23	4.17	2.18	1.71	.78	.56	.74	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

MEAN	47.6	66.6	49.6	39.8	36.2	86.3	145	74.9	36.9	25.7	25.9	29.9
MAX	121	121	80.1	75.8	76.6	185	269	130	67.8	57.5	51.5	97.2
(WY)	1988	1989	1991	1995	1990	1986	1994	1989	1989	1987	1986	1987
MIN	19.0	25.4	25.4	19.4	14.5	44.6	45.7	34.7	13.7	6.77	7.88	6.19
(WY)	1985	1995	1990	1988	1987	1989	1995	1995	1988	1991	1985	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1985 - 1995
ANNUAL TOTAL	21707.9	12995.7	
ANNUAL MEAN	59.5	35.6	55.3
HIGHEST ANNUAL MEAN			71.6
LOWEST ANNUAL MEAN			35.6
HIGHEST DAILY MEAN	757	292	1270
LOWEST DAILY MEAN	8.6	3.3	3.0
ANNUAL SEVEN-DAY MINIMUM	10	3.5	3.3
INSTANTANEOUS PEAK FLOW		318	a 1450
INSTANTANEOUS PEAK STAGE		4.38	7.78
INSTANTANEOUS LOW FLOW		3.2	2.8
ANNUAL RUNOFF (CFSM)	2.54	1.52	2.37
ANNUAL RUNOFF (INCHES)	34.51	20.66	32.13
10 PERCENT EXCEEDS	127	69	114
50 PERCENT EXCEEDS	30	26	32
90 PERCENT EXCEEDS	15	5.4	11

a From rating curve no. 7 extended above 440 ft³/s.

b Also occurred on Sept. 4-9.

e Estimated

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: 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.-- No estimated daily discharges. Records good. Flow regulated by powerplants upstream and by North Hartland Reservoir (Reservoir in Connecticut River basin) 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, Sept. 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, 3.8 ft³/s, July 3, 1933. Maximum discharge since construction of North Hartland Dam in March 1961, 6,170 ft³/s, Mar. 17, 1977, gage height, 8.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,820 ft³/s, Jan. 17, gage height, 7.16 ft; minimum daily, 20 ft³/s, July 11, 12, 14-16.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	198	216	283	449	211	557	168	157	31	32	25
2	374	212	167	354	337	142	218	258	106	31	21	24
3	295	226	193	238	192	137	249	320	221	31	21	24
4	224	164	211	248	225	137	589	292	190	31	322	24
5	215	147	355	161	249	166	43	198	214	31	181	23
6	273	151	1620	128	230	219	595	182	128	31	238	32
7	215	244	1580	296	227	143	323	217	152	31	195	23
8	220	235	727	238	266	348	33	251	71	32	108	22
9	209	154	305	177	46	821	33	238	151	32	85	23
10	154	161	589	186	453	814	894	196	94	25	47	22
11	167	195	409	108	47	263	248	245	112	20	62	22
12	140	146	276	155	123	330	332	175	137	20	53	22
13	144	132	201	228	397	370	352	178	64	94	73	22
14	207	165	330	456	294	528	520	105	119	20	162	22
15	127	130	360	568	99	742	241	257	85	20	69	22
16	151	128	278	641	213	1590	173	413	115	20	79	22
17	114	133	249	1710	282	1850	468	243	93	134	24	22
18	146	134	312	2090	148	1540	272	247	101	139	23	70
19	117	137	275	968	270	947	299	219	74	21	133	22
20	161	132	193	699	149	889	178	245	61	104	23	22
21	215	186	227	1620	271	1010	395	224	71	33	23	22
22	179	100	280	1370	149	1140	661	180	67	73	23	22
23	128	168	247	880	271	825	337	214	31	54	23	22
24	139	88	297	684	155	663	336	203	31	32	23	22
25	148	100	850	710	142	550	336	239	62	21	23	144
26	124	168	626	386	138	658	335	210	52	21	23	21
27	116	76	331	475	136	551	342	200	31	225	23	177
28	106	139	396	237	177	449	342	180	31	21	23	24
29	36	519	311	279	---	366	340	180	31	136	24	21
30	233	259	66	341	---	547	344	329	31	21	25	21
31	134	---	222	365	---	325	---	159	---	159	25	---
TOTAL	5628	5127	12699	17279	6135	19271	10385	6965	2883	1694	2209	1006
MEAN	182	171	410	557	219	622	346	225	96.1	54.6	71.3	33.5
MAX	417	519	1620	2090	453	1850	894	413	221	225	322	177
MIN	36	76	66	108	46	137	33	105	31	20	21	21

MEAN	215	334	339	283	275	623	1363	658	284	158	119	134
MAX	1060	816	1028	726	1157	2570	2587	1676	964	1131	759	1030
(WY)	1988	1976	1984	1937	1981	1936	1969	1940	1984	1973	1976	1938
MIN	33.3	70.5	72.2	56.2	55.4	84.0	346	201	70.3	34.8	28.5	29.7
(WY)	1965	1965	1948	1948	1940	1940	1995	1941	1965	1965	1965	1967

WATER YEARS 1931 - 1995

ANNUAL TOTAL	146748		91281				
ANNUAL MEAN	402		250			398	
HIGHEST ANNUAL MEAN						691	1976
LOWEST ANNUAL MEAN						173	1965
HIGHEST DAILY MEAN	4110	Apr 18	2090	Jan 18	13300		Mar 18 1936
LOWEST DAILY MEAN	23	Jul 20	a 20	Jul 11		3.8	Jul 3 1933
ANNUAL SEVEN-DAY MINIMUM	55	Jul 4	22	Sep 10		14	Sep 25 1967
INSTANTANEOUS PEAK FLOW			3820	Jan 17	b 24400		Sep 21 1938
INSTANTANEOUS PEAK STAGE			7.16	Jan 17		17.68	Sep 21 1938
10 PERCENT EXCEEDS	790		550			910	
50 PERCENT EXCEEDS	199		177			202	
90 PERCENT EXCEEDS	86		23			55	

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

CONNECTICUT RIVER BASIN

01152500 SUGAR RIVER AT WEST CLAREMONT, N.H.

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

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 Oct. 1, 1928, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Regulation by Sunapee Lake 25 mi upstream (Reservoirs in Connecticut River basin) 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, Mar. 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, Mar. 12, 1936 (ice jam); minimum daily discharge, 14 ft³/s, Aug. 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)
Dec. 25	0915	*3,050	5.15	Mar. 9	0100	ice jam	*9.52

Minimum daily discharge, 32 ft³/s, Sept. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	216	268	e390	e310	e190	501	270	342	e66	130	40
2	147	243	225	e400	e290	e175	447	249	288	e62	95	41
3	124	199	209	e350	e270	e160	401	218	269	e60	106	38
4	117	180	190	e300	e240	e155	387	216	289	e54	586	37
5	110	183	372	e250	e210	e160	425	194	262	e53	547	37
6	100	181	1140	e260	e200	e165	343	194	231	47	630	37
7	96	188	864	e270	e190	e170	337	180	210	54	521	34
8	91	168	686	e280	e190	e200	308	168	211	53	318	42
9	86	177	506	e260	e200	e1300	291	146	196	60	225	47
10	91	142	417	e240	e220	e1150	301	144	182	53	168	49
11	88	130	373	e230	e190	e860	286	158	182	54	137	43
12	84	124	358	e210	e180	e650	273	262	227	51	118	40
13	77	119	231	e230	e190	e580	383	258	274	49	120	40
14	90	119	247	e270	e185	e600	456	221	239	45	118	45
15	82	95	244	e500	e180	677	395	274	208	50	104	33
16	82	101	221	e1000	e195	1040	352	532	215	49	95	32
17	79	91	216	1360	e200	1140	321	437	192	101	91	40
18	79	72	216	1080	e190	1140	297	409	164	123	75	49
19	71	92	218	862	e190	1040	291	382	e140	102	63	44
20	88	85	177	769	e200	934	324	378	e120	80	52	44
21	104	94	207	1240	e200	920	323	373	e110	75	47	38
22	120	134	196	1220	e195	1260	497	373	e100	65	53	51
23	114	157	190	1050	e195	1110	508	340	e94	56	52	76
24	119	121	618	897	e190	958	430	310	e87	57	51	69
25	179	117	2590	767	e190	807	377	295	e82	50	48	63
26	205	111	1660	646	e190	689	334	267	e90	94	48	53
27	204	94	1190	e520	e180	605	299	243	e100	192	51	52
28	201	143	951	e450	e180	504	283	218	e84	177	45	44
29	199	365	790	e400	---	447	301	241	e72	576	42	45
30	195	329	e460	e370	---	430	289	444	e68	286	41	39
31	191	---	e430	e340	---	493	---	425	---	182	40	---
TOTAL	3790	4570	16660	17411	5740	20709	10760	8819	5328	3076	4817	1342
MEAN	122	152	537	562	205	668	359	284	178	99.2	155	44.7
MAX	205	365	2590	1360	310	1300	508	532	342	576	630	76
MIN	71	72	177	210	180	155	273	144	68	45	40	32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	MEAN	208	338	356	310	322	671	1282	642	314	169	139	131
MAX	895	832	997	1090	1343	2490	2745	1657	818	711	952	1269	
(WY)	1976	1952	1984	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1928 - 1995

ANNUAL TOTAL	145550	103022	
ANNUAL MEAN	399	282	
HIGHEST ANNUAL MEAN			406
LOWEST ANNUAL MEAN			660
HIGHEST DAILY MEAN	3710	Apr 14	11200
LOWEST DAILY MEAN	40	Sep 22	14
ANNUAL SEVEN-DAY MINIMUM	49	Sep 16	21
INSTANTANEOUS PEAK FLOW			a 14000
INSTANTANEOUS PEAK STAGE			c 11.80
10 PERCENT EXCEEDS	863	bc 9.52	Mar 9
50 PERCENT EXCEEDS	210		70
90 PERCENT EXCEEDS	78		

a From rating curve extended above 6,700 ft³/s as explained above.

b From peak stage indicator.

c Ice jam.

e Estimated

CONNECTICUT RIVER BASIN

89

01152500 SUGAR RIVER AT WEST CLAREMONT, N.H.-- continued

(National water quality assessment program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water-quality records: Water years 1954, 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) UNITS (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 28...	1030	41	158	7.0	15.5	16.5	759	9.4	97	29

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR-BONATE WATER DIS-IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND-ARD) UNITS (00403)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
AUG 1995 28...	56	1	29	28	90	1.4	7.8	168	22	170

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
AUG 1995 28...	31	9.0	1.7	2.4	18	8.0	<0.10	<0.010	<0.010	0.160

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 28...	<0.015	<0.010	<0.20	0.20	<0.010	2.8	0.20	8	50

CONNECTICUT RIVER BASIN

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.--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 fair. Low flow regulated by powerplant upstream.

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)
Dec. 5	1930	* 3150	* 7.01	No other peak greater than base discharge.			

Minimum daily discharge, 6.9 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	54	132	e115	e122	e84	e190	121	e63	27	13	8.8
2	80	105	107	e121	e111	e79	e160	113	e56	32	11	8.6
3	68	70	103	e110	e97	e74	e152	107	e59	20	14	8.0
4	59	55	115	e100	e93	e73	e170	100	e68	16	342	7.6
5	54	51	955	e78	e92	e77	e162	96	e55	14	91	7.4
6	50	49	977	e79	e93	e80	e135	102	e45	13	132	7.1
7	47	78	526	e100	e95	e83	e140	88	e43	15	90	6.9
8	44	64	333	e94	e93	e200	e130	82	e42	19	52	7.2
9	43	55	231	e79	e92	779	e132	78	e40	36	37	11
10	43	50	210	e69	e100	285	e135	76	e37	21	29	13
11	43	46	250	e63	e94	213	e128	91	e36	17	25	12
12	40	44	e150	e67	e88	186	e130	116	e46	17	23	10
13	38	43	e90	e87	e85	187	e215	95	e44	15	21	9.6
14	38	42	e108	e135	e84	e270	e198	85	43	13	18	11
15	36	41	e113	e355	e82	e400	e162	105	40	15	18	12
16	35	40	e101	568	e96	e730	e142	113	36	19	17	10
17	35	39	e102	594	e90	e810	e129	96	31	36	16	13
18	33	38	e105	318	e85	e700	e125	108	28	38	15	16
19	34	37	e100	247	e87	e490	144	92	26	27	13	13
20	37	36	e81	462	e90	e435	145	84	23	21	12	11
21	60	36	e92	784	e89	e490	147	78	20	18	12	10
22	53	104	e88	533	e86	e600	308	81	19	16	11	16
23	46	75	e84	401	e84	e425	207	68	18	15	9.7	51
24	43	45	256	301	e91	e340	167	65	17	14	9.7	25
25	41	e50	601	245	e86	e280	147	82	19	13	9.1	18
26	38	e50	334	203	e77	e240	133	e67	25	36	9.1	17
27	37	e40	230	e175	e74	e198	124	e60	20	29	11	19
28	36	e142	199	e140	e75	e200	138	e55	17	20	12	17
29	36	373	170	e128	---	e180	154	e78	16	31	10	14
30	35	194	e94	e124	---	e180	132	e137	15	21	9.4	13
31	33	---	e104	e123	---	e212	---	e82	---	15	8.8	---
TOTAL	1411	2146	7141	6998	2531	9580	4681	2801	1047	659	1100.8	403.2
MEAN	45.5	71.5	230	226	90.4	309	156	90.4	34.9	21.3	35.5	13.4
MAX	96	373	977	784	122	810	308	137	68	38	342	51
MIN	33	36	81	63	74	73	124	55	15	13	8.8	6.9
CFSM	.41	.64	2.06	2.02	.81	2.76	1.39	.81	.31	.19	.32	.12
IN.	.47	.71	2.37	2.32	.84	3.18	1.55	.93	.35	.22	.37	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	140	191	180	127	127	416	643	276	120
MAX	461	281	326	226	278	850	1199	535	242
(WY)	1988	1990	1991	1995	1990	1990	1994	1990	1992
MIN	29.4	71.5	78.2	58.7	51.0	184	156	90.4	34.9
(WY)	1994	1995	1990	1989	1993	1994	1995	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1987 - 1995

ANNUAL TOTAL	74142	40499.0	199
ANNUAL MEAN	203	111	283
HIGHEST ANNUAL MEAN			1990
LOWEST ANNUAL MEAN			111
HIGHEST DAILY MEAN	4200	977	6670
LOWEST DAILY MEAN	16	6.9	6.9
ANNUAL SEVEN-DAY MINIMUM	17	7.5	7.5
INSTANTANEOUS PEAK FLOW		3150	a 11500
INSTANTANEOUS PEAK STAGE		7.01	10.59
ANNUAL RUNOFF (CFSM)	1.81	.99	1.78
ANNUAL RUNOFF (INCHES)	24.63	13.45	24.13
10 PERCENT EXCEEDS	385	242	413
50 PERCENT EXCEEDS	75	75	97
90 PERCENT EXCEEDS	28	13	24

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

e Estimated

01154500 CONNECTICUT RIVER AT NORTH WALPOLE, N.H.

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, N.H., and at mile 172.5.

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

PERIOD OF RECORD.--Discharge: 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 (Reservoirs in Connecticut River basin), 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, Mar. 19, 1936, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,400 ft³/s, Jan. 18, gage height, 16.75 ft; minimum daily, 1,230 ft³/s, Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4950	4810	5820	5040	8390	6030	12200	9220	7250	1850	3140	1480
2	4640	4560	4730	5120	8320	6020	11200	9530	6370	1820	2340	1230
3	5140	4190	4240	5950	7660	5970	8400	8570	6230	1760	2080	1450
4	5980	5080	4580	5330	6170	6060	7100	7840	6360	1740	5800	1510
5	5140	4140	5430	5150	4230	5690	9290	7240	7030	1470	3980	1440
6	4080	2790	18900	4520	5770	5800	7240	6220	6950	1380	8560	1530
7	4010	4600	17500	5250	6620	6290	6930	6060	6550	1670	15700	1520
8	4220	5160	17500	3800	6570	7430	5770	6160	4930	1850	12500	1540
9	5350	5380	15500	5130	6280	17700	6980	5590	2610	1690	8170	1640
10	5170	5540	11900	4750	5840	15000	6130	5920	3300	1630	6090	1560
11	4740	5270	11600	5750	6230	11900	7330	5380	2960	1680	4520	1630
12	3480	4600	8910	5730	5230	10100	6330	5380	3530	1640	2250	1710
13	2440	3830	6930	5270	6490	10200	7450	5250	5260	1670	2550	1540
14	2820	3590	7630	6440	5950	11100	8210	6270	3950	1670	3410	1540
15	2540	5540	5760	8860	6190	13100	7830	6800	4100	1660	3680	1530
16	2610	3450	6340	20700	6130	21900	6140	8540	2630	1640	3560	1600
17	3500	3730	6810	31100	6040	26200	6190	9970	2300	2810	3680	1530
18	2760	3380	5270	34700	5370	28000	5830	10600	2800	2110	3500	1590
19	3400	2580	5450	29200	5610	24000	6160	10100	3530	3630	2690	1500
20	3740	3980	5280	23600	5580	21500	6990	9580	3280	2200	2150	1500
21	4340	3120	6160	27000	5650	21800	7610	9100	2960	1660	2170	1400
22	3570	3910	6160	29200	4750	27300	8050	7580	2280	1910	2060	1540
23	3190	2790	7500	23300	4930	29000	10800	6530	2140	1890	1720	1540
24	4270	2590	7120	17200	6750	26200	10300	5560	2350	2330	1240	1410
25	3540	2410	11900	14300	6080	21900	8800	5700	1610	2030	1480	1510
26	3150	3460	11500	12500	4700	16500	7540	6600	2070	2730	1500	1740
27	2360	3510	8310	10500	4880	15900	6730	6430	1750	4070	1570	1700
28	3170	3120	8700	9140	4770	16800	7430	5880	1650	4450	1520	1880
29	3080	5360	8850	5830	---	12900	8180	6300	1580	3780	1500	1630
30	2520	7290	6600	5410	---	12100	8940	7250	1720	3740	1500	1740
31	2800	---	4240	6800	---	12200	---	7310	---	1290	1540	---
TOTAL	116700	123760	263120	382570	167180	472590	234080	224460	112030	67450	118150	46660
MEAN	3765	4125	8488	12340	5971	15240	7803	7241	3734	2176	3811	1555
MAX	5980	7290	18900	34700	8390	29000	12200	10600	7250	4450	15700	1880
MIN	2360	2410	4240	3800	4230	5690	5770	5250	1580	1290	1240	1230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995, BY WATER YEAR (WY)

	MEAN	6197	8514	8381	6718	6931	13440	27100	16390	8008	4329	3905	3778
MAX	18300	18420	22550	14890	21810	34150	45630	33380	20600	18930	12990	14820	
(WY)	1978	1960	1984	1978	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1942 - 1995	
ANNUAL TOTAL	3560100		2328750			
ANNUAL MEAN	9754		6380		9473	
HIGHEST ANNUAL MEAN					13980	
LOWEST ANNUAL MEAN					4991	
HIGHEST DAILY MEAN	71400	Apr 17	34700	Jan 18	88300	Mar 28 1953
LOWEST DAILY MEAN	1650	Aug 12	1230	Sep 2	a 115	Aug 31 1952
ANNUAL SEVEN-DAY MINIMUM	2720	Sep 3	1450	Aug 30	777	Aug 7 1970
INSTANTANEOUS PEAK FLOW			36400	Jan 18	97000	Mar 27 1953
INSTANTANEOUS PEAK STAGE			16.75	Jan 18	30.37	Mar 27 1953
10 PERCENT EXCEEDS	18900		12100		21000	
50 PERCENT EXCEEDS	5820		5270		6100	
90 PERCENT EXCEEDS	3380		1630		1970	

a Also occurred on Sept. 2, 1957.

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, VT., 2.2 mi upstream from Mills Brook, and 18.2 mi upstream from mouth.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--Discharge: October 1994 to current year. September 1919 to September 1923, October 1928 to September 1989, at site 5.5 mi downstream (station 01156000).

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, which are fair. Flow regulated since 1961 by Ball Mountain Reservoir and Townshend Reservoir (Reservoirs in Connecticut River basin). These reservoirs have a combined usable capacity of about 3.84 billion ft³.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,430 ft³/s, Dec. 6, gage height, 7.93 ft; minimum daily discharge, 2.3 ft³/s, estimated, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	597	113	624	273	318	218	545	618	270	37	44	45
2	476	158	497	306	339	205	516	518	198	37	42	33
3	364	182	234	323	282	196	403	289	151	35	42	26
4	260	174	249	331	261	172	293	293	498	34	431	26
5	287	167	1180	237	252	172	307	257	293	34	420	25
6	247	167	3880	220	209	189	273	244	197	37	558	24
7	164	215	4630	286	159	245	278	234	174	34	555	19
8	161	206	2210	314	209	471	268	281	159	35	423	4.5
9	161	216	970	300	210	1570	267	203	134	38	202	e2.3
10	158	191	807	288	249	1680	272	240	113	35	130	e2.8
11	155	146	800	253	232	1330	268	215	75	36	95	4.5
12	146	144	748	230	214	841	299	215	115	32	69	9.8
13	142	142	511	238	210	854	762	295	169	32	67	10
14	99	140	350	413	209	946	933	252	154	29	62	11
15	95	139	422	915	204	1260	850	155	145	26	51	10
16	95	140	426	1320	254	2520	782	300	124	27	49	9.4
17	93	137	411	2750	199	3480	453	302	93	44	47	14
18	114	135	403	3330	209	2590	261	295	78	59	44	23
19	154	134	385	2230	257	1800	356	262	50	89	42	18
20	147	131	283	1110	276	1710	433	241	109	107	40	25
21	162	133	231	1960	271	1670	285	208	37	90	40	38
22	131	228	312	2170	260	1850	454	221	55	51	38	45
23	120	201	335	1590	253	1500	366	206	55	47	37	100
24	141	161	660	891	249	1000	470	182	43	48	36	56
25	190	172	1200	800	192	825	533	195	40	36	35	35
26	166	163	849	593	176	664	444	231	57	94	35	34
27	108	136	1050	383	172	557	422	224	48	145	31	67
28	101	465	1360	252	214	483	423	190	42	81	29	236
29	100	1730	861	237	---	367	1060	165	39	68	27	69
30	99	1730	373	214	---	377	958	360	38	59	26	39
31	99	---	262	248	---	474	---	433	---	48	27	---
TOTAL	5532	8296	27513	25005	6539	32216	14234	8324	3753	1604	3774	1061.3
MEAN	178	277	888	807	234	1039	474	269	125	51.7	122	35.4
MAX	597	1730	4630	3330	339	3480	1060	618	498	145	558	236
MIN	93	113	231	214	159	172	261	155	37	26	26	2.3

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

	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	178	277	888	807	234	1039	474	269	125	51.7	122	35.4
MAX	178	277	888	807	234	1039	474	269	125	51.7	122	35.4
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
MIN	178	277	888	807	234	1039	474	269	125	51.7	122	35.4
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1995 WATER YEAR

ANNUAL TOTAL	137851.3
ANNUAL MEAN	378
HIGHEST DAILY MEAN	4630 Dec 7
LOWEST DAILY MEAN	e 2.3 Sep 9
ANNUAL SEVEN-DAY MINIMUM	6.4 Sep 8
INSTANTANEOUS PEAK FLOW	5430 Dec 6
INSTANTANEOUS PEAK STAGE	7.93 Dec 6
10 PERCENT EXCEEDS	901
50 PERCENT EXCEEDS	209
90 PERCENT EXCEEDS	35

e Estimated.

01160350 ASHUELOT RIVER AT WEST SWANZY, N.H.

LOCATION.--Lat 42°52'16", long 72°19'42", Cheshire County, Hydrologic Unit 01080201, on left bank 4 miles south of Keene, N.H., 3.8 mi downstream from South Branch Ashuelot River, and 14.2 mi upstream from mouth.

DRAINAGE AREA.--316.1 mi².

PERIOD OF RECORD.--Discharge: 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 good except those for estimated daily discharges, which are fair. Flow regulated by Surry Mountain Lake 20 mi upstream since 1942 and by Otter Brook Lake 16 mi upstream on Otter Brook since 1958 (Reservoirs in Connecticut River basin). Some regulation by small hydro plants upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,400 ft³/s, Apr. 8, gage height, 3.73 ft; minimum daily discharge, 53 ft³/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1900	1190	396	468	167	87
2	---	---	---	---	---	---	1950	1140	345	301	134	82
3	---	---	---	---	---	---	1990	955	319	251	118	76
4	---	---	---	---	---	---	2340	821	296	211	109	75
5	---	---	---	---	---	---	2670	683	264	182	102	75
6	---	---	---	---	---	---	2740	609	245	159	111	68
7	---	---	---	---	---	---	2860	594	235	136	100	62
8	---	---	---	---	---	---	3200	1030	223	161	85	59
9	---	---	---	---	---	---	2890	1540	198	235	71	63
10	---	---	---	---	---	---	2740	1410	174	213	65	71
11	---	---	---	---	---	---	2820	1150	156	186	59	72
12	---	---	---	---	---	---	2790	1030	161	165	53	69
13	---	---	---	---	---	---	2750	1020	179	145	57	64
14	---	---	---	---	---	---	2980	877	168	126	83	e74
15	---	---	---	---	---	---	2880	781	175	113	93	e68
16	---	---	---	---	---	---	2640	1170	174	112	85	e62
17	---	---	---	---	---	---	2550	1770	166	107	77	e66
18	---	---	---	---	---	---	2550	1920	157	107	175	e80
19	---	---	---	---	---	---	2600	1730	143	100	340	e88
20	---	---	---	---	---	---	2490	1480	128	86	261	e76
21	---	---	---	---	---	---	2340	1280	121	94	283	e72
22	---	---	---	---	---	---	2250	1000	129	100	551	e64
23	---	---	---	---	---	---	2110	798	118	109	472	e89
24	---	---	---	---	---	---	1930	701	111	118	324	e155
25	---	---	---	---	---	---	1830	649	122	112	234	e200
26	---	---	---	---	---	---	1700	661	144	109	184	e180
27	---	---	---	---	---	---	1620	830	137	107	153	e180
28	---	---	---	---	---	---	1620	780	143	164	132	e300
29	---	---	---	---	---	---	1500	656	149	231	119	e450
30	---	---	---	---	---	---	1360	582	219	190	105	e355
31	---	---	---	---	---	---	---	475	---	216	89	---
TOTAL	---	---	---	---	---	---	70590	31312	5695	5114	4991	3482
MEAN	---	---	---	---	---	---	2353	1010	190	165	161	116
MAX	---	---	---	---	---	---	3200	1920	396	468	551	450
MIN	---	---	---	---	---	---	1360	475	111	86	53	59

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

MEAN	---	---	---	---	---	---	2353	1010	190	165	161	116
MAX	---	---	---	---	---	---	2353	1010	190	165	161	116
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994
MIN	---	---	---	---	---	---	2353	1010	190	165	161	116
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	121184	
ANNUAL MEAN	662	
HIGHEST DAILY MEAN	3200	Apr 8
LOWEST DAILY MEAN	53	Aug 12
ANNUAL SEVEN-DAY MINIMUM	66	Sep 7
INSTANTANEOUS PEAK FLOW	3400	Apr 8
INSTANTANEOUS PEAK STAGE	3.73	Apr 8
10 PERCENT EXCEEDS	2300	
50 PERCENT EXCEEDS	186	
90 PERCENT EXCEEDS	73	

e Estimated

CONNECTICUT RIVER BASIN

01160350 ASHUELOT RIVER AT WEST SWANZY, N.H.

LOCATION.--Lat 42°52'16", long 72°19'42", Cheshire County, Hydrologic Unit 01080201, on left bank 4 miles south of Keene, N.H., 3.8 mi downstream from South Branch Ashuelot River, and 14.2 mi upstream from mouth.

DRAINAGE AREA.--316.1 mi².

PERIOD OF RECORD.--Discharge: 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 good except those for estimated daily discharges, which are fair. Flow regulated by Surry Mountain Lake 20 mi upstream since 1942 and by Otter Brook Lake 16 mi upstream on Otter Brook since 1958 (Reservoirs in Connecticut River basin). Some regulation by small hydro plants upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,840 ft³/s, Mar. 10, gage height, 3.30 ft (ice jam); minimum daily discharge, 29 ft³/s, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e242	112	e270	751	698	332	575	320	373	48	587	29
2	e210	115	e211	793	542	316	531	279	322	49	448	30
3	e182	117	e200	683	545	264	492	216	306	48	432	30
4	e172	165	186	540	540	251	495	204	312	44	487	30
5	e182	160	333	e464	558	244	538	198	289	43	611	30
6	206	158	853	e464	519	250	465	210	242	41	704	29
7	197	162	e765	544	e535	262	451	257	213	41	717	28
8	179	186	e687	594	511	465	444	308	197	48	549	30
9	161	237	e616	551	471	1580	429	242	180	54	400	30
10	138	214	576	500	432	e1700	482	205	155	48	280	30
11	118	196	e602	e327	300	1430	495	223	140	45	206	30
12	116	164	e561	216	300	1210	455	459	141	44	170	29
13	151	141	448	402	266	1130	645	493	150	44	136	29
14	199	131	422	368	244	1210	893	427	143	42	106	30
15	185	124	386	718	211	1230	827	418	138	42	92	30
16	171	116	357	1130	330	1300	709	511	139	42	83	30
17	156	97	314	1300	391	1370	592	481	130	47	74	38
18	130	91	327	1440	375	1460	501	456	117	56	66	49
19	130	105	324	1420	e371	1420	496	413	103	66	58	48
20	136	114	300	1360	e365	1360	568	388	93	49	51	46
21	171	131	297	1480	e350	1390	514	351	84	49	46	44
22	173	172	312	1560	e325	1510	593	334	76	52	42	56
23	161	191	294	1570	e290	1470	598	301	71	49	38	109
24	155	167	729	1550	e345	1370	533	268	67	60	36	98
25	139	151	1540	1320	e375	1280	457	279	70	56	33	82
26	159	e138	1450	1160	e310	1130	394	273	69	102	31	80
27	167	e122	1130	1080	e285	813	356	251	65	434	31	83
28	123	177	1180	967	e317	651	330	227	59	275	31	79
29	118	e307	1120	916	---	609	348	224	55	242	30	75
30	128	e327	e946	831	---	554	341	245	51	564	30	72
31	123	---	e718	788	---	600	---	344	---	582	29	---
TOTAL	4978	4788	18454	27787	11101	30161	15547	9805	4550	3406	6634	1433
MEAN	161	160	595	896	396	973	518	316	152	110	214	47.8
MAX	242	327	1540	1570	698	1700	893	511	373	582	717	109
MIN	116	91	186	216	211	244	330	198	51	41	29	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	161	160	595	896	396	973	1436	663	171	137	187	81.9
MAX	161	160	595	896	396	973	2353	1010	190	165	214	116
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1994	1995	1994
MIN	161	160	595	896	396	973	518	316	152	110	161	47.8
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1994 - 1995

ANNUAL TOTAL	138644											
ANNUAL MEAN	380									380		
HIGHEST ANNUAL MEAN										380		1995
LOWEST ANNUAL MEAN										380		1995
HIGHEST DAILY MEAN	3200	Apr	8		1700	Mar	10		3200	Apr	8	1994
LOWEST DAILY MEAN	53	Aug	12		28	Sep	7		28	Sep	7	1995
ANNUAL SEVEN-DAY MINIMUM	66	Sep	7		29	Sep	1		29	Sep	1	1995
INSTANTANEOUS PEAK FLOW					1840	Mar	10		3400	Apr	8	1994
INSTANTANEOUS PEAK STAGE					a 3.30	Mar	10		3.73	Apr	8	1994
10 PERCENT EXCEEDS	1750				954				1360			
50 PERCENT EXCEEDS	184				257				235			
90 PERCENT EXCEEDS	84				44				53			

a Ice jam.

e Estimated

01161000 ASHUELOT RIVER AT HINSDALE, N.H.

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: 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 Sept. 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 Surry Mountain Lake 33 mi upstream since 1942 and by Otter Brook Lake 29 mi upstream on Otter Brook since 1958 (Reservoirs in Connecticut River basin). Regulation at low flow by small hydro plants upstream.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,840 ft³/s, Mar. 9, gage height, 6.42 ft; minimum daily discharge, 29 ft³/s, Sept. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324	169	457	897	883	509	765	458	424	68	585	42
2	286	167	381	964	692	504	704	427	396	65	538	39
3	247	166	323	901	620	429	658	359	376	65	474	37
4	215	170	309	711	624	394	647	330	407	61	478	37
5	203	199	464	e580	687	384	e570	319	392	59	650	35
6	212	199	1250	e630	e670	402	e600	326	334	59	773	35
7	235	199	1120	e720	e660	423	e580	312	294	55	852	35
8	215	211	914	800	e650	633	e570	402	274	65	701	33
9	201	255	787	723	e610	2320	e550	361	251	65	537	34
10	188	272	740	723	e560	2290	e620	329	221	67	412	36
11	174	250	813	668	e400	1900	e640	305	204	77	320	35
12	137	227	906	497	e400	1530	e580	535	199	50	263	39
13	141	198	650	527	e360	1370	e840	648	213	59	217	29
14	217	182	596	525	e330	1430	e1100	570	210	57	187	34
15	253	179	549	821	e290	1470	e1020	539	196	50	160	33
16	235	165	501	1500	e475	1550	e920	623	192	48	136	32
17	215	153	466	1700	e630	1630	756	614	184	50	123	40
18	191	134	468	1730	e610	1750	666	579	171	58	111	54
19	177	135	480	1660	611	1700	645	533	154	73	99	59
20	180	147	433	1610	576	1590	748	498	134	77	88	54
21	216	162	419	1930	543	1600	706	464	121	66	79	50
22	235	225	427	2060	513	1780	761	451	106	67	72	54
23	223	262	420	2000	474	1750	779	418	103	66	65	96
24	215	242	753	1900	547	1610	711	380	83	63	61	117
25	197	212	1940	1610	590	1470	632	383	84	67	56	100
26	192	201	1880	1350	503	1340	543	384	91	114	53	92
27	214	178	1360	1240	463	1070	500	358	81	403	51	84
28	198	233	1290	1070	494	861	474	320	79	402	50	77
29	171	449	1240	1020	---	779	479	310	72	288	49	88
30	170	521	980	949	---	730	478	321	72	447	47	60
31	174	---	898	877	---	760	---	365	---	583	44	---
TOTAL	6451	6462	24214	34893	15465	37958	20242	13221	6118	3794	8331	1590
MEAN	208	215	781	1126	552	1224	675	426	204	122	269	53.0
MAX	324	521	1940	2060	883	2320	1100	648	424	583	852	117
MIN	137	134	309	497	290	384	474	305	72	48	44	29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 1995, BY WATER YEAR (WY)

	MEAN	337	575	650	592	594	1235	1888	988	513	274	228	241
MAX	1474	2248	1727	1539	2016	4392	3723	2175	2075	1182	1098	2394	
(WY)	1976	1928	1974	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1907 - 1995

ANNUAL TOTAL	255634		178739									
ANNUAL MEAN	700		490									
HIGHEST ANNUAL MEAN												1960
LOWEST ANNUAL MEAN												1965
HIGHEST DAILY MEAN	4260	Apr 8	2320	Mar 9								1936
LOWEST DAILY MEAN	82	Aug 12	29	Sep 13								1929
ANNUAL SEVEN-DAY MINIMUM	97	Sep 7	34	Sep 10								1966
INSTANTANEOUS PEAK FLOW			2840	Mar 9								1936
INSTANTANEOUS PEAK STAGE			6.42	Mar 9								1936
10 PERCENT EXCEEDS	1960		1170									
50 PERCENT EXCEEDS	324		381									
90 PERCENT EXCEEDS	135		59									

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

b From flood marks.

e Estimated

RESERVOIRS IN CONNECTICUT RIVER BASIN

- 01127850; 01128000. **FIRST CONNECTICUT AND SECOND CONNECTICUT LAKES** on Connecticut River are operated as a unit for storage of water for power and are used for recreation. The downstream order and usable capacity of each are as follows: Second Lake, 12 mi northeast of Pittsburg, NH, 506 million ft³; First Lake, 5.6 mi northeast of Pittsburg, NH, 3.33 billion ft³. Records provided by New England Power Co.
01129000. **LAKE FRANCIS** on Connecticut River at Pittsburg, NH, completed in March 1940, used for storage of water for power and for recreation, has usable capacity of 4.326 billion ft³. Records provided by New Hampshire Water Resources Board.
- 01132000; 01132500. **MOORE AND COMERFORD RESERVOIRS** on Connecticut River are operated as a unit for storage of water for hydroelectric power development and are used for recreation. The downstream order and usable capacity of each are as follows: Moore Reservoir, 4.5 mi northwest of Littleton, NH, filled in April 1956, 4.97 billion ft³; Comerford Reservoir, 5 mi northeast of Monroe, NH, completed in 1930, 1.279 billion ft³. Records provided by New England Power Co.
01141000. **UNION VILLAGE RESERVOIR** on Ompompanoosuc River, 0.3 mi north of Union Village, VT, completed in 1949 for flood control, has usable capacity of 1.66 billion ft³. Records provided by U.S. Army Corps of Engineers.
- 01148000; 01150000. **LAKES AND PONDS IN MASCOMA RIVER BASIN** are operated as a unit for storage of water for power and are used for recreation. The reservoirs and usable capacity of each are as follows: 01148000 Goose Pond, 5.2 mi northeast of Mascoma, NH, 509 million ft³; Grafton Pond, 8.5 mi southeast of Mascoma, 144 million ft³; Crystal Lake, 5.8 mi southeast of Mascoma, 75 million ft³; 01150000 Mascoma Lake at Mascoma, 337 million ft³; total usable capacity of the four reservoirs, 1.06 billion ft³. Records provided by New Hampshire Water Resources Board.
01151400. **NORTH HARTLAND RESERVOIR** on Ottauquechee River at North Hartland, VT, completed in 1961, used for flood control and recreation, has usable capacity of 3.11 billion ft³. Records provided by U.S. Army Corps of Engineers.
01152000. **SUNAPEE LAKE** on Sugar River at Sunapee, NH, used for recreation and storage of water for power, has usable capacity of 862 million ft³. Records provided by New Hampshire Water Resources Board.
01152900. **NORTH SPRINGFIELD RESERVOIR** on Black River at North Springfield, VT, completed in 1960, used for flood control and recreation, has usable capacity of 2.23 billion ft³. Records provided by U.S. Army Corps of Engineers.
01155400. **BALL MOUNTAIN RESERVOIR** on West River, 2 mi north of Jamaica, VT, completed in 1961, used for food control and recreation, has usable capacity of 2.38 billion ft³. Records provided by U.S. Army Corps of Engineers.
01155900. **TOWNSHEND RESERVOIR** on West River, 1.8 mi northwest of Townshend, VT, completed in 1961, used for flood control and recreation, has usable capacity of 1.46 billion ft³. Records provided by U.S. Army Corps of Engineers.
01157500. **SURRY MOUNTAIN LAKE** on Ashuelot River, 4.5 mi north of Keene, NH, completed in 1942, used for flood control and recreation, has usable capacity of 1.42 billion ft³. Records provided by U.S. Army Corps of Engineers.
01158550. **OTTER BROOK LAKE** on Otter Brook, 2.5 mi northeast of Keene, NH completed in 1958, used for flood control and recreation, has usable capacity of 798 million ft³. Records provided by U.S. Army Corps of Engineers.

MONTHEND USABLE CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	First and Second Connecticut Lakes	Lake Francis	Moore and Comerford Reservoirs	Union Village Reservoirs	Lakes and Ponds in Mascoma River basin	North Hartland Reservoir
Sept. 30, 1994.....	2391.5	3394.8	5122.4	0.48	1043.1	122.0
Oct. 31.....	2229.1	3143.8	5244.8	0.27	742.8	120.0
Nov. 30.....	2213.5	3451.4	5450.9	2.6	661.0	113.0
Dec. 31.....	2366.2	3218.8	5691.3	4.7	669.4	121.0
Jan. 31, 1995.....	2712.0	3214.9	5263.6	5.8	741.0	124.0
Feb. 28.....	1807.0	2635.7	3472.9	4.4	758.1	119.0
Mar. 31.....	1213.1	3034.4	2298.9	0.92	1006.2	124.0
Apr. 30.....	1720.0	3439.3	5485.3	0.70	1134.9	105.5
May 31.....	2381.8	3971.1	5962.2	0.45	1121.2	117.0
June 30.....	2732.5	4116.8	5281.1	0.14	1040.4	120.0
July 31.....	2762.3	3860.8	5475.9	0.15	997.9	119.0
Aug. 31.....	2736.3	3652.1	5215.6	0.14	961.2	128.0
Sept. 30.....	2562.5	3398.8	4958.2	0.36	887.6	117.0

	Sunapee Lake	North Springfield Lake	Ball Mountain Reservoir	Townshend Reservoir	Surry Mountain Lake	Otter Brook Lake
Sept. 30, 1994.....	471	24.7	68.7	44.8	64.5	39.3
Oct. 31.....	330	24.7	25.5	35.8	58.6	14.6
Nov. 30.....	231	28.4	21.6	43.3	88.8	40.7
Dec. 31.....	338	26.2	18.3	38.0	527.7	57.7
Jan. 31, 1995.....	314	27.6	31.3	38.0	348.6	39.6
Feb. 28.....	245	26.2	28.7	37.6	82.0	40.7
Mar. 31.....	415	29.8	54.2	39.7	73.1	39.3
Apr. 30.....	512	27.6	56.5	39.7	68.1	36.8
May 31.....	595	26.9	13.3	38.3	75.6	37.6
June 30.....	573	22.5	19.4	38.3	55.3	35.4
July 31.....	559	24.0	16.8	34.8	116.8	37.6
Aug. 31.....	524	22.5	14.7	34.4	53.2	36.1
Sept. 30.....	452	22.5	20.2	35.2	55.3	36.2

97

b. From rating curve extended above 2,800 ft³/s on basis of contracted-opening measurements at gage heights 10.13 ft, 10.49 ft, 11.50 ft, and 12.04 ft and slope area measurement and computation of flow over dam at gage height 12.04 ft.

ST. LAWRENCE RIVER BASIN

99

04280350 METTAWEE RIVER NEAR PAWLET, VT.

LOCATION.--Lat 43°22'04", 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.--October 1984 to current year.

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)
Mar. 8	2300	*780	*3.86	No other peak greater than base discharge.			

Minimum discharge, 6.5 ft³/s, Sept. 6, 7, gage height, 1.47 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	55	65	e130	105	e87	124	100	53	15	9.2	10
2	59	49	59	104	98	e75	115	95	49	15	8.7	9.5
3	54	48	56	90	101	68	108	90	74	14	43	9.1
4	52	44	54	86	e91	68	118	86	66	13	222	8.6
5	50	43	131	83	e78	69	104	83	54	13	70	8.2
6	47	43	199	e78	e72	69	100	81	48	12	45	7.8
7	46	49	217	e160	e69	84	97	75	46	12	35	7.7
8	44	45	174	132	e67	364	92	71	49	13	28	10
9	42	44	150	105	e65	401	98	66	46	13	24	11
10	53	42	128	84	e64	244	102	65	42	11	21	12
11	46	40	171	82	e70	218	95	66	48	13	19	10
12	44	39	138	e84	e80	191	93	65	60	12	18	9.6
13	43	39	e133	e170	e76	230	186	62	52	11	18	10
14	42	38	112	e217	e66	257	144	59	45	10	17	11
15	40	37	106	e379	e70	303	129	72	43	12	16	10
16	39	36	96	359	e83	329	123	66	40	13	15	9.6
17	37	35	93	368	e72	313	116	58	36	18	14	9.9
18	36	35	99	288	e62	293	110	57	34	19	13	10
19	36	35	96	242	e63	251	116	57	30	15	13	9.4
20	38	33	85	249	e65	224	113	55	28	13	12	9.3
21	43	34	82	273	68	235	120	53	25	14	11	8.9
22	40	41	80	263	62	237	146	50	24	14	10	12
23	36	36	78	236	59	212	129	47	22	12	10	24
24	36	37	105	201	86	192	121	49	21	12	10	14
25	36	33	120	177	77	173	114	64	22	11	9.6	12
26	34	33	109	159	e70	160	109	57	22	22	9.7	12
27	34	33	98	135	e64	149	103	53	18	27	11	12
28	34	73	96	e123	e125	140	120	49	17	15	11	11
29	33	105	88	e110	---	131	113	64	16	13	9.7	9.9
30	33	74	71	e100	---	131	106	79	15	11	9.1	9.5
31	37	---	e67	e110	---	135	---	61	---	9.9	9.4	---
TOTAL	1308	1328	3356	5377	2128	6033	3464	2055	1145	427.9	771.4	318.0
MEAN	42.2	44.3	108	173	76.0	195	115	66.3	38.2	13.8	24.9	10.6
MAX	64	105	217	379	125	401	186	100	74	27	222	24
MIN	33	33	54	78	59	68	92	47	15	9.9	8.7	7.7
CFSM	.60	.63	1.54	2.47	1.08	2.77	1.64	.94	.54	.20	.35	.15
IN.	.69	.70	1.78	2.85	1.13	3.20	1.84	1.09	.61	.23	.41	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

MEAN	82.9	141	127	105	96.7	195	267	132	74.7	44.0	49.3	43.0
MAX	286	233	183	173	182	244	559	266	141	84.2	101	99.3
(WY)	1988	1989	1987	1995	1990	1986	1994	1989	1986	1988	1988	1987
MIN	28.1	44.3	45.8	45.3	45.5	96.5	115	55.4	36.3	13.8	17.4	10.6
(WY)	1993	1995	1990	1989	1987	1989	1995	1987	1988	1995	1985	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1985 - 1995

ANNUAL TOTAL	47593	27711.3	113
ANNUAL MEAN	130	75.9	141
HIGHEST ANNUAL MEAN			75.9
LOWEST ANNUAL MEAN			1988
HIGHEST DAILY MEAN	1330	Apr 7	1770
LOWEST DAILY MEAN	26	Jul 21	7.7
ANNUAL SEVEN-DAY MINIMUM	30	Jul 11	8.7
INSTANTANEOUS PEAK FLOW		780	Mar 8
INSTANTANEOUS PEAK STAGE		3.86	Mar 8
INSTANTANEOUS LOW FLOW		b 6.5	Sep 6
ANNUAL RUNOFF (CFSM)	1.86	1.08	1.61
ANNUAL RUNOFF (INCHES)	25.22	14.68	21.90
10 PERCENT EXCEEDS	252	170	230
50 PERCENT EXCEEDS	68	57	78
90 PERCENT EXCEEDS	36	11	25

a From rating curve extended above 925 ft³/s.

b Also occurred on Sep. 7.

e Estimated

04282000 OTTER CREEK AT CENTER RUTLAND, VT.

LOCATION.--Lat 43°36'13", long 73°00'49", Rutland County, Hydrologic Unit 02010002, on right bank 200 ft downstream from dam, 500 ft upstream from bridge on U.S. Highway 4 at Center Rutland, 1.2 mi downstream from East Creek, and 1.5 mi west of Rutland.

DRAINAGE AREA.--307 mi².

PERIOD OF RECORD.--Discharge: May 1928 to current year. Water-quality records: Water years 1955, 1971.

REVISED RECORDS.--WSP 1084: 1929.

GAGE.--Water-stage recorder. Datum of gage is 474.80 ft above sea level; prior to Oct. 1, 1964, datum was 1.00 ft higher. Prior to July 22, 1929, nonrecording gage at same site.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by powerplants and Chittenden Reservoir 14 mi upstream on East Creek. These reservoirs have a combined usable capacity of about 819.8 million ft³. Prior to June 3, 1947, regulation by East Pittsford Reservoir, usable capacity, 150 million ft³.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 17	1100	* 2260	* 5.98

Minimum daily discharge, 40 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e920	e235	377	292	524	e270	e405	371	285	63	63	105
2	e660	e270	292	367	507	e230	e370	390	236	73	59	55
3	e520	e260	271	361	388	e200	e360	331	319	68	147	51
4	e455	e245	264	348	401	e230	e390	307	508	63	1040	48
5	e430	e230	564	298	382	e270	e370	303	342	57	797	53
6	e410	e600	1400	263	393	e310	393	299	261	60	451	49
7	e370	e490	1220	276	435	e350	473	275	215	61	340	40
8	e330	e400	816	318	415	1020	407	261	194	85	246	42
9	e310	e330	498	314	394	1110	310	251	204	76	181	66
10	e340	e300	463	291	393	533	358	218	182	70	158	70
11	e310	e270	440	283	386	763	379	235	178	60	139	90
12	e280	e250	377	337	373	1170	351	269	247	78	134	90
13	e270	e240	266	527	339	1050	684	253	269	71	187	93
14	e250	e220	351	931	294	1110	634	234	220	60	182	131
15	e230	e200	344	1470	247	1310	494	352	183	121	224	99
16	e230	e148	280	1980	250	e1740	447	401	170	102	214	70
17	e230	e150	272	2210	245	1820	420	313	144	274	209	64
18	e215	e160	264	1770	233	1580	421	275	132	190	193	74
19	e230	168	281	1190	e205	1250	405	259	134	e180	98	87
20	e240	164	284	1070	e210	1160	466	303	120	e140	83	56
21	e260	192	287	1590	e210	1170	470	266	113	e133	105	68
22	e230	260	209	1370	e200	1320	746	235	103	e160	176	139
23	e220	222	209	1140	e190	1100	637	205	92	e130	134	194
24	e205	176	258	960	e390	900	484	215	91	e117	63	121
25	e200	160	435	825	e250	e720	428	328	89	e107	68	115
26	e180	183	348	697	e230	e600	387	311	92	e350	59	133
27	e180	137	295	578	e200	e540	372	291	94	e390	60	132
28	e175	276	365	408	e235	e500	415	248	85	e220	92	102
29	e170	734	413	421	---	e480	464	278	72	e195	97	104
30	e170	535	237	461	---	e450	399	488	73	e170	80	65
31	e180	---	206	495	---	e460	---	376	---	e120	74	---
TOTAL	9400	8205	12586	23841	8919	25716	13339	9141	5447	4044	6153	2606
MEAN	303	273	406	769	319	830	445	295	182	130	198	86.9
MAX	920	734	1400	2210	524	1820	746	488	508	390	1040	194
MIN	170	137	206	263	190	200	310	205	72	57	59	40
CFSM	.99	.89	1.32	2.51	1.04	2.70	1.45	.96	.59	.42	.65	.28
IN.	1.14	.99	1.53	2.89	1.08	3.12	1.62	1.11	.66	.49	.75	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	MEAN	352	503	513	468	457	824	1463	823	434	275	241	260
MAX	1227	1025	1291	1094	1564	2376	3078	2120	1565	1047	1591	1385	
(WY)	1988	1960	1984	1949	1981	1936	1969	1940	1947	1976	1976	1938	
MIN	86.5	141	126	100	110	231	445	271	130	78.2	91.2	78.4	
(WY)	1965	1965	1948	1948	1980	1965	1995	1941	1965	1965	1965	1964	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1928 - 1995	
ANNUAL TOTAL	220445		129397			
ANNUAL MEAN	604		355		550	
HIGHEST ANNUAL MEAN					1049	
LOWEST ANNUAL MEAN					239	
HIGHEST DAILY MEAN	5790	Apr 14	2210	Jan 17	10100	Sep 22 1938
LOWEST DAILY MEAN	136	Jul 15	40	Sep 7	40	Sep 7 1995
ANNUAL SEVEN-DAY MINIMUM	169	Nov 15	48	Sep 2	48	Sep 2 1995
INSTANTANEOUS PEAK FLOW			2260	Jan 17	a 13700	Sep 22 1938
INSTANTANEOUS PEAK STAGE			5.98	Jan 17	12.45	Sep 22 1938
ANNUAL RUNOFF (CFSM)	1.97		1.15		1.79	
ANNUAL RUNOFF (INCHES)	26.71		15.68		24.34	
10 PERCENT EXCEEDS	1190		726		1200	
50 PERCENT EXCEEDS	351		264		337	
90 PERCENT EXCEEDS	201		77		135	

a Present datum, from rating curve extended above 7,400 ft³/s on basis of computation of peak flow over dam.
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: 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: 1903-4. 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. Apr. 1, 1903, to Apr. 30, 1907, and Oct. 5, 1910, to Jan. 31, 1920, nonrecording gage at site 1,800 ft upstream at datum 10 ft lower, and Oct. 1, 1928, to Oct. 17, 1933, at present datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 13,600 ft³/s, Nov. 4, 1927, gage height, 13.3 ft, present datum, from rating curve extended above 9,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,490 ft³/s, Mar. 22, gage height, 4.35 ft; minimum daily, 122 ft³/s, Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	358	1200	410	885	e410	920	793	655	171	187	157
2	1290	500	901	e470	e890	e420	852	739	535	168	161	132
3	1040	662	721	e480	e840	e430	786	714	533	161	179	126
4	924	697	603	e465	779	e435	705	631	587	157	796	122
5	795	549	788	e460	649	e445	751	569	738	151	1260	147
6	707	460	1790	e440	e660	e470	741	514	598	137	1220	147
7	658	502	1810	385	e680	e550	662	487	516	138	754	145
8	593	653	1860	388	e660	1080	655	465	443	146	462	140
9	536	664	1780	423	669	1500	636	458	427	161	343	162
10	573	522	1600	e470	630	1550	696	440	400	164	276	188
11	705	487	1340	e460	623	1590	746	474	379	147	300	184
12	731	368	1160	393	e580	1620	754	446	403	151	344	169
13	626	346	776	604	578	1680	958	434	467	148	309	195
14	566	368	713	1150	539	1790	1270	442	462	146	271	256
15	508	445	852	1650	496	2130	1270	513	423	154	283	212
16	479	494	843	1950	450	2290	1100	814	367	199	269	187
17	492	393	703	2120	489	2350	985	850	355	275	254	167
18	476	349	657	2190	487	2370	917	669	330	431	196	172
19	483	306	677	2250	465	2400	890	553	303	354	162	179
20	512	307	e700	2310	462	2430	837	518	296	253	162	170
21	570	304	734	2440	e498	2440	876	549	283	229	210	164
22	571	322	739	2430	e505	2460	1060	509	261	265	205	191
23	541	433	568	2390	e495	2390	1210	456	251	230	172	383
24	507	408	505	2330	e475	2310	1150	411	234	206	154	365
25	484	312	659	2240	e450	2190	981	420	216	186	150	264
26	444	291	889	2080	e420	2030	853	507	203	209	136	246
27	427	307	803	1860	e395	1840	745	541	200	356	142	318
28	361	335	777	1570	e400	1610	753	499	190	360	160	345
29	316	927	756	1280	---	1330	887	456	181	292	156	315
30	302	1330	e580	1090	---	1050	891	548	170	280	149	265
31	317	---	494	964	---	949	---	779	---	225	150	---
TOTAL	19064	14399	28978	40142	16149	48539	26537	17198	11406	6650	9972	6213
MEAN	615	480	935	1295	577	1566	885	555	380	215	322	207
MAX	1530	1330	1860	2440	890	2460	1270	850	738	431	1260	383
MIN	302	291	494	385	395	410	636	411	170	137	136	122
CFSM	.98	.76	1.49	2.06	.92	2.49	1.41	.88	.61	.34	.51	.33
IN.	1.13	.85	1.72	2.38	.96	2.88	1.57	1.02	.68	.39	.59	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1995, BY WATER YEAR (WY)

	MEAN	635	860	905	852	842	1516	2544	1504	817	521	454	484
MAX	2021	1897	2610	2509	2414	4538	4500	3649	3025	1723	2624	2411	
(WY)	1988	1976	1984	1949	1981	1936	1960	1983	1947	1976	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1903 - 1995
ANNUAL TOTAL	425026	245247	
ANNUAL MEAN	1164	672	992
HIGHEST ANNUAL MEAN			1878
LOWEST ANNUAL MEAN			397
HIGHEST DAILY MEAN	6500	Apr 19	a 11000
LOWEST DAILY MEAN	291	Nov 26	92
ANNUAL SEVEN-DAY MINIMUM	340	Nov 20	107
INSTANTANEOUS PEAK FLOW			a 11000
INSTANTANEOUS PEAK FLOW		4.35	b 10.30
INSTANTANEOUS LOW FLOW		114	
ANNUAL RUNOFF (CFSM)	1.85	1.07	1.58
ANNUAL RUNOFF (INCHES)	25.18	14.53	21.47
10 PERCENT EXCEEDS	2500	1580	2300
50 PERCENT EXCEEDS	776	494	627
90 PERCENT EXCEEDS	431	169	259

a From rating curve extended above 9,000 ft³/s.

b For period of Oct. 1928 to current year at present datum.

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, 3 mi north of Middlebury off Rt 7 and on secondary road that parallels Route 7.

DRAINAGE AREA.-- 115 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 275 ft above sea level, from topographic map. Prior to Sept. 5, 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 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 6	0500	* 2,290	* 7.43	No other peak greater than base discharge.			

Minimum discharge, 15 ft³/s, July 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	101	126	e64	e84	e56	158	164	96	19	61	31
2	98	151	112	e68	e82	e53	140	148	83	22	47	29
3	89	151	107	e66	e81	e55	130	140	90	23	47	26
4	87	114	119	e64	e80	e56	141	129	119	20	86	24
5	90	104	300	e62	e77	e60	151	122	88	19	209	23
6	89	135	516	e60	e77	e70	124	116	75	18	1460	30
7	84	183	291	e60	e76	e96	134	108	66	19	458	29
8	79	137	202	e59	e74	e150	127	101	59	20	199	55
9	77	117	162	e58	e74	e300	134	97	59	23	131	64
10	152	104	153	e56	e73	e250	154	93	54	22	100	83
11	108	97	148	e54	e72	e200	135	97	52	21	93	52
12	91	93	120	e70	e72	e165	129	104	72	20	394	38
13	85	91	88	e255	e71	e210	413	102	74	18	171	43
14	81	88	e108	e630	e71	e370	257	99	55	17	113	121
15	83	85	e107	973	e70	e750	195	186	50	29	90	131
16	76	82	e103	708	e70	864	189	246	46	46	79	72
17	73	79	e101	548	e70	689	193	154	41	123	69	54
18	72	77	e99	330	e69	498	224	135	38	118	59	53
19	76	78	e109	248	e68	353	198	119	38	54	53	49
20	81	74	e91	229	e66	292	199	139	33	38	48	42
21	123	73	111	529	e65	301	186	125	30	71	43	40
22	101	78	101	388	e65	447	301	107	28	99	39	95
23	88	75	99	298	e62	369	216	98	27	50	37	411
24	82	61	98	227	e59	298	172	94	26	78	36	135
25	78	71	133	192	e56	227	153	153	25	57	35	93
26	74	75	112	165	e60	204	145	122	24	249	34	82
27	73	54	94	140	e66	184	143	129	23	184	41	121
28	71	154	97	98	e63	171	190	108	20	95	47	103
29	70	303	e85	e94	---	159	247	106	20	224	35	88
30	67	155	e65	e89	---	154	191	130	19	176	31	68
31	66	---	e52	e86	---	168	---	125	---	88	29	---
TOTAL	2678	3240	4209	6968	1973	8219	5469	3896	1530	2060	4374	2285
MEAN	86.4	108	136	225	70.5	265	182	126	51.0	66.5	141	76.2
MAX	152	303	516	973	84	864	413	246	119	249	1460	411
MIN	66	54	52	54	56	53	124	93	19	17	29	23
CFSM	.75	.94	1.18	1.95	.61	2.31	1.59	1.09	.44	.58	1.23	.66
IN.	.87	1.05	1.36	2.25	.64	2.66	1.77	1.26	.49	.67	1.41	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	176	201	193	149	83.9	278	440	222	120	66.9	113	92.5
MAX	409	369	385	225	115	494	763	371	176	108	245	132
(WY)	1991	1991	1991	1995	1994	1990	1994	1990	1990	1990	1990	1991
MIN	86.4	108	119	101	46.5	156	182	126	51.0	44.7	49.0	68.5
(WY)	1995	1995	1993	1994	1992	1993	1995	1995	1995	1993	1993	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1990 - 1995
ANNUAL TOTAL	67160	46901	
ANNUAL MEAN	184	128	167
HIGHEST ANNUAL MEAN			220
LOWEST ANNUAL MEAN			128
HIGHEST DAILY MEAN	2380	1460	2380
LOWEST DAILY MEAN	39	17	17
ANNUAL SEVEN-DAY MINIMUM	48	20	20
INSTANTANEOUS PEAK FLOW		a 2290	a 4180
INSTANTANEOUS PEAK STAGE		7.43	9.97
INSTANTANEOUS LOW FLOW		b 15	b 15
ANNUAL RUNOFF (CFSM)	1.60	1.12	1.46
ANNUAL RUNOFF (INCHES)	21.72	15.17	19.79
10 PERCENT EXCEEDS	350	246	380
50 PERCENT EXCEEDS	104	90	112
90 PERCENT EXCEEDS	63	35	47

a From rating curve extended above 1,130 ft³/s.

b 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 at highway bridge on Route 7, 1.1 mi north of junction of Routes 22a and 7 in Ferrisburg.

DRAINAGE AREA.-- 57.1 mi².

PERIOD OF RECORD.--March 1990 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 145 ft above sea level, from topographic map. Prior to Oct. 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)
Mar. 10	0815	Ice jam	3.98	Mar. 15	1830	* 522	3.11

No other peak greater than base discharge.

Minimum discharge, 1.1 ft³/s, Sept. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	14	45	e15	e22	e15	32	40	6.5	2.6	3.1	1.6
2	9.6	46	37	e16	e22	e15	29	35	5.8	2.7	2.4	1.4
3	7.6	39	32	e15	e21	e15	25	30	5.6	2.7	2.2	1.4
4	6.0	34	29	e14	e21	e14	25	26	6.4	2.4	2.3	1.3
5	5.5	30	47	e14	e20	e14	26	22	8.2	2.3	4.0	1.4
6	5.8	24	163	e14	e20	e16	24	19	6.7	2.2	63	1.8
7	5.1	23	155	e14	e19	e18	22	16	5.1	2.4	78	1.8
8	5.1	22	106	e14	e19	e75	22	14	4.6	2.3	54	2.7
9	5.1	21	75	e13	e19	e135	22	12	4.1	2.4	29	4.4
10	4.5	19	51	e12	e19	e110	23	11	3.7	2.3	18	4.6
11	4.8	17	e33	e14	e18	e80	21	13	3.7	2.3	12	4.9
12	5.3	15	e28	e15	e18	e60	20	13	4.9	2.4	12	4.8
13	4.8	13	e21	e23	e18	e83	65	13	6.9	2.4	15	4.3
14	4.3	12	e21	e54	e18	e150	67	12	6.4	2.5	12	6.1
15	4.0	11	e21	201	e18	e370	62	15	5.2	2.5	14	8.6
16	3.7	11	e20	206	e18	463	54	21	4.0	2.6	13	6.2
17	3.6	10	e20	184	e18	422	48	18	4.0	2.9	10	5.1
18	3.7	9.6	e20	143	e18	329	40	16	2.7	3.4	8.0	4.5
19	3.9	9.3	e22	105	e17	240	35	15	2.9	4.5	6.5	3.8
20	4.8	9.1	e25	88	e17	174	32	13	3.1	3.9	5.3	3.2
21	5.4	9.3	e24	149	e17	137	30	12	3.1	4.1	4.1	2.9
22	10	9.3	e23	185	e17	138	43	10	2.8	4.3	3.2	3.4
23	6.1	9.7	e22	175	e17	122	40	9.2	2.6	3.8	2.8	9.8
24	6.2	11	e21	130	e17	102	35	8.3	2.2	4.1	2.2	14
25	6.4	9.2	e21	e80	e16	83	30	9.8	2.2	3.6	2.1	11
26	6.2	11	e19	e60	e16	68	26	9.9	2.2	5.4	2.1	6.6
27	5.7	13	e17	e40	e16	55	24	9.3	2.2	4.8	2.1	9.1
28	5.8	14	e16	e35	e15	46	32	8.9	2.3	4.4	2.0	14
29	6.1	49	e15	e28	---	39	46	7.5	2.4	3.7	2.0	9.5
30	6.2	52	e14	e22	---	35	43	7.5	2.4	3.5	1.9	6.6
31	6.3	---	e13	e22	---	34	---	7.3	---	3.3	1.9	---
TOTAL	177.6	576.5	1176	2100	511	3657	1043	473.7	124.9	98.7	390.2	160.8
MEAN	5.73	19.2	37.9	67.7	18.2	118	34.8	15.3	4.16	3.18	12.6	5.36
MAX	10	52	163	206	22	463	67	40	8.2	5.4	78	14
MIN	3.6	9.1	13	12	15	14	20	7.3	2.2	2.2	1.9	1.3
CFSM	.10	.34	.66	1.19	.32	2.07	.61	.27	.07	.06	.22	.09
IN.	.12	.38	.77	1.37	.33	2.38	.68	.31	.08	.06	.25	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	58.0	67.3	57.8	44.2	26.0	113
MAX	178	174	106	67.7	35.7	193
(WY)	1991	1991	1991	1995	1991	1990
MIN	5.73	19.2	32.4	22.0	18.0	43.1
(WY)	1995	1995	1993	1994	1992	1994

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1990 - 1995

ANNUAL TOTAL	15659.3	10489.4	50.9
ANNUAL MEAN	42.9	28.7	72.2
HIGHEST ANNUAL MEAN			28.7
LOWEST ANNUAL MEAN			1000
HIGHEST DAILY MEAN	750	Apr 17	Mar 31 1993
LOWEST DAILY MEAN	3.5	Jul 18	Sep 4 1995
ANNUAL SEVEN-DAY MINIMUM	4.0	Oct 13	Sep 1 1995
INSTANTANEOUS PEAK FLOW			Mar 31 1993
INSTANTANEOUS PEAK STAGE			Nov 11 1990
INSTANTANEOUS LOW FLOW			Sep 4 1995
ANNUAL RUNOFF (CFSM)	.75	.50	.89
ANNUAL RUNOFF (INCHES)	10.20	6.83	12.11
10 PERCENT EXCEEDS	76	64	130
50 PERCENT EXCEEDS	21	14	22
90 PERCENT EXCEEDS	6.2	2.5	5.4

a From rating curve extended above 920 ft³/s.

b Ice jam.

c Also occurred on Sept.5.

e Estimated

04282780 LEWIS CREEK AT 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, 3 mi northeast of Ferrisburg, Vt.

DRAINAGE AREA.--77.2 mi².

PERIOD OF RECORD.--March 1990 to current year.

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)
Mar. 8	2015	Ice jam	* 4.81	Mar. 16	0115	* 552	3.52

Minimum discharge, 5.3 ft³/s, July 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	49	51	e41	e50	e42	86	78	28	6.8	10	7.7
2	27	85	45	e40	e47	e42	75	71	25	6.9	8.7	7.6
3	23	75	41	e39	e46	e43	67	64	26	11	8.9	7.4
4	21	64	40	e38	e46	e42	67	58	33	8.2	16	6.6
5	21	60	75	e37	e45	e42	70	54	26	7.4	37	6.8
6	23	62	240	e37	e45	e42	60	50	21	6.7	216	7.8
7	23	68	138	e37	e45	e50	62	46	19	8.0	106	10
8	21	60	98	e36	e44	e80	58	43	17	7.8	61	15
9	19	52	87	e35	e44	e160	58	41	16	7.9	50	17
10	26	48	73	e31	e43	e130	58	38	15	8.1	39	17
11	27	45	67	e50	e43	e105	56	38	15	7.4	34	15
12	22	42	e60	e80	e43	e88	54	40	22	6.3	144	12
13	20	40	e59	264	e42	e110	130	40	25	6.2	68	12
14	19	37	e59	370	e41	e200	105	38	18	5.9	45	14
15	19	36	e58	386	e42	e440	88	50	16	7.0	34	26
16	18	34	e55	240	e42	491	88	69	15	9.6	28	18
17	18	32	e53	193	e42	439	88	52	14	14	24	14
18	17	31	e55	142	e41	332	96	50	13	29	20	13
19	18	31	e60	116	e40	262	86	46	12	18	17	12
20	19	29	e65	107	e38	216	80	42	11	12	15	11
21	32	28	e64	204	e38	195	73	41	10	12	13	11
22	35	28	e60	199	e38	219	96	37	9.0	14	11	13
23	28	28	e58	155	e37	205	83	33	9.0	12	11	54
24	25	42	e56	119	e36	174	72	33	8.7	12	11	31
25	24	36	e55	100	e35	141	65	46	9.0	17	9.5	22
26	22	32	e50	e68	e33	125	59	38	8.9	14	9.2	19
27	22	48	e45	e53	e42	110	60	36	8.4	15	10	27
28	21	46	e42	e52	e51	100	82	32	7.5	15	10	35
29	20	97	e39	e52	---	91	103	30	6.9	14	8.6	24
30	19	61	e37	e52	---	86	87	35	6.7	17	7.9	20
31	20	---	e35	e52	---	89	---	36	---	13	7.6	---
TOTAL	700	1426	2020	3425	1179	4891	2312	1405	471.1	349.2	1090.4	505.9
MEAN	22.6	47.5	65.2	110	42.1	158	77.1	45.3	15.7	11.3	35.2	16.9
MAX	35	97	240	386	51	491	130	78	33	29	216	54
MIN	17	28	35	31	33	42	54	30	6.7	5.9	7.6	6.6
CFSM	.29	.62	.84	1.43	.55	2.04	1.00	.59	.20	.15	.46	.22
IN.	.34	.69	.97	1.65	.57	2.36	1.11	.68	.23	.17	.53	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	MEAN	95.0	108	111	90.6	65.3	174	263	95.4	47.7	28.5	46.4	35.8
MAX	247	238	229	123	121	275	446	124	60.8	74.0	139	55.0	
(WY)	1991	1991	1991	1991	1991	1990	1993	1994	1994	1990	1990	1991	
MIN	22.6	47.5	41.6	42.1	32.8	112	77.1	45.3	15.7	11.3	17.3	16.9	
(WY)	1995	1995	1993	1993	1993	1994	1995	1995	1995	1995	1992	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1990 - 1995

ANNUAL TOTAL	33031	19774.6	
ANNUAL MEAN	90.5	54.2	92.6
HIGHEST ANNUAL MEAN			131
LOWEST ANNUAL MEAN			54.2
HIGHEST DAILY MEAN	1080	491	1500
LOWEST DAILY MEAN	13	5.9	5.9
ANNUAL SEVEN-DAY MINIMUM	15	7.0	7.0
INSTANTANEOUS PEAK FLOW		a 552	a 2870
INSTANTANEOUS PEAK STAGE		b 4.81	5.40
INSTANTANEOUS LOW FLOW		c 5.3	5.3
ANNUAL RUNOFF (CFSM)	1.17	.70	1.20
ANNUAL RUNOFF (INCHES)	15.92	9.53	16.29
10 PERCENT EXCEEDS	175	105	209
50 PERCENT EXCEEDS	52	38	57
90 PERCENT EXCEEDS	19	9.6	16

a From rating curve extended above 250 ft³/s.

b Ice jam.

c Also occurred on July 15, 1995.

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 at Shelburne Falls, 2.0 mi above mouth.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--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)
Mar. 08	0330	ice jam	*4.58	Mar. 13	2030	*604	4.01
Minimum discharge, .18 ft ³ /s, Sept. 3, 4.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	18	21	11	22	e9.0	30	35	8.3	1.9	1.2	.41
2	4.4	40	15	12	21	e9.0	25	29	7.1	1.8	1.1	.39
3	4.2	23	13	12	20	e9.0	22	25	8.5	1.5	1.3	.26
4	3.7	13	12	10	18	e9.0	21	22	30	1.4	3.3	.23
5	3.3	11	58	9.0	18	e8.0	21	20	13	1.0	7.1	.29
6	3.3	14	211	8.9	e18	e17	22	18	9.0	1.1	8.7	.37
7	3.2	14	81	11	e18	e30	18	15	7.0	1.4	8.9	.68
8	3.1	11	e40	12	e17	e45	18	14	5.7	1.0	4.0	1.4
9	3.7	9.0	e33	11	e16	e115	18	14	5.4	1.0	2.4	8.6
10	4.3	7.5	e26	11	e16	e100	17	12	5.0	1.1	1.7	3.9
11	4.4	7.1	e25	12	e14	e80	15	12	4.6	.90	2.5	1.2
12	4.5	6.2	e20	14	e13	e66	15	14	7.9	.88	14	.93
13	4.4	5.9	17	119	e13	e200	58	13	9.9	.67	7.2	4.7
14	4.1	5.4	17	153	e13	368	46	13	6.1	.84	3.7	3.0
15	3.8	4.8	17	120	e12	328	34	23	5.0	1.1	2.4	1.9
16	5.5	4.5	16	149	e12	302	31	29	4.5	1.3	2.1	2.1
17	4.7	4.3	16	119	e12	223	35	19	3.9	3.0	2.2	5.8
18	3.6	4.2	e15	73	e11	154	38	18	3.5	3.0	1.6	2.0
19	3.4	4.3	e14	53	e11	116	30	15	3.2	2.5	1.5	1.3
20	5.0	3.9	e13	50	e11	86	27	14	2.9	1.9	1.4	1.2
21	5.1	4.1	e15	162	e10	77	25	13	3.1	2.2	1.2	1.2
22	5.2	5.1	e14	162	e10	93	38	11	2.6	2.5	1.2	4.4
23	4.6	7.6	e13	104	e10	76	32	9.5	2.5	2.4	1.1	8.8
24	3.6	5.4	e15	65	e11	63	26	9.9	2.6	1.8	.90	4.6
25	3.5	5.0	18	50	e11	50	22	19	2.5	1.5	.69	2.4
26	3.4	4.4	17	e40	e8.0	43	20	13	2.7	2.0	.63	2.8
27	3.2	4.5	15	e32	e8.0	38	22	11	2.3	2.2	.69	4.0
28	3.6	8.3	14	e28	e10	33	43	10	2.1	2.5	.75	4.9
29	3.2	48	13	24	---	31	52	9.1	2.0	2.7	.52	3.1
30	3.1	31	11	22	---	28	42	10	1.8	1.8	.38	1.8
31	3.2	---	14	22	---	30	---	11	---	1.6	.39	---
TOTAL	123.2	334.5	839	1680.9	384.0	2836.0	863	500.5	174.7	52.49	86.75	78.66
MEAN	3.97	11.1	27.1	54.2	13.7	91.5	28.8	16.1	5.82	1.69	2.80	2.62
MAX	5.5	48	211	162	22	368	58	35	30	3.0	14	8.8
MIN	3.1	3.9	11	8.9	8.0	8.0	15	9.1	1.8	.67	.38	.23
CFSM	.09	.25	.61	1.22	.31	2.05	.64	.36	.13	.04	.06	.06
IN.	.10	.28	.70	1.40	.32	2.37	.72	.42	.15	.04	.07	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	45.6	57.5	43.2	29.0	20.0	68.8	125	39.8	15.4	10.8	22.5
MAX	113	135	86.8	54.2	34.8	95.5	249	61.9	24.7	41.5	99.7
(WY)	1991	1991	1991	1995	1991	1991	1993	1994	1994	1990	1990
MIN	3.97	11.1	16.5	14.0	8.61	38.7	28.8	16.1	5.82	1.69	2.80
(WY)	1995	1995	1993	1993	1993	1994	1995	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1990 - 1995
ANNUAL TOTAL	12374.7	7953.70	
ANNUAL MEAN	33.9	21.8	38.2
HIGHEST ANNUAL MEAN			55.4
LOWEST ANNUAL MEAN			21.8
HIGHEST DAILY MEAN	426	368	1040
LOWEST DAILY MEAN	3.1	.23	.23
ANNUAL SEVEN-DAY MINIMUM	3.3	.33	.33
INSTANTANEOUS PEAK FLOW		a 604	a 1320
INSTANTANEOUS PEAK STAGE		b 4.58	b 9.50
INSTANTANEOUS LOW FLOW		c .18	c .18
ANNUAL RUNOFF (CFSM)	.76	.49	.86
ANNUAL RUNOFF (INCHES)	10.32	6.63	11.63
10 PERCENT EXCEEDS	66	47	100
50 PERCENT EXCEEDS	16	10	17
90 PERCENT EXCEEDS	4.3	1.3	3.2

a From rating curve extended above 200 ft³/s.

b Ice jam.

c Also occurred Sep. 4, 1995.

e Estimated

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: 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 Nov. 21, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges and period of shifting control, 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, Nov. 3, 1927, by computation of peak flow over dam 0.8 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 994 ft³/s, Aug. 6, gage height, 3.81 ft; minimum daily, 4.0 ft³/s, July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	66	118	47	56	e30	120	159	68	4.0	23	16
2	81	136	78	52	63	e35	102	117	50	6.7	23	13
3	67	120	74	48	e55	e30	90	95	51	5.6	21	11
4	44	82	75	40	e52	e28	98	91	56	5.8	77	8.8
5	45	82	246	e42	e51	e30	102	76	48	5.7	446	7.5
6	47	99	779	e35	e50	32	71	71	39	5.3	877	7.3
7	39	160	683	43	e42	32	75	75	23	4.7	842	7.2
8	34	144	303	40	e40	43	70	54	23	4.9	813	9.0
9	39	107	178	40	e42	68	79	65	23	6.4	781	13
10	37	82	142	e32	42	110	71	58	23	6.3	818	16
11	38	69	116	e42	46	84	63	41	23	6.2	879	16
12	30	60	e85	e40	e40	70	71	65	24	5.8	863	14
13	23	50	e79	e32	e38	67	153	75	24	4.7	805	17
14	23	52	76	e68	e35	117	175	57	24	4.3	729	34
15	23	42	76	317	e32	277	122	103	24	11	236	42
16	23	41	70	773	e40	585	112	230	23	20	60	24
17	23	41	67	811	e40	737	103	160	23	54	33	24
18	23	38	65	771	e46	679	137	164	23	106	27	24
19	23	43	62	407	40	417	135	113	24	51	35	25
20	31	28	e48	229	31	358	174	92	23	28	28	24
21	97	34	59	585	21	362	126	78	16	24	30	18
22	76	36	53	512	e35	630	222	67	8.9	24	31	17
23	63	44	54	340	32	433	225	61	7.0	24	21	45
24	36	30	54	227	39	295	170	51	6.4	24	18	57
25	39	35	86	171	e30	212	79	84	5.5	24	15	39
26	36	35	103	111	e32	164	129	66	5.1	24	12	41
27	30	28	68	88	e30	130	92	69	5.0	61	11	62
28	30	52	77	79	e44	125	122	55	4.7	43	10	60
29	29	156	e62	e64	---	126	182	51	4.7	53	23	24
30	23	148	e53	e68	---	136	173	110	4.3	77	23	51
31	23	---	e42	e65	---	133	---	94	---	47	22	---
TOTAL	1342	2140	4131	6219	1144	6575	3643	2747	706.6	771.4	8632	766.8
MEAN	43.3	71.3	133	201	40.9	212	121	88.6	23.6	24.9	278	25.6
MAX	167	160	779	811	63	737	225	230	68	106	879	62
MIN	23	28	42	32	21	28	63	41	4.3	4.0	10	7.2
MEAN(†)	41.2	72.6	132	201	40.1	214	122	87.1	19.0	28.1	278	25.2
CFM(†)	0.60	1.05	1.91	2.90	0.58	3.09	1.76	1.26	0.27	0.41	4.02	0.36
IN(†)	0.69	1.17	2.19	3.35	0.60	3.57	1.97	1.45	0.31	0.47	4.62	0.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1995, BY WATER YEAR (WY)

	MEAN	105	137	113	79.3	68.1	174	453	247	90.1	45.8	46.8	52.4
MAX	437	248	318	212	348	556	714	617	396	271	278	230	
(WY)	1991	1984	1974	1935	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1934 - 1995

ANNUAL TOTAL	48238.6	38817.8	
ANNUAL MEAN	132	106	
HIGHEST ANNUAL MEAN			134
LOWEST ANNUAL MEAN			226
HIGHEST DAILY MEAN	1030	879	1620
LOWEST DAILY MEAN	9.7	4.0	.20
ANNUAL SEVEN-DAY MINIMUM	12	4.8	2.8
INSTANTANEOUS PEAK FLOW		a 994	a 2170
INSTANTANEOUS PEAK STAGE		3.81	6.53
10 PERCENT EXCEEDS	292	226	400
50 PERCENT EXCEEDS	52	51	60
90 PERCENT EXCEEDS	26	15	13

a From rating curve extended above 920 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 Aug. 30, 1960, nonrecording gage, and Aug. 30 to Sept. 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, Mar. 22, 1936; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,139.01 ft Jan. 21; minimum, not determined.

04285000 WRIGHTSVILLE DETENTION RESERVOIR.--Lat 44°18'38", long 72°34'31", Washington County, Hydrologic Unit 02010003, at dam on North Branch Winoski 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, and July 28 to Sept. 30, 1960, water-stage recorder, 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, Mar. 22, 1936, from graph based on gage readings; minimum observed, 613.00 ft, Aug. 17, 1949, and Aug. 17-19, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 673.76 ft, Aug. 7; minimum, 632.88 ft, Sept. 22.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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				
Sept. 30.	1135.98	15.4	--	--
Oct. 31.	1131.31	10.2	-5.2	-1.94
Nov. 30.	1133.30	10.2	0	0
Dec. 31.	1132.99	9.7	-0.5	-0.19
CAL YR 1994	--	--	+2.7	+0.08
Jan. 31.	1134.76	12.8	+3.1	+1.16
Feb. 28.	1134.04	11.4	-1.4	-0.58
Mar. 31.	1136.41	16.7	+5.3	+1.98
Apr. 30.	1136.33	16.5	-0.2	-0.08
May 31.	1135.76	15.0	-1.5	-0.56
June 30.	1131.88	8.1	-6.9	-2.66
July 31.	1134.14	11.6	+3.5	+1.31
Aug. 31.	1132.23	8.6	-3.0	-1.12
Sept. 30.	1133.28	10.2	+1.6	+0.62
WTR YR 1995	--	--	-5.2	-0.16
04285000 Wrightsville Detention Reservoir				
Sept. 30.	634.74	107.4	--	--
Oct. 31.	634.04	101.8	-5.6	-2.09
Nov. 30.	634.45	105.1	+3.3	+1.27
Dec. 31.	633.92	100.9	-4.2	-1.57
CAL YR 1994	--	--	+1.3	+0.04
Jan. 31.	634.12	102.5	+1.6	+0.60
Feb. 28.	633.91	100.8	-1.7	-0.70
Mar. 31.	634.72	107.2	+6.4	+2.39
Apr. 30.	634.93	109.0	+1.8	+0.69
May 31.	634.43	104.9	-4.1	-1.53
June 30.	632.91	93.1	-11.8	-4.55
July 31.	634.02	101.7	+8.6	+3.21
Aug. 31.	633.72	99.3	-2.4	-0.90
Sept. 30.	633.60	98.4	-0.9	-0.35
WTR YR 1995.	--	--	-9.0	-0.28

04286000 WINOOSKI RIVER AT MONTPELIER, VT.

LOCATION.--Lat 44°15'23", long 72°35'36", Washington County, Hydrologic Unit 02010003, on right bank 0.4 mi upstream from Dog River and 1 mi downstream from depot at Montpelier.

DRAINAGE AREA. - - 397 mi².

PERIOD OF RECORD.--May 1909 to June 1914 (fragmentary), July 1914 to September 1923, August 1928 to current year.

REVISED RECORDS.--WSP 424: 1915. WSP 894: Drainage area. WSP 1437: 1912-14(M), 1915-18, 1919(M), 1920, 1921(M), 1922-23, 1929, 1933, 1934(M), 1936, 1937(M), 1938, 1946(M), WDR MA-NH-RI-VT-72-1: 1969(M), 1970(P), 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 499.99 ft above sea level. Prior to June 16, 1914, nonrecording gage at site 0.9 mi upstream at different datum. June 16 to July 3, 1914, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by several small powerplants upstream, by Peacham Pond and, since 1926, by Mollys Falls Reservoir, combined usable capacity, 492 million ft³, which regulated runoff from 24 mi², and by East Barre and Wrightsville Detention Reservoirs since 1935 (Reservoirs in Winooski River basin). See table below for monthend contents in Peacham Pond and Mollys Falls Reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 57,000 ft³/s, Nov. 3, 1927, gage height, 27.1 ft, from rating curve extended above 6,900 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 15	1730	Ice jam	*7.82	Aug. 6	1800	*2,860	6.94
Minimum daily discharge, 48 ft ³ /s, Jun. 29, 30.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	203	453	e225	e440	e250	639	651	268	71	111	85
2	371	331	352	e215	e390	e265	554	526	223	115	92	78
3	301	339	317	e210	e320	e240	507	447	234	92	101	71
4	254	233	271	e205	e325	e220	542	427	265	69	162	64
5	250	244	793	e180	e315	e212	589	374	216	59	935	61
6	208	263	2160	e200	e308	e222	471	386	191	62	2570	56
7	184	373	1460	e190	e325	e248	469	363	158	58	2080	73
8	180	390	845	e208	e340	e600	434	312	145	66	1440	77
9	192	284	566	e180	e320	e960	444	306	140	82	1230	103
10	226	262	508	e158	e300	e640	438	290	130	71	1150	113
11	247	215	400	e188	e310	e520	407	275	128	64	1170	99
12	178	195	327	e230	e322	e400	418	317	160	63	1350	82
13	176	206	e340	e390	e310	e590	718	329	187	60	1170	88
14	162	197	e355	e520	e295	e1000	721	306	151	50	1000	165
15	148	179	365	e1350	e270	e1500	587	507	135	77	498	229
16	146	176	362	2300	e290	1890	573	857	124	111	234	117
17	144	181	286	2080	e305	2340	489	539	111	364	190	102
18	141	165	300	1570	e255	2050	527	547	110	633	145	95
19	141	171	319	1120	e225	1460	522	426	108	262	140	91
20	180	156	258	919	e235	1360	597	406	98	175	126	85
21	278	160	342	2500	e225	1430	523	366	86	141	122	96
22	262	247	334	1790	e255	2180	794	323	80	129	120	103
23	215	270	301	1320	e275	1620	709	284	73	117	99	253
24	186	256	274	1030	e265	1260	580	263	71	132	104	203
25	180	172	490	855	e220	977	439	350	68	127	85	147
26	167	271	448	707	e137	859	468	314	65	158	78	145
27	178	139	318	e485	e153	756	435	368	62	204	74	234
28	153	205	306	e390	e220	713	534	317	56	151	75	219
29	150	607	274	e350	---	700	757	293	48	164	80	144
30	145	510	e175	e400	---	710	756	395	48	208	90	148
31	141	---	e290	e480	---	667	---	337	---	142	101	---
TOTAL	6368	7600	14589	22945	7950	28839	16641	12201	3939	4277	16922	3626
MEAN	205	253	471	748	284	930	555	394	131	138	546	121
MAX	484	607	2160	2500	440	2340	794	857	268	633	2570	253
MIN	141	139	175	158	137	212	407	263	48	50	74	56
(+)	428.1	391.6	326.5	289.9	136.2	242.5	320.0	375.0	383.5	394.9	422.5	408.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)												
MEAN	379	508	485	412	382	902	1869	949	476	260	235	230
MAX	1432	1164	1504	1226	1475	3442	3275	2374	1785	1245	1008	934
(WY)	1946	1991	1984	1935	1981	1936	1933	1972	1947	1973	1990	1938
MIN	74.3	152	126	109	91.6	153	555	254	131	88.5	87.1	60.1
(WY)	1964	1979	1915	1940	1940	1940	1995	1921	1995	1991	1952	1921

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1914 - 1995

SUMMARY STATISTICS FOR FLOOD CONTROL		FLOOD CONTROL		FLOOD CONTROL		FLOOD CONTROL	
ANNUAL TOTAL	217744			145897			
ANNUAL MEAN	597			400			
HIGHEST ANNUAL MEAN						591	
LOWEST ANNUAL MEAN						967	1976
HIGHEST DAILY MEAN	6640	Apr 16	2570	Aug 6	12200		Mar 18 1936
LOWEST DAILY MEAN	105	Aug 13	a 48	Jun 29	17		Sep 3 1933
ANNUAL SEVEN-DAY MINIMUM	132	Sep 7	60	Jun 24	49		Sep 10 1957
INSTANTANEOUS PEAK FLOW			2860	Aug 6	b 17200		Apr 7 1912
INSTANTANEOUS PEAK STAGE			c 7.82	Mar 15	17.55		Jun 30 1973
10 PERCENT EXCEEDS	1300		858		1410		
50 PERCENT EXCEEDS	292		262		321		
90 PERCENT EXCEEDS	153		85		117		

(†) Month-end contents in millions of cubic feet in Peacham Pond and Mollys Falls Reservoir; records furnished by Green Mountain Power Corporation.

a Also occurred on June 30.

b From rating curve extended above 6,900 ft³/s.

c Ice affected.

e Estimated.

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: 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)
Aug. 6	0115	* 1,100	* 3.76

Minimum discharge, 8.6 ft³/s, July 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	30	60	e59	114	e47	129	114	44	9.6	15	10
2	36	35	52	e57	99	e43	115	104	39	14	13	9.9
3	32	38	49	e56	e92	e42	108	97	44	13	13	9.6
4	30	34	53	e53	89	e43	121	89	46	10	36	9.5
5	29	32	356	e52	e88	e42	107	82	38	9.8	85	9.7
6	28	34	489	e54	e88	e42	104	81	33	9.4	767	12
7	28	59	281	e54	e87	e44	105	71	31	9.2	216	12
8	26	48	174	e52	e85	103	96	68	29	11	94	18
9	26	44	139	e47	e81	195	100	68	27	15	58	18
10	26	38	122	e43	e75	146	98	62	26	12	39	21
11	25	34	113	e49	e70	135	90	65	26	11	45	15
12	24	31	83	e54	65	95	90	74	30	11	198	13
13	23	30	82	e64	e63	114	167	67	30	11	89	14
14	23	30	89	146	62	228	138	62	26	9.5	55	18
15	22	29	86	483	59	511	118	101	23	13	42	19
16	22	29	75	697	61	670	114	118	20	16	35	14
17	22	28	72	503	56	655	112	92	19	56	29	13
18	21	27	72	303	53	508	119	90	18	51	21	12
19	22	27	68	233	54	387	119	78	17	37	19	11
20	26	26	61	290	55	348	117	80	16	18	17	10
21	32	26	67	819	54	369	117	74	14	17	15	10
22	30	30	63	490	52	418	155	68	14	18	14	16
23	26	31	61	344	49	321	129	63	14	15	13	53
24	27	27	72	266	52	259	111	62	13	21	13	24
25	23	27	182	218	45	213	102	73	13	17	12	17
26	24	27	128	173	e42	189	95	68	12	37	11	17
27	24	21	102	149	e38	169	96	70	12	37	12	31
28	21	41	92	e140	e50	158	118	60	11	24	13	27
29	22	108	e58	e130	---	149	142	65	10	28	11	17
30	22	77	e50	e123	---	146	125	65	10	26	11	16
31	22	---	e56	118	---	141	---	53	---	18	10	---
TOTAL	809	1098	3507	6319	1878	6930	3457	2384	705	604.5	2021	496.7
MEAN	26.1	36.6	113	204	67.1	224	115	76.9	23.5	19.5	65.2	16.6
MAX	45	108	489	819	114	670	167	118	46	56	767	53
MIN	21	21	49	43	38	42	90	53	10	9.2	10	9.5
CFSM	.34	.48	1.49	2.68	.88	2.94	1.51	1.01	.31	.26	.86	.22
IN.	.40	.54	1.71	3.09	.92	3.39	1.69	1.17	.34	.30	.99	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

	MEAN	70.5	103	111	86.5	86.8	208	420	193	80.0	39.3	36.4	38.2
MAX	301	242	349	241	439	831	785	463	357	176	219	259	
(WY)	1978	1960	1984	1935	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1935 - 1995
ANNUAL TOTAL	43493	30209.2	123
ANNUAL MEAN	119	82.8	205
HIGHEST ANNUAL MEAN			1976
LOWEST ANNUAL MEAN			1965
HIGHEST DAILY MEAN	2140	819	4390
LOWEST DAILY MEAN	16	9.2	4.3
ANNUAL SEVEN-DAY MINIMUM	19	10	6.1
INSTANTANEOUS PEAK FLOW		1100	a 10600
INSTANTANEOUS PEAK STAGE		3.76	11.57
INSTANTANEOUS LOW FLOW		8.6	b 4.3
ANNUAL RUNOFF (CFSM)	1.57	1.09	1.61
ANNUAL RUNOFF (INCHES)	21.26	14.77	21.92
10 PERCENT EXCEEDS	262	162	269
50 PERCENT EXCEEDS	48	49	61
90 PERCENT EXCEEDS	22	13	16

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

b Also occurred on Sept. 7, 1942.

e Estimated

ST. LAWRENCE RIVER BASIN

04288000 MAD RIVER NEAR MORETOWN, VT.

LOCATION.--Lat 44°16'42", long 72°44'37", Washington County, Hydrologic Unit 02010003, on left bank at downstream side of highway bridge, 2.4 mi downstream from Moretown, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--Discharge: July to November 1910, October 1928 to current year. October 1928 monthly discharge only, published in WSP 1307. Water-quality records: Water years 1954-55, 1957, 1967-74.

REVISED RECORDS.--WSP 744: Drainage area. WSP 854: 1934(M). WSP 1114: 1929, 1930(M), 1936-37.

GAGE.--Water-stage recorder. Concrete control since Oct. 13, 1933. Datum of gage is 543.93 ft above sea level (levels by Vermont Department of Highway). July 6 to Nov. 4, 1910, nonrecording gage at same site at different datum.

Nov. 20, 1928, to Sept. 27, 1930, nonrecording gage at same site at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation at low flow; much greater regulation prior to 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1830, 23,000 ft³/s, Nov. 3, 1927, gage height, 19.4 ft, from floodmarks, by computation of peak flow over dam.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 9	0400	Ice jam	* 8.94	Aug. 6	0200	* 4,770	8.12

Minimum discharge, 17 ft³/s, July 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	115	167	e118	e187	e85	231	255	130	22	57	36
2	144	188	143	e110	e170	e78	201	229	112	35	45	33
3	120	207	138	e102	e160	e75	186	213	126	26	45	29
4	111	157	172	e98	e155	e74	217	197	141	20	193	27
5	116	148	770	e97	e155	e75	233	187	107	19	450	27
6	126	184	1040	e97	e152	e76	282	176	92	19	2690	48
7	117	309	596	e97	e150	e78	198	158	84	20	622	37
8	103	226	414	e96	e145	e90	181	147	73	20	296	91
9	93	182	359	e93	e140	e410	189	139	69	20	190	74
10	135	151	273	e85	e130	e340	193	134	63	19	140	90
11	113	132	241	e92	e122	e250	175	144	63	19	202	54
12	97	119	e190	e103	e115	e220	173	174	74	18	565	42
13	88	114	e170	e415	e110	e170	427	156	72	18	253	48
14	81	106	e160	1410	e108	e460	327	145	60	18	166	129
15	75	100	e155	1450	e105	1200	266	245	53	30	133	123
16	71	93	e150	1140	e100	1320	251	279	48	43	115	69
17	68	87	e140	757	e98	1220	244	208	43	214	92	55
18	67	85	e138	493	e95	825	287	199	41	164	78	50
19	68	84	e135	390	e95	599	288	171	37	64	67	46
20	71	78	e130	437	e97	515	298	182	33	42	61	42
21	125	75	e125	1310	e95	520	295	165	29	48	56	41
22	102	91	e122	781	e90	664	433	147	28	69	50	85
23	87	81	e120	540	e80	524	336	135	27	44	46	300
24	80	78	e125	412	e92	427	269	145	25	143	49	118
25	74	97	e310	e325	e81	342	235	205	24	66	44	86
26	70	77	339	e275	e72	311	216	162	23	258	42	79
27	67	73	271	e255	e69	285	218	165	21	165	45	132
28	66	155	e225	e240	e88	269	273	140	19	91	47	108
29	63	371	e135	e225	---	252	334	149	19	183	40	80
30	60	215	e96	e215	---	244	294	171	19	134	36	69
31	59	---	e94	e210	---	244	---	158	---	77	33	---
TOTAL	2907	4178	7643	12468	3256	12242	7750	5480	1755	2128	6948	2248
MEAN	93.8	139	247	402	116	395	258	177	58.5	68.6	224	74.9
MAX	190	371	1040	1450	187	1320	433	279	141	258	2690	300
MIN	59	73	94	85	69	74	173	134	19	18	33	27
CFSM	.67	1.00	1.77	2.89	.84	2.84	1.86	1.27	.42	.49	1.61	.54
IN.	.78	1.12	2.05	3.34	.87	3.28	2.07	1.47	.47	.57	1.86	.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

	MEAN	174	255	232	181	173	382	799	433	175	95.8	97.3	103
MAX	675	582	705	472	956	1324	1415	1114	840	273	734	588	
(WY)	1978	1984	1974	1978	1981	1936	1969	1940	1947	1976	1976	1938	
MIN	22.1	65.5	73.0	35.9	40.8	76.9	258	142	46.2	22.8	22.9	22.5	
(WY)	1964	1954	1948	1981	1931	1956	1995	1941	1965	1933	1942	1963	

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1929 - 1995
ANNUAL TOTAL	93218	69003	
ANNUAL MEAN	255	189	258
HIGHEST ANNUAL MEAN			430
LOWEST ANNUAL MEAN			133
HIGHEST DAILY MEAN	3690	2690	6410
LOWEST DAILY MEAN	29	18	2.9
ANNUAL SEVEN-DAY MINIMUM	35	19	4.6
INSTANTANEOUS PEAK FLOW		a 4770	a 18400
INSTANTANEOUS PEAK STAGE		b 8.94	16.34
INSTANTANEOUS LOW FLOW		c 17	1.4
ANNUAL RUNOFF (CFSM)	1.84	1.36	1.86
ANNUAL RUNOFF (INCHES)	24.95	18.47	25.23
10 PERCENT EXCEEDS	570	349	583
50 PERCENT EXCEEDS	128	125	133
90 PERCENT EXCEEDS	47	41	38

a From floodmarks, from rating curve extended above 2,700 ft³/s on basis of computations of flow over dam at gage heights 9.98 ft, 11.51 ft, 16.34 ft, 19.4 ft.

b Ice jam.

c Also occurred on July 15.

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 Dec. 10, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except for the periods Oct. 1-13, Dec. 20 - Jan. 15, and Jan. 28 - Feb. 15, which are fair. 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.

Capacity table (elevation, in feet, and contents, in millions of cubic feet)			
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, Oct. 16, 1938, July 3, 12, 13, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 599.99 ft, Aug. 6; minimum elevation, 556.84 ft, Mar. 14.

ELEVATION (SEA LEVEL), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

INSTANTANEOUS OBSERVATION AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588.50	587.44	588.67	585.10	585.60	559.72	571.05	585.89	589.54	589.06	589.80	589.58
2	588.40	587.55	588.42	585.30	585.62	588.45	570.12	586.44	589.04	589.87	589.68	589.62
3	588.20	587.56	588.69	584.90	584.90	557.59	569.14	586.87	589.34	589.95	589.75	589.24
4	588.30	587.45	589.08	584.70	584.50	557.53	568.71	587.36	589.60	590.01	592.93	589.05
5	588.70	587.62	591.23	584.00	583.75	557.83	568.95	587.80	589.79	589.53	595.59	588.91
6	589.00	587.83	592.92	583.30	582.85	557.01	569.38	588.20	589.95	589.56	599.36	588.71
7	589.00	588.23	592.68	582.90	581.85	557.25	569.85	588.58	589.57	589.61	596.23	588.46
8	589.10	588.78	592.04	582.60	580.90	557.76	570.27	588.76	589.22	589.39	593.24	588.60
9	589.20	589.01	591.31	582.00	579.90	559.68	570.74	589.02	589.21	589.43	592.06	588.72
10	588.90	589.37	590.48	581.20	579.20	559.48	571.13	589.20	589.17	589.47	591.13	588.80
11	588.50	589.66	589.72	580.40	578.60	559.03	571.52	589.56	589.14	589.49	590.23	588.60
12	588.10	589.91	588.83	579.70	577.85	557.92	571.80	589.92	589.12	589.52	589.56	588.38
13	587.70	590.16	588.23	578.90	577.15	557.00	572.74	590.28	589.07	589.55	589.86	588.23
14	587.83	590.36	587.72	580.80	576.43	558.07	573.48	590.57	589.00	589.57	589.53	588.16
15	587.96	590.62	587.41	584.90	575.42	562.31	574.06	591.45	589.09	589.70	589.21	588.03
16	588.08	590.72	587.22	588.23	574.42	566.57	574.59	591.41	589.17	589.74	589.30	588.11
17	587.46	590.89	587.30	589.23	573.28	569.99	575.13	590.88	589.02	590.58	589.45	588.21
18	587.54	591.05	587.40	589.14	572.11	572.10	575.77	590.37	588.55	590.48	589.58	588.16
19	587.69	591.24	587.06	588.80	570.93	573.63	576.62	589.72	588.62	590.31	589.68	588.22
20	587.88	591.38	586.60	588.59	569.76	575.00	577.56	588.98	588.66	589.83	589.78	588.17
21	588.26	591.10	586.30	589.67	568.57	576.37	578.42	588.19	588.70	589.60	589.89	588.22
22	588.49	590.71	586.00	589.78	567.34	577.23	579.83	588.17	588.74	589.69	589.94	588.69
23	588.68	590.19	585.60	589.39	566.08	577.29	580.72	588.42	588.77	589.85	589.93	588.92
24	588.28	589.81	586.40	588.76	564.88	576.93	581.31	588.81	588.80	590.16	589.76	589.08
25	587.80	589.44	586.40	588.02	563.54	576.34	581.81	589.06	588.83	590.08	589.62	588.77
26	587.45	589.16	586.70	587.40	562.14	575.66	582.21	589.31	588.86	590.22	589.70	588.64
27	587.09	588.92	586.20	587.04	560.70	574.92	582.71	589.63	588.87	589.94	589.77	588.77
28	586.86	588.80	585.70	586.40	560.92	574.14	583.57	589.89	588.89	589.57	589.83	588.60
29	586.99	589.01	585.30	586.04	--	573.35	584.41	590.26	588.91	589.85	589.91	588.55
30	587.05	588.90	584.70	585.45	--	572.59	585.23	590.74	588.93	589.99	589.73	588.49
31	587.21	--	584.80	585.50	--	571.87	--	590.25	--	589.88	589.77	--
MEAN	588.07	589.43	587.97	585.42	574.61	567.44	575.43	589.16	589.07	589.79	590.77	588.62
MAX	589.20	591.38	592.92	589.78	585.62	588.45	585.23	591.45	589.95	590.58	599.36	589.62
MIN	586.86	587.44	584.70	578.90	560.70	557.00	568.71	585.89	588.55	589.06	589.21	588.03
(†)	1406.2	1466.0	1321.9	1345.9	679.4	941.5	1336.4	1514.6	1467.1	1500.7	1496.8	1451.5
(‡)	-17.7	+23.1	-53.8	+8.96	-276	+97.8	+152	+66.5	-18.3	+12.5	-1.46	-17.5

CAL YR 1994 MEAN 581.05 MAX 594.57 MIN 532.90 (†) +4.82
WTR YR 1995 MEAN 584.72 MAX 599.36 MIN 557.00 (†) -0.07

(†) Contents, in millions of cubic feet, at end of month.
(‡) Change in contents, equivalent in cubic feet per second.

Data for period Oct. 1-13, and Dec. 20 - Jan. 15 furnished by Green Mountain Power Co.

LOCATION.--Lat 44°22'12", long 72°46'11", Washington County, Hydrologic Unit 02010003, on right bank 1 mi downstream from Waterbury Reservoir, 1.7 mi upstream from mouth, and 2.5 mi north of Waterbury.

DRAINAGE AREA. - - 111 mi².

PERIOD OF RECORD.--July to October 1910 (gage heights only), October 1935 to current year. October, November 1935 monthly discharge only, published in WSP 1307. Prior to October 1962, published as Waterbury River near Waterbury.

REVISED RECORDS. -- WSP 824: 1936.

GAGE.--Water-stage recorder. Concrete control since Dec. 8, 1937. Datum of gage is 428.00 ft above sea level (levels by U. S. Army Corps of Engineers). July 7 to Oct. 31, 1910, nonrecording gage at site 2 mi upstream at different datum.

REMARKS..No estimated daily discharges. Records good. Flow completely regulated by Waterbury Reservoir (station 04288500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s, Mar. 18, 1936, gage height, 19.38 ft; minimum daily, 0.6 ft³/s several times during summers of 1938-39, 1941, and 1944. Maximum discharge since construction of Waterbury Reservoir in 1937, 4,080 ft³/s, Dec. 9, 1937, gage height, 14.88 ft.

EXTREMES FOR CURRENT YEAR. --Maximum discharge, 4,410 ft³/s Aug. 06, gage height, 14.81 ft; minimum daily, 11 ft³/s May 12-14, Jun. 25-29, Jul. 07, 09-14, 16, Aug. 21, 22, 29, Sep. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	334	259	22	130	366	459	13	486	12	74	127
2	157	414	257	22	108	403	456	13	366	12	89	13
3	228	382	25	266	339	286	454	51	15	12	13	192
4	16	368	25	281	325	104	345	12	14	12	227	112
5	16	276	146	347	380	16	80	12	14	243	725	98
6	16	325	598	352	473	274	13	12	13	12	3570	118
7	156	148	724	204	471	56	13	12	246	11	2560	173
8	101	20	631	161	472	261	13	12	213	123	1590	12
9	91	116	577	280	471	22	14	12	70	11	902	12
10	239	19	575	337	466	276	13	31	68	11	584	11
11	265	19	575	342	465	276	13	12	70	11	583	117
12	281	19	523	337	460	430	65	11	108	11	572	132
13	279	19	377	454	455	429	15	11	91	11	18	133
14	16	18	367	51	340	221	13	11	84	11	259	135
15	16	18	299	36	429	36	13	14	12	13	250	138
16	17	48	221	456	458	38	13	306	12	11	56	12
17	304	17	121	493	455	42	14	484	91	15	12	12
18	66	17	108	491	454	32	14	485	260	208	12	52
19	15	18	275	490	451	30	14	483	12	149	12	12
20	16	18	256	493	450	30	13	483	12	264	12	55
21	17	234	255	553	448	133	13	482	12	182	11	13
22	16	299	270	575	445	472	13	148	12	13	11	16
23	15	296	268	571	442	472	13	12	12	13	54	129
24	259	258	25	568	433	472	15	15	12	88	126	12
25	281	253	25	565	437	470	12	108	11	115	93	194
26	222	219	23	439	435	468	39	50	11	239	12	141
27	219	188	302	377	432	467	13	12	11	268	12	128
28	195	255	287	292	33	464	14	12	11	247	12	131
29	15	262	327	260	---	463	13	13	11	18	11	81
30	15	263	270	341	---	462	13	335	12	13	99	76
31	16	---	23	149	---	460	---	487	---	91	13	---
TOTAL	3836	5140	9014	10605	11157	8431	2205	4154	2372	2450	12574	2587
MEAN	124	171	291	342	398	272	73.5	134	79.1	79.0	406	86.2
MAX	304	414	724	575	473	472	459	487	486	268	3570	194
MIN	15	17	23	22	33	16	12	11	11	11	11	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1995, BY WATER YEAR (WY)

MEAN	181	211	230	213	254	308	456	396	213	137	152	142
MAX	749	462	477	476	527	1121	1111	954	646	433	421	375
(WY)	1946	1991	1974	1991	1947	1936	1976	1940	1973	1973	1962	1938
MIN	18.9	10.4	9.39	16.8	53.3	12.0	72.4	28.8	1.31	31.4	34.8	30.4
(WY)	1942	1941	1939	1938	1936	1938	1940	1938	1938	1977	1970	1984

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1936 - 1995

ANNUAL TOTAL	85287.0		74525				
ANNUAL MEAN	234		204			239	
HIGHEST ANNUAL MEAN						456	1976
LOWEST ANNUAL MEAN						146	1965
HIGHEST DAILY MEAN	1450	Apr 28	3570	Aug 6	4830		Mar 18 1936
LOWEST DAILY MEAN	4.6	Aug 30	a 11	May 12	b .60		Jul 10 1938
ANNUAL SEVEN-DAY MINIMUM	21	Mar 23	11	Jun 23	b .70		Jul 13 1938
INSTANTANEOUS PEAK FLOW			4410	Aug 6	6520		Mar 18 1936
INSTANTANEOUS PEAK STAGE			14.81	Aug 6	19.38		Mar 18 1936
10 PERCENT EXCEEDS	567		471		557		
50 PERCENT EXCEEDS	219		116		186		
90 PERCENT EXCEEDS	18		12		7.9		

a Also occurred on May, 13, 14, Jun. 25-29, Jul. 07, 09-14, 16, Aug. 21, 22, 29, Sep. 10.

b See Extremes for Period of Record.

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: 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 Oct. 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, Nov. 4, 1927, gage height, 50.4 ft, present datum, from floodmarks, from rating curve extended above 27,000 ft³/s by method explained above.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,600 ft³/s, Aug. 6, gage height, 10.46 ft; minimum daily, 170 ft³/s, July 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	832	1480	e700	1350	e575	1960	1710	1110	180	434	287
2	1170	1460	1130	760	1270	e800	1770	1470	1080	179	364	339
3	858	1600	1060	776	798	e880	1630	1240	747	214	311	241
4	923	1300	819	e900	e1200	e680	1570	1190	725	245	544	342
5	546	1170	1170	e800	e1020	e560	1500	1030	795	225	1860	327
6	609	1210	7410	e880	e1160	e650	1110	997	578	460	11700	332
7	722	1520	4730	714	e1260	e930	1240	946	451	683	8800	371
8	711	1010	3200	681	e1420	e1850	1120	834	696	195	4300	406
9	526	1110	2230	e760	e1300	3560	1060	714	518	235	3080	343
10	753	843	2010	e800	e1200	2300	1100	513	423	220	2190	320
11	784	781	1760	e720	e1100	2040	1050	676	443	202	2080	386
12	836	598	1480	e860	e1060	1950	993	725	545	183	3130	386
13	697	520	1130	e1060	e1030	2090	1620	857	531	175	2330	374
14	508	618	1110	e1500	e930	3060	2040	800	552	170	1750	431
15	585	586	1210	5330	e1040	4550	1520	1030	447	187	1560	660
16	431	512	1190	7610	e1110	6940	1490	1820	393	216	982	492
17	452	515	e860	6200	e1140	7320	1330	1870	368	409	586	336
18	630	560	e880	4290	e1120	5920	1510	1670	370	1230	464	316
19	443	474	e930	3250	e1110	4010	1480	1590	263	901	412	316
20	420	498	787	2590	e1100	3310	1630	1370	276	573	398	271
21	569	505	e940	6350	e1100	3110	1530	1470	267	571	354	304
22	790	844	e920	6260	e1100	4890	1880	1160	246	438	332	312
23	520	868	e900	4310	e1120	4420	1940	756	232	347	334	982
24	637	650	809	3230	e1170	3420	1560	944	218	434	358	733
25	712	783	1030	2710	e1070	2780	1290	913	210	473	403	554
26	664	697	1200	e1800	e900	2500	1180	994	200	472	317	566
27	648	689	1040	e1300	e775	2290	1210	916	194	1040	264	598
28	645	611	1190	e1150	e630	2140	1390	945	198	798	273	771
29	468	1560	1100	e1250	---	2070	1790	637	186	560	254	573
30	416	1730	e580	1350	---	1960	1830	1020	183	591	265	416
31	399	---	e580	1530	---	1980	---	1510	---	488	306	---
TOTAL	20532	26654	46865	72421	30583	85535	44323	34317	13445	13294	50735	13085
MEAN	662	888	1512	2336	1092	2759	1477	1107	448	429	1637	436
MAX	1460	1730	7410	7610	1420	7320	2040	1870	1110	1230	11700	982
MIN	399	474	580	681	630	560	993	513	183	170	254	241

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

	MEAN	1112	1560	1483	1271	1220	2584	5150	2795	1288	741	710	695
MAX	4587	3525	4549	2793	4266	9642	9256	6826	5027	3368	3284	3095	
(WY)	1946	1984	1974	1935	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	1938	1965	1934	1963	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1929 - 1995

ANNUAL TOTAL	660499	451789											
ANNUAL MEAN	1810	1238								1716			
HIGHEST ANNUAL MEAN										2751		1973	
LOWEST ANNUAL MEAN										832		1965	
HIGHEST DAILY MEAN	22300	Apr 17				11700	Aug 6			41600	Mar 19	1936	
LOWEST DAILY MEAN	332	Aug 13				170	Jul 14			24	Sep 7	1968	
ANNUAL SEVEN-DAY MINIMUM	385	Jul 16				189	Jun 26			54	Aug 5	1964	
INSTANTANEOUS PEAK FLOW						14600	Aug 6			a 45300	Mar 19	1936	
INSTANTANEOUS PEAK STAGE						10.46	Aug 6			24.54	Mar 19	1936	
10 PERCENT EXCEEDS	3610					2250				3960			
50 PERCENT EXCEEDS	950					860				988			
90 PERCENT EXCEEDS	458					312				350			

a 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.

e Estimated

LOCATION.--Lat 44°37'22", long 72°40'50", Lamoille County, Hydrologic Unit 02010003, on right bank above falls, 0.7 mi upstream from bridge in Johnson and 0.8 mi upstream from Gihon River.

PERIOD OF RECORD.--Discharge: July to December 1910, June 1911 to December 1913 (monthly discharge only, January to March 1912, February 1913), September 1928 to current year. Water-quality records: Water year 1953.

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

GAGE.--Water-stage recorder. Elevation of gage is 490.1 ft above sea level, by levels. Prior to Dec. 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 (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 06	1030	* 19,000	* 19.98	No other peak greater than base discharge.			
Minimum discharge, 47 ft ³ /s, Sept. 21.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	502	392	e188	e300	e160	709	715	302	67	168	71
2	299	644	299	e185	e275	e160	569	628	235	206	57	67
3	402	610	235	e180	e255	e160	486	550	237	123	86	65
4	252	448	299	e175	e250	e160	492	416	546	83	388	63
5	306	401	902	e175	e250	e160	507	343	265	80	1010	63
6	351	562	2480	e170	e245	e160	439	382	283	82	13400	53
7	252	602	1330	e170	e245	e165	437	324	292	83	3370	53
8	241	530	781	e170	e230	e280	400	302	133	82	1220	58
9	234	518	531	e155	e220	e590	402	290	116	82	710	54
10	234	409	451	e140	e205	e450	382	260	118	97	508	54
11	230	362	505	e155	e195	e350	374	266	127	92	431	78
12	230	354	e285	e180	e190	e300	405	277	253	65	482	86
13	225	347	e268	e200	e185	e270	635	236	179	72	421	65
14	210	229	e260	e475	e180	e450	780	248	119	72	322	103
15	164	181	e250	e1370	e180	e980	616	393	116	71	267	173
16	164	241	e240	3650	e175	1800	540	540	116	67	262	153
17	177	219	e230	2810	e175	2020	506	490	115	182	211	132
18	209	209	e225	1500	e175	1770	563	580	113	317	182	113
19	211	209	e220	922	e170	1300	584	466	112	165	169	94
20	207	206	e205	786	e175	1230	675	344	111	67	154	67
21	255	213	e220	2000	e180	1370	633	398	131	113	142	47
22	239	253	e210	1610	e170	2340	801	349	95	70	124	109
23	233	254	e203	1060	e160	1810	782	336	93	78	117	607
24	272	175	e245	720	e170	1320	590	414	92	347	116	352
25	286	159	e300	627	e160	858	503	373	92	280	113	248
26	276	192	348	475	e160	734	446	274	90	254	109	141
27	196	209	279	e420	e160	644	404	310	89	325	105	139
28	129	268	293	e395	e155	642	527	366	89	188	101	230
29	129	610	e230	e375	---	624	708	343	88	122	96	175
30	169	588	e155	e340	---	629	786	395	74	242	240	157
31	194	---	e195	e325	---	703	---	417	---	306	98	---
TOTAL	7455	10704	13066	22103	5590	24589	16681	12025	4821	4480	25179	3870
MEAN	240	357	421	713	200	793	556	388	161	145	812	129
MAX	479	644	2480	3650	300	2340	801	715	546	347	13400	607
MIN	129	159	155	140	155	160	374	236	74	65	57	47
CFSM	.78	1.15	1.36	2.30	.64	2.56	1.79	1.25	.52	.47	2.62	.42
IN.	.89	1.28	1.57	2.65	.67	2.95	2.00	1.44	.58	.54	3.02	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1995, BY WATER YEAR (WY)

MEAN	391	502	455	361	334	717	1636	796	411	254	249	256
MAX	1481	1173	1390	845	1624	2711	2868	1903	1344	1028	843	655
(WY)	1991	1991	1991	1978	1981	1936	1933	1972	1973	1973	1990	1938
MIN	84.1	139	162	93.0	114	157	556	245	123	102	101	93.6
(WY)	1964	1954	1948	1948	1934	1940	1995	1965	1988	1991	1987	1978

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1912 - 1995

ANNUAL TOTAL	202148		150563				
ANNUAL MEAN	554		413			531	
HIGHEST ANNUAL MEAN						819	1973
LOWEST ANNUAL MEAN						305	1965
HIGHEST DAILY MEAN	7260	Apr 16	13400	Aug 6		13400	Aug 6 1995
LOWEST DAILY MEAN	69	Aug 13	47	Sep 21		16	Oct 26 1947
ANNUAL SEVEN-DAY MINIMUM	142	Aug 8	57	Sep 4		50	Aug 29 1934
INSTANTANEOUS PEAK FLOW			19000	Aug 6		19000	Aug 6 1995
INSTANTANEOUS PEAK STAGE			19.98	Aug 6		19.98	Aug 6 1995
INSTANTANEOUS LOW FLOW			47	Sep 21		11	Sep 2 1935
ANNUAL RUNOFF (CFSM)	1.79		1.33			1.71	
ANNUAL RUNOFF (INCHES)	24.26		18.07			23.26	
10 PERCENT EXCEEDS	1150		709			1170	
50 PERCENT EXCEEDS	253		245			290	
90 PERCENT EXCEEDS	163		90			133	

e Estimated.

a Ice jam.
b Also occurred Sept. 8, 14.
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 culvert on gravel road and 1.5 mi southwest of Georgia Plains.

DRAINAGE AREA.--8.45 mi².

PERIOD OF RECORD.--Discharge: 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)
Mar. 10	0700	Ice jam	* 5.28	Mar. 15	1600	* 50	3.93
Minimum discharge, 0.10 ft ³ /s, July 12.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	9.9	5.8	e2.9	4.4	e2.1	6.5	7.3	2.6	.29	.59	.32
2	2.7	16	5.2	e2.8	e4.0	e2.1	5.9	6.2	2.4	.38	.31	.25
3	2.4	13	4.7	e2.7	e3.5	e2.1	5.3	5.2	4.7	.34	.43	.29
4	2.1	8.3	4.9	e2.7	e3.7	e2.1	5.1	4.6	10	.27	3.1	.24
5	2.1	6.9	8.7	e2.9	e3.8	e2.1	5.0	4.0	7.8	.22	4.4	.30
6	2.0	6.8	21	e2.9	e3.3	e2.7	4.5	3.7	4.2	.20	16	.23
7	1.8	6.9	19	e2.7	e2.9	e5.0	4.3	3.4	2.7	e.20	11	.40
8	1.8	6.3	e11	e2.5	e2.8	e8.0	4.4	3.1	1.9	e.45	6.0	.73
9	2.4	5.3	e7.6	e2.7	e2.8	e14	4.4	2.8	1.3	e.38	3.4	.62
10	2.6	4.7	e6.0	e2.8	e2.8	e11	4.3	2.7	1.1	.23	2.1	.78
11	2.6	4.4	e5.8	e3.0	e2.7	e9.0	4.2	2.7	1.5	.17	3.3	.95
12	2.5	4.2	e5.6	e4.0	e2.7	e7.6	4.0	2.7	1.9	.12	8.9	.80
13	2.3	3.9	e5.0	e7.8	e2.3	e9.5	7.2	2.6	2.1	.15	10	.79
14	2.0	4.0	4.5	e22	e2.5	e17	9.0	2.6	1.9	.15	5.6	1.9
15	1.9	3.4	3.9	27	e2.5	e38	7.3	5.2	1.6	.20	4.1	2.3
16	1.8	3.4	3.7	30	e2.5	43	7.1	7.4	1.3	.19	2.7	1.7
17	1.8	3.4	3.9	25	e2.5	36	6.8	5.6	1.1	2.0	2.0	2.0
18	1.9	3.5	4.4	19	e2.5	33	6.4	4.3	1.2	2.1	1.7	2.7
19	2.0	3.5	e4.8	13	e2.6	28	5.7	3.7	1.2	2.5	1.2	1.8
20	3.1	3.5	e5.3	9.9	e2.6	20	5.3	3.3	.92	2.0	1.1	1.6
21	3.4	3.6	5.1	20	e2.4	17	5.1	3.3	.64	1.3	1.0	1.6
22	3.6	3.5	4.9	26	e2.4	22	6.9	3.4	.51	.95	.82	3.2
23	3.4	3.4	e4.8	20	e2.4	19	7.0	3.4	.58	.85	.69	7.4
24	3.1	3.3	4.8	15	e2.4	15	5.6	3.1	.53	1.9	.81	6.0
25	2.9	3.3	4.5	12	e2.3	12	4.8	3.4	.54	1.5	.68	4.5
26	2.7	3.3	e4.2	e8.8	e2.2	9.1	3.9	3.2	.53	1.7	.60	4.0
27	2.6	3.2	3.7	e6.9	e2.1	7.5	4.2	3.8	.36	1.5	.41	4.1
28	2.6	5.2	3.7	e5.6	e2.1	6.9	8.7	3.1	.27	1.2	.36	3.6
29	2.4	6.6	e3.2	e4.3	---	6.3	11	2.9	.26	1.1	.31	3.3
30	2.8	6.8	e2.7	4.0	---	5.9	9.6	3.4	.31	.73	.54	2.5
31	3.1	---	e3.1	4.1	---	6.6	---	3.3	---	.50	.39	---
TOTAL	77.6	163.5	185.5	315.0	77.7	419.6	179.5	119.4	57.95	25.77	94.54	60.90
MEAN	2.50	5.45	5.98	10.2	2.77	13.5	5.98	3.85	1.93	.83	3.05	2.03
MAX	3.6	16	21	30	4.4	43	11	7.4	10	2.5	16	7.4
MIN	1.8	3.2	2.7	2.5	2.1	2.1	3.9	2.6	.26	.12	.31	.23
CFSM	.30	.64	.71	1.20	.33	1.60	.71	.46	.23	.10	.36	.24
IN.	.34	.72	.82	1.39	.34	1.85	.79	.53	.26	.11	.42	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

	MEAN	5.86	8.99	9.37	5.73	4.71	14.1	23.8	9.77	4.76	4.26	4.06	3.10
MAX	22.0	18.0	30.5	11.5	7.71	25.3	47.6	21.9	19.1	18.3	11.9	9.95	
(WY)	1991	1991	1974	1973	1970	1966	1994	1974	1973	1990	1973	1973	
MIN	1.79	2.95	3.78	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1963 - 1995
ANNUAL TOTAL	3266.60	1776.96	
ANNUAL MEAN	8.95	4.87	8.11
HIGHEST ANNUAL MEAN			12.6
LOWEST ANNUAL MEAN			4.15
HIGHEST DAILY MEAN	104	43	255
LOWEST DAILY MEAN	.76	.12	.12
ANNUAL SEVEN-DAY MINIMUM	1.1	.17	.17
INSTANTANEOUS PEAK FLOW		50	a 412
INSTANTANEOUS PEAK STAGE		b 5.28	6.31
INSTANTANEOUS LOW FLOW		.10	.10
ANNUAL RUNOFF (CFSM)	1.06	.58	.96
ANNUAL RUNOFF (INCHES)	14.38	7.82	13.03
10 PERCENT EXCEEDS	16	9.9	18
50 PERCENT EXCEEDS	4.5	3.2	4.5
90 PERCENT EXCEEDS	1.8	.53	1.3

a From rating curve extended above 70 ft³/s.

b Ice jam.

e Estimated

04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT.

LOCATION.--Lat 44°58'22", long 72°23'15", Orleans County, Hydrologic Unit 02010007, on right bank 200 ft upstream from Big Falls, 1.5 mi downstream from Jay Branch, and 2.2 mi upstream from North Troy.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--August 1931 to current year.

REVISED RECORDS.--WSP 924: 1940. WSP 1114: 1933(M), 1936- 39.

GAGE.--Water-stage recorder. Elevation of gage is 580 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional regulation at low flow caused by small powerplant upstream; greater regulation prior to 1967.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,290 ft³/s, Apr. 18, 1982, gage height, 13.21 ft, from rating curve extended above 5,500 ft³/s on basis of computation of flow over dam at gage height 11.70 ft; minimum, 9.4 ft³/s, Aug. 28, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 6	1800	* 3,120	* 8.02
Minimum discharge, 19 ft ³ /s, Sept. 20.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	479	183	e90	e112	e82	285	290	171	45	34	32
2	117	564	146	e86	e102	e84	218	233	136	119	30	31
3	97	510	140	e83	e95	e76	192	201	605	58	30	28
4	89	270	205	e79	e92	e76	212	178	1070	40	76	27
5	91	475	667	e78	e92	e78	189	161	335	34	118	26
6	96	819	1640	e78	e94	e80	152	165	211	32	2260	25
7	91	738	715	e78	e94	e82	159	152	158	47	749	26
8	81	427	354	e79	e93	e200	149	131	131	44	213	40
9	71	355	218	e79	e92	e450	159	121	118	44	132	35
10	109	284	219	e67	e90	e325	146	112	99	39	79	31
11	94	210	186	e65	e88	e270	144	108	135	33	73	29
12	78	171	121	e68	e85	e230	164	119	158	31	129	27
13	76	155	e115	e90	e83	e218	403	121	138	29	119	27
14	75	146	e115	e300	e81	e400	431	114	109	27	79	61
15	69	124	e110	e875	e78	e800	279	254	74	25	313	73
16	66	115	e108	e1200	e80	1270	222	431	76	25	144	54
17	53	111	e106	e900	e80	1320	207	358	74	303	88	35
18	51	106	e104	e600	e82	943	287	710	67	189	65	28
19	62	106	e102	e425	e94	643	329	314	57	129	39	21
20	70	97	e95	e620	e87	611	387	216	42	81	45	20
21	133	93	e115	e575	e85	885	311	185	40	55	40	25
22	113	103	134	e400	e83	1620	598	204	42	42	39	37
23	91	101	127	e290	e81	850	414	159	41	45	37	156
24	83	77	121	e230	e84	536	263	196	39	95	40	67
25	78	85	125	e210	e80	357	216	269	37	61	35	45
26	77	90	107	e175	e75	301	197	175	36	103	35	46
27	70	71	99	e160	e72	263	184	190	33	121	32	78
28	65	103	97	e140	e69	269	294	160	31	76	33	130
29	67	431	e75	e130	---	273	396	213	29	103	31	75
30	61	287	e63	e125	---	307	372	480	30	65	29	52
31	44	---	e76	e118	---	306	---	280	---	34	28	---
TOTAL	2602	7703	6788	8493	2423	14205	7959	7000	4322	2174	5194	1387
MEAN	83.9	257	219	274	86.5	458	265	226	144	70.1	168	46.2
MAX	184	819	1640	1200	112	1620	598	710	1070	303	2260	156
MIN	44	71	63	65	69	76	144	108	29	25	28	20
CFSM	.64	1.96	1.67	2.09	.66	3.50	2.03	1.72	1.10	.54	1.28	.35
IN.	.74	2.19	1.93	2.41	.69	4.03	2.26	1.99	1.23	.62	1.47	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

	MEAN	216	283	225	157	138	367	875	416	185	109	109	133
MAX	653	630	585	448	796	1225	1522	991	626	356	454	421	
(WY)	1946	1960	1974	1937	1981	1936	1933	1940	1978	1958	1976	1945	
MIN	51.3	97.6	60.9	53.9	34.0	57.0	265	143	43.7	32.0	19.7	31.5	
(WY)	1949	1979	1956	1940	1980	1941	1995	1977	1933	1934	1934	1953	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1931 - 1995

ANNUAL TOTAL	95428	70250	
ANNUAL MEAN	261	192	267
HIGHEST ANNUAL MEAN			385
LOWEST ANNUAL MEAN			168
HIGHEST DAILY MEAN	4240	Apr 16	6710
LOWEST DAILY MEAN	44	Oct 31	11
ANNUAL SEVEN-DAY MINIMUM	52	Feb 13	15
INSTANTANEOUS PEAK FLOW			8290
INSTANTANEOUS PEAK STAGE			13.21
INSTANTANEOUS LOW FLOW			9.4
ANNUAL RUNOFF (CFSM)	2.00		2.04
ANNUAL RUNOFF (INCHES)	27.10		27.74
10 PERCENT EXCEEDS	566	429	623
50 PERCENT EXCEEDS	107	104	125
90 PERCENT EXCEEDS	58	35	45

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: 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 Aug. 1, 1915, nonrecording gage at site 0.2 mi downstream at datum 4.35 ft lower. Aug. 1, 1915, to Sept. 30, 1923, water-stage recorder at present site and datum. Oct. 1, 1928, to Sept. 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. 16	0400	* 7,880	10.26	Mar. 15	1630	Ice jam	* 11.47

No other peak greater than base discharge.
Minimum discharge, 52 ft³/s, Sept. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	493	864	819	e370	e370	e250	1160	1180	985	134	170	78
2	340	1750	627	e350	e340	e230	970	967	711	218	143	77
3	254	1830	572	e330	e320	e235	831	816	3900	254	120	73
4	228	1210	638	e315	e320	e235	800	701	4720	144	143	65
5	209	1450	1500	e300	e325	e240	796	611	3200	116	227	61
6	205	2190	4410	e295	e325	e240	700	554	1820	102	2010	58
7	203	2350	3910	e290	e330	e245	669	532	1170	98	2860	60
8	194	1780	2250	e285	e320	e580	569	461	758	106	1100	84
9	183	1290	1410	e275	e315	e1600	570	411	598	121	488	81
10	219	1100	1080	e270	e310	e1200	545	380	492	111	341	80
11	221	842	e810	e260	e305	e1000	513	360	589	98	235	72
12	201	668	e600	e255	e295	e800	522	394	831	84	757	65
13	181	559	e415	e335	e280	e1400	1020	408	682	82	1160	72
14	172	504	e390	e1100	e275	e2500	1340	379	521	80	664	79
15	170	463	e380	e4000	e265	e5390	1070	823	424	78	556	108
16	163	412	e375	7190	e270	4060	873	1640	342	76	873	132
17	159	364	e365	6170	e270	5220	788	1460	285	193	441	106
18	150	349	e355	4160	e275	4930	890	3150	269	744	297	89
19	149	330	e340	2380	e315	4070	953	2060	235	391	223	79
20	168	319	e360	1690	e290	3240	1080	1270	212	293	165	69
21	315	293	e375	2690	e290	3290	1020	971	185	194	154	62
22	341	323	e390	2800	e280	4880	1570	855	168	149	138	90
23	273	349	e395	1830	e300	4420	1540	736	163	137	121	305
24	246	285	e700	1300	e280	3000	1060	740	148	291	116	279
25	225	364	e690	e1000	e260	1980	842	985	119	205	112	172
26	218	294	e600	e750	e240	1510	730	773	138	156	106	151
27	198	640	e500	e600	e215	1230	670	661	120	239	98	204
28	188	687	e450	e450	e270	1130	914	630	102	231	93	248
29	180	1060	e350	e440	---	1080	1350	721	100	237	87	255
30	176	1200	e310	e410	---	1090	1320	1540	97	357	82	178
31	175	---	e280	e380	---	1180	---	1420	---	225	79	---
TOTAL	6797	26119	26646	43270	8250	62455	27675	28589	24084	5944	14159	3532
MEAN	219	871	860	1396	295	2015	922	922	803	192	457	118
MAX	493	2350	4410	7190	370	5390	1570	3150	4720	744	2860	305
MIN	149	285	280	255	215	230	513	360	97	76	79	58
CFSM	.46	1.82	1.79	2.91	.62	4.21	1.93	1.93	1.68	.40	.95	.25
IN.	.53	2.03	2.07	3.36	.64	4.85	2.15	2.22	1.87	.46	1.10	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1995, BY WATER YEAR (WY)

	MEAN	771	1022	842	619	507	1355	2989	1306	679	389	350	415
MAX	2295	2385	2330	2034	2439	4013	4882	3187	2129	1671	1528	1365	
(WY)	1978	1984	1984	1990	1981	1936	1969	1940	1978	1974	1976	1954	
MIN	87.4	241	270	157	115	240	922	453	178	86.0	63.3	57.5	
(WY)	1949	1954	1956	1918	1980	1941	1995	1977	1988	1991	1934	1921	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1915 - 1995

ANNUAL TOTAL	339875	277520	
ANNUAL MEAN	931	760	
HIGHEST ANNUAL MEAN			1415
LOWEST ANNUAL MEAN			580
HIGHEST DAILY MEAN	12600	Apr 16	17800
LOWEST DAILY MEAN	139	Sep 5	28
ANNUAL SEVEN-DAY MINIMUM	162	Oct 14	39
INSTANTANEOUS PEAK FLOW			7880
INSTANTANEOUS PEAK STAGE			b 11.47
INSTANTANEOUS LOW FLOW			52
ANNUAL RUNOFF (CFSM)	1.94	1.59	8.0
ANNUAL RUNOFF (INCHES)	26.40	21.55	1.95
10 PERCENT EXCEEDS	2210	1710	2210
50 PERCENT EXCEEDS	440	355	460
90 PERCENT EXCEEDS	196	106	140

a From rating curve extended above 9,300 ft³/s, as described above in Extremes paragraphs.

b Ice jam.

c Estimated

04294000 MISSISQUOI RIVER AT SWANTON, VT.

LOCATION.--Lat 44°54'00", long 73°06'00", Franklin County, Hydrologic Unit 02010007, on left bank at dam, 0.3 mi upstream of Route 78 bridge across the Missisquoi River in Swanton, Vt.

DRAINAGE AREA.--850 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 105 ft above sea level, from topographic map. Prior to Oct. 24, 1990, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by powerplants upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,900 ft³/s, Jan. 16, gage height, 5.34 ft; minimum daily discharge, 68 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	606	1010	1370	e350	e600	e285	1920	2110	1680	145	200	113
2	551	2680	1030	e370	e570	e270	1630	1680	1130	227	174	111
3	327	3160	632	e350	e540	e275	1380	1410	3270	321	160	109
4	247	2160	834	e335	e510	e280	1230	1230	7950	311	169	101
5	245	1700	1230	e325	e490	e280	1260	1050	5440	135	319	94
6	239	4140	6340	e320	e480	e285	910	983	3100	147	2980	93
7	194	4110	6300	e320	e480	e400	1020	806	2020	149	4540	87
8	227	3300	4200	e315	e475	e1500	937	757	1280	135	2520	69
9	216	2170	2210	e310	e470	e3150	895	654	781	142	925	68
10	272	1930	1620	e310	e460	e2500	822	641	665	171	478	82
11	612	1430	1600	e350	e450	e1900	788	580	769	150	351	101
12	243	1040	706	e360	e420	e1650	776	630	1240	152	468	100
13	210	928	530	e950	e390	e2200	1350	659	1190	127	1490	124
14	136	968	e440	2360	e395	e4000	2290	617	804	116	1080	115
15	150	616	e450	7020	e380	e5900	1930	931	583	115	671	105
16	157	630	e460	10800	e365	8220	1500	2790	524	112	1090	136
17	266	561	e440	9380	e350	8810	1440	2160	451	142	820	168
18	149	486	e420	6930	e360	8550	1570	4070	357	789	348	152
19	156	341	e410	4470	e370	6900	1550	3640	344	773	284	101
20	199	446	e400	3000	e355	5410	1850	2200	299	402	220	99
21	372	698	e560	4210	e340	5020	1680	1550	275	295	179	100
22	635	205	692	4970	e340	7970	2400	1440	191	204	153	127
23	468	460	654	3690	e350	7210	2860	1240	217	179	148	460
24	362	580	696	2460	e340	5560	2020	1030	215	291	144	493
25	327	225	665	2020	e315	3770	1460	1610	200	405	131	196
26	315	474	601	1250	e275	2700	1310	1410	164	255	113	338
27	269	289	591	958	e255	2200	1150	1120	143	407	133	220
28	286	554	512	e725	e315	1840	1310	1040	157	284	124	383
29	290	1040	e500	e695	---	1810	2300	936	139	225	119	266
30	179	1650	e190	e680	---	1720	2270	1940	129	334	122	252
31	233	---	e300	e615	---	1750	---	2430	---	360	113	---
TOTAL	9138	39981	37583	71198	11440	104315	45808	45344	35707	8000	20766	4963
MEAN	295	1333	1212	2297	409	3365	1527	1463	1190	258	670	165
MAX	635	4140	6340	10800	600	8810	2860	4070	7950	789	4540	493
MIN	136	205	190	310	255	270	776	580	129	112	113	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1461	1767	1432	1164	629	2688	4686	1527	914	526	493
MAX	2507	2335	2631	2297	1316	5005	7078	2306	1353	1143	758
(WY)	1991	1991	1991	1995	1991	1990	1993	1994	1993	1990	1991
MIN	295	1024	596	429	317	801	1527	994	375	148	165
(WY)	1995	1992	1993	1994	1993	1994	1995	1992	1992	1991	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	496706		434243			
ANNUAL MEAN	1361		1190		1439	
HIGHEST ANNUAL MEAN					1726	
LOWEST ANNUAL MEAN					1190	
HIGHEST DAILY MEAN	18000	Apr 16	10800	Jan 16	21000	Mar 17 1990
LOWEST DAILY MEAN	119	Sep 21	68	Sep 9	68	Sep 9 1995
ANNUAL SEVEN-DAY MINIMUM	173	Oct 14	85	Sep 4	85	Sep 4 1995
INSTANTANEOUS PEAK FLOW			a 12900	Jan 16	ab 25000	Mar 17 1990
INSTANTANEOUS PEAK STAGE			5.34	Jan 16		
10 PERCENT EXCEEDS	3540		2990		3640	
50 PERCENT EXCEEDS	600		500		759	
90 PERCENT EXCEEDS	234		141		200	

a From rating curve extended above 7,700 ft³/s.

b Estimated record from comparison of discharge with peak from upstream site at East Berkshire.

e Estimated

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft south of Gulf Oil Co. dock at Burlington, 0.1 mi north of Burlington Water Department pumping station, and 0.5 mi north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year. Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAUGE.--Water-stage recorder. Datum of gage is 92.86 ft above sea level. Prior to July 20, 1937, nonrecording gage at site 0.7 mi south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 9.00 ft Apr. 27, 1993; minimum observed, -0.25 ft Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.38 ft, Mar. 26, affected by seiche; minimum, 1.22 ft Sept. 30, affected by seiche.

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.34	1.70	1.65	1.99	3.46	2.58	4.12	3.24	2.50	1.92	1.58	1.80
2	2.33	1.79	1.60	1.98	3.44	2.54	4.07	3.22	2.50	1.91	1.57	1.78
3	2.28	1.84	1.64	1.95	3.40	2.50	3.98	3.20	2.55	1.87	1.57	1.77
4	2.25	1.88	1.64	1.94	3.37	2.47	3.93	3.16	2.62	1.84	1.62	1.73
5	2.22	1.91	1.69	1.91	3.40	2.44	3.89	3.13	2.67	1.80	1.71	1.68
6	2.18	1.93	1.87	1.86	3.35	2.40	3.84	3.09	2.69	1.76	1.92	1.67
7	2.12	1.95	2.06	1.88	3.30	2.35	3.77	3.06	2.69	1.73	2.13	1.61
8	2.08	1.98	2.15	1.85	3.28	2.40	3.70	3.00	2.67	1.73	2.27	1.60
9	2.03	2.02	2.18	1.83	3.22	2.64	3.64	2.96	2.64	1.73	2.32	1.62
10	2.05	2.02	2.22	1.83	3.20	2.72	3.60	2.90	2.60	1.70	2.33	1.57
11	2.04	2.01	2.28	1.81	3.16	2.76	3.54	2.84	2.53	1.67	2.34	1.52
12	2.00	1.98	2.29	1.78	3.13	2.76	3.40	2.81	2.55	1.64	2.40	1.46
13	1.97	1.98	2.29	1.82	3.08	2.80	3.44	2.79	2.53	1.60	2.45	1.40
14	1.98	1.90	2.28	1.85	3.04	2.92	3.46	2.73	2.51	1.59	2.47	1.44
15	1.97	1.91	2.26	1.94	2.94	3.06	3.44	2.70	2.47	1.60	2.42	1.48
16	1.94	1.90	2.24	2.28	2.95	3.26	3.42	2.74	2.44	1.59	2.40	1.40
17	1.92	1.87	2.17	2.61	2.92	3.52	3.40	2.73	2.40	1.62	2.43	1.30
18	1.88	1.79	2.22	2.81	2.88	3.75	3.37	2.74	2.36	1.58	2.41	1.35
19	1.85	1.80	2.22	2.92	2.83	3.90	3.28	2.75	2.32	1.60	2.38	1.36
20	1.83	1.79	2.17	3.02	2.81	3.97	3.29	2.73	2.30	1.60	2.29	1.33
21	1.84	1.66	2.14	3.19	2.78	4.03	3.27	2.71	2.26	1.59	2.24	1.31
22	1.83	1.69	2.14	3.39	2.76	4.13	3.25	2.68	2.23	1.58	2.22	1.31
23	1.81	1.69	2.15	3.54	2.72	4.25	3.28	2.67	2.20	1.58	2.19	1.35
24	1.79	1.65	2.15	3.62	2.70	4.32	3.28	2.63	2.16	1.59	2.12	1.35
25	1.77	1.58	2.13	3.65	2.67	4.34	3.26	2.64	2.11	1.59	2.07	1.33
26	1.74	1.61	2.12	3.66	2.63	4.33	3.21	2.62	2.11	1.61	2.04	1.32
27	1.72	1.57	2.09	3.65	2.58	4.32	3.20	2.60	2.06	1.63	1.99	1.32
28	1.66	1.53	2.06	3.61	2.60	4.28	3.20	2.55	1.99	1.64	1.96	1.31
29	1.59	1.57	2.08	3.57	---	4.24	3.22	2.48	1.94	1.64	1.91	1.29
30	1.60	1.64	2.05	3.53	---	4.18	3.24	2.52	1.92	1.62	1.86	1.26
31	1.59	---	2.00	3.49	---	4.15	---	2.51	---	1.61	1.84	---
MEAN	1.94	1.80	2.07	2.61	3.02	3.36	3.50	2.81	2.38	1.67	2.11	1.47
MAX	2.34	2.02	2.29	3.66	3.46	4.34	4.12	3.24	2.69	1.92	2.47	1.80
MIN	1.59	1.53	1.60									

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)

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. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi².

WATER-STAGE RECORDS

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 Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 97.27 ft, Mar. 30; minimum, 93.79 ft, Sept. 18.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95.19	94.50	94.53	94.82	96.31	95.40	96.91	96.07	95.39	94.77	94.47	94.62
2	95.14	94.54	94.64	94.81	96.21	95.36	96.88	96.06	95.36	94.72	94.35	94.58
3	95.10	94.71	94.52	94.83	96.22	95.35	96.95	96.04	95.35	94.67	94.41	94.55
4	95.08	94.76	94.51	94.78	96.17	95.30	96.75	96.01	95.43	94.71	94.54	94.55
5	95.06	94.74	94.56	94.82	96.17	95.26	96.53	95.98	95.54	94.70	94.53	94.55
6	95.08	94.88	94.69	94.84	96.17	95.25	96.65	95.79	95.55	94.76	94.68	94.46
7	95.11	94.72	94.79	94.69	96.16	95.29	96.57	95.76	95.55	94.76	94.93	94.55
8	95.14	94.90	94.94	94.73	96.11	95.27	96.60	95.76	95.40	94.60	95.12	94.41
9	95.15	94.82	95.23	94.66	96.10	95.43	96.45	95.79	95.44	94.54	95.16	94.41
10	94.91	94.79	95.02	94.63	96.03	95.54	96.41	95.80	95.48	94.52	95.18	94.32
11	94.88	94.78	95.06	94.63	96.00	95.59	96.38	95.79	95.59	94.52	95.25	94.38
12	94.90	94.88	95.08	94.70	95.95	95.69	96.55	95.68	95.37	94.50	95.31	94.44
13	94.89	94.80	95.09	94.68	95.95	95.67	96.31	95.63	95.39	94.50	95.23	94.50
14	94.75	95.00	95.07	94.75	95.88	95.76	96.24	95.70	95.30	94.46	95.26	94.31
15	94.76	94.74	95.06	94.96	95.93	95.89	96.25	95.68	95.29	94.41	95.44	94.26
16	94.73	94.75	95.13	95.09	95.78	96.09	96.23	95.58	95.30	94.34	95.29	94.52
17	94.72	94.77	95.30	95.40	95.76	96.33	96.23	95.65	95.28	94.55	95.24	94.43
18	94.72	94.92	95.04	95.66	95.72	96.57	96.19	95.58	95.24	94.58	95.13	94.14
19	94.73	94.63	95.00	95.81	95.69	96.73	96.37	95.60	95.20	94.47	95.17	94.19
20	94.76	94.62	95.09	95.80	95.63	96.88	96.08	95.58	95.10	94.52	95.28	94.20
21	94.68	95.05	95.09	95.99	95.59	96.91	96.24	95.60	95.07	94.48	95.17	94.16
22	94.65	94.54	95.01	96.17	95.58	96.97	96.15	95.55	95.06	94.47	94.97	94.21
23	94.69	94.45	94.90	96.34	95.57	97.03	96.06	95.55	95.03	94.48	94.98	94.17
24	94.65	94.52	94.81	96.41	95.53	97.08	96.09	95.53	95.02	94.45	94.87	94.18
25	94.63	94.55	94.89	96.44	95.48	97.10	96.09	95.47	94.98	94.44	94.83	94.23
26	94.60	94.38	94.92	96.46	95.45	97.11	96.07	95.48	94.87	94.48	94.85	94.21
27	94.55	94.42	94.97	96.41	95.46	97.09	96.03	95.43	94.97	94.46	94.80	94.23
28	94.65	94.66	94.97	96.42	95.41	97.07	96.04	95.52	94.94	94.49	94.80	94.11
29	94.67	94.50	94.67	96.41	---	97.07	96.06	95.58	94.87	94.55	94.78	94.20
30	94.46	94.43	94.83	96.37	---	97.09	96.06	95.35	94.79	94.45	94.68	94.20
31	94.42	---	94.90	96.38	---	96.96	---	95.40	---	94.48	94.76	---
MEAN	94.82	94.69	94.91	95.45	95.86	96.20	96.35	95.68	95.24	94.54	94.95	94.34
MAX	95.19	95.05	95.30	96.46	96.31	97.11	96.95	96.07	95.59	94.77	95.44	94.62
MIN	94.42	94.38	94.51	94.63	95.41	95.25	96.03	95.35	94.79	94.34	94.35	94.11

CAL YR 1994 MEAN 96.34 MAX 101.39 MIN 94.38
WTR YR 1995 MEAN 95.25 MAX 97.11 MIN 94.11

ST. LAWRENCE RIVER BASIN

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to August 1995 (discontinued).

CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-82 (c), 1983-86 (b), 1987 (c), 1988 (d), 1989 (c), 1990-95 (b).

MINOR ELEMENTS DATA: 1974-86 (b), 1987 (c), 1988 (d), 1989 (c), 1990-95 (b).

PESTICIDE DATA: 1976-79 (b), 1980 (a), 1982 (b).

ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-81 (c).

PCB--1978-79 (b), 1980 (a), 1982 (b).

NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-82 (c), 1983-86 (b), 1987-89 (c), 1990-95 (b).

BIOLOGICAL DATA:

Bacteria--1974 (a), 1975-82 (c), 1983-89 (b), 1990-95 (b).

Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980-81 (c).

Periphyton--1975 (c), 1976-80 (b).

SEDIMENT DATA: 1975-82 (c), 1983-95 (b).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO AUGUST 1995

DATE	TIME	PH				BARO-	OXYGEN,		COLI-	STREP-	HARD- NESS TOTAL (MG/L AS CACO3)
		SPE- CIFIC CON- DUCT- ANCE (US/CM)	WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	METRIC PRES- SURE (MM OF HG)	DIS- SOLVED (PER- CENT SATUR- ATION)	FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)		
NOV 02...	0915	167	7.5	10.5	0.90	749	11.4	104	38	10	65
APR 18...	1030	130	7.1	4.5	0.70	770	8.9	68	<1	<1	62
JUN 21...	0930	159	7.5	20.5	0.50	770	--	--	<1	<1	59
AUG 08...	0915	158	7.9	23.0	0.40	771	8.6	99	K5	K4	59
DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
NOV 02...	19	4.2	7.6	1.4	51	62	ND	11	11	<0.10	1.2
APR 18...	18	4.1	7.2	1.3	52	63	0	11	11	<0.10	0.87
JUN 21...	17	3.9	7.1	1.3	46	56	0	10	11	<0.10	0.43
AUG 08...	17	4.0	7.5	1.2	50	61	0	10	11	<0.10	2.4
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	BARIUM, DIS- SOLVED (UG/L AS BA)
NOV 02...		91	86	0.060	0.020	0.30	0.020	<0.010	<0.010	<10	8
APR 18...		92	85	0.180	<0.015	0.30	<0.010	<0.010	<0.010	<10	7
JUN 21...		90	79	0.090	0.040	0.40	<0.010	<0.010	<0.010	20	7
AUG 08...		92	84	0.100	0.020	0.40	0.020	0.020	<0.010	<10	7

K Results based on colony count outside the acceptable range (non-ideal colony count).

ND Not detected.

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO AUGUST 1995

DATE	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
NOV 02...	<3	16	<4	3	<10	<1	<1	<1.0	83	<6
APR 18...	<3	4	5	1	<10	<1	<1	<1.0	84	<6
JUN 21...	<3	46	<4	7	10	1	<1	<1.0	81	<6
AUG 08...	3	6	<4	<1	<10	<1	<1	<1.0	82	<6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO AUGUST 1995

DATE	TIME	SEDI- MENT, SUS- PENDE (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 02...	0915	1	80
JUN 21...	0930	1	65
AUG 08...	0915	1	89

- a 1 or 2 samples per year.
b 3 to 5 samples per year.
c 6 to 9 samples per year.
d 10 to 20 samples per year.

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.

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 Aug. 22, 1961, nonrecording gage on east side, and Aug. 23, 1961, to Oct. 18, 1966, on west side of bridge at present site and datum.

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

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.58 ft, Jan. 23, 24, affected by seiche; minimum gage height, 7.47 ft. Mar. 13, 14, affected by seiche.

DAILY MEAN VALUES

CAL YR 1994	MEAN 8.91	MAX 11.86	MIN 7.02
WTR YR 1995	MEAN 9.07	MAX 10.58	MIN 7.48

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: 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 (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 8	0030	* 1,200	* 5.46

Minimum discharge, 21 ft³/s, July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	185	147	e55	e102	69	269	271	96	24	37	32
2	83	321	117	e67	e97	71	219	201	78	36	32	31
3	68	295	106	e66	e89	70	191	166	130	74	29	29
4	60	184	122	e64	e84	70	191	151	328	47	31	28
5	56	152	278	e62	e86	69	181	135	193	34	47	26
6	54	283	665	e62	e89	70	143	126	123	29	836	25
7	52	294	571	e62	e89	75	146	116	95	28	1010	26
8	48	260	407	e63	e89	183	132	106	78	28	1070	28
9	48	190	211	e61	e88	260	133	99	68	29	687	29
10	48	152	200	e60	e87	242	125	93	61	33	337	32
11	58	126	167	e55	e83	207	123	91	62	33	144	30
12	57	111	139	e53	e81	163	131	93	67	28	123	29
13	52	101	e135	e63	e80	150	232	95	73	27	125	27
14	49	95	e130	e80	e80	227	267	91	66	25	104	29
15	47	90	e115	e470	e79	430	197	119	57	23	94	36
16	45	83	112	e800	e78	717	164	204	51	22	87	45
17	54	79	111	936	e77	772	160	206	46	59	77	35
18	61	77	e110	722	e76	672	182	371	44	96	66	30
19	55	75	e108	558	e74	620	208	261	42	86	59	28
20	51	72	e105	352	e76	576	233	170	38	72	54	26
21	59	71	104	549	e78	732	210	140	35	49	47	25
22	71	75	103	480	e74	869	294	133	32	40	43	27
23	62	84	115	371	e72	741	310	116	30	37	37	70
24	57	103	100	269	e72	574	216	110	29	39	34	141
25	58	75	101	224	e71	396	170	124	28	65	32	78
26	60	73	115	195	74	316	146	116	28	63	33	56
27	55	104	94	e150	68	278	139	112	27	89	31	57
28	53	75	85	e140	68	270	178	102	27	81	30	76
29	51	195	79	e130	---	262	268	95	24	55	29	64
30	49	213	e90	e120	---	267	329	126	23	49	33	51
31	48	---	e65	e110	---	274	---	128	---	46	33	---
TOTAL	1775	4293	5107	7449	2261	10692	5887	4467	2079	1446	5431	1246
MEAN	57.3	143	165	240	80.7	345	196	144	69.3	46.6	175	41.5
MAX	106	321	665	936	102	869	329	371	328	96	1070	141
MIN	45	71	65	53	68	69	123	91	23	22	29	25
CFSM	.47	1.17	1.35	1.97	.66	2.83	1.61	1.18	.57	.38	1.44	.34
IN.	.54	1.31	1.56	2.27	.69	3.26	1.80	1.36	.63	.44	1.66	.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1995, BY WATER YEAR (WY)

	MEAN	149	192	173	118	119	270	654	282	145	88.3	89.1	89.6
MAX	512	421	473	286	534	611	1164	709	412	405	334	280	
(WY)	1991	1960	1984	1973	1981	1976	1969	1972	1973	1973	1976	1977	
MIN	28.4	54.6	58.1	43.4	29.1	63.1	196	90.5	43.9	29.1	34.2	19.9	
(WY)	1954	1979	1979	1954	1980	1956	1995	1987	1988	1991	1953	1953	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1952 - 1995

	ANNUAL TOTAL	75910	52133	
ANNUAL MEAN	208		143	
HIGHEST ANNUAL MEAN				197
LOWEST ANNUAL MEAN				301
HIGHEST DAILY MEAN	2710	Apr 16	1070	Aug 8
LOWEST DAILY MEAN	44	Aug 13	22	Jul 16
ANNUAL SEVEN-DAY MINIMUM	51	Oct 10	26	Jun 25
INSTANTANEOUS PEAK FLOW			1200	Aug 8
INSTANTANEOUS PEAK STAGE			5.46	Aug 8
INSTANTANEOUS LOW FLOW			21	Jul 16
ANNUAL RUNOFF (CFSM)	1.70		1.17	
ANNUAL RUNOFF (INCHES)	23.15		15.90	
10 PERCENT EXCEEDS	472		294	456
50 PERCENT EXCEEDS	92		84	104
90 PERCENT EXCEEDS	55		30	40

a Also occurred on Aug. 30 to Sept. 1

e Estimated

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: 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 and since Mar. 6, 1957, records of power generation. Datum of gage is 682.36 ft above sea level. May 25, 1909, to Sept. 20, 1915, nonrecording gage, and Sept. 21, 1915, to Sept. 30, 1924, Nov. 16, 1928, to May 4, 1936, water-stage recorder, at site 0.65 mi upstream at different datum.

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 Mar. 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, Mar. 20, 1936, gage height, 5.76 ft, site and datum then in use; maximum daily, 3,610 ft³/s, Mar. 20, 1936; minimum daily, 2.6 ft³/s, June 18, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 676 ft³/s, Mar. 24, gage height, 5.29 ft; minimum daily, 43 ft³/s, July 3-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	98	172	98	129	92	420	252	269	44	84	60
2	97	160	172	172	195	93	417	265	240	44	74	60
3	97	196	174	151	e250	e175	407	264	189	43	74	60
4	147	187	174	95	e240	106	309	212	244	43	76	60
5	96	201	178	92	185	155	279	222	261	43	91	61
6	90	201	191	90	192	124	276	261	252	46	210	63
7	155	272	347	91	192	93	205	183	189	74	300	59
8	177	320	349	142	137	148	207	113	185	87	304	52
9	99	258	326	170	153	94	209	169	186	86	326	50
10	96	241	194	e85	169	144	205	168	186	71	327	50
11	87	280	344	e95	169	168	196	168	186	70	336	50
12	82	207	290	91	160	211	168	168	185	69	336	50
13	77	221	123	112	e124	255	186	163	176	69	258	49
14	77	206	189	94	e160	201	249	146	137	69	207	49
15	155	206	194	209	e165	279	268	113	88	69	203	48
16	125	206	194	344	167	334	267	153	83	69	200	48
17	91	206	141	371	106	365	203	292	75	72	200	48
18	91	197	91	367	e135	413	99	361	75	145	199	48
19	91	195	165	462	e95	411	149	359	104	117	197	48
20	91	172	173	589	143	417	251	356	135	67	101	48
21	91	172	172	586	92	427	240	344	86	68	87	48
22	157	114	109	536	91	429	201	344	85	108	87	51
23	118	92	106	487	116	487	244	297	76	158	87	49
24	93	136	194	444	164	662	266	275	71	72	114	48
25	93	172	184	424	90	651	266	232	71	72	181	74
26	93	88	91	402	e120	600	266	189	70	86	126	151
27	93	88	90	372	e120	532	218	189	68	146	87	172
28	93	103	93	363	95	495	239	188	61	136	69	120
29	93	174	159	293	---	465	273	189	48	93	60	95
30	93	173	143	171	---	429	222	251	44	93	60	159
31	93	---	90	122	---	426	---	270	---	93	60	---
TOTAL	3227	5542	5612	8120	4154	9881	7405	7156	4125	2522	5121	2028
MEAN	104	185	181	262	148	319	247	231	137	81.4	165	67.6
MAX	177	320	349	589	250	662	420	361	269	158	336	172
MIN	77	88	90	85	90	92	99	113	44	43	60	48
CFSM	.73	1.30	1.27	1.84	1.04	2.24	1.74	1.63	.97	.57	1.16	.48
IN.	.85	1.45	1.47	2.13	1.09	2.59	1.94	1.87	1.08	.66	1.34	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1995, BY WATER YEAR (WY)

MEAN	179	231	221	180	156	279	690	496	242	145	129	129
MAX	576	560	599	363	477	1136	1192	1042	545	464	369	523
(WY)	1946	1919	1984	1978	1981	1936	1933	1972	1978	1973	1976	1924
MIN	50.7	79.5	80.4	62.9	19.1	72.8	186	179	74.0	47.2	39.6	41.9
(WY)	1962	1923	1923	1948	1979	1911	1979	1941	1988	1991	1909	1984

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1909 - 1995

ANNUAL TOTAL	99843		64893				
ANNUAL MEAN	274		178			255	
HIGHEST ANNUAL MEAN						394	1974
LOWEST ANNUAL MEAN						153	1979
HIGHEST DAILY MEAN	2260	Apr 17	662	Mar 24		3610	Mar 20 1936
LOWEST DAILY MEAN	55	Jan 10	a 43	Jul 3		2.6	Jun 18 1956
ANNUAL SEVEN-DAY MINIMUM	92	Sep 4	44	Jun 30		14	Oct 9 1961
INSTANTANEOUS PEAK FLOW			676	Mar 24	bc	3900	Mar 20 1936
INSTANTANEOUS PEAK STAGE			5.29	Mar 24	bd	5.76	Mar 20 1936
ANNUAL RUNOFF (CFSM)	1.93		1.25			1.79	
ANNUAL RUNOFF (INCHES)	26.16		17.00			24.38	
10 PERCENT EXCEEDS	452		344			524	
50 PERCENT EXCEEDS	173		159			179	
90 PERCENT EXCEEDS	91		65			62	

a Also occurred July 4, 5.

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

c From rating curve extended above 2,800 ft³/s on basis of computation of peak flow over dam.

d Site and datum then in use.

e Estimated.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations

Station name and number	Location and drainage area	Period of record	Water year 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
MERRIMACK RIVER BASIN								
Pemigewasset River at Woodstock, N.H. (01075000)	Lat 43°58'34", Long 71°40'48", Grafton County, Hydrologic Unit 01070001, 0.2 mi east of Woodstock and 0.7 mi upstream from Eastman Brook. Drainage area is 193 mi ² .	1940-77†, 1978-80, 1985-95	01-17-95	7.62	5,690	10-24-59	16.13	47,000
Baker River near Rumney, N.H. (01076000)	Lat 43°47'46", Long 71°50'42", Grafton County, Hydrologic Unit 01070001, 0.3 mi upstream from Halls Brook, and 1.8 mi southwest of Rumney. Drainage area is 143 mi ² .	1929-77†, 1978-81, 1985-95	3-22-95	4.44	1,940	6-15-42	15.50	21,400
Merrimack River at Franklin Junction, N.H. (01081500)	Lat 43°25'26", Long 71°50'12", Merrimack County, Hydrologic Unit 01070002, 1 mi downstream from confluence of Pemigewas- set and Winnepesaukee Rivers. Drainage area is 1,507 mi ² .	1903-78†, 1983-95	1-18-95	10.62	11,300	3-19-36	36.4	83,000
Contoocook River at Peterbor- ough, N.H. (01082000)	Lat 42°51'45", Long 71°57'55", Hillsborough County, Hydro- logic Unit 01070003, 1 mi south of Peterborough, and 1.5 mi upstream from Nubanusit Brook. Drainage area is 68.1 mi ² .	1964-77†, 1978-95	12-24-94	5.01	1540	11-26-50	6.35	2,640
Nubanusit Brook near Peterbor- ough, N.H. (01083000)	Lat 42°53'10", Long 71°58'24", Hillsborough County, Hydro- logic Unit 01070003, on left bank 1.2 mi downstream from Edward Macdowell Reservoir, 1.3 mi northwest of Peterbor- ough, and 1.5 mi upstream from mouth. Drainage area is 46.9 mi ² .	1920-31†, 1945-95	12-27-94	4.18	611	4-16-87	5.59	722
Contoocook River near Henni- ker, N.H. (01085000)	Lat 43°09'10", Long 71°51'24", Merrimack County, Hydrologic Unit 01070003, 0.6 mi down- stream from Sand Brook and 2.5 mi southwest of Henniker. Drainage area is 368 mi ² .	1939-77†, 1988-95	12-25-94	10.64	4,920	4-14-87	b 16.0	b 16,000

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
MERRIMACK RIVER BASIN								
Contoocook River below Hopkinton Dam, at West Hopkinton, N.H. (01085500)	Lat 43°11'31", Long 71°44'51", Merrimack County, Hydrologic Unit 01070003, on right bank 400 ft downstream from covered bridge at West Hopkinton, 0.2 mi downstream from Hopkinton Dam, and 5.9 mi upstream from Warner River. Drainage area is 427 mi ² .	1903-07†, 12-26-94 1963-89†, 1990-95		8.25	4,900	4-8-87	10.89	7,530
Blackwater River near Webster, N.H. (01087000)	Lat 43°17'45", Long 71°41'46", Merrimack County, Hydrologic Unit 01070003, on left bank 0.2 mi west of Dingit corner, 2.4 mi downstream from Black- water Dam, 2.5 mi southeast of Webster, and 6.5 mi upstream from mouth. Drainage area is 129 mi ² .	1918-20†, 12-28-94 1927-89†, 1990-95		5.95	1,340	3-19-36	11.78	11,000
Piscataquog River below Everett Dam near East Weare, N.H. (01090800)	Lat 43°05'29", Long 71°39'36", Hillsborough County, Hydro- logic Unit 01070002, on right bank 500 ft downstream from Everett Dam and 1.4 mi south- east of East Weare. Drainage area is 63.1 mi ² .	1963-89†, 12-29-94 1990-95		8.16	1,150	6-12-84	9.09	1,770
Piscataquog River near Goffstown, N.H. (01091500)	Lat 43°00'58", Long 71°33'03", Hillsborough County, Hydro- logic Unit 01070002, 0.2 mi upstream from Harry Brook, 0.9 mi downstream from Glen Lake, and 2.5 mi east of Goffstown, N.H. Drainage area is 202 mi ² .	1939-78†, 12-24-94 1983-95		9.20	4,430	4-5-60	10.85	6,840
Souhegan River at Merri- mack, N.H. (01094000)	Lat 42°51'27", Long 71°30'24", Hillsborough County, Hydro- logic Unit 01070002, at head of Wildcat Falls, 0.9 south- west of Merrimack, 1.5 mi upstream from mouth. Drainage area is 171 mi ² .	1909-76†, 12-25-94 1979-95		8.16	3980	3-19-36	16.2	16,900
CONNECTICUT RIVER BASIN								
Ompompanoosuc River at Union Vil- lage, Vt. (01141500)	Lat 43°47'23", Long 72°15'19", Orange County, Hydrologic Unit 01080103, on right bank 100 ft upstream from covered bridge at Union Village, 0.2 mi down- stream from Avery Brook, 0.3 mi downstream from Union Vil- lage Reservoir, and 3.8 mi upstream from mouth. Drainage area is 130 mi ² .	1940-89†, 3-22-95 1990-95		5.78	830	6-3-47	9.65	4,800

Maximum discharge at crest-stage partial-record stations--Continued

Station name and number	Location and drainage area	Period of record	Water year 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
CONNECTICUT RIVER BASIN								
Mascoma River at West Canann, N.H. (01145000)	Lat 43°39'00", Long 72°04'50", Grafton County, Hydrologic Unit 01080104, on right bank 45 ft downstream from Boston and Maine Railroad bridge, 0.9 mi east of West Canaan, 1.2 mi downstream from Indian River, 3.5 mi west of Canann and at mile 19.3. Drainage area is 80.5 mi ² .	1939-78†, 1985-95	3-23-95	3.99	680	3-27-53	8.94	3,780
Black River at North Spring- field, Vt. (01153000)	Lat 43°20'00", Long 72°30'55", Windsor County, Hydrologic Unit 01080106, on right bank of North Springfield, 800 ft downstream from North Spring- field Dam, 1,300 ft upstream from Great Brook, and 8.1 mi upstream from mouth. Drainage area is 158 mi ² .	1929-89†, 1990-95	12-06-94	6.21	2,160	9-22-38	17.68	15,500
West River at Jamaica, Vt. (01155500)	Lat 43°06'32", Long 72°46'33", Windham County, Hydrologic Unit 01080107, on left bank, 0.2 mi upstream from highway bridge at Jamaica, 0.4 mi upstream from Ball Mountain Brook, and 2.8 mi downstream from Ball Mountain Dam and at mile 26.2. Drainage area is 179 mi ² .	1946-89†, 1990-95	12-9-94	8.56	3,490	12-31-48	14.87	29,500
West River at Newfane, Vt. (01156000)	Lat 42°59'43", Long 72°38'13", Windam County, Hydrologic Unit 01080107, on left bank, 400 ft downstream from highway bridge, 1 mi northeast of New- fane, and at mile 12.7. Drain- age area is 308 mi ² .	1919-23†, 1928-89†, 1990-95 (discon- tinued)	12-6-94	8.04	4,930	9-31-38	22.81	52,300
Ashuelot River below Surry Mountain near Keene, N.H. (01158000)	Lat 42°59'40", Long 72°18'40", Cheshire County, Hydrologic Unit 01080201, on right bank 600 ft downstream from Surry Mountain Dam, 2.5 mi upstream from Sturtevent Brook, 4.5 mi north of Keene, and at mile 34.0. Drainage area is 101 mi ² .	1945-89†, 1990-95	3-20-95	7.31	614	4-7-87	11.78	2,260
Otter Brook below Otter Brook Dam, near Keene, N.H. (01158600)	Lat 42°56'45", Long 72°14'14", Cheshire County, Hydrologic Unit 01080201, on right bank 450 ft downstream from Otter Brook Dam, 2 mi northeast of Keene, 2.4 mi northeast of Keene, 2.4 mi upstream from Minnewawa Brook, and 4.9 mi upstream from mouth. Drainage area is 47.2 mi ² .	1958-89†, 1990-95	12-28-94	8.10	478	4-9-87	8.62	c 752

†Operated as a continuous-record gaging station.

a Revised.

b From outside gage reading taken when gage site was closed down.

c Includes bypass flow around gage through emergency spillway.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

Discharge measurements in the following table were made at miscellaneous sites throughout New Hampshire and Vermont.
Discharge measurements made at miscellaneous sites during water year 1995

Stream	Tributary to	Location	Drainage area (mi ²)	Measured pre-viously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
MERRIMACK RIVER BASIN						
01075000 Pemigewasset River	Merrimack River	Lat 43°58'29", Long 71°40'51", Grafton County, Hydrologic Unit 01070001, 0.6 mi upstream from Eastman Brook, 0.34 mi southeast of Woodstock, N.H.	193	1940-77†, 1978-95	11-08-95 4-27-95 6-19-95 8-31-95	275 517 182 64.0
01076000 Baker River	Pemigewasset River	Lat 43°47'46", Long 71°50'42", Grafton County, Hydrologic Unit 01070001, 0.3 mi upstream from Halls Brook, and 1.8 mi southwest of Rumney, N.H.	143	1929-77†, 1978-95	4-28-95 7-27-95 8-31-95	187 141 14.9
01077510 Newfound River	Pemigewasset River	Lat 43°37'05", Long 71°44'25", Grafton County, Hydrologic Unit 01070001, below outlet of Newfound Lake, 1.7 mi north of Bristol, N.H. off State Highway 3.	--	1983-87, 1991-95	11-17-94 04-28-95 07-28-95	65.5 75.7 42.0
01081500 Merrimack River	Atlantic Ocean	Lat 43°25'26", Long 71°50'12", Merrimack County at Franklin Junction, N.H., Hydrologic Unit 01070001, 1 mi downstream from confluence of Pemigewasset and Winnepesaukee Rivers.	1,507	1903-78†, 1979-95	10-21-94 5-9-95	1,160 1,210
01082000 Contoocook River	Merrimack River	Lat 42°51'45", Long 71°57'55", Hillsborough County, Hydrologic Unit 01070003, 1 mi south of Peterborough, N.H., and 1.5 mi upstream from Nubanusit Brook.	68.1	1964-77†, 1978-95	10-20-94 12-08-94 4-13-95 5-31-95 7-21-95 8-29-95	17.2 201 214 68.2 9.35 5.61
01083000 Nubanusit Brook	Contoocook River	Lat 42°53'10", Long 71°58'24", Hillsborough County, Hydrologic Unit 01070003, on left bank 1.2 mi downstream from Edward MacDowell Reservoir, 1.3 mi northwest of Peterborough, N.H. and 1.5 mi upstream from mouth.	46.9	1920-31†, 1945-89†, 1990-95	10-19-94 12-08-94 01-19-95 03-03-95 04-12-95 07-20-95 08-28-95 08-29-95	19.0 118 275 68.4 70.5 10.4 3.96 3.61
01085000 Contoocook River	Merrimack River	Lat 43°09'10", Long 71°51'24", Merrimack County, Hydrologic Unit 01070003, 0.6 mi downstream from Sand Brook and 2.5 mi southwest of Henniker, N.H.	368	1939-77†, 1978-95	10-28-94 06-26-95 09-05-95	184 81.4 42.3
01085500 Contoocook River	Merrimack River	Lat 43°11'31", Long 71°44'05", Merrimack County, Hydrologic Unit 01070003, on right bank 400 ft downstream from covered bridge at West Hopkinton, N.H., 0.2 mi downstream from Hopkinton, 0.2 mi downstream from Hopkinton Dam, and 5.9 mi upstream from Warner River.	427	1903-07†, 1963-89†, 1990-95	10-03-94 10-25-94 11-30-94 04-03-95 05-22-95 09-06-95	354 236 681 572 532 55.9
01087000 Blackwater River	Merrimack River	Lat 43°17'45", Long 71°41'46", Merrimack County, Hydrologic Unit 01070003, on left bank 0.2 mi west of Dingit Corner, N.H., 2.4 mi downstream from Blackwater Dam, 2.5 mi southeast of Webster, and 6.5 mi upstream from mouth.	129	1927-89†, 1990-95	4-6-95 7-7-95 9-5-95	231 21.6 9.66

Discharge measurements made at miscellaneous sites during water year 1995

Stream	Tributary to	Location	Drainage area (mi ²)	Measured pre-viously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
MERRIMACK RIVER BASIN						
01090800 Piscataquog River	Merrimack River	Lat 43°05'29", Long 71°39'36", Hillsborough County, Hydrologic Unit 01070002, on right bank 500 ft downstream from Everett Dam and 1.4 mi southeast of East Weare, N.H.	63.1	1963-89†, 1990-95	10-28-94	42.8
					1-3-95	190
					5-15-95	94.7
					6-23-95	15.7
01091500 Piscataquog River	Merrimack River	Lat 43°00'58", Long 71°33'03", Hillsborough County, Hydrologic Unit 01070002, 0.2 mi upstream from Harry Brook, 0.9 mi downstream from Glen Lake, and 2.5 mi east of Goffstown, N.H.	202	1939-78†, 1979-95	12-5-94	186
					4-10-95	292
					6-29-95	14.9
					7-5-95	14.8
01093852 Souhegan River	Merrimack River	Lat 42°50'39", Long 71°42'35", Hillsborough County, Hydrologic Unit 01070002, on right bank 1.9 mi downstream from Stony Brook, 1.6 mi upstream from Purgatory Brook, and 2.8 mi west of Milford, N.H.	103	1994-95	8-21-95	15.8
					4-12-94	569
					4-14-94	704
					6-16-94	42.2
					7-20-94	15.4
					8-24-94	139
					9-29-94	236
					10-11-94	88.3
					11-22-94	131
					12-19-94	164
					1-18-95	393
					1-26-95	297
					2-27-95	133
3-27-95	196					
4-24-95	141					
5-22-95	129					
6-28-95	17.8					
8-3-95	23.4					
9-14-95	5.10					
01093875 Souhegan River	Merrimack River	Lat 42°50'46", Long 71°40'52", Hillsborough County, Hydrologic Unit 01070002, on left bank 0.1 mi downstream from Purgatory Brook, 0.7 mi upstream from Tucker Brook, and 1.1 mi west of Milford, N.H.	119	1994-1995	4-14-94	812
					4-14-94	847
					6-16-94	46.7
					7-20-94	18.5
					8-24-94	150
					9-29-94	234
					10-11-94	77.1
					11-22-94	135
					12-19-94	189
					1-26-95	336
					2-27-95	161
					3-27-95	226
					4-24-95	167
5-22-95	139					
6-28-95	21.5					
8-3-95	25.5					
9-14-95	6.71					
01094000 Souhegan River	Merrimack River	Lat 42°51'27", Long 71°30'24", Hillsborough County, Hydrologic Unit 01070002, at head of Wildcat Falls, N.H., 0.9 mi southwest of Merrimack, 1.5 mi upstream from mouth.	171	1909-76†, 1977-95	12-06-94	912
					4-12-95	223
					8-22-95	19.7
CONNECTICUT RIVER BASIN						
01141500 Ompompanoosuc River	Connecticut River	Lat 44°47'23", Long 71°15'19", Coos County, Hydrologic Unit 01080103, on right bank 100 ft upstream from covered bridge at Union Village, Vt., 0.2 mi downstream from Avery Brook, 0.3 mi downstream from Union Village Reservoir, and 3.8 mi upstream from mouth.	130	1940-89†, 1990-95	10-7-94	55.4
					11-10-94	40.6
					12-22-94	83.8
					2-9-95	151
					3-21-95	492
					5-4-95	134
					6-13-95	70.8
					8-10-95	29.3
8-10-95	28.6					

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1995

Stream	Tributary to	Location	Drainage area (mi ²)	Measured pre-viously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
CONNECTICUT RIVER BASIN						
01145000 Mascoma River	Connecticut River	Lat 43°39'00", Long 72°04'50", Grafton County, Hydrologic Unit 01080104, on right bank 45 ft downstream from Boston and Maine Railroad bridge, 0.9 mi east of West Canaan, 1.2 mi downstream from Indian River, 3.5 mi west of Canaan and at mile 19.3.	80.5	1939-78†, 1985-95	10-18-94	25.9
					4-20-95	112
					4-20-95	114
					6-30-95	5.30
					6-30-95	5.18
01152010 Sugar River	Connecticut River	Lat 43°23'10", Long 72°05'30", Sullivan County, Hydrologic Unit 01080107, on left bank below outlet of Lake Sunapee, 800 ft downstream from State Highway 11 and behind Crutch Factory at Sunapee, N.H.	46	1983-87 1991-1995	12-1-94	28.8
					4-4-95	50.6
					8-15-95	27.0
01153000 Black River	Connecticut River	Lat 43°20'00", Long 72°30'55", Windsor County, Hydrologic Unit 01080106, on right bank of North Springfield, Vt., 800 ft downstream from North Springfield Dam, 1,300 ft upstream from Great Brook and 8.1 mi upstream from mouth.	158	1929-89†, 1990-95	1-24-95	500
					3-7-95	105
					7-12-95	31.3
					9-7-95	14.5
01155500 West River	Connecticut River	Lat 43°06'32", Long 72°46'33", Windham County, Hydrologic Unit 01080107, on left bank 0.2 mi upstream from highway bridge at Jamaica, 0.4 mi upstream from Ball Mountain Brook and 2.8 mi downstream from Ball Mountain Dam, and at mile 26.2.⁴	179	1946-89†, 1990-95	10-26-94	92.7
					4-20-95	115
					7-13-95	14.8
					9-11-95	0.86
01156000 West River	Connecticut River	Lat 43°59'43", Long 72°38'13", Windham County, Hydrologic Unit 01080107, on left bank 400 ft downstream from highway bridge, 1.0 mi northeast of Newfane, Vt., and at mile 12.7.	308	1919-23†, 1928-89†, 1990-95 (discontinued)	12-15-94	459
					1-21-95	2,410
					5-23-95	245
01158000 Ashuelot River	Connecticut River	Lat 42°59'40", Long 72°18'40", Cheshire County, Hydrologic Unit 01080201, on right bank 600 ft downstream from Surry Mountain Dam, 2.5 mi upstream from Sturtevent Brook, 4.5 mi north of Keene, N.H., and at mile 34.0.	101	1945-89†, 1990-95	10-28-94	36.8
					2-15-95	138
					2-27-95	102
					4-13-95	212
					5-22-95	136
					7-25-95	11.7
9-5-95	3.59					
01158600 Otter Brook	Ashuelot River	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 upstream from Minnewawa Brook, and 4.9 mi upstream from mouth, at Keene, N.H.	47.2	1958-89†, 1990-95	10-20-94	14.5
					12-9-94	190
					1-19-95	285
					4-13-95	139
					5-22-95	51.0
9-5-95	2.97					
01160248 South Branch Ashuelot River	Ashuelot River	at 42°52'34", Long 72°16'39", Cheshire County, Hydrologic Unit Code 01080201, at Route 32 bridge, 800 ft northeast from Monodnock Regional High School in Swanzey, NH, 2.3 mi upstream from mouth, and 3.5 mi south of Keene, NH	75.3	1994-95	6-14-94	51.7
					10-6-94	25.1
					4-17-95	112
					5-23-95	60.3
					8-31-95	4.22

†Operated as a continuous-record gaging station.

DATE	TIME	DIS- CHARGE, INST.	TEMPER- ATURE	SPE- CIFIC CON- DUCT- ANCE	DATE	TIME	DIS- CHARGE, INST.	TEMPER- ATURE	SPE- CIFIC CON- DUCT- ANCE
		CUBIC FEET PER SECOND (00061)	(DEG C) (00010)	(US/CM) (00095)			CUBIC FEET PER SECOND (00061)	(DEG C) (00010)	(US/CM) (00095)

SACO RIVER BASIN

01064300 ELLIS RIVER NEAR JACKSON, NH (LAT 44 13 12N LONG 071 15 00W)

NOV 1994					APR 1995				
10...	0930	18	4.0	34	20...	0745	28	4.5	30
DEC					JUN				
28...	0920	20	0.0	40	22...	1015	14	14.0	32
FEB 1995					JUL				
02...	0900	13	0.0	35	25...	1045	13	17.5	34
MAR					SEP				
16...	0745	38	0.5	30	05...	0815	7.9	11.0	34

01064801 BEAR CAMP RIVER NEAR SOUTH TAMWORTH, N.H. (LAT 43 49 48N LONG 071 17 18W)

NOV 1994					MAY 1995				
10...	1150	51	7.5	34	03...	0550	118	9.0	27
DEC					JUN				
28...	1200	192	0.0	27	22...	1300	25	24.0	39
FEB 1995					30...	0715	13	19.5	41
02...	1150	92	0.0	30	JUL				
MAR					27...	1145	18	26.0	41
16...	1120	257	0.5	27	SEP				
APR					05...	1130	5.1	19.0	46
20...	1015	146	5.0	26	15...	0850	6.2	15.5	45

PISCATAQUA RIVER BASIN

01072100 SALMON FALLS RIVER AT MILTON, NH (LAT 43 24 50N LONG 070 59 15W)

OCT 1994					MAR 1995				
27...	0915	183	12.5	82	27...	1050	324	4.5	60
JAN 1995					MAY				
04...	1025	255	2.0	53	12...	1200	58	13.0	71

01072800 COCHECO RIVER NEAR ROCHESTER, NH (LAT 43 16 07N LONG 070 58 29W)

DEC 1994					APR 1995				
21...	1045	82	1.0	101	21...	1040	100	11.0	105
JAN 1995					JUN				
04...	1245	189	0.5	87	20...	0915	32	24.0	110
11...	1330	135	0.5	61	28...	1515	12	23.0	158
18...	1025	416	2.0	68	JUL				
23...	1025	504	1.0	64	12...	0855	13	22.0	177
FEB					AUG				
13...	1240	87	0.0	127	17...	1430	7.1	26.5	189
24...	0950	102	0.0	131	25...	1300	3.5	21.5	215
MAR					31...	1250	2.9	20.5	242
02...	1245	97	0.0	130	SEP				
02...	1430	98	0.0	130	07...	1035	2.5	--	256
08...	1530	189	2.0	115					
15...	1400	227	2.0	83					
27...	1335	189	6.0	80					

01072880 COCHECO RIVER AT DOVER, NH (LAT 43 12 21N LONG 070 53 47W)

OCT 1994					MAY 1995				
06...	1200	46	11.0	137	12...	0830	156	12.5	125
NOV					JUN				
23...	0935	126	4.0	21	20...	1335	168	22.0	132
FEB 1995					SEP				
14...	1100	160	0.0	119	26...	0845	17	18.5	253
MAR									
28...	0920	349	6.0	84					

134 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS-	TEMPER-	SPE-	DATE	TIME	DIS-	TEMPER-	SPE-
		CHARGE,		CIFIC			CHARGE,		CIFIC
		INST.		CON-			INST.		CON-
		CUBIC	ATURE	DUCT-			CUBIC	ATURE	DUCT-
		FEET		ANCE			FEET		ANCE
		PER	WATER	(US/CM)			PER	WATER	(US/CM)
		SECOND	(DEG C)	(00095)			SECOND	(DEG C)	(00095)
		(00061)	(00010)				(00061)	(00010)	

PISCATAQUA RIVER BASIN

01073000		OYSTER RIVER NEAR DURHAM, NH (LAT 43 08 55N LONG 070 57 56W)							
OCT 1994					MAY 1995				
03...	1355	6.1	12.5	--	11...	0745	5.1	12.0	168
06...	1530	4.3	10.0	159	JUN				
NOV					19...	1000	2.7	22.5	190
22...	1000	5.7	3.0	195	JUL				
JAN 1995					06...	0845	0.82	21.0	216
06...	1315	25	8.5	121	AUG				
FEB					14...	0915	1.8	21.5	162
15...	1400	11	0.0	144	31...	0720	0.26	15.0	--
MAR					SEP				
15...	1115	40	0.5	89	07...	1445	0.29	18.0	281
28...	1330	27	6.5	98					
APR									
21...	0800	17	10.5	121					

01073500 LAMPREY RIVER NEAR NEWMARKET, NH (LAT 43 06 09N LONG 070 57 11W)

OCT 1994					JUN 1995				
27...	1300	63	11.5	122	19...	1415	42	26.0	140
NOV					JUL				
22...	1320	101	5.5	45	13...	0700	12	--	166
FEB 1995					AUG				
15...	1115	148	0.0	135	14...	1110	21	26.0	147
MAR					31...	0920	1.8	20.0	161
29...	1230	313	6.5	97	SEP				
MAY					01...	0905	2.0	2..0	161
11...	1030	83	14.0	131	07...	1320	2.1	22.0	165

MERRIMACK RIVER BASIN

01074520 EAST BRANCH PEMIGEWASSET RIVER AT LINCOLN, N.H. (LAT 44 02 51N LONG 071 39 37)

NOV 1994					APR 1995				
08...	1030	159	6.0	29	27...	0830	371	4.5	27
30...	0845	153	0.0	30	JUN				
JAN 1995					16...	0730	201	10.0	30
04...	1045	128	0.0	31	30...	0945	76	19.0	35
30...	0930	200	0.0	31	JUL				
FEB					05...	1100	66	22.0	34
15...	1100	97	0.0	34	25...	0655	138	19.0	35
MAR					AUG				
01...	0950	87	0.0	33	30...	1200	55	18.0	37

01075000 PEMIGEWASSET RIVER AT WOODSTOCK, NH (LAT 43 58 34N LONG 071 40 48W)

NOV 1994					JUN 1995				
08...	1300	275	7.0	41	19...	0900	182	18.0	50
APR 1995					AUG				
27...	1200	517	5.5	37	31...	0730	64	17.0	74

01075800 STEVENS BROOK NEAR WENTWORTH, NH (LAT 43 50 12N LONG 071 53 07W)

NOV 1994					JUN 1995				
17...	0900	0.78	2.5	34	20...	1100	0.27	16.0	40
DEC					JUL				
29...	0810	2.9	0.0	25	05...	0920	0.06	14.5	48
FEB 1995					26...	0930	0.07	21.0	49
03...	0815	1.1	0.0	29	AUG				
APR					31...	1040	0.03	13.0	55
28...	0630	2.6	6.5	26					

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)		SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)		DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)		SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	
		TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE (DEG C) (00010)	TEMPER- ATURE (DEG C) (00010)						

MERRIMACK RIVER BASIN

01076000 BAKER RIVER NEAR RUMNEY, NH (LAT 43 47 46N LONG 071 50 42W)

APR 1995	28...	0745	187	8.0	47	AUG 1995	31...	0915	15	17.0	78
JUL	27...	0610	141	19.0	45						

01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH (LAT 43 45 33N LONG 071 41 10W)

OCT 1994	24...	1115	457	14.0	58	MAY 1995	31...	0825	1430	15.0	50
NOV	30...	1045	873	0.0	48	JUN	19...	1240	412	24.0	70
DEC	29...	0950	1070	0.0	43		30...	1130	224	24.0	79
MAR 1995	01...	1200	372	0.0	65	JUL	05...	1300	160	24.0	86
	28...	1035	1480	4.5	47		27...	0730	864	25.0	65
APR	25...	0630	1490	6.5	45	AUG	31...	1145	141	17.0	93

01077000 SQUAM RIVER AT ASHLAND, NH (LAT 43 42 19N LONG 071 37 49W)

NOV 1994	15...	1410	62	10.0	48	APR 1995	27...	1400	64	9.5	50
FEB 1995	03...	1000	85	1.0	47	JUL	27...	0855	63	25.0	48
MAR	13...	1115	68	2.5	49						

01077510 NEWFOUND RIVER AT NEWFOUND LAKE OUTLET NEAR BRISTOL, NH (LAT 43 37 05N LONG 071 44 25)

NOV 1994	17...	1030	66	8.0	37	JUL 1995	28...	0530	42	23.5	36
APR 1995	28...	0915	76	8.0	35						

01078000 SMITH RIVER NEAR BRISTOL, NH (LAT 43 34 04N LONG 071 44 54W)

NOV 1994	17...	1215	28	2.0	72	JUN 1995	21...	1130	26	20.0	73
FEB 1995	03...	1310	59	0.0	58	JUL	05...	0740	12	20.0	88
MAR	13...	0915	144	0.0	42		28...	0710	24	22.0	80
APR	28...	1040	101	10.0	51	SEP	01...	0730	6.7	16.5	94

01081000 WINNIPESAUKEE RIVER AT TILTON, NH (LAT 43 26 31N LONG 071 35 20W)

OCT 1994	14...	1245	78	18.5	100	JAN 1995	09...	0935	797	7.0	83
NOV	29...	1030	357	3.0	96	MAY	09...	1445	305	16.0	87

01081500 MERRIMACK RIVER AT FRANKLIN JUNCTION, NH (LAT 43 25 26N LONG 071 39 12W)

OCT 1994	21...	1000	1160	--	73	MAY 1995	09...	1200	1210	13.0	55
----------	-------	------	------	----	----	----------	-------	------	------	------	----

01082000 CONTOOCOOK RIVER AT PETERBOROUGH, NH (LAT 42 51 45N LONG 071 57 35W)

OCT 1994	20...	0940	17	11.0	93	MAY 1995	31...	1120	68	18.0	88
DEC	08...	1050	201	1.0	66	JUL	21...	0800	9.3	20.0	116
APR 1995	13...	0935	214	7.0	79	AUG	29...	1125	5.7	18.0	152

136 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS- CHARGE, INST.	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	DATE	TIME	DIS- CHARGE, INST.	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
		CUBIC FEET PER SECOND (00061)		CUBIC FEET PER SECOND (00061)					
MERRIMACK RIVER BASIN									
01083000		NUBANUSIT BROOK NEAR PETERBOROUGH, NH (LAT 42 53 10N LONG 071 58 24W)							
OCT 1994					APR 1995				
19...	1445	19	12.0	62	12...	1620	71	6.5	59
DEC					JUL				
08...	1315	118	2.0	47	20...	1430	10	24.0	60
MAR 1995					AUG				
03...	1015	68	0.5	58	28...	1445	4.0	20.0	68
01085000		CONTOOCOOK RIVER NEAR HENNIKER, NH (LAT 43 09 10N LONG 071 51 24W)							
OCT 1994					SEP 1995				
28...	0915	176	9.0	74	05...	1420	42	22.5	99
JUN 1995									
26...	1520	81	24.5	92					
01085500		CONTOOCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH (LAT 43 11 31N LONG 071 44 51)							
OCT 1994					APR 1995				
03...	1000	354	12.0	73	03...	1325	572	7.0	72
25...	1200	235	12.0	79	MAY				
NOV					22...	1300	532	16.5	76
30...	1245	681	1.5	83					
01085800		WEST BRANCH WARNER RIVER NEAR BRADFORD, NH (LAT 43 15 33N LONG 072 01 35W)							
OCT 1994					MAY 1995				
20...	1300	2.0	11.0	41	10...	0915	4.1	11.0	33
DEC					JUN				
01...	1015	12	1.5	30	27...	0925	0.94	19.0	82
JAN 1995					JUL				
05...	1445	7.6	0.0	29	14...	1055	0.30	23.0	41
FEB					AUG				
21...	1320	5.1	0.5	36	15...	1435	1.2	19.0	39
APR									
05...	0905	11	0.5	28					
01087000		BLACKWATER RIVER NEAR WEBSTER, NH (LAT 43 17 45N LONG 071 41 46W)							
APR 1995					SEP 1995				
05...	1330	244	4.0	48	05...	1050	9.7	18.5	72
06...	0935	231	2.0	--					
JUL									
07...	1150	22	25.5	68					
01089100		SOUCOOK RIVER PEMBROKE ROAD NEAR CONCORD, NH (LAT 43 12 47N LONG 071 28 49W)							
OCT 1994					MAR 1995				
11...	0830	16	9.0	123	30...	0810	145	4.0	71
JAN 1995					JUL				
03...	1115	165	0.0	79	13...	1140	18	22.0	136
FEB					AUG				
16...	1120	72	0.0	105	22...	0820	10	18.5	137
01090800		PISCATAQUOG RIVER BELOW EVERETT DAM NEAR EAST WEARE, NH (LAT 43 05 29N LONG 071 39 36)							
OCT 1994					MAY 1995				
28...	1330	43	12.0	73	15...	1040	95	13.0	86
JAN 1995					JUN				
03...	1440	190	1.5	64	23...	0930	16	24.0	80
01091500		PISCATAQUOG RIVER NEAR GOFFSTOWN, NH (LAT 43 00 58N LONG 071 33 03W)							
DEC 1994					JUL 1995				
05...	0905	186	2.5	84	05...	1225	15	28.5	92
APR 1995					AUG				
10...	0920	292	5.5	88	21...	1455	16	27.5	84
JUN									
29...	0715	15	17.0	91					

DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)					TEMPER-ATURE WATER (DEG C) (00010)					SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)				
DATE	TIME				DATE	TIME				DATE	TIME			
MERRIMACK RIVER BASIN														
01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH (LAT 42 56 54N LONG 071 27 52)														
DEC 1994					JUN 1995									
06...	1225	7230	3.5	93	28...	1710	977	25.0	107					
JAN 1995					30...	1005	775	26.5	114					
17...	1215	13900	1.0	84	AUG									
APR					21...	1135	790	26.5	91					
10...	1530	5440	6.0	95										
01093800 STONY BROOK TRIBUTARY NEAR TEMPLE, NH (LAT 42 51 36N LONG 071 50 00W)														
OCT 1994					MAY 1995									
19...	0745	1.1	9.0	31	30...	1345	3.6	15.5	25					
DEC					JUL									
07...	1450	13	4.5	26	07...	1500	0.37	20.0	28					
JAN 1995					19...	1125	0.61	18.0	28					
18...	1430	13	3.0	25	AUG									
MAR					23...	1615	0.08	17.0	29					
02...	1610	3.5	0.5	25										
APR														
11...	1400	4.7	8.0	26										
01094000 SOUHEGAN RIVER AT MERRIMACK, NH (LAT 42 51 27N LONG 071 30 24W)														
DEC 1994					AUG 1995									
06...	0745	912	4.0	77	22...	1105	20	21.5	179					
APR 1995														
12...	0830	223	6.5	112										
010965852 BEAVER BROOK AT N. PELHAM, NH (LAT 42 46 59N LONG 071 21 14W)														
OCT 1994					APR 1995									
18...	0850	19	7.5	295	11...	0910	56	7.0	282					
DEC					MAY									
07...	1055	88	4.5	244	30...	0845	42	16.5	270					
JAN 1995					JUL									
18...	1030	172	3.0	228	18...	1420	3.4	19.0	330					
MAR					AUG									
02...	1245	66	0.5	469	23...	1150	1.7	20.0	388					
CONNECTICUT RIVER BASIN														
01129200 CONNECTICUT RIVER BELOW INDIAN STREAM NEAR PITTSBURG, NH (LAT 45 02 25N LONG 071 26 37)														
NOV 1994					JUL 1995									
14...	1300	193	4.5	46	24...	1025	196	16.0	45					
APR 1995					AUG									
25...	1120	252	5.5	38	28...	1130	164	16.0	42					
01129440 MOHAWK RIVER NEAR COLEBROOK NH (LAT 44 52 28N LONG 071 24 38W)														
NOV 1994					JUN 1995									
14...	1035	23	3.5	130	13...	0815	40	12.0	114					
DEC					JUL									
20...	1440	32	0.0	114	06...	0715	11	17.5	193					
JAN 1995					24...	1205	39	20.0	110					
31...	1320	60	0.0	113	AUG									
MAR					28...	1330	6.4	17.0	194					
14...	1400	62	1.0	98										
APR														
25...	1345	62	9.5	87										
01129500 CONNECTICUT RIVER AT NORTH STRATFORD, NH (LAT 44 44 56N LONG 071 37 50W)														
APR 1995					AUG 1995									
26...	0600	1150	6.5	63	28...	1520	271	20.0	73					
JUL					30...	0915	247	15.0	79					
06...	0845	260	22.5	79										

138 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS-CHARGE, INST. CUBIC TEMPER- FEET ATURE PER WATER SECOND (DEG C) (00061) (00010) (00095)			DATE	TIME	DIS-CHARGE, INST. CUBIC TEMPER- FEET ATURE PER WATER SECOND (DEG C) (00061) (00010) (00095)			
		SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)						
CONNECTICUT RIVER BASIN										
01130000		UPPER AMMONOOSUC RIVER NEAR GROVETON, NH (LAT 44 37 30N LONG 071 28 10W)								
NOV 1994					JUN 1995					
15...	0745	135	5.0	44	14...	0915	238	15.0	43	
DEC					JUL					
21...	0850	180	0.0	32	24...	1415	206	21.5	42	
FEB 1995					AUG					
01...	0830	303	0.0	36	29...	0645	42	15.0	50	
APR										
26...	0920	531	7.0	31						
01131500		CONNECTICUT RIVER NEAR DALTON, NH (LAT 44 24 36N LONG 071 43 16W)								
APR 1995					AUG 1995					
26...	1220	2350	8.5	49	29...	0900	452	20.0	106	
					29...	1400	429	20.5	87	
01134500		MOOSE RIVER AT VICTORY, VT (LAT 44 30 42N LONG 071 50 13W)								
OCT 1994					JUN 1995					
26...	1025	47	7.0	42	01...	1015	81	16.0	37	
DEC					JUL					
08...	1055	227	0.0	31	26...	1015	38	22.0	49	
JAN 1995					AUG					
19...	1135	333	1.0	29	17...	1100	52	20.0	41	
MAR					29...	1145	15	16.5	52	
01...	1220	34	0.0	50						
APR										
25...	1100	178	4.0	29						
01135150		POPE BROOK (SITE W-3) NEAR N. DANVILLE, VT (LAT 44 28 35N LONG 072 07 33W)								
NOV 1994										
30...	1210	3.4	1.5	95						
01135500		PASSUMPSIC RIVER AT PASSUMPSIC, VT (LAT 44 21 56N LONG 072 02 23W)								
OCT 1994					APR 1995					
26...	1505	190	9.5	222	25...	1415	757	7.0	145	
DEC					JUN					
08...	1525	896	0.5	115	01...	1415	400	17.0	172	
JAN 1995					JUL					
19...	1515	1290	2.0	119	26...	1455	226	24.0	177	
01137500		AMMONOOSUC RIVER AT BETHLEHEM JUNCTION, NH (LAT 44 16 08N LONG 071 37 52W)								
NOV 1994					APR 1995					
14...	1100	73	2.5	36	17...	1030	108	1.5	40	
15...	1110	71	7.5	41	27...	0640	191	4.0	30	
DEC					MAY					
21...	1200	79	0.0	39	08...	1115	162	4.0	29	
27...	1430	92	0.5	37	JUN					
JAN 1995					05...	1145	232	12.0	25	
23...	1200	314	0.5	28	15...	1330	189	14.0	40	
FEB					JUL					
01...	1200	139	0.0	33	11...	0945	42	15.5	45	
21...	1100	a 56	0.0	39	25...	0700	77	16.5	41	
MAR					AUG					
15...	1100	228	0.0	32	09...	1300	68	19.5	41	
21...	0830	232	1.5	33	29...	1130	32	16.0	54	
					SEP					
					13...	1145	35	14.0	63	

a Estimated mean daily discharge

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT 139

DATE	TIME	DIS-	TEMPER-	SPE-	DATE	TIME	DIS-	TEMPER-	SPE-
		CHARGE,		CIFIC			CHARGE,		CIFIC
		INST.		CON-			INST.		CON-
		CUBIC		DUCT-			CUBIC		DUCT-
FEET	ATURE	ANCE	FEET	ATURE	ANCE	FEET	ATURE	ANCE	
PER	WATER		PER	WATER		PER	WATER		
SECOND	(DEG C)	(US/CM)	SECOND	(DEG C)	(US/CM)	SECOND	(DEG C)	(US/CM)	
(00061)	(00010)	(00095)	(00061)	(00010)	(00095)	(00061)	(00010)	(00095)	
CONNECTICUT RIVER BASIN									
01138500		CONNECTICUT RIVER AT WELLS RIVER, VT (LAT 44 09 13N LONG 072 02 34W)							
OCT 1994					JUN 1995				
27...	1300	1880	11.5	98	12...	1000	2150	22.0	86
DEC					JUL				
02...	1230	2100	2.0	137	25...	1215	1630	22.0	96
MAY 1995					SEP				
08...	0945	5630	7.0	91	05...	1015	1920	20.0	97
01139000		WELLS RIVER AT WELLS RIVER, VT (LAT 44 09 03N LONG 072 03 55W)							
OCT 1994					JUL 1995				
27...	1050	40	7.0	154	25...	0930	30	22.5	143
DEC					AUG				
02...	0835	82	0.5	139	28...	1700	14	17.5	206
MAY 1995					SEP				
08...	1345	85	10.0	132	05...	1045	9.5	18.0	236
JUN									
12...	1345	48	16.0	158					
01139800		EAST ORANGE BRANCH AT EAST ORANGE, VT (LAT 44 05 34N LONG 072 20 10W)							
OCT 1994					APR 1995				
11...	1205	4.7	7.5	242	25...	1330	13	9.0	195
NOV					JUN				
30...	1115	8.2	0.0	217	05...	1400	6.9	16.0	215
JAN 1995					JUL				
04...	0840	11	0.0	200	28...	1045	4.4	17.0	244
FEB					AUG				
02...	0900	23	0.0	166	31...	0900	0.78	12.0	260
MAR									
13...	1230	10	1.5	210					
01141500		OMPOMPANOOSUC RIVER AT UNION VILLAGE, VT (LAT 43 47 23N LONG 072 15 19W)							
OCT 1994					MAR 1995				
07...	1120	55	11.0	214	21...	1430	492	1.0	122
NOV					MAY				
10...	1445	41	5.5	196	04...	1245	134	11.0	178
DEC					JUN				
22...	0845	84	0.0	164	13...	1200	71	17.0	207
FEB 1995					AUG				
09...	1330	151	0.0	188	10...	1320	29	24.0	257
01141800		MINK BROOK NEAR ETNA, NH (LAT 43 42 08N LONG 072 11 15W)							
DEC 1994					MAY 1995				
06...	1130	16	4.5	68	19...	1220	4.4	11.0	79
JAN 1995					JUN				
10...	1245	3.1	0.0	71	29...	1105	0.20	16.0	113
FEB					AUG				
22...	1115	2.9	0.0	74	16...	1210	0.20	19.5	157
MAR									
31...	1230	14	4.0	69					
01142500		AYERS BROOK AT RANDOLPH, VT (LAT 43 56 04N LONG 072 39 30W)							
DEC 1994					APR 1995				
19...	1330	31	1.0	187	26...	1315	41	9.0	203
JAN 1995					JUN				
31...	1300	51	0.0	188	05...	1030	20	15.0	226
MAR					AUG				
14...	1415	49	1.0	198	03...	1430	5.6	20.0	273

140 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS-	TEMPER-	SPE-	DATE	TIME	DIS-	TEMPER-	SPE-
		CHARGE,		CIFIC			CHARGE,		CIFIC
		INST.		CON-			INST.		CON-
		CUBIC		DUCT-			CUBIC		DUCT-
FEET	ANCE	FEET	ANCE	FEET	ANCE	FEET	ANCE	FEET	ANCE
PER	WATER	PER	WATER	PER	WATER	PER	WATER	PER	WATER
SECOND	(DEG C)	SECOND	(DEG C)	SECOND	(DEG C)	SECOND	(DEG C)	SECOND	(DEG C)
(00061)	(00010)	(00061)	(00010)	(00061)	(00010)	(00061)	(00010)	(00061)	(00010)
			</						

a Estimated daily mean discharge.

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT 141

DIS-CHARGE, INST. CUBIC TEMPER- ATURE WATER ANCE					DIS-CHARGE, INST. CUBIC TEMPER- ATURE WATER ANCE				
DATE	TIME	FEET PER SECOND (00061)	(DEG C) (00010)	CON- DUCT- ANCE (US/CM) (00095)	DATE	TIME	FEET PER SECOND (00061)	(DEG C) (00010)	CON- DUCT- ANCE (US/CM) (00095)
CONNECTICUT RIVER BASIN									
01152500		SUGAR RIVER AT WEST CLAREMONT, NH (LAT 43 23 15N LONG 072 21 45W)							
OCT 1994					APR 1995				
19...	1000	55	10.5	150	04...	1000	368	5.0	94
DEC					MAY				
02...	1030	225	2.0	92	08...	1120	168	10.5	118
JAN 1995					JUL				
05...	1025	204	0.0	113	05...	1105	54	25.5	154
13...	1025	233	3.0	133	AUG				
FEB					15...	0915	110	21.0	135
09...	1025	<206	0.0	108	28...	1030	--	16.5	158
23...	1030	198	0.0	119					
01153000		BLACK RIVER AT NORTH SPRINGFIELD, VT (LAT 43 20 00N LONG 072 30 55W)							
JAN 1995					JUL 1995				
24...	1540	500	0.5	83	12...	0740	31	22.0	179
MAR					SEP				
07...	0840	105	0.5	133	07...	1705	15	22.0	201
01153550		WILLIAMS RIVER NEAR ROCKINGHAM, VT (LAT 43 11 30N LONG 072 29 08W)							
OCT 1994					APR 1995				
24...	1630	41	11.0	140	19...	1115	135	8.0	107
DEC					MAY				
13...	1245	90	0.0	106	24...	1645	65	17.5	130
JAN 1995					JUL				
24...	1300	282	1.0	81	10...	1210	22	26.0	156
MAR					SEP				
07...	1050	83	0.0	134	07...	0945	7.2	17.5	237
01154500		CONNECTICUT RIVER AT NORTH WALPOLE, NH (LAT 43 07 34N LONG 072 26 14W)							
OCT 1994					APR 1995				
24...	1015	6800	13.5	139	18...	1650	7260	6.5	134
JAN 1995					MAY				
25...	1215	14100	1.5	91	24...	0945	10600	15.0	110
MAR					JUL				
06...	1110	9960	0.0	118	10...	0755	1770	23.5	134
01155500		WEST RIVER AT JAMAICA, VT (LAT 43 06 32N LONG 072 46 33W)							
OCT 1994					JUL 1995				
26...	1505	93	9.5	72	13...	1510	15	26.5	98
APR 1995					SEP				
20...	1540	115	10.0	60	11...	1605	0.86	18.0	101
01156000		WEST RIVER AT NEWFANE, VT (LAT 42 59 43N LONG 072 38 13W)							
DEC 1994					MAY 1995				
15...	0940	459	0.5	62	23...	1650	245	20.0	76
01155910		WEST RIVER BELOW TOWNSHEND DAM NEAR TOWNSHEND, VT (LAT 43 03 04N LONG 072 42 02)							
OCT 1994					APR 1995				
26...	1030	175	9.0	69	20...	1100	581	8.0	69
NOV					MAY				
04...	1250	201	8.0	73	25...	1240	202	18.0	76
DEC					JUL				
15...	1220	414	0.0	58	13...	0930	30	23.0	102
JAN 1995					AUG				
26...	1200	553	0.5	58	03...	1030	41	25.0	101
FEB					SEP				
28...	1600	221	0.0	77	08...	1240	1.8	18.5	118
MAR					11...	1055	3.9	19.5	119

142 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS-CHARGE, INST.	TEMPER- ATURE	SPE- CIFIC CON- DUCT- ANCE	DATE	TIME	DIS-CHARGE, INST.	TEMPER- ATURE	SPE- CIFIC CON- DUCT- ANCE
		FEET	(DEG C)	(US/CM)			FEET	(DEG C)	(US/CM)
		(00061)	(00010)	(00095)			(00061)	(00010)	(00095)
CONNECTICUT RIVER BASIN									
01158000		ASHUELOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH (LAT 42 59 40N LONG 072 18 40W)							
OCT 1994					MAY 1995				
28...	1530	37	10.0	56	22...	1500	136	17.5	47
FEB 1995					JUL				
15...	1130	138	1.5	50	25...	0905	12	26.0	57
27...	1100	102	1.0	54	SEP				
APR					05...	1240	3.6	21.5	49
13...	1610	212	6.5	47					
01158600		OTTER BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH (LAT 42 56 45N LONG 072 14 14)							
OCT 1994					APR 1995				
20...	1350	15	9.0	77	13...	1330	139	5.5	71
DEC					MAY				
09...	0955	190	2.0	62	22...	0945	51	14.5	65
JAN 1995					SEP				
19...	1415	285	1.5	68	05...	0910	3.0	21.0	72
01160248		SOUTH BRANCH ASHUELOT RIVER AT SWANZY, NH (LAT 42 52 34N LONG 072 16 39W)							
JUN 1994					MAY 1995				
14...	1325	52	--	73	23...	0820	60	14.0	69
OCT					AUG				
06...	1020	25	10.5	90	31...	1335	4.2	15.5	112
APR 1995									
17...	0950	112	4.5	60					
01160350		ASHUELOT RIVER AT WEST SWANZEY, NH (LAT 42 52 16N LONG 072 19 42W)							
MAR 1994					DEC 1994				
21...	1240	786	1.0	83	12...	1100	604	0.5	42
30...	1315	1920	1.0	71	JAN 1995				
APR					23...	1050	1480	1.5	59
15...	1045	2880	4.5	49	FEB				
19...	1210	2750	6.0	47	27...	1515	288	0.0	96
JUN					APR				
14...	1155	180	20.0	120	14...	1415	884	6.5	77
SEP					MAY				
12...	1007	71	16.5	155	22...	1750	323	16.0	83
OCT					JUL				
06...	0910	206	12.0	112	03...	1235	50	23.0	161
21...	1145	170	12.0	109	26...	1145	49	25.5	153
					AUG				
					31...	1140	30	19.0	185
01161000		ASHUELOT RIVER AT HINSDALE, NH (LAT 42 47 07N LONG 072 29 12W)							
DEC 1994					MAY 1995				
14...	0940	595	0.0	79	23...	1200	432	17.5	81
JAN 1995					SEP				
24...	0800	1910	1.5	58	06...	0835	34	20.0	163
APR									
17...	1415	809	8.0	76					
HUDSON RIVER BASIN									
01334000		WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT (LAT 42 54 47N LONG 073 15 25W)							
OCT 1994					APR 1995				
27...	0900	70	8.0	239	02...	1615	185	6.5	208
DEC					09...	1455	161	4.0	213
16...	0855	131	0.5	178	21...	0845	216	8.0	175
JAN 1995					MAY				
27...	0845	175	0.0	175	26...	1025	134	14.0	194
MAR					JUL				
08...	1330	508	4.0	170	14...	0850	42	22.0	260
					SEP				
					12...	1705	31	17.0	289

DATE	TIME	DIS-	TEMPER-	SPE-	DATE	TIME	DIS-	TEMPER-	SPE-
		CHARGE,		CIFIC			CHARGE,		CIFIC
		INST.		CON-			INST.		CON-
		CUBIC		DUCT-			CUBIC		DUCT-
PER	WATER	ANCE	PER	WATER	ANCE				
SECOND	(DEG C)	(US/CM)	SECOND	(DEG C)	(US/CM)				
(00061)	(00010)	(00095)	(00061)	(00010)	(00095)				
ST. LAWRENCE RIVER BASIN									
04280000		POULTNEY RIVER BELOW FAIR HAVEN, VT (LAT 43 37 27N LONG 073 18 43W)							
NOV 1994					MAY 1995				
15...	1205	58	7.5	285	02...	1215	226	9.0	221
DEC					JUN				
29...	1330	133	2.0	216	08...	1215	92	20.0	223
MAR 1995					SEP				
16...	0900	834	1.0	140	08...	1315	7.5	20.0	333
04280350		METTAWEE RIVER NEAR PAWLET, VT (LAT 43 22 14N LONG 073 13 00W)							
OCT 1994					APR 1995				
27...	1525	35	9.5	233	21...	1420	112	9.0	186
DEC					MAY				
16...	1245	98	1.5	185	26...	1445	58	13.5	211
JAN 1995					JUL				
27...	1330	137	0.0	183	14...	1400	11	29.0	219
MAR					SEP				
08...	1720	460	3.0	120	13...	0800	9.9	16.0	238
04282000		OTTER CREEK AT CENTER RUTLAND, VT (LAT 43 36 13N LONG 073 00 49W)							
NOV 1994					JUN 1995				
15...	0930	202	7.0	191	08...	0800	196	13.0	225
DEC					AUG				
29...	0845	459	1.5	168	01...	1130	64	23.0	315
MAR 1995					SEP				
15...	1500	1320	1.0	145	07...	1700	8.5	20.0	311
MAY									
02...	0730	393	9.5	300					
04282500		OTTER CREEK AT MIDDLEBURY, VT (LAT 44 00 47N LONG 073 10 06W)							
NOV 1994					JUN 1995				
14...	1345	354	6.0	209	07...	1145	483	20.0	198
DEC					AUG				
28...	1015	795	0.5	178	02...	1230	146	24.0	270
MAY 1995									
03...	0830	743	10.0	218					
04282525		NEW HAVEN RIVER AT BROOKSVILLE NEAR MIDDLEBURY, VT(LAT 44 03 42N LONG 073 10 16							
NOV 1994					JUN 1995				
14...	1220	85	6.5	148	07...	0915	30	17.0	149
DEC					AUG				
28...	0900	93	1.0	123	02...	0930	46	23.0	174
MAR 1995					SEP				
15...	1000	631	1.5	91	08...	1335	80	16.0	180
MAY									
03...	1230	140	10.0	130					
04282650		LITTLE OTTER CREEK AT FERRISBURG, VT (LAT 44 11 53N LONG 073 14 58W)							
OCT 1994					APR 1995				
19...	1055	3.8	10.0	453	21...	1100	30	11.0	345
DEC					MAY				
13...	1115	21	0.0	374	30...	1115	7.2	19.0	416
JAN 1995					JUL				
27...	1155	41	0.0	342	19...	1100	4.0	24.0	369
MAR					AUG				
03...	1210	14	0.0	480	23...	1025	2.7	21.0	490
04282780		LEWIS CREEK AT NORTH FERRISBURG, VT (LAT 44 14 57N LONG 073 13 44W)							
JAN 1995					MAY 1995				
06...	1315	40	0.0	274	30...	1315	35	20.0	228
27...	1340	53	0.0	208	JUL				
MAR					19...	1415	17	27.0	248
03...	1450	44	0.0	252	AUG				
APR					23...	1235	10	21.0	248
21...	1310	68	10.0	189					

144 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS-	TEMPER-	SPE-	DATE	TIME	DIS-	TEMPER-	SPE-
		CHARGE,		CIFIC			CHARGE,		CIFIC
		INST.		CON-			INST.		CON-
		CUBIC		DUCT-			CUBIC		DUCT-
FEET	ANCE	FEET	ANCE	FEET	ANCE	FEET	ANCE	FEET	ANCE
PER	(DEG C)	(US/CM)	PER	(DEG C)	(US/CM)	PER	(DEG C)	(US/CM)	(US/CM)
SECOND	(00010)	(00095)	SECOND	(00010)	(00095)	SECOND	(00010)	(00095)	(00095)
ST. LAWRENCE RIVER BASIN									
04282795		LAPLATTE RIVER AT SHELBURNE FALLS, VT (LAT 44 22 12N LONG 073 13 00W)							
OCT 1994					APR 1995				
19...	1355	3.3	12.0	661	21...	1500	25	11.0	354
DEC					MAY				
13...	1440	17	0.0	432	30...	1510	12	23.0	474
JAN 1995					JUL				
26...	1310	36	0.0	355	24...	1230	2.1	26.0	784
MAR									
06...	1605	17	0.0	603					
04285500		NORTH BRANCH WINOOSKI RIVER AT WRIGHTSVILLE, VT (LAT 44 17 58N LONG 072 34 45)							
OCT 1994					MAY 1995				
12...	1032	24	10.5	51	05...	1350	25	11.5	43
DEC					JUN				
01...	1045	61	2.0	50	14...	0900	22	19.0	48
JAN 1995					JUL				
03...	1100	23	1.0	47	26...	1300	26	25.0	58
FEB					AUG				
13...	0845	21	0.0	54	31...	1200	24	19.0	55
MAR									
20...	1000	376	1.0	33					
04286000		WINOOSKI RIVER AT MONTPELIER, VT (LAT 44 15 23N LONG 072 35 36W)							
OCT 1994					MAY 1995				
12...	1325	176	9.5	227	05...	0900	383	10.0	235
DEC					JUN				
01...	1315	342	2.0	142	14...	1300	152	18.0	254
JAN 1995					JUL				
04...	1320	203	0.0	265	28...	1315	106	24.0	258
FEB					AUG				
23...	1230	275	0.0	196	30...	1120	85	23.0	267
04287000		DOG RIVER AT NORTHFIELD FALLS, VT (LAT 44 10 58N LONG 072 38 27W)							
OCT 1994					MAR 1995				
31...	0930	22	7.5	204	13...	0900	90	3.0	129
DEC					28...	0830	156	1.0	125
30...	0945	35	0.0	152	APR				
FEB 1995					27...	0915	91	7.0	131
16...	1005	66	0.0	160	JUN				
27...	1215	37	0.0	170	29...	0830	9.2	20.0	284
					AUG				
					30...	0845	10	13.0	291
04288000		MAD RIVER NEAR MORETOWN, VT (LAT 44 16 38N LONG 072 44 35W)							
JAN 1995					MAY 1995				
18...	1255	487	3.0	65	23...	1125	140	12.0	82
FEB					JUL				
27...	1610	69	0.0	114	07...	1000	20	24.0	132
APR					AUG				
10...	1230	155	3.0	88	21...	1455	56	26.0	123
04289000		LITTLE RIVER NEAR WATERBURY, VT (LAT 44 22 12N LONG 072 46 11W)							
OCT 1994					MAY 1995				
13...	1335	499	14.0	82	23...	1400	13	11.0	76
DEC					JUL				
07...	1150	743	5.0	77	12...	1115	12	14.5	72
APR 1995					AUG				
10...	1430	13	4.0	46	22...	1245	11	16.0	70

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT 143

DATE	TIME	DIS-CHARGE, INST.	TEMPER- ATURE PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	DATE	TIME	DIS-CHARGE, INST.	TEMPER- ATURE PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
		CUBIC FEET					CUBIC FEET		
ST. LAWRENCE RIVER BASIN									
04290500 WINOOSKI RIVER NEAR ESSEX JUNCTION, VT (LAT 44 28 44N LONG 073 08 21W)									
OCT 1994					MAY 1995				
24...	1435	773	13.5	223	25...	1300	828	15.0	188
DEC					JUL				
09...	1435	2240	1.0	108	20...	1410	461	21.0	173
APR 1995					AUG				
24...	1405	1390	8.0	141	28...	1305	280	18.0	223
04292000 LAMOILLE RIVER AT JOHNSON, VT (LAT 44 37 22N LONG 072 40 50W)									
OCT 1994					APR 1995				
18...	0935	196	7.5	177	11...	0925	361	3.0	143
DEC					MAY				
12...	1435	281	0.0	127	24...	0900	325	14.0	138
JAN 1995					JUL				
24...	1105	739	0.5	104	25...	1035	322	24.0	172
FEB					AUG				
28...	1110	154	0.0	171	16...	1300	312	25.0	173
04292500 LAMOILLE RIVER AT EAST GEORGIA, VT (LAT 44 40 45N LONG 073 04 23W)									
JAN 1995					MAY 1995				
25...	1305	1600	0.0	105	24...	1215	723	14.0	117
MAR					JUL				
08...	1410	2390	0.0	131	21...	1400	243	26.0	156
APR									
26...	0955	1070	8.0	102					
04292700 STONE BRIDGE BROOK NEAR GEORGIA PLAINS, VT (LAT 44 42 14N LONG 073 10 55W)									
OCT 1994					APR 1995				
20...	0915	2.7	10.5	312	26...	1110	4.0	10.0	275
DEC					JUL				
14...	1400	4.5	0.0	308	25...	1445	1.4	29.0	346
JAN 1995					AUG				
25...	1535	12	0.5	228	25...	1115	0.65	19.0	312
MAR									
07...	1320	5.2	0.0	309					
04293000 MISSISQUOI RIVER NEAR NORTH TROY, VT (LAT 44 58 22N LONG 072 23 09W)									
MAR 1995					JUL 1995				
02...	1620	88	0.0	117	28...	1200	90	22.0	109
APR					AUG				
20...	1330	405	6.0	60	24...	1320	43	19.0	154
MAY									
31...	1200	292	16.0	69					
04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT (LAT 44 57 36N LONG 072 41 49W)									
OCT 1994					JUL 1995				
25...	0945	235	10.0	121	27...	1330	301	24.0	124
APR 1995					AUG				
27...	1520	667	8.0	84	24...	1005	110	19.0	138
04294000 MISSISQUOI RIVER AT SWANTON, VT (LAT 44 55 00N LONG 073 07 44W)									
OCT 1994					APR 1995				
25...	1445	313	11.5	137	27...	1145	1140	8.0	84

146 SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)			SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)			DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)			SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)		
		TEMPER- ATURE WATER (DEG C) (00010)	CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CON- DUCT- ANCE (US/CM) (00095)										
ST. LAWRENCE RIVER BASIN															
04296000		BLACK RIVER AT COVENTRY, VT (LAT 44 52 08N LONG 072 16 14W)													
OCT 1994								MAY 1995							
18...	1340	61	8.0	232	31...	0915	134	16.0	175						
JAN 1995					JUL										
24...	1510	259	0.5	149	13...	1455	28	24.0	250						
FEB					AUG										
28...	1515	71	0.0	232	18...	0940	68	21.0	229						
APR															
20...	1005	253	7.0	145											
04296500		CLYDE RIVER AT NEWPORT, VT (LAT 44 56 22N LONG 072 11 23W)													
OCT 1994								APR 1995							
21...	1005	85	11.0	171	28...	0915	195	5.0	133						
DEC					JUL										
15...	1215	197	1.5	147	11...	1645	70	22.0	149						
MAR 1995					AUG										
01...	1640	92	1.0	114	18...	1220	199	19.0	140						

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

147

443603071242901 UPPER AMMONOOSUC RIVER AT STARK, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 44°36'03", Long 71°24'31", Coos County, Hydrologic Unit 01080101, at Covered Bridge off Route 110 in Stark, NH, 0.3 mi upstream of Mill Brook, 1.9 mi southwest of Percy, N.H.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 30...	1100	26	51	6.7	16.5	18.0	740	9.1	99 14

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB DIS- (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 30...	34	0.4	15	3.6	38	0.70	7.3	52	13	320

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 30...	18	4.2	0.86	9.1	3.6	4.1	0.40	<0.010	<0.010	0.070

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 30...	<0.015	<0.010	<0.20	<0.20	<0.010	3.1	0.70	10	19

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

01138000 AMMONOOSUC RIVER AT BATH, N.H.

(National Water Quality Assessment Station)

LOCATION.--Lat 44 09'14", long 71 59'10", Grafton County, Hydrologic Unit 01080101, on left bank 0.4 mi down-stream from Wild Ammonoosuc River, 1.4 mi southwest of Bath, and 3.3 mi upstream from mouth.

DRAINAGE AREA.--395 mi².

PERIOD OF RECORD.-- Water-quality records: Water year 1953, 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L CACO3) (00900)
AUG 1995 29...	0845	80	115	6.9	15.0	17.0	751	9.1	96	26

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 29...	44	0.9	21	17	69	1.2	7.6	116	21	82

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTH- DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 29...	11	7.8	1.5	5.6	10	5.9	0.20	<0.010	<0.010	<0.050

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE TOTAL (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
AUG 1995 29...	<0.015	<0.010	<0.20	<0.20	<0.010	2.0	0.20	6	29

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

149

435843072032101 EASTMAN BROOK AT ROUTE 10, AT PIERMONT, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°58'43", Long 72°03'21", Grafton County, Hydrologic Unit 01080104, at intersection of Route 25 & Route 10 in Piermont, NH, 0.5 mi east of mouth, 3.0 mi southeast of Bradford, Vt.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 10...	0900	37	85	6.6	16.5	15.5	745	9.3	96	18

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 10...	47	0.8	19	12	54	0.80	7.2	85	13	35

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 10...	5	6.0	0.84	4.3	8.0	6.1	<0.10	<0.010	<0.010	0.090

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 10...	<0.015	<0.010	<0.20	<0.20	<0.010	2.3	0.10	4	18

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

435823072052601 UNNAMED TRIBUTARY TO EASTMAN BROOK AT PIERMONT, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°58'23", Long 72°05'28", Grafton County, Hydrologic Unit 01080104, at Route 25 crossing, 0.6 mi west of Route 25, 10, and 25c intersection in Piermont, NH, 2.5 mi southeast of Bradford.
PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L CACO3) (00301)	HARD- NESS TOTAL AS CACO3 (00900)	
AUG 1995	10...	0.79	289	7.0	19.5	15.0	750	8.4	85	110

DATE	SODIUM PERCENT (00932)	BICAR- BONATE AD- SORP- TION RATIO (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE (MG/L AS CACO3) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)		
AUG 1995	10...	14	0.3	92	20	189	3.4	7.8	289	77	<3

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
AUG 1995	10...	<1	38	4.2	12	8.4	15	<0.10	<0.010	0.030	4.20

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995	10...	<0.015	0.030	<0.20	<0.20	0.040	1.7	0.20	6	58

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS
IN NEW HAMPSHIRE AND VERMONT**

151

435251072345201 SECOND BRANCH WHITE RIVER AT SOUTH RANDOLPH, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°52'51", Long 72°34'55", Orange County, Hydrologic Unit 01080105, at Covered Bridge off Route 14, 0.5 mi north of East Bethel, 1.0 mi south of South Randolph, Vt.
PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)
AUG 1995 03...	1045	11	350	7.6	20.0	20.5	755	8.2	92	160

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE LAB AS (00403)	SPE- CIFIC CON- DUCT- ANCE LAB AS (US/CM) (90095)	ALKA- LINEITY LAB AS (MG/L CAC03) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 03...	12	0.3	171	16	204	2.1	8.0	354	147	39

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 03...	83	54	5.6	5.3	9.8	12	<0.10	<0.010	<0.010	0.200

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEDED (MG/L (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (0.062 MM (70331)
AUG 1995 03...	<0.015	<0.010	<0.20	0.30	<0.010	1.2	0.20	6	71

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

435031072351101 SECOND BRANCH WHITE RIVER NEAR EAST BETHEL, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°50'31", Long 72°35'11", Windsor County, Hydrologic Unit 01080105, at southern most Route 14 bridge (nearest to North Royalton), 1.6 mi northwest of North Royalton, 2.0 mi south of East Bethel.
PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL AS CACO3 (00900)
AUG 1995 28...	1400	9.7	331	7.9	23.0	20.5	753	9.6	108	160

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	CAR- BONATE WATER DIS IT MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)
AUG 1995 28...	12	0.3	2	171	17	200	2.2	7.9	326	145

DATE	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
AUG 1995 28...	68	88	55	6.1	4.7	9.9	13	<0.10	<0.010	<0.010

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 28...	0.060	<0.015	<0.010	<0.20	<0.20	<0.010	1.4	0.20	4	31

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS
IN NEW HAMPSHIRE AND VERMONT**

153

433602072351801 OTTAUQUECHEE RIVER NEAR WEST WOODSTOCK, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°36'02", Long 72°35'18", Windsor County, Hydrologic Unit 01080106, at covered bridge, 1.6 mi southwest of West Woodstock, 2.7 mi northeast of Bridgewater, Vt.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED OF (MG/L) (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 03...	1530	32	179	8.4	22.5	23.0	749	8.5	101	49

DATE	SODIUM PERCENT (00932)	BICAR- SODIUM AD- SORP- TION RATIO (00931)	BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 03...	38	0.9	53	22	92	0.80	8.3	180	42	39

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 03...	10	14	3.4	1.4	14	6.7	<0.10	<0.010	<0.010	<0.050

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
AUG 1995 03...	<0.015	<0.010	<0.20	0.20	0.010	1.6	0.30	4	50

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

433709072320301 OTTAUQUECHEE RIVER AT WEST WOODSTOCK, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°37'09", Long 72°32'03", Windsor County, Hydrologic Unit 01080106, 0.5 mi upstream of Route 4 Bridge across the Ottauquechee River west of Woodstock center, 0.6 mi northwest of West Woodstock, 0.8 mi southeast of Woodstock, Vt.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 03...	1345	24	193	7.5	22.5	22.5	750	8.4	99	55
DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINITY LAB AS CACO3 (90410)	IRON, DIS- SOLVED (MG/L AS FE) (01046)
AUG 1995 03...	37	0.9	58	24	105	0.80	8.0	196	49	39
DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 03...	13	16	3.6	1.3	15	6.8	<0.10	<0.010	<0.010	<0.050
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995 03...	0.020	<0.010	<0.20	<0.20	<0.010	1.5	0.20	7	21	

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS
IN NEW HAMPSHIRE AND VERMONT**

155

433103072221201 BLOW-ME-DOWN BROOK AT SQUAG CITY NEAR PLAINFIELD, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°31'03", Long 72°22'12", Sullivan County, Hydrologic Unit 01080104, at road crossing, 0.1 mi northeast of Squag City, 0.5 mi south of northeastern Platt Road and Route 12 intersection, 1.4 mi southwest of Plainfield, N.H.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 1995	10...	1430	3.8	200	7.1	26.5	23.5	750	6.0	72	60

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (MG/L AS CACO3) (90095)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
AUG 1995	10...	31	0.7	66	22	118	1.4	7.5	200	52	440

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
AUG 1995	10...	160	20	2.5	5.9	13	7.8	<0.10	<0.010	<0.010	0.100

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995	10...	0.030	0.010	<0.20	0.20	0.020	3.3	0.20	10	83

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

432042072372501 WILLIAMS RIVER NEAR GASSETTS, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°20'42", Long 72°37'25", Windsor County, Hydrologic Unit 01080107, at intersection of Smokeshire Road and Route 103, 1.5 mi northwest of Gassetts, 4.6 mi west of Route 106 and 10 junction in North Springfield, Vt.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 15...	1100	2.6	66	7.0	23.0	19.5	741	9.6	107	24

DATE	SODIUM PERCENT (00932)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00931)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 15...	19	0.2	27	3.2	39	0.80	7.4	67	20

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 15...	1	5.9	2.2	5.4	2.7	6.6	<0.10	<0.010	<0.010	<0.050

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (MG/L) .062 MM (70331)
AUG 1995 15...	<0.015	<0.010	<0.20	<0.20	0.010	1.4	0.10	4	27

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

157

431625072274201 BLACK RIVER AT GOULDS MILL NEAR SPRINGFIELD, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°16'20", Long 72°27'38", Windsor County, Hydrologic Unit 01080106, at small unnamed left bank tributary, 0.3 mi upstream of Goulds Mill bridge over the Black River, 0.7 mi west of Goulds Mill, 1.7 mi northwest of the mouth of the Black River, 1.9 mi southeast of Post Office in Springfield, Vt.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 1995	15...	0900	52	185	6.9	20.5	22.0	754	7.6	88	51

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB AS (US/CM) (90095)	ALKA- LITY LAB (MG/L CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
AUG 1995	15...	37	0.9	24	23	97	1.5	7.3	186	43	130

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
AUG 1995	15...	37	15	3.2	2.6	14	6.9	<0.10	0.010	0.040	0.300

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995	15...	0.040	0.040	0.20	0.30	0.060	2.9	0.20	9	17

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

01155000 COLD RIVER AT DREWSTOWN, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 43°07'57", Long 72°23'25", Cheshire County, Hydrologic Unit 01080104, at Route 123 bridge, 0.3 mi north of Drewsville, NH, 3.9 mi east of Bellows Falls, VT

PERIOD OF RECORD.--Water Year 1995. Surface water records 1940-78.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 1995 14...	1415	24	82	6.8	24.5	22.0	752	9.0	105	17

DATE	SODIUM PERCENT (00932)	BICAR- AD- SORP- TION RATIO (00931)	BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINEITY LAB AS CACO3 (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 14...	49	0.8	16	11	57	1.1	7.6	83	13	200

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 14...	9	4.7	1.2	6.2	7.9	5.5	<0.10	<0.010	<0.010	0.090

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 14...	0.020	<0.010	<0.20	0.20	0.020	3.1	0.10	5	17

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS
IN NEW HAMPSHIRE AND VERMONT**

159

430217072271601 GREAT BROOK NEAR WALPOLE, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 43° 02'17", Long 72°27'16", Cheshire County, Hydrologic Unit 01080104, at River Road bridge,
2.1 mi south of Westminster, VT, 3.0 mi southwest of Walpole, N.H.
PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CAC03) (00900)
AUG 1995 02...	1400	1.8	247	7.4	27.5	21.5	759	8.0	91	65

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	PH WATER WHOLE LAB DUCT- ANCE (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CAC03) (90410)	IRON, DIS- SOLVED AS (UG/L AS FE) (01046)
AUG 1995 02...	39	1	58	34	139	3.2	7.6	247	50	50

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 02...	26	19	4.3	5.7	20	11	<0.10	<0.010	<0.010	0.790

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 02...	<0.015	<0.010	<0.20	0.20	<0.010	1.6	0.20	24	18

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

425829072275301 PARTRIDGE BROOK AT PARK HILL, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 42°58'29", Long 72°27'53", Cheshire County, Hydrologic Unit 01080104, at Partridge Brook Road Bridge, 0.1 mi east from junction of Partridge Brook Road and Route 63, 0.4 mi west of Park Hill, 1.4 mi northwest of Westmoreland, N.H.

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	HARD- NESS TOTAL AS CACO3 (00900)		
AUG 1995	02...	1130	5.5	176	7.3	27.5	26.5	760	6.8	85	35

DATE	SODIUM PERCENT (00932)	SODIUM RATIO (00931)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LINEITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	
AUG 1995	02...	52	1	34	27	97	1.1	7.8	176	28	23

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	
AUG 1995	02...	10	10	2.4	6.1	18	7.3	0.10	<0.010	<0.010	0.100

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995	02...	0.020	<0.010	<0.20	<0.20	<0.010	1.7	0.20	6	50

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS
IN NEW HAMPSHIRE AND VERMONT**

161

425104072322601 WHETSTONE BROOK AT BRATTLEBORO, VT

(National Water Quality Assessment Station)

LOCATION.-- Lat 42°51'04", Long 72°32'26", Windham County, Hydrologic Unit 01080104, 200 ft downstream of Main Street Bridge, 200 ft above mouth, 1400 ft southeast of Post Office in Brattleboro, Vt.
PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
AUG 1995	14...	1100	4.7	244	7.2	23.0	18.0	756	9.1	97	66

DATE	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	ALKA-LINITY LAB (MG/L CACO3) (90410)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	
AUG 1995	14...	38	1	64	33	139	1.8	7.8	241	53	67

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	
AUG 1995	14...	22	22	2.7	7.7	19	9.6	<0.10	<0.010	<0.010	0.320

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
AUG 1995	14...	<0.015	<0.010	<0.20	<0.20	<0.010	1.5	0.20	4	60

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GAGING STATIONS IN NEW HAMPSHIRE AND VERMONT

425509072164701 ASHUELOT RIVER ABOVE THE BRANCH AT KEENE, NH

(National Water Quality Assessment Station)

LOCATION.-- Lat 42°55'09", Long 72°16'47", Cheshire County, Hydrologic Unit 01080201, at pumping station, just upstream of The Branch, 0.2 mi southeast of Route 101 bridge over the Ashuelot River, 1.0 mi south of the Keene City Hall, NH

PERIOD OF RECORD.--Water Year 1995.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
AUG 1995 15...	1330	55	69	6.6	29.5	22.5	751	7.1	83	11

DATE	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	BICAR- BONATE WATER DIS- TIT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	ALKA- LITY LAB (MG/L AS CACO3) (90410)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
AUG 1995 15...	57	0.9	11	11	47	0.70	7.6	69	6.1	810

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
AUG 1995 15...	83	3.2	0.78	4.5	7.3	4.8	<0.10	<0.010	<0.010	0.050

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995 15...	0.040	0.010	0.30	0.40	0.020	5.8	0.20	13	17

GROUND-WATER LEVELS IN NEW HAMPSHIRE

163

CHESHIRE COUNTY

425543072175801. Local number, KEW 2.

LOCATION.--Lat 42°55'43", long 72°17'58", Hydrologic Unit 01080201, east side of State Highway 12, about 0.5 mi north of State Highway 9, and 1.1 mi southwest of the center of Keene.

Owner: New Hampshire Department of Transportation.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in, depth 18 ft.

DATUM.--Altitude of land-surface datum is 470 ft. Measuring point: Top of casing, 4.5 ft above land-surface datum.

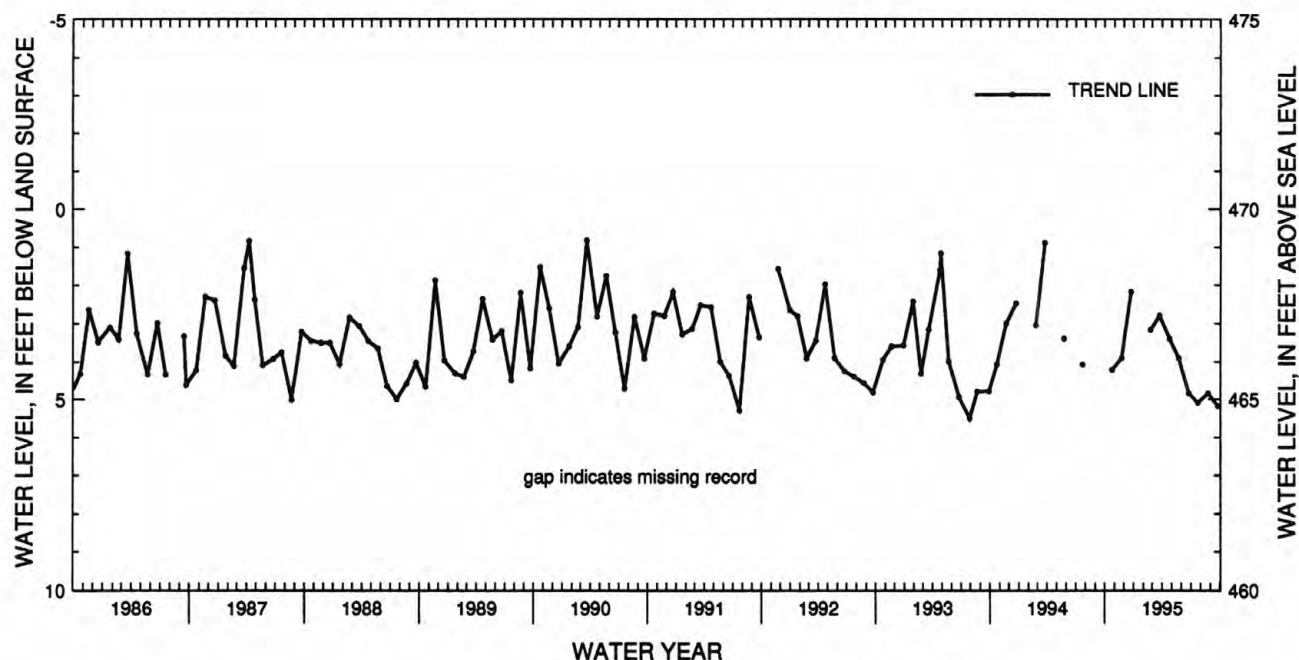
PERIOD OF RECORD.--August 1963 to current year. Prior to January 1973, published in New Hampshire Hydrologic-Data Report No. 3.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.17 ft below land-surface datum, May 31, 1984; lowest measured, 6.23 ft below land-surface datum, Sept. 27, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER	DATE	WATER	DATE	WATER	DATE	WATER
LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL
OCT 24	4.22	FEB 24	3.18	MAY 24	3.91	AUG 24	4.85
NOV 24	3.90	MAR 24	2.79	JUN 24	4.85	SEP 23	5.18
DEC 24	2.18	APR 24	3.40	JUL 23	5.09		

WATER YEAR 1995 HIGHEST 2.18 DEC. 24, 1994 LOWEST 5.18 SEP. 23, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

COOS COUNTY

444733071094901. Local number, ETW 1.

LOCATION.--Lat 44°47'33", long 71°09'49", Hydrologic Unit 01040001, southwest side of State Highway 26, 1.8 mi northwest of the center of Errol.

Owner: U.S. Geological Survey.

AQUIFER.--Very fine sand and silt of Pleistocene age.

WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in, depth 30 ft.

DATUM.--Altitude of land-surface datum is 1,245 ft. Measuring point: Top of casing, 3.00 ft above land-surface datum.

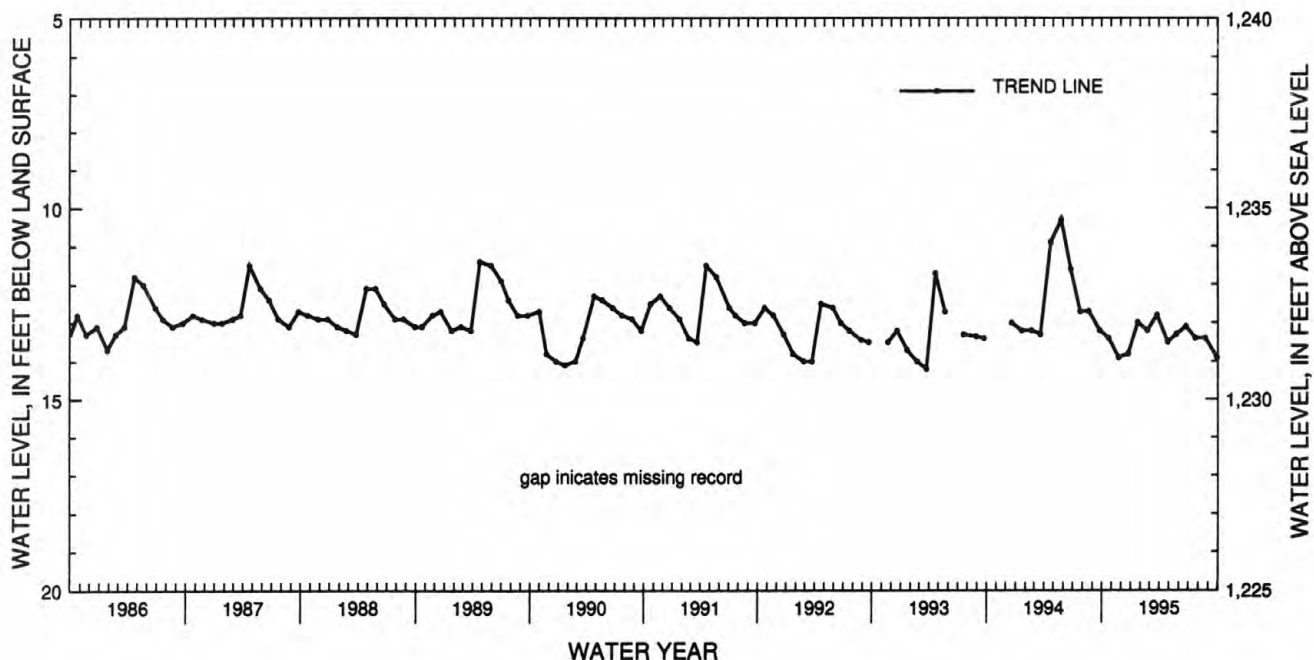
PERIOD OF RECORD.--November 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.4 ft below land-surface datum, May 22, 1969; lowest measured, 14.2 ft below land-surface datum, Mar. 24, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	13.2	JAN 24	13.0	APR 28	13.5	JUL 24	13.4
NOV 24	13.9	FEB 23	13.2	MAY 25	13.3	AUG 25	13.4
DEC 24	13.8	MAR 25	12.8	JUN 25	13.1	SEP 30	13.9

WATER YEAR 1995 HIGHEST 12.8 MAR. 25, 1995 LOWEST 13.9 NOV. 24, 1994 AND SEP. 30, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

COOS COUNTY

442830071321001. Local number, LCW 1.

LOCATION.--Lat 44°28'30", long 71°32'10", Hydrologic Unit 01080101, in gravel pit about 1,100 ft southwest of Middle Street, 2.2 mi southeast of U.S. Highway 3, and 2.0 mi southeast of the center of Lancaster.

Owner: Forbes Farm Partnership.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven, unused test well, diameter 2.5 in, depth 30 ft.

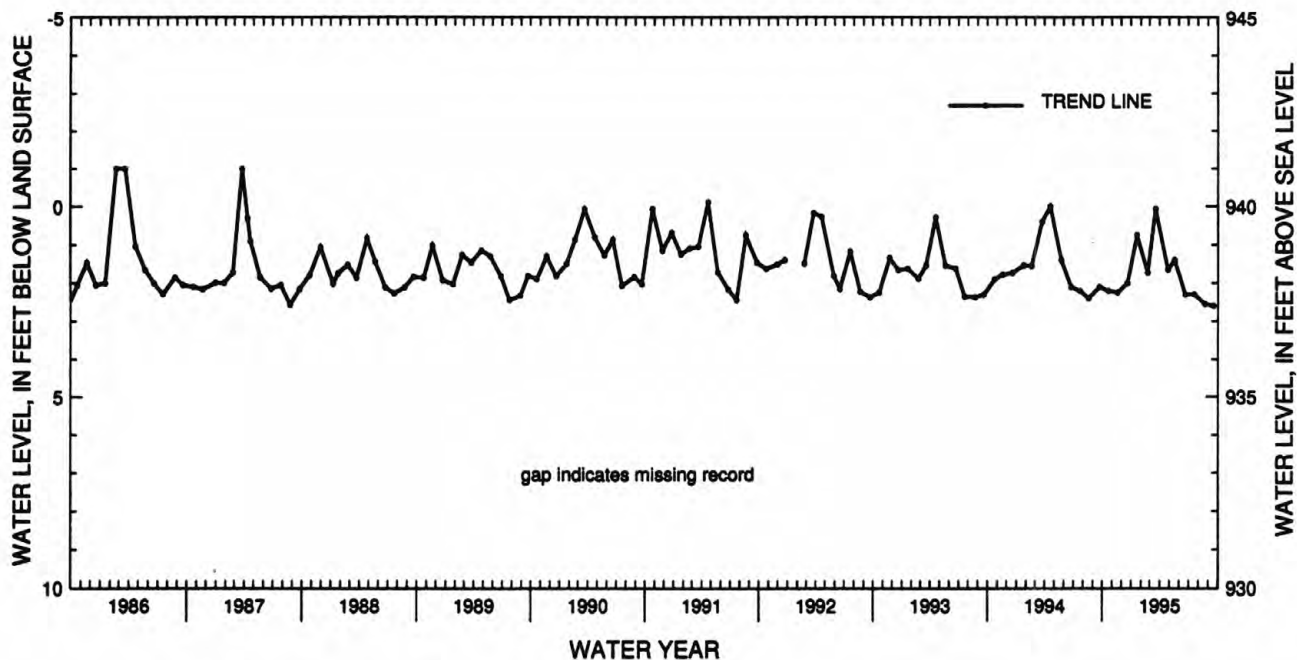
DATUM.--Altitude of land-surface datum is 940 ft. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to May 1980, April 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing at 1.0 ft above land-surface datum, April 26, 1970, Apr. 28, 1972, Dec. 21, 1982, Feb. 21, Mar. 21, 1986, Mar. 27, 1987; lowest measured, 2.67 ft below land-surface datum, Sept. 24, 1972.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	2.20	JAN 20	0.75	APR 27	1.65	JUL 20	2.30
NOV 19	2.25	FEB 22	1.73	MAY 19	1.40	AUG 22	2.55
DEC 20	2.00	MAR 20	0.07	JUN 21	2.30	SEP 19	2.60
WATER YEAR 1995 HIGHEST 0.07 MAR. 20, 1995 LOWEST 2.60 SEP. 19, 1995							



GROUND-WATER LEVELS IN NEW HAMPSHIRE

HILLSBOROUGH COUNTY

425024071413001. Local number, MOW 36.

LOCATION.--Lat 42°50'24", long 71°41'30", Hydrologic Unit 01070002, 85 ft from north side of Old Wilton Road, about 550 ft west of the intersection of State Highway 101, and 2.2 mi west of the center of Milford.

Owner: Leonard Cushing.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug, unused water-table well, diameter 36 in, depth 14.6 ft, lined with concrete.

DATUM.--Altitude of land-surface datum is 262.79 ft above sea level (levels by U.S. Geological Survey, January 26, 1995). Previously published as about 265 ft above sea level. Measuring point #1: top of concrete casing on south side of well, 1.60 ft above land-surface datum (covered and discontinued as of September 1994); measuring point #2: top of concrete casing on west side of well, 1.55 ft above land-surface datum.

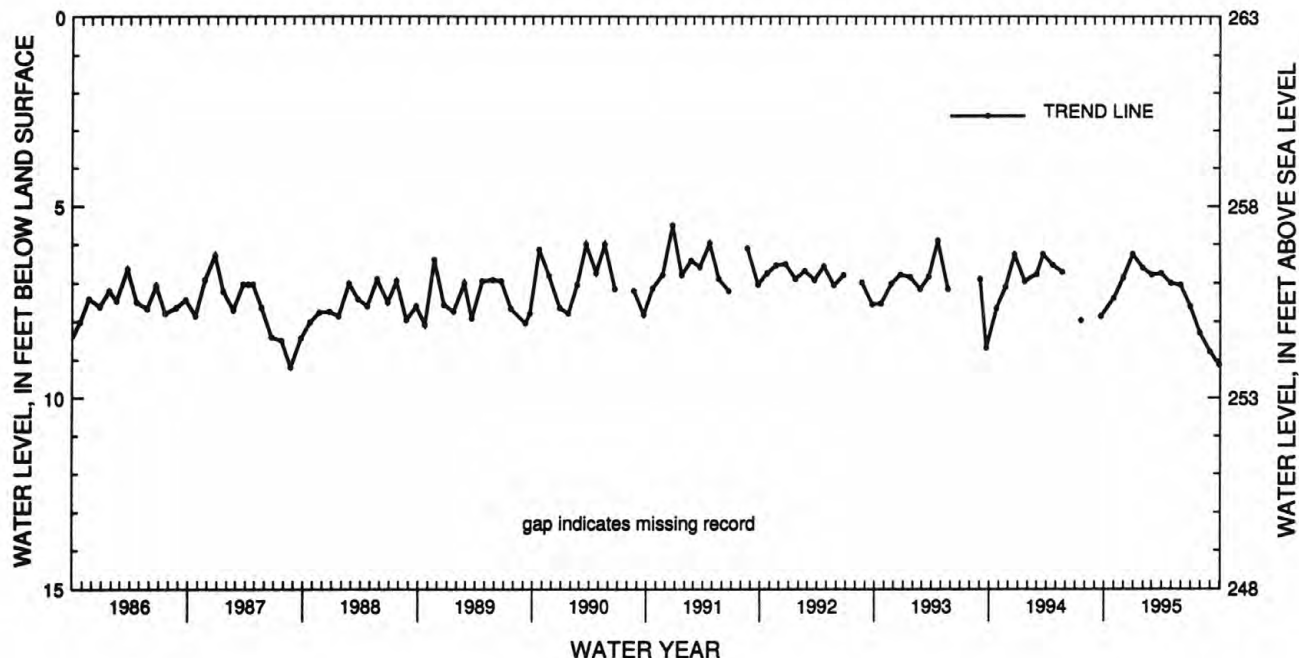
PERIOD OF RECORD.--January 1962 to current year. Prior to May 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series. Continuous record for the 1995 water year have not been published but are available in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.50 ft below land-surface datum, Dec. 24, 1990; lowest measured, 12.30 ft below land-surface datum, Nov. 18, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	7.86	JAN 31	6.61	APR 30	7.00	JUL 31	8.30
NOV 30	6.86	FEB 28	6.78	MAY 31	7.05	AUG 31	8.79
DEC 31	6.26	MAR 31	6.75	JUN 30	7.61	SEP 30	9.13

WATER YEAR 1995 HIGHEST 6.26 DEC. 31, 1994 LOWEST 9.13 SEP. 30, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

167

HILLSBOROUGH COUNTY

424800071295301. Local number, NAW 218.

LOCATION.--Lat 42°48'00", long 71°29'53", Hydrologic Unit 01070002, 57 ft east of edge of pavement of northbound lane of Everett Turnpike, about 0.63 mi north of Tinker Road overpass, and 2.8 mi northwest of the center of Nashua.

Owner: New Hampshire Department of Transportation.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in, depth 42.5 ft.

DATUM.--Altitude of land-surface datum is 205 ft. Measuring point: Top of casing, 3.1 ft above land-surface datum.

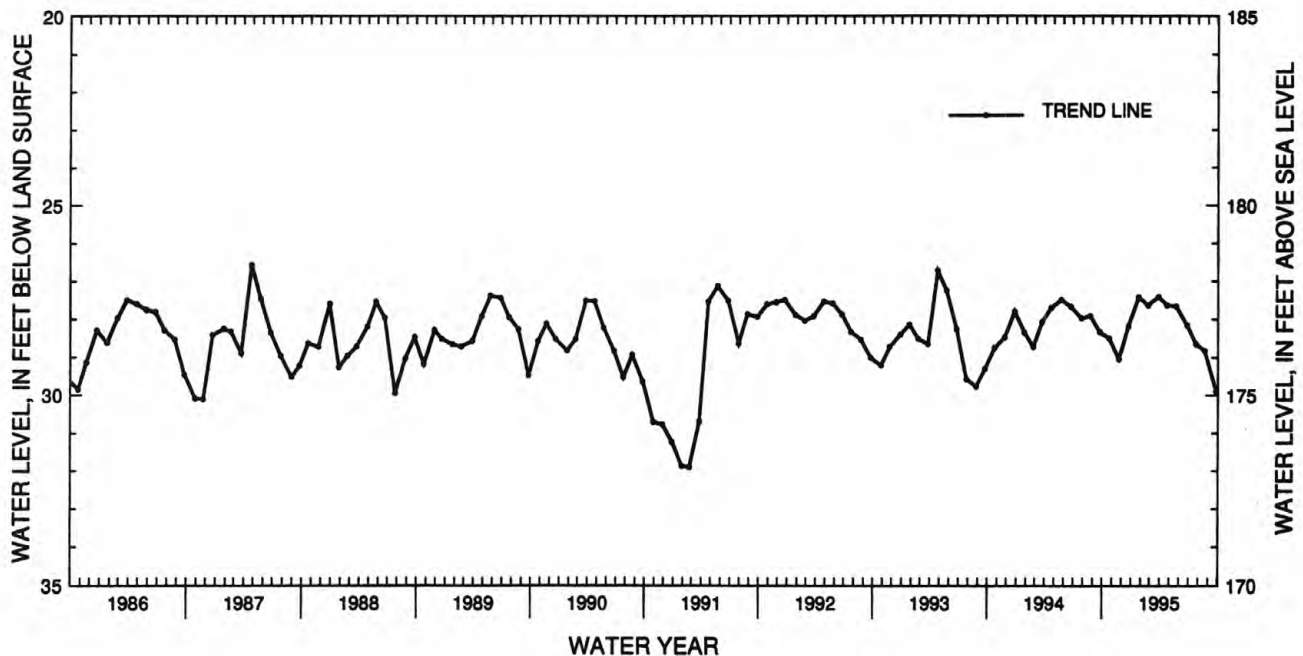
PERIOD OF RECORD.--October 1964 to current year. Prior to June 1966, published in New Hampshire Basic-Data Report No. 2, Ground-Water Series.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.10 ft below land-surface datum, June 5, 1984; lowest measured, 33.10 ft below land-surface datum, Nov. 25, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	28.50	JAN 25	27.42	APR 24	27.63	JUL 26	28.65
NOV 23	29.04	FEB 24	27.63	MAY 24	27.66	AUG 22	28.82
DEC 23	28.18	MAR 29	27.41	JUN 27	28.16	SEP 27	29.90

WATER YEAR 1995 HIGHEST 27.41 MAR. 29, 1995 LOWEST 29.90 SEP. 27, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

MERRIMACK COUNTY

431224071303601. Local number, CVW 2.

LOCATION.--Lat 43°12'24", long 71°30'36", Hydrologic Unit 01070002, about 100 ft north of the Federal Aeronautics Administration Building at Concord Municipal Airport.

Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 2 in, depth 60 ft.

DATUM.--Altitude of land-surface datum is 340 ft. Measuring point: Top of casing, 3.00 ft above land-surface datum.

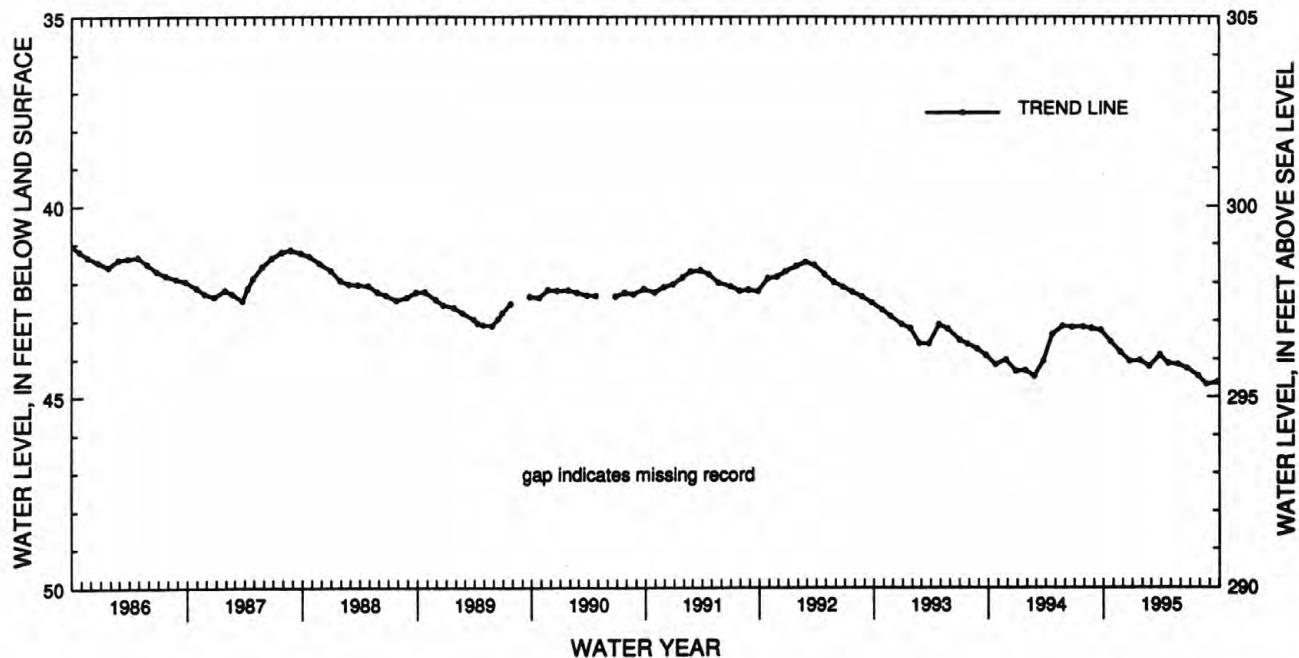
PERIOD OF RECORD.--August 1963 to May 1965, August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.85 ft below land-surface datum, Aug. 27, 1973; lowest measured, 44.62 ft below land-surface datum, Aug. 1, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	43.54	JAN 25	44.03	APR 24	44.11	JUL 28	44.44
NOV 23	43.82	FEB 24	44.19	MAY 26	44.14	AUG 23	44.66
DEC 23	44.05	MAR 29	43.89	JUN 23	44.25	SEP 28	44.60

WATER YEAR 1995 HIGHEST 43.54 OCT. 24, 1994 LOWEST 44.66 AUG. 23, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

169

MERRIMACK COUNTY

431049071324301. Local number, CVW 4.

LOCATION.--Lat 43°10'49", long 71°32'43", Hydrologic Unit 01070002, north side of Iron Works Road, about 700 ft west of South Street, and 1.8 mi southwest of the State House in Concord.

Owner: U.S. Geological Survey.

AQUIFER.--Lacustrine silty fine sands and clays of Pleistocene age.

WELL CHARACTERISTICS.--Bored, unused water-table well, diameter 1.25 in, depth 40.71 ft.

DATUM.--Altitude of land-surface datum is 285 ft. Measuring point: Top of casing, 3.8 ft above land-surface datum.

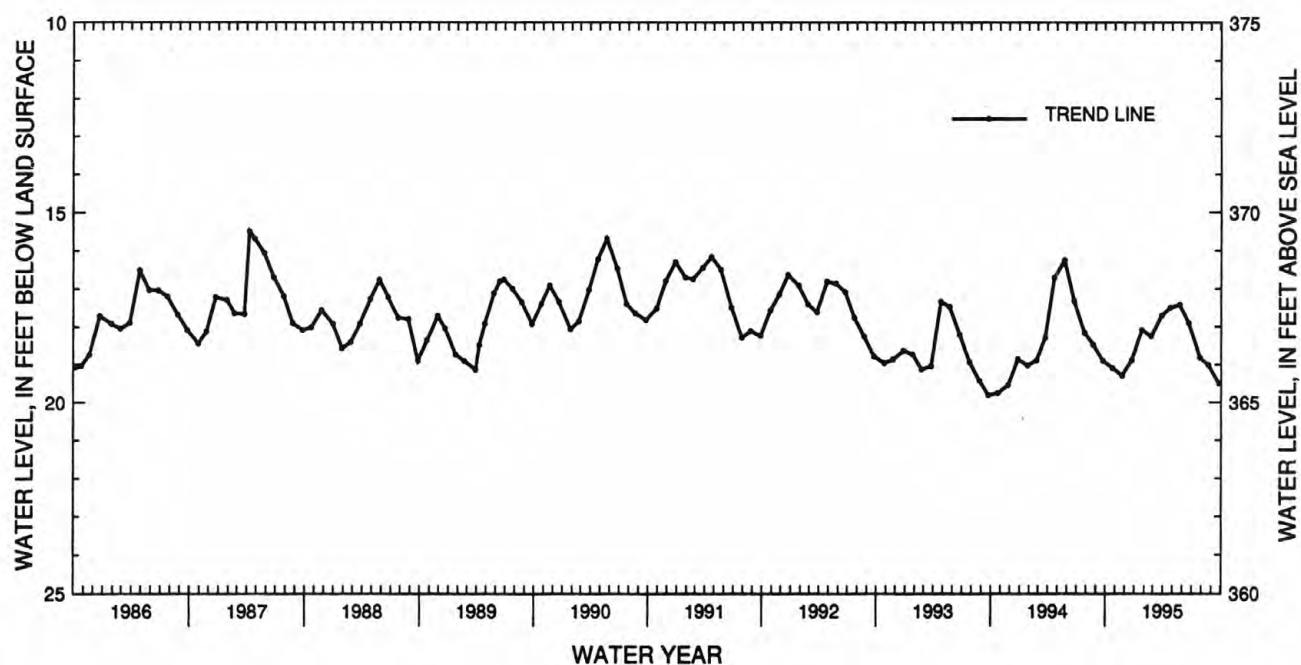
PERIOD OF RECORD.--November 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.94 ft below land-surface datum, June 5, 1984; lowest measured, 20.30 ft below land-surface datum, Jan. 26, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	19.09	JAN 25	18.09	APR 25	17.49	JUL 28	18.82
NOV 23	19.28	FEB 24	18.26	MAY 25	17.42	AUG 23	19.01
DEC 23	18.88	MAR 29	17.71	JUN 22	17.90	SEP 26	19.50

WATER YEAR 1995 HIGHEST 17.42 MAY 25, 1995 LOWEST 19.50 SEP. 26, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

MERRIMACK COUNTY

432428071390701. Local number, FKW 1.

LOCATION.--Lat 43°24'31", long 71°39'12", Hydrologic Unit 01070002, about 700 ft northeast of U.S. Highway 3, and entrance to Holy Cross Convent, and 2.5 mi south of Franklin.

Owner: Holy Cross Convent.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Unused water-table well, diameter 2.5 in, depth 52.3 ft.

DATUM.--Altitude of land-surface datum is 290 ft. Measuring point: Top of casing, 1.80 ft above land-surface datum.

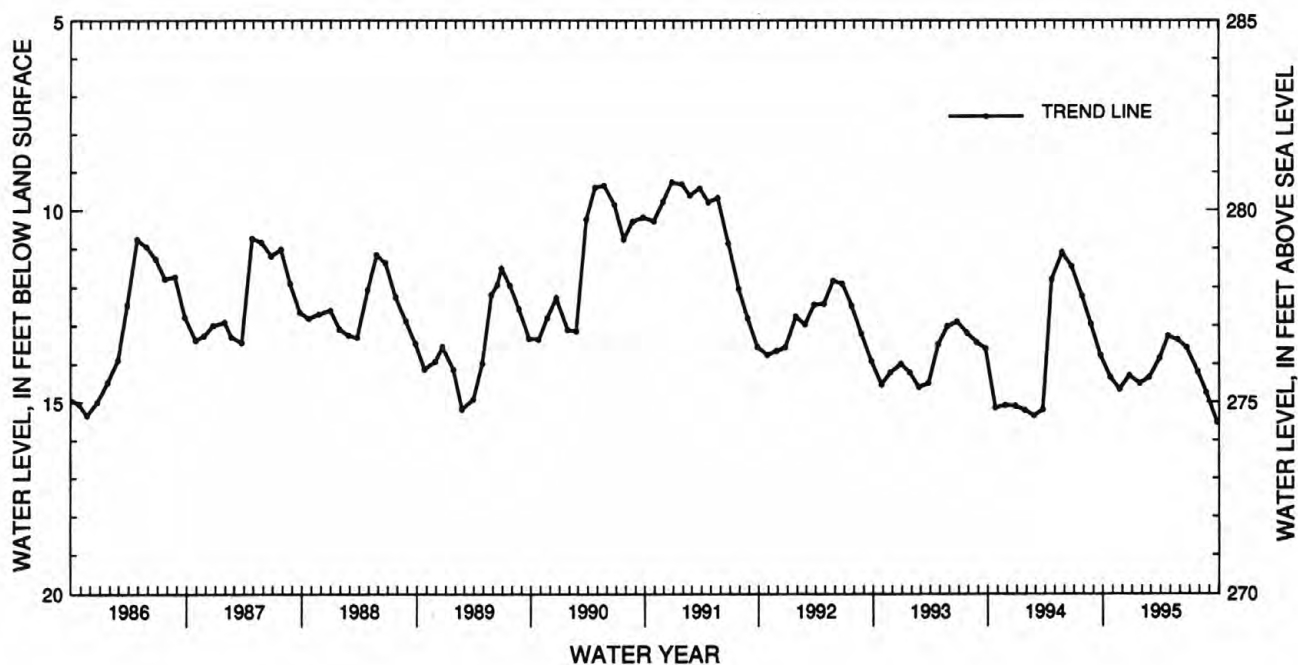
PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.18 ft below land-surface datum, June 5, 1984; lowest measured, 16.27 ft below land-surface datum, Jan. 26, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	14.34	JAN 25	14.50	APR 25	13.27	JUL 28	14.20
NOV 23	14.66	FEB 24	14.35	MAY 25	13.36	AUG 23	14.74
DEC 23	14.30	MAR 29	13.85	JUN 22	13.57	SEP 26	15.53

WATER YEAR 1995 HIGHEST 13.27 APR. 25, 1995 LOWEST 15.53 SEP. 26, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

171

MERRIMACK COUNTY

430235071275501. Local number, HTW 5.

LOCATION.--Lat 43°02'35", long 71°27'55", Hydrologic Unit 01070002, within southeastern cloverleaf of intersection of U.S. Highway 3A and Interstate Highway 93, 3.7 mi south of the center of Hooksett.

Owner: New Hampshire Department of Transportation.

AQUIFER.--Crystalline rock of Devonian age.

WELL CHARACTERISTICS.--Drilled, unused bedrock well, diameter 6 in, depth 102.73 ft.

DATUM.--Land-surface datum is 258.93 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

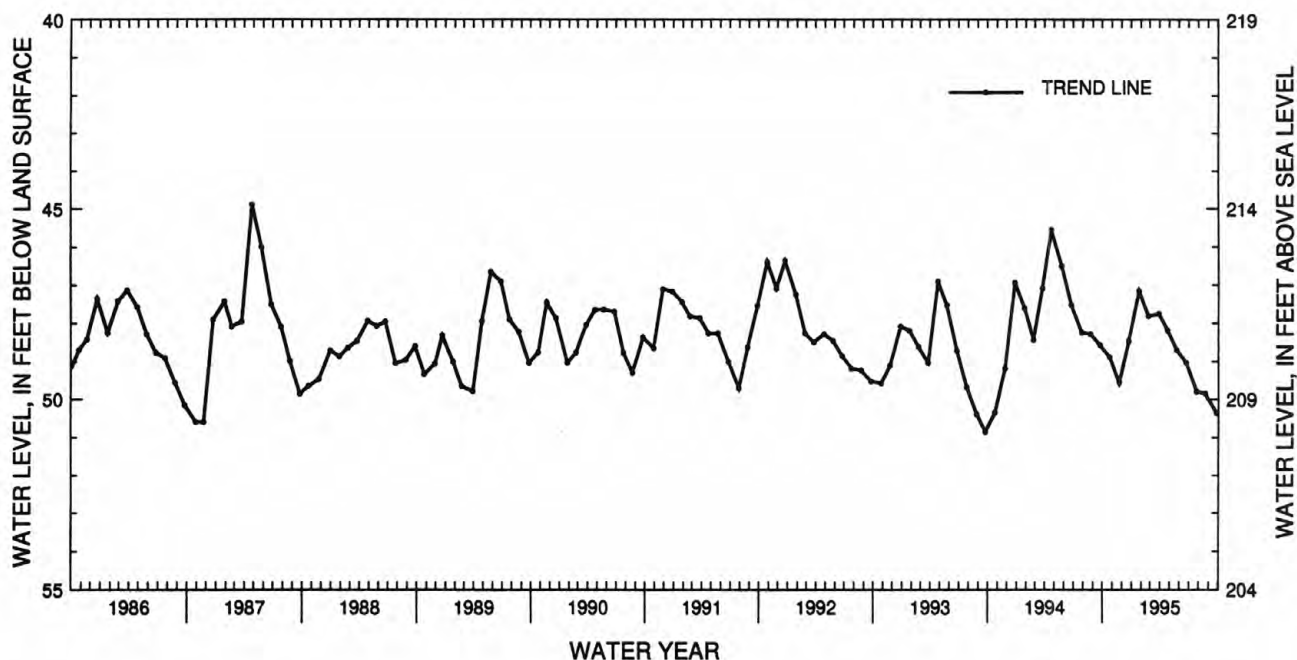
PERIOD OF RECORD.--April 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.69 ft below land-surface datum, Apr. 28, 1967; lowest measured, 51.96 ft below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	48.88	JAN 25	47.16	APR 25	48.18	JUL 26	49.80
NOV 23	49.57	FEB 24	47.81	MAY 24	48.69	AUG 22	49.85
DEC 23	48.47	MAR 29	47.75	JUN 23	49.03	SEP 27	50.36

WATER YEAR 1995 HIGHEST 47.16 JAN. 25, 1995 LOWEST 50.36 SEP. 27, 1995



GROUND-WATER LEVELS IN NEW HAMPSHIRE

MERRIMACK COUNTY

432343071570901. Local number, NLW 1.

LOCATION.--Lat 43°23'43", long 71°57'09", Hydrologic Unit 01070003, at north side of Golf Course Road, about 500 ft east of intersection of State Highway 114 and Golf Course Road, and 2.1 mi southeast of New London.

Owner: Peter Danforth.

AQUIFER.--Sandy till of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 36 in, depth 21 ft, lined with stone to 21 ft, open end.

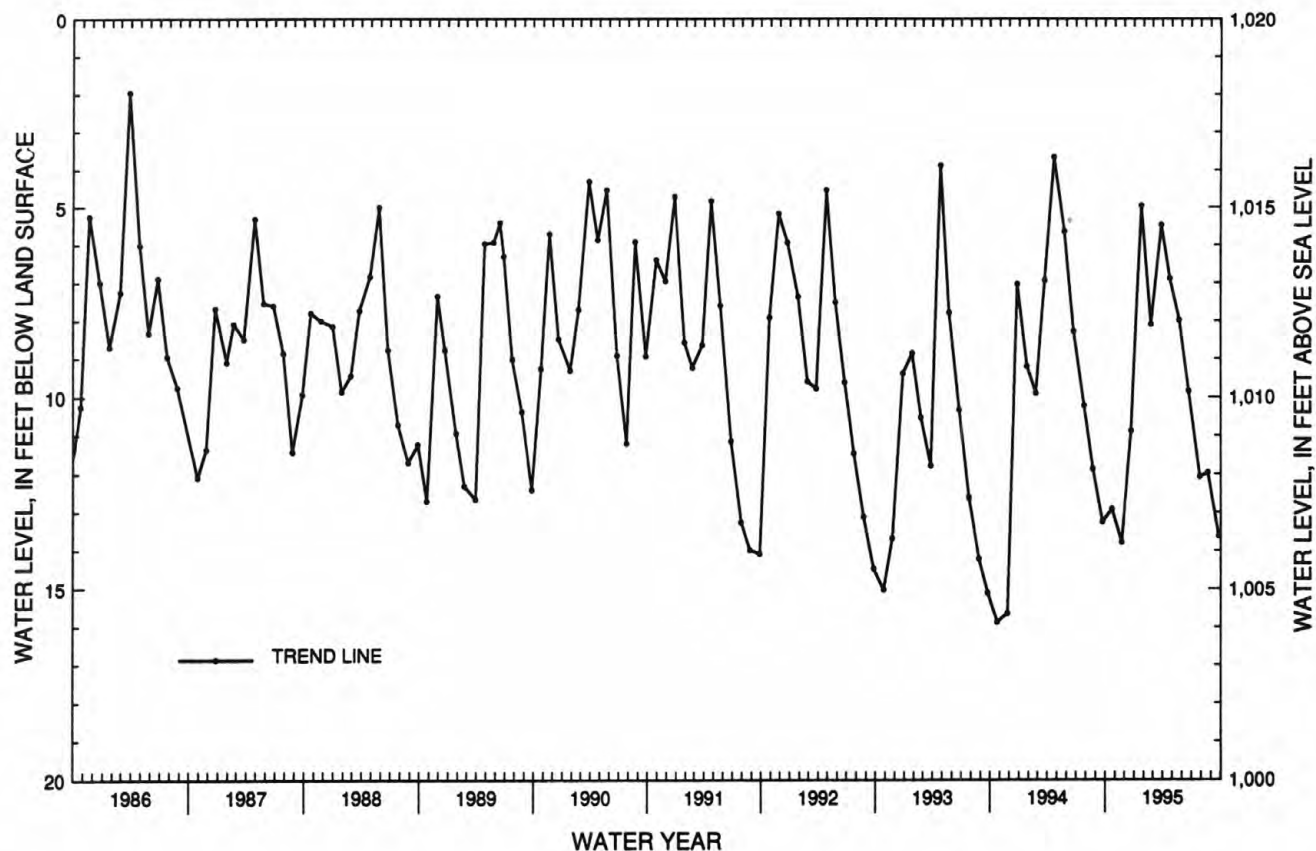
DATUM.--Altitude of land-surface datum is 1,020 ft. Measuring point: Edge of 0.75-in hole in wooden cover, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1956, published in Water Levels and Artesian Pressures in Observation Wells in the United States: Part 1. Northeastern States; U.S. Geological Survey Water-Supply Paper Series. January 1956 to November 1972, published in Ground-Water Levels in the United States, Northeastern States; U.S. Geological Survey Water-Supply Paper Series.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.80 ft below land-surface datum, Apr. 2, 1963; lowest measured, 16.90 ft below land-surface datum, Dec. 28, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

WATER		WATER		WATER		WATER	
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 24	12.92	JAN 25	4.97	APR 25	6.88	JUL 28	12.08
NOV 23	13.79	FEB 24	8.10	MAY 25	7.98	AUG 23	11.97
DEC 23	10.89	MAR 29	5.47	JUN 23	9.85	SEP 26	13.62
WATER YEAR 1995 HIGHEST 4.97 JAN. 25, 1995 LOWEST 13.79 NOV. 23, 1994							



GROUND-WATER LEVELS IN NEW HAMPSHIRE

173

MERRIMACK COUNTY

431540071452801. Local number, WCW 1.

LOCATION.--Lat 43°15'40", long 71°45'28", Hydrologic Unit 01070003, 44 ft northeast of edge of pavement of northbound lane of Interstate Highway 89, about 2 mi southeast of State Highway 103 overpass in Warner.

Owner: New Hampshire Department of Transportation.

AQUIFER.--Sand and fine gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven, unused water-table well, diameter 2 in, depth 42.8 ft.

DATUM.--Altitude of land-surface datum is 424 ft. Measuring point: Top of casing, 3.2 ft above land-surface datum.

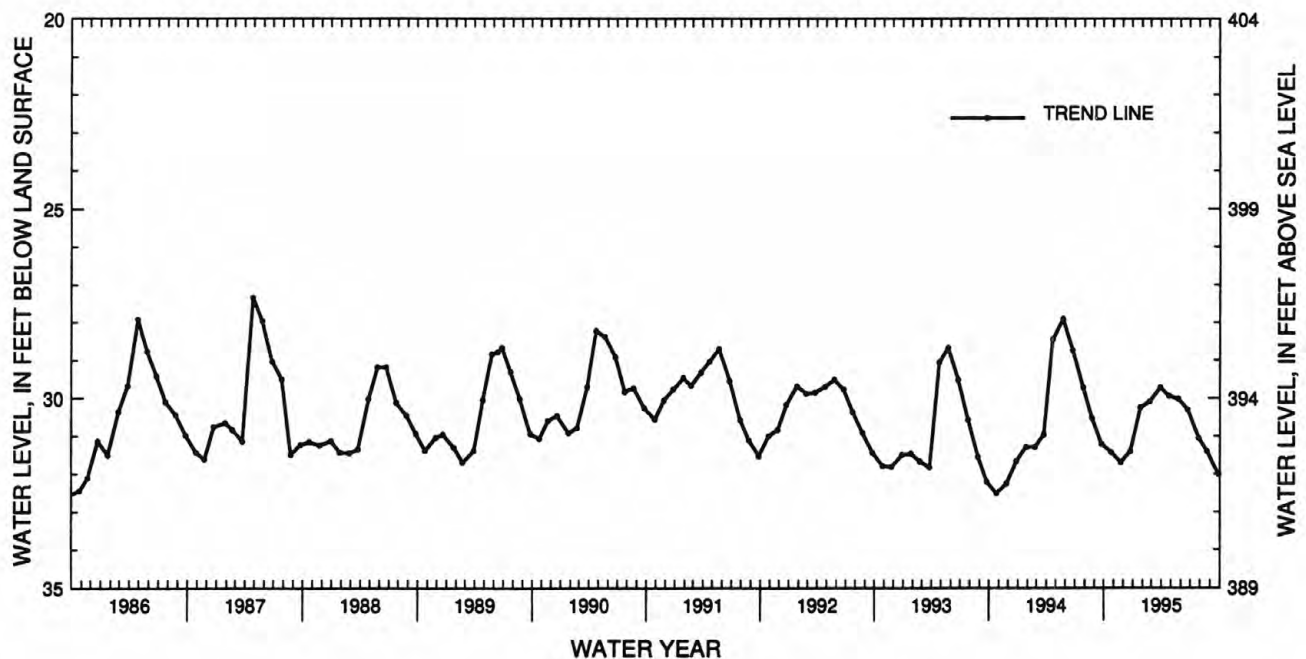
PERIOD OF RECORD.--December 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.94 ft below land-surface datum, May 5, 1969; lowest measured, 33.82 ft below land-surface datum, Dec. 17, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	31.43	JAN 25	31.24	APR 25	29.94	JUL 28	31.05
NOV 23	31.69	FEB 24	30.08	MAY 25	30.02	AUG 23	31.41
DEC 23	31.41	MAR 29	29.72	JUN 23	30.30	SEP 28	32.01

WATER YEAR 1995 HIGHEST 29.72 MAR. 29, 1995 LOWEST 32.01 SEP. 28, 1995



GROUND-WATER LEVELS IN VERMONT

STRAFFORD COUNTY

430721071005001. Local number, LIW 1.

LOCATION.--Lat 43°07'21", long 71°00'50", Hydrologic Unit 01060003, southwest side of Bennett Road about 200 ft from the west corner of the Lee Town Green.

Owner: Brenda Nye.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 40 in, depth 32.8 ft, lined with stone to 32.8 ft.

DATUM.--Altitude of land-surface datum is 190 ft. Measuring point: Top edge of board across well opening, 2.00 ft above land-surface datum.

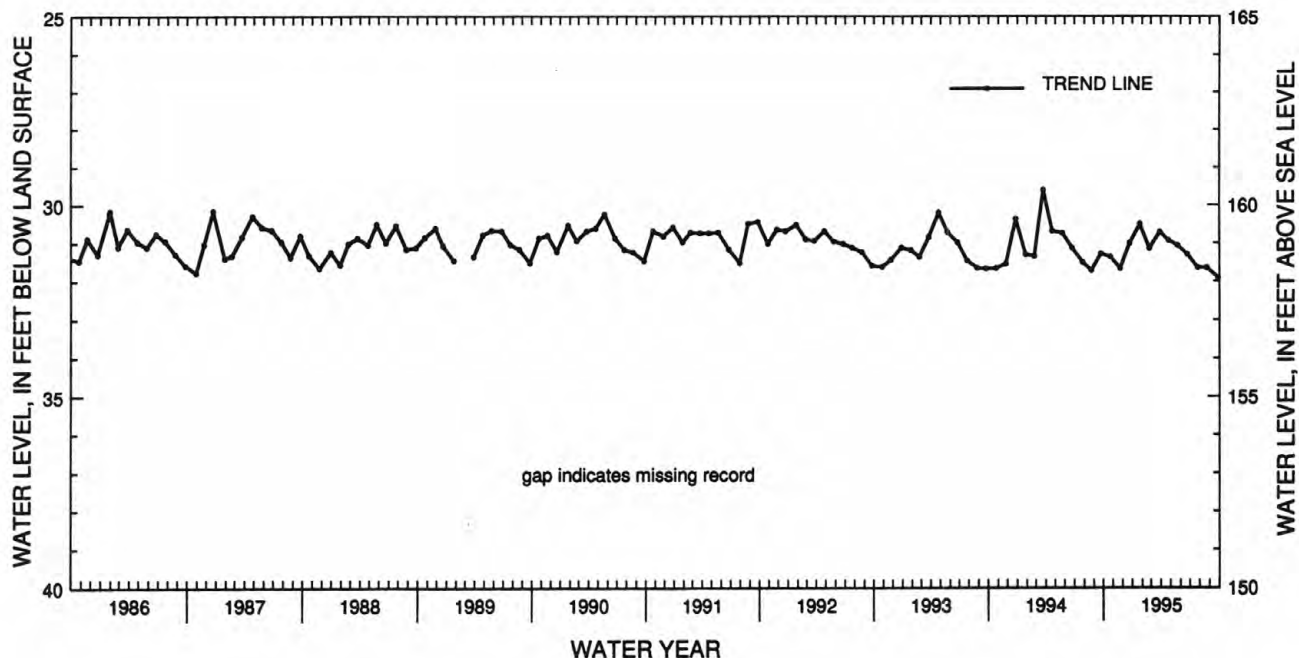
PERIOD OF RECORD.--November 1953 to current year. Prior to January 1958, published in New Hampshire Basic-Data Report No. 1, Ground-Water Series. Prior to January 1956, published in Water Levels and Artesian Pressures in Observation Wells in the United States: Part 1. Northeastern States; U.S. Geological Survey Water-Supply Paper Series. January 1956 to December 1972, published in Ground-Water Levels in the United States, Northeastern States; U.S. Geological Survey Water-Supply Paper Series.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.66 ft below land-surface datum, Mar. 22, 1983; lowest measured, 32.40 ft below land-surface datum, Dec. 18, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	31.37	JAN 25	30.51	APR 25	30.93	JUL 26	31.64
NOV 23	31.67	FEB 24	31.14	MAY 24	31.07	AUG 24	31.65
DEC 23	31.01	MAR 29	30.72	JUN 23	31.30	SEP 28	31.92

WATER YEAR 1995 HIGHEST 30.51 JAN. 25, 1995 LOWEST 31.92 SEP. 28, 1995



GROUND-WATER LEVELS IN VERMONT

175

BENNINGTON COUNTY

424810073160401. Local number, PQW 1.

LOCATION.--Lat 42°48'10", long 73°16'04", Hydrologic Unit 02020003, in front of residence on west side of State Highway 346 and 0.15 mi south of post office at North Pownal.

Owner: James Burden

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug observation water-table well, diameter 24 in, depth 18 ft, cased with stone to 18 ft, open end.

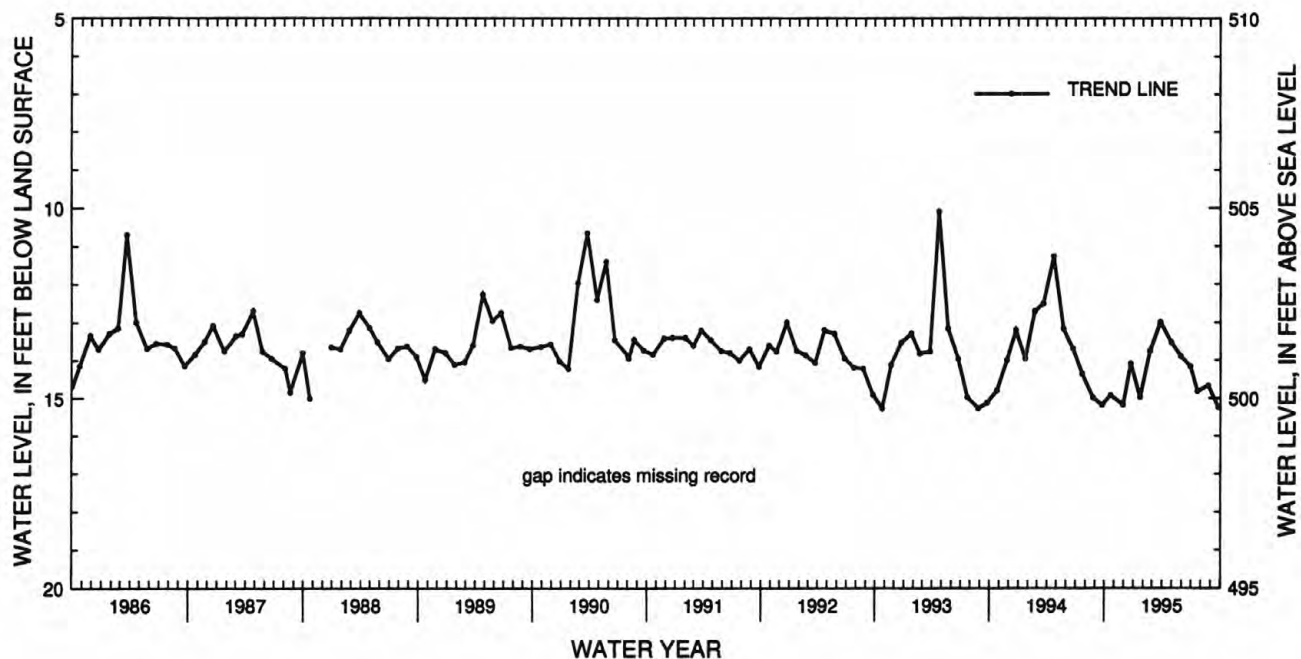
DATUM.--Altitude of land-surface datum is 515 ft. Measuring point: Top of 0.75-in diameter hole drilled in center of 0.38-in thick steel cover at land-surface datum.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1977, published as Pownal 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.98 ft below land-surface datum, June 1, 1984; lowest measured, 16.59 ft below land-surface datum, Oct. 19, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	14.92	JAN 22	14.97	APR 30	13.52	JUL 22	14.81
NOV 29	15.17	FEB 22	13.75	MAY 30	13.89	AUG 25	14.67
DEC 23	14.09	MAR 27	12.99	JUN 29	14.16	SEP 25	15.23
WATER YEAR 1995 HIGHEST 12.99 MAR. 27, 1995 LOWEST 15.23 SEP. 25, 1995							



GROUND-WATER LEVELS IN VERMONT

CHITTENDEN COUNTY

443646073124901. Local number, MJW 3.

LOCATION.--Lat 44°36'46", long 73°12'49", Hydrologic Unit 02010005, about 600 ft south of manager's residence at Vermont Sandbar Waterfowl Development Area, about 400 ft west of former U.S. Highway 2, and 0.9 mi northwest of Lamoille River bridge at Milton.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in, depth 40 ft, screened 38 to 40 ft.

DATUM.--Altitude of land-surface datum is 160 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

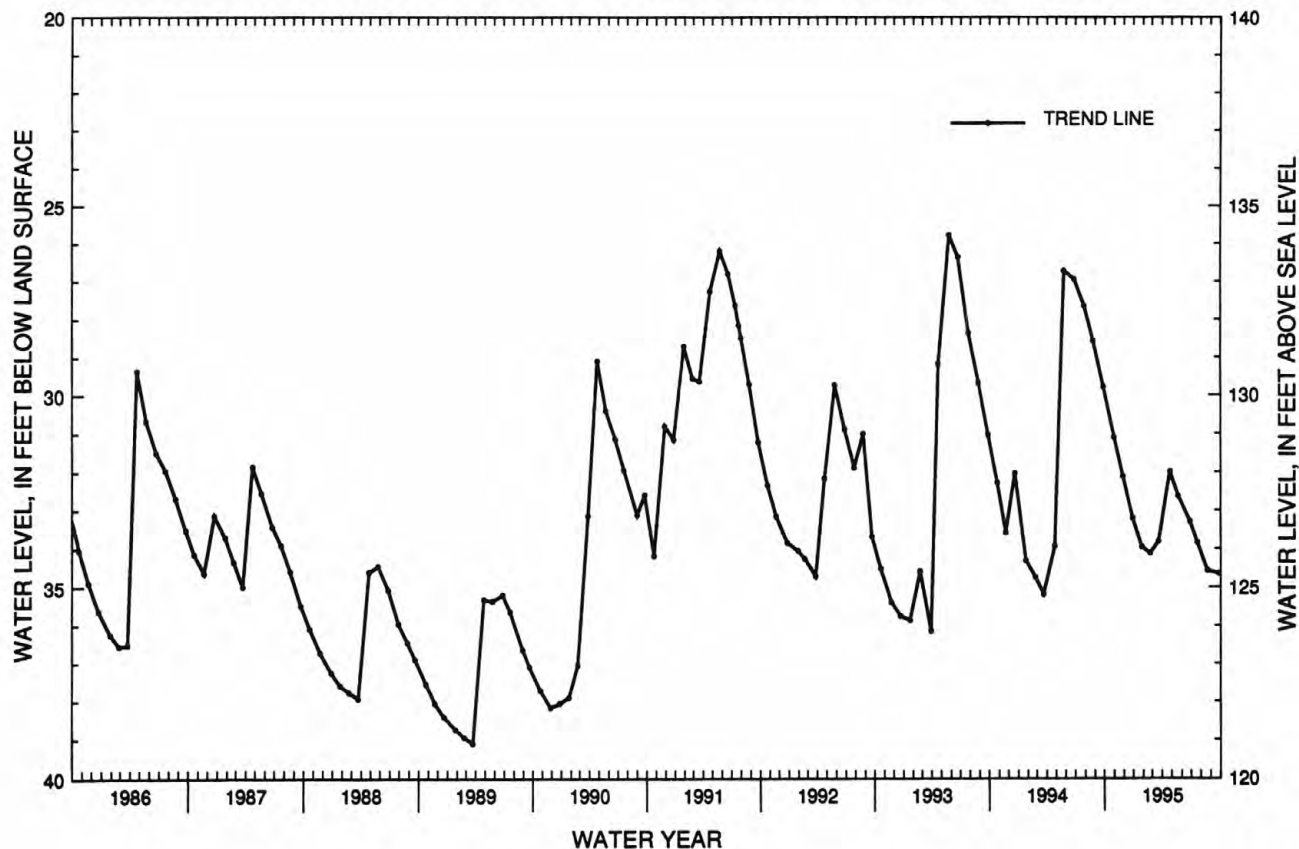
PERIOD OF RECORD.--November 1956 to current year. Prior to October 1977, published as Milton 3.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.97 ft below land-surface datum, May 29, 1974; lowest measured, 39.10 ft below land-surface datum, Mar. 23, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	31.10	JAN 27	33.96	APR 26	31.99	JUL 21	33.85
NOV 28	32.12	FEB 22	34.12	MAY 22	32.63	AUG 22	34.57
DEC 29	33.21	MAR 21	33.82	JUN 28	33.30	SEP 27	34.64

WATER YEAR 1995 HIGHEST 31.10 OCT. 31, 1995 LOWEST 34.64 SEP. 27, 1995



GROUND-WATER LEVELS IN VERMONT

177

ESSEX COUNTY

444731071514701. Local number, BIW 1.

LOCATION.--Lat 44°47'31", long 71°51'47", Hydrologic Unit 01110000, south of road and just west of parking lot for Brighton State Park Beach at Brighton.

Owner: U.S. Geological Survey.

AQUIFER.--Medium and coarse sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 35 ft, screened 33 to 35 ft.

DATUM.--Altitude of land-surface datum is 1,180 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

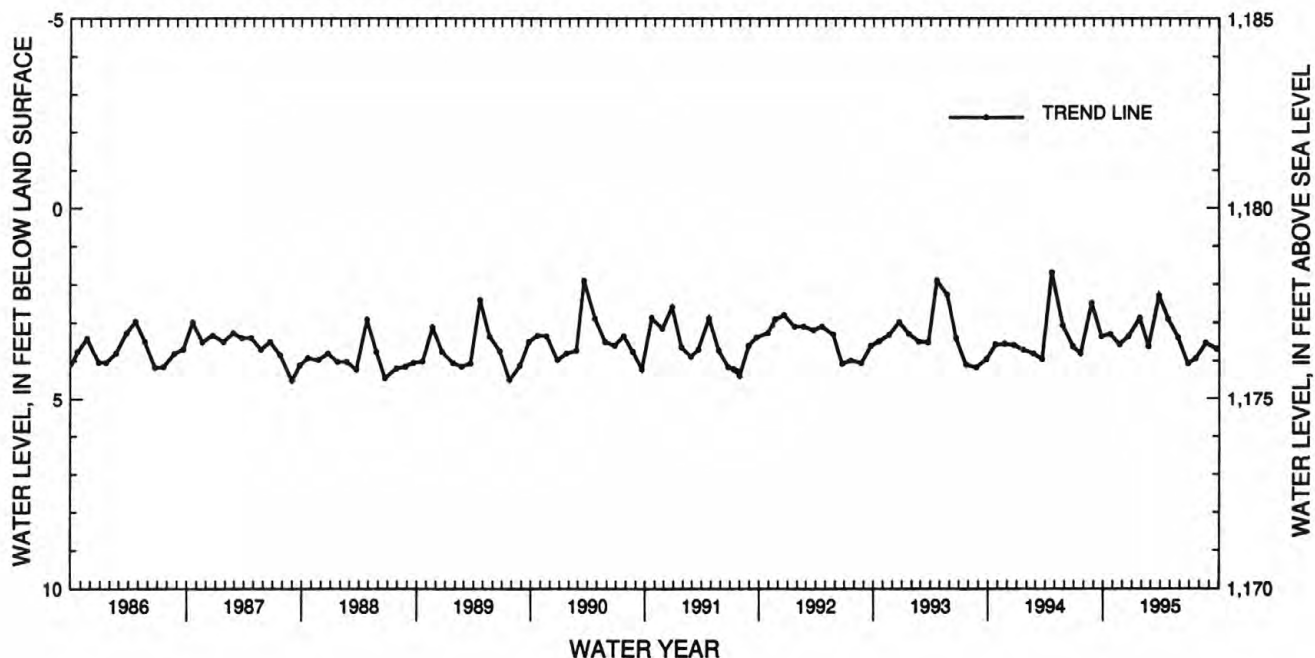
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as Brighton 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.68 ft below land-surface datum, Apr. 21, 1994; lowest measured, 4.95 ft below land-surface datum, Aug. 21, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	3.30	JAN 25	2.88	APR 25	2.91	JUL 21	3.93
NOV 22	3.57	FEB 22	3.62	MAY 26	3.39	AUG 22	3.53
DEC 21	3.36	MAR 27	2.30	JUN 26	4.07	SEP 25	3.68

WATER YEAR 1995 HIGHEST 2.30 MAR. 27, 1995 LOWEST 4.07 JUN 26, 1995



GROUND-WATER LEVELS IN VERMONT

FRANKLIN COUNTY

445603072422901. Local number, BKW 1.

LOCATION.--Lat 44°56'03", long 72°42'29", Hydrologic Unit 02010007, at southeast end of State Highway 118 bridge on Missisquoi River at East Berkshire.

Owner: U.S. Geological Survey.

AQUIFER.--Fine sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 51 ft, screened 49 to 51 ft.

DATUM.--Altitude of land-surface datum is 425 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

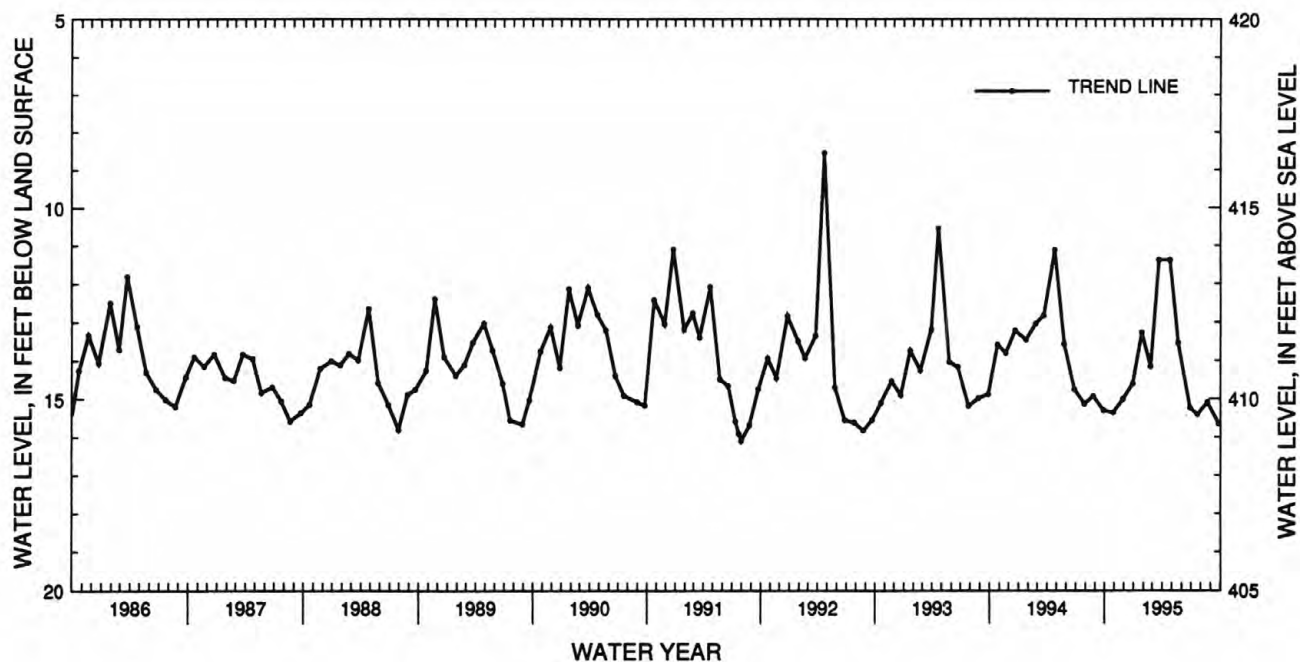
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as Berkshire 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.55 ft below land-surface datum, Apr. 23, 1992; lowest measured, 16.43 ft below land-surface datum, Aug. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	15.36	JAN 27	13.28	APR 26	11.38	JUL 21	15.41
NOV 28	15.01	FEB 24	14.16	MAY 22	13.55	AUG 22	15.09
DEC 29	14.60	MAR 22	11.38	JUN 28	15.23	SEP 27	15.65

WATER YEAR 1995 HIGHEST 11.38 MAR. 22, 1995 AND APR. 26, 1995 LOWEST 15.65 SEP. 27, 1995



GROUND-WATER LEVELS IN VERMONT

179

LAMOILLE COUNTY

443405072323501. Local number, MPW 1.

LOCATION.--Lat 44°34'05", long 72°32'35", Hydrologic Unit 02010005, Vermont Highway Department right-of-way off State Highway 15 and 3 mi east of Morrisville.

Owner: U.S. Geological Survey.

AQUIFER.--Silty, fine to medium sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 50 ft, screened 48 to 50 ft.

DATUM.--Altitude of land-surface datum is 660 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

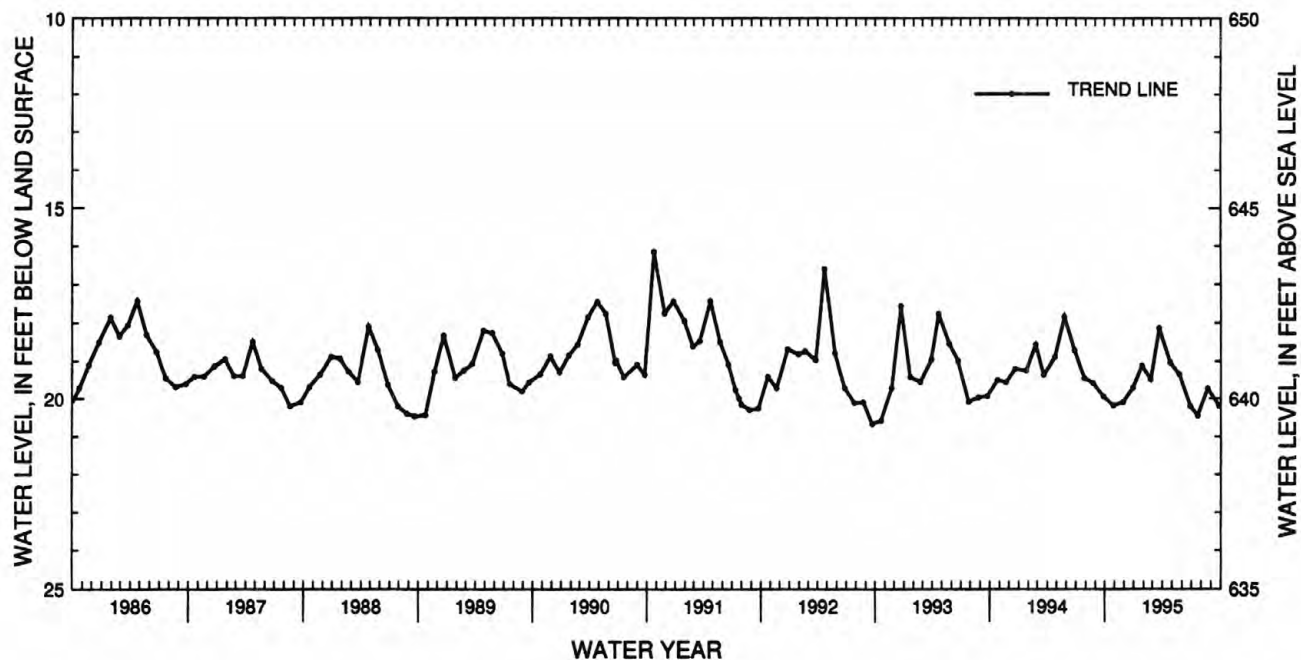
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as Morristown 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.87 ft below land-surface datum, Jan. 27, 1978; lowest measured, 20.67 ft below land-surface datum, Sept. 22, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	20.18	JAN 27	19.12	APR 26	19.03	JUL 21	20.45
NOV 28	20.10	FEB 24	19.48	MAY 25	19.35	AUG 22	19.73
DEC 29	19.71	MAR 22	18.14	JUN 28	20.20	SEP 27	20.19

WATER YEAR 1995 HIGHEST 18.14 MAR. 22, 1995 LOWEST 20.45 JUL. 21, 1995



GROUND-WATER LEVELS IN VERMONT

ORANGE COUNTY

435343072151801. Local number, WOW 1.

LOCATION.--Lat 43°53'43", long 72°15'18", Hydrologic Unit 01080103, 60 ft west of salt shed and 1.3 mi south southeast of West Fairlee Village.

Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 54 ft, screened 52 to 54 ft.

DATUM.--Altitude of land-surface datum is 700 ft. Measuring point: Top of casing, 2.00 ft above land-surface datum.

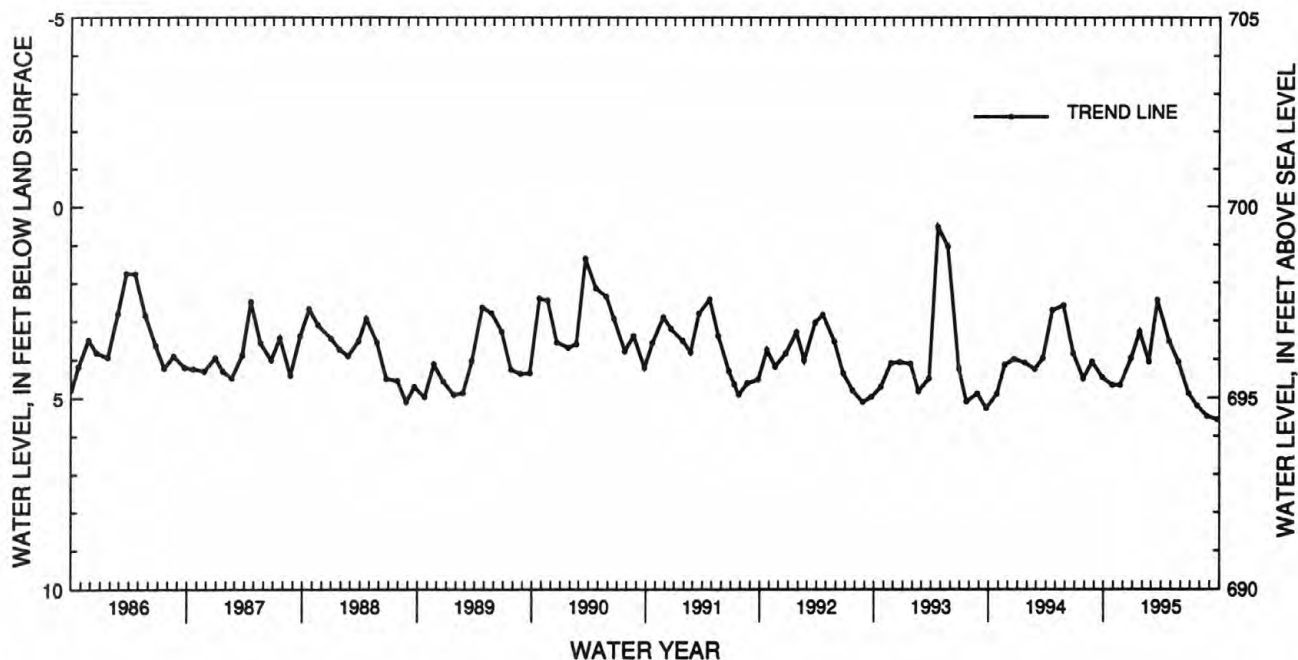
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as West Fairlee 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.53 ft below land-surface datum, Apr. 23, 1993; lowest measured, 5.51 ft below land-surface datum, Aug. 26, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	4.67	JAN 24	3.28	APR 27	3.53	JUL 24	5.21
NOV 23	4.67	FEB 22	4.06	MAY 26	4.07	AUG 25	5.48
DEC 28	3.97	MAR 21	2.46	JUN 27	4.88	SEP 26	5.56

WATER YEAR 1995 HIGHEST 2.46 MAR. 21, 1995 LOWEST 5.56 SEP. 26, 1995



GROUND-WATER LEVELS IN VERMONT

181

ORLEANS COUNTY

443952072114001. Local number, GLW 1.

LOCATION.--Lat 44°39'52", long 72°11'40", Hydrologic Unit 01110000, at Vermont Highway Department salt shed west of State Highway 16 and 3 mi south of Glover Village.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 82 ft, screened 80 to 82 ft.

DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

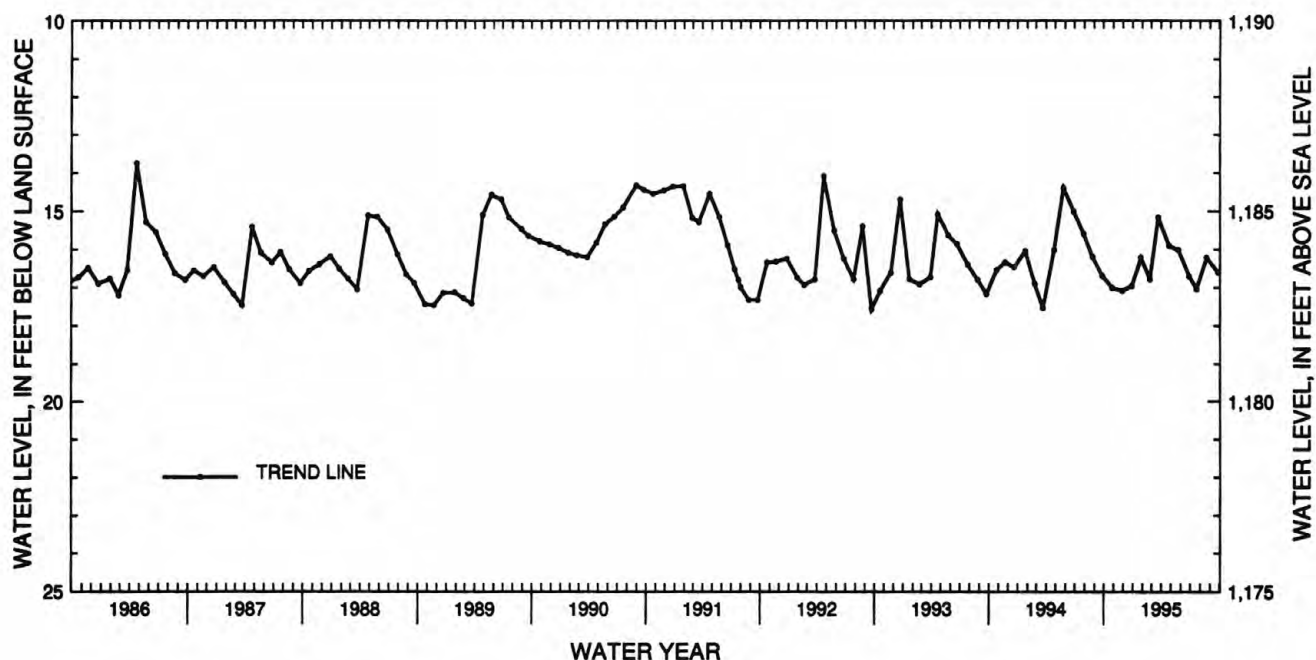
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as Glover 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.11 ft below land-surface datum, May 23, 1969; lowest measured, 18.95 ft below land-surface datum, Mar. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	17.01	JAN 27	16.22	APR 26	15.91	JUL 21	17.04
NOV 28	17.08	FEB 24	16.78	MAY 25	16.02	AUG 22	16.22
DEC 29	16.96	MAR 22	15.17	JUN 28	16.71	SEP 27	16.60

WATER YEAR 1995 HIGHEST 15.17 MAR. 22, 1995 LOWEST 17.08 NOV. 28, 1994



GROUND-WATER LEVELS IN VERMONT

RUTLAND COUNTY

434217073010601. Local number, PFW 8.

LOCATION.--Lat 43°42'17", long 73°01'06", Hydrologic Unit 02010002, 12 ft west of storage building at St. Alphonsus Cemetery at Pittsford.

Owner: U.S. Geological Survey.

AQUIFER.--Medium to fine sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 42 ft, screened 40 to 42 ft.

DATUM.--Altitude of land-surface datum is 490 ft. Measuring point: Top of casing, 2.00 ft above land-surface datum.

REMARKS.--Well pulled Nov. 8, 1968, point replaced, depth changed from 43 ft to 42 ft, old 3-ft point was completely encrusted.

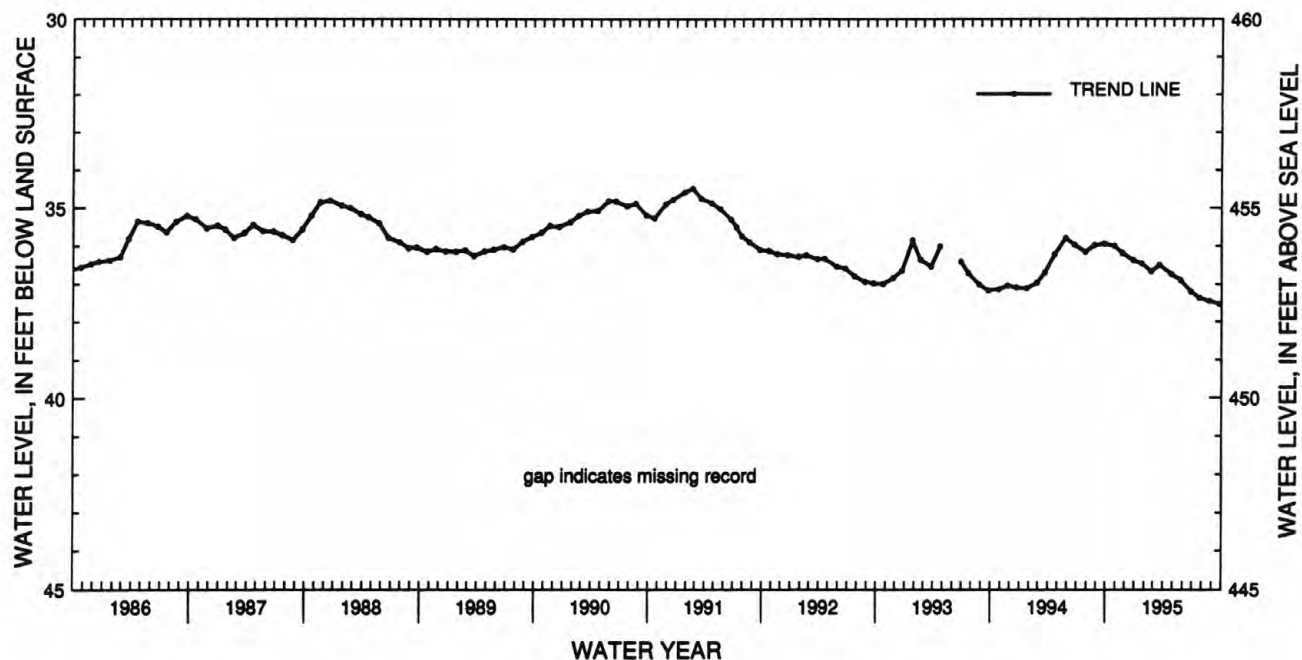
PERIOD OF RECORD.--October 1957 to current year. Prior to October 1977, published as Pittsford 8.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.17 ft below land-surface datum, May 26, 1976; lowest measured, 39.59 ft below land-surface datum, Oct. 18, 1957.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	36.00	JAN 24	36.46	APR 27	36.74	JUL 24	37.37
NOV 23	36.18	FEB 22	36.67	MAY 26	36.90	AUG 25	37.45
DEC 28	36.37	MAR 21	36.50	JUN 27	37.20	SEP 26	37.53

WATER YEAR 1995 HIGHEST 36.00 OCT. 28, 1994 LOWEST 37.53 SEP. 26, 1995



GROUND-WATER LEVELS IN VERMONT

183

WASHINGTON COUNTY

441552072341901. Local number, MMW 2.

LOCATION.--Lat 44°15'52", long 72°34'19", Hydrologic Unit 02010003, at southeast corner of garage at Nine Winter Street in Montpelier.

Owner: U.S. Geological Survey.

AQUIFER.--Medium to coarse sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 26 ft, screened 24 to 26 ft.

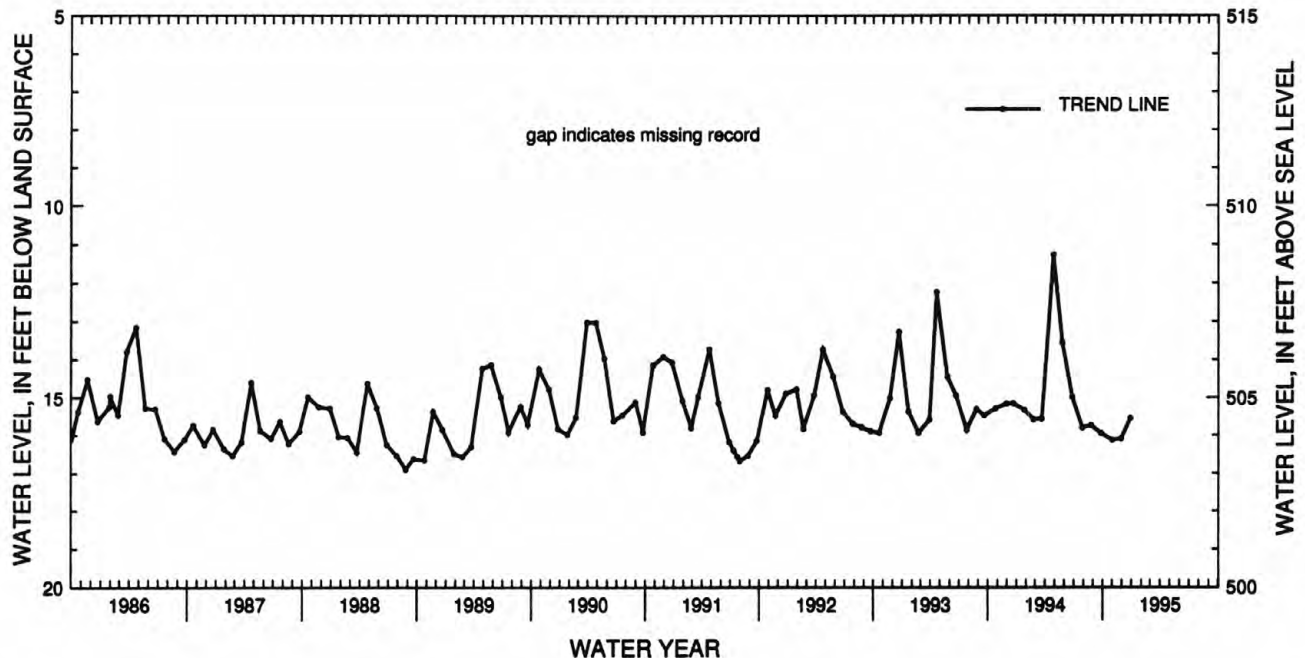
DATUM.--Altitude of land-surface datum is 520 ft. Measuring point: Top of casing, 1.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to January 1995 (well was made inaccessible after December 1994). Prior to October 1977, published as Montpelier 2.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.09 ft below land-surface datum, Apr. 24, 1969; lowest measured, 17.10 ft below land-surface datum, Aug. 27, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	16.13	NOV 29	16.10	DEC 28	15.57
WATER YEAR 1995 HIGHEST 15.57 DEC. 28, 1994 LOWEST 16.13 OCT. 31, 1994					



GROUND-WATER LEVELS IN VERMONT

WASHINGTON COUNTY

441215072483101. Local number, WAW 2.

LOCATION.--Lat 44°12'15", long 72°48'31", Hydrologic Unit 02010003, at rest area on east side of State Highway 100 and 1.3 mi northeast of Waitsfield Village.

Owner: U.S. Geological Survey.

AQUIFER.--Silty gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drive and wash observation water-level well, diameter 1.25 in, depth 45.5 ft, screened 43.5 to 45.5 ft.

DATUM.--Altitude of land-surface datum is 685 ft. Measuring point: Top of casing, 2.00 ft above land-surface datum.

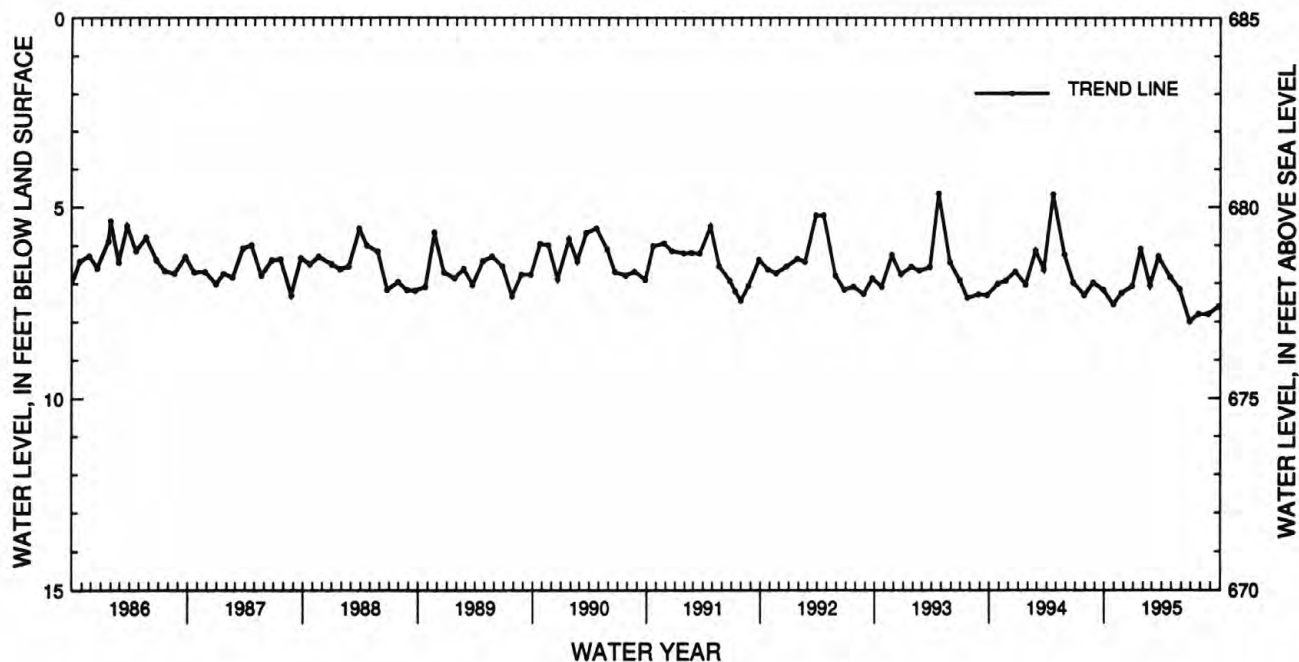
PERIOD OF RECORD.--June 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.25 ft below land-surface datum, Dec. 14, 1983; lowest measured, 7.87 ft below land-surface datum, Nov. 26, 1984.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	7.54	JAN 24	6.10	APR 27	6.84	JUL 24	7.80
NOV 23	7.25	FEB 22	7.06	MAY 26	7.15	AUG 25	7.80
DEC 28	7.07	MAR 21	6.30	JUN 27	7.99	SEP 26	7.60

WATER YEAR 1995 HIGHEST 6.10 JAN. 24, 1995 LOWEST 7.99 JUN. 27, 1995



GROUND-WATER LEVELS IN VERMONT

185

WASHINGTON COUNTY

441033072500201. Local number, WAW 3.

LOCATION.--Lat 44°10'33", long 72°50'02", Hydrologic Unit 02010003, town of Waitsfield, northwest of Vermont Highway Department salt shed on State Highway 100 and 0.5 mi southeast of Irasville Village.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drive and wash observation water-level well, diameter 1.25 in, depth 53 ft, screened 51 to 53 ft.

DATUM.--Altitude of land-surface datum is 715 ft. Measuring point: Top of casing, 3.25 ft above land-surface datum.

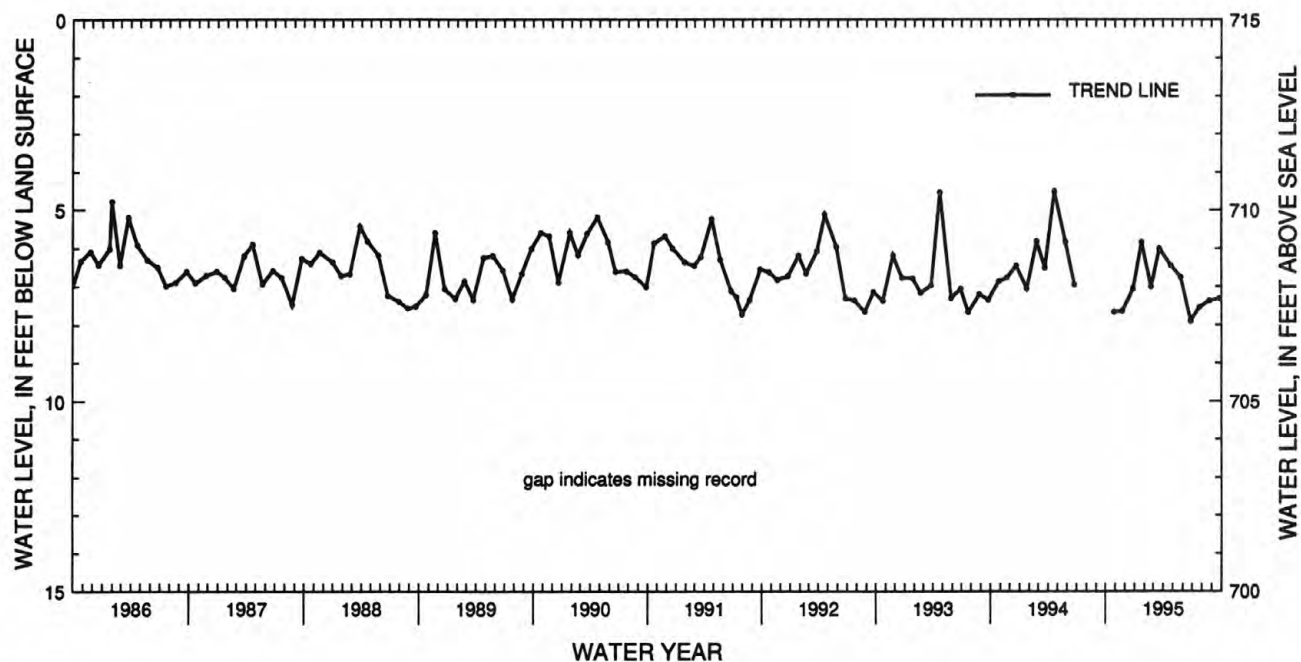
PERIOD OF RECORD.--June 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.34 ft below land-surface datum, Feb. 24, 1976; lowest measured, 8.00 ft below land-surface datum, Sept. 25, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	7.67	JAN 24	5.84	APR 26	6.45	JUL 24	7.54
NOV 23	7.64	FEB 22	7.01	MAY 26	6.75	AUG 25	7.37
DEC 28	7.06	MAR 21	6.01	JUN 27	7.90	SEP 26	7.31

WATER YEAR 1995 HIGHEST 5.84 JAN. 24, 1995 LOWEST 7.90 JUN. 27, 1995



GROUND-WATER LEVELS IN VERMONT

WINDSOR COUNTY

431551072350601. Local number, CKW 1.

LOCATION.--Lat 43°15'51", long 72°35'06", Hydrologic Unit 01080107, at Vermont Highway Department salt shed on Elm Street in Chester.

Owner: U.S. Geological Survey.

AQUIFER.--Boulders, coarse gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 22 ft, screened 20 to 22 ft.

DATUM.--Altitude of land-surface datum is 580 ft. Measuring point: Top of casing, 2.00 ft above land-surface datum.

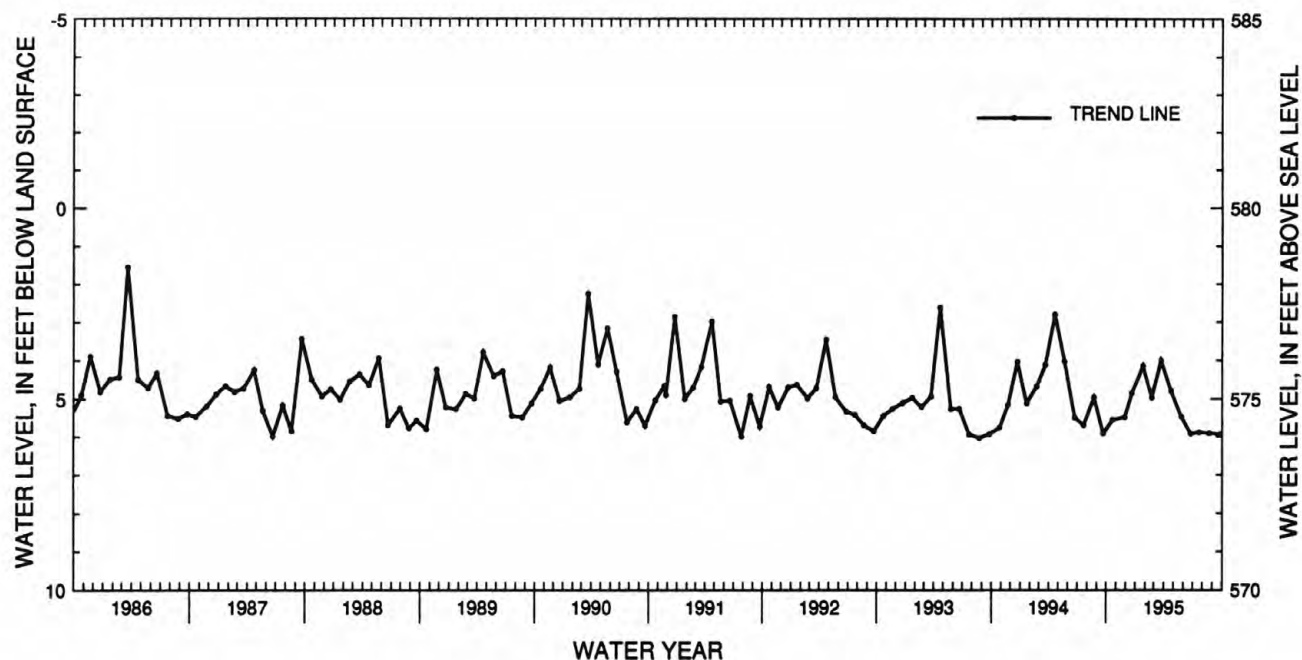
PERIOD OF RECORD.--November 1966 to current year. Prior to October 1977, published as Chester 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.56 ft below land-surface datum, Mar. 20, 1986; lowest measured, 6.31 ft below land-surface datum, Sept. 28, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	5.55	JAN 25	4.15	APR 24	4.79	JUL 21	5.88
NOV 28	5.48	FEB 22	4.97	MAY 26	5.47	AUG 23	5.91
DEC 21	4.85	MAR 23	4.01	JUN 25	5.92	SEP 26	5.93

WATER YEAR 1995 HIGHEST 4.01 MAR. 23, 1995 LOWEST 5.93 SEP. 26, 1995



GROUND-WATER LEVELS IN VERMONT

187

WINDSOR COUNTY

433240072242901. Local number, HLW 54.

LOCATION.--Lat 43°32'40", long 72°24'29", Hydrologic Unit 01080104, at northeast corner of fire station in Hartland.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-level well, diameter 1.25 in, depth 51 ft, screened 49 to 51 ft.

DATUM.--Altitude of land-surface datum is 575 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

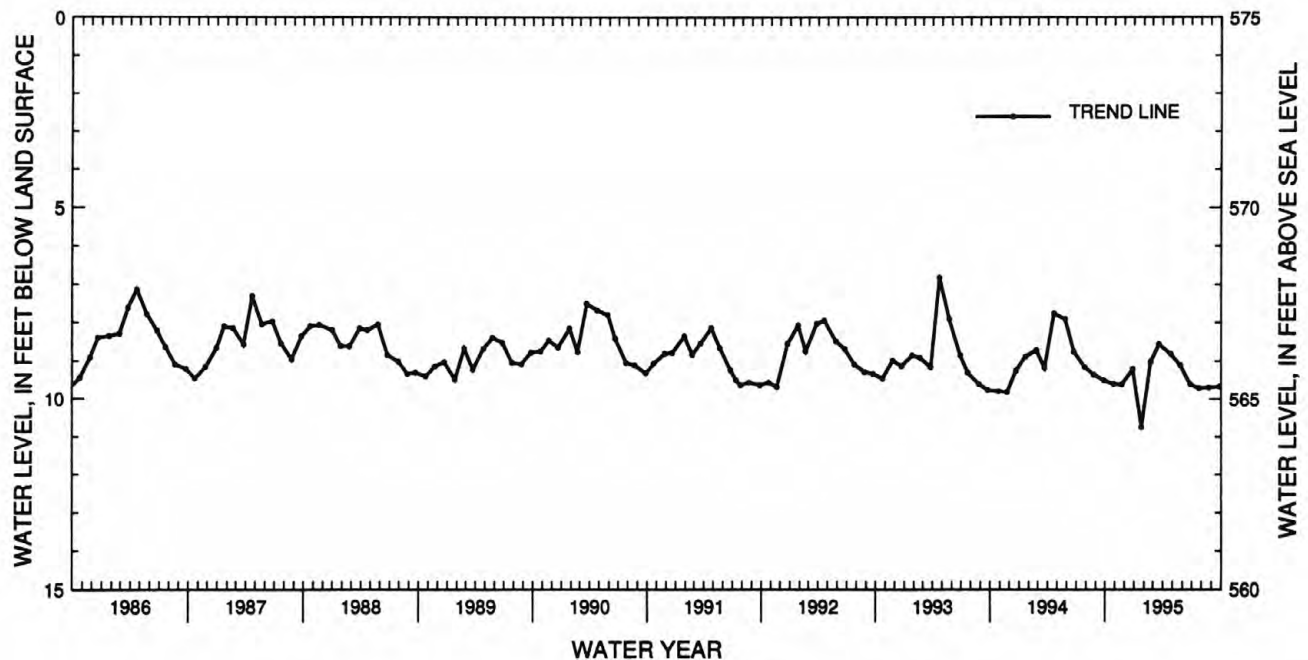
PERIOD OF RECORD.--August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.96 ft below land-surface datum, June 1, 1984; lowest measured, 10.75 ft below land-surface datum, Jan. 24, 1995.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	9.60	JAN 24	10.75	APR 27	8.82	JUL 24	9.71
NOV 23	9.61	FEB 22	9.02	MAY 26	9.10	AUG 25	9.69
DEC 28	9.21	MAR 21	8.56	JUN 27	9.60	SEP 26	9.67

WATER YEAR 1995 HIGHEST 8.56 MAR. 21, 1995 LOWEST 10.75 JAN. 24, 1995



GROUND-WATER LEVELS IN VERMONT

WINDSOR COUNTY

435129072483301. Local number, RJW 1.

LOCATION.--Lat 43°51'29", long 72°48'33", Hydrologic Unit 01080105, adjacent to salt shed at Vermont Highway Department garage 1.3 mi south of Rochester Village.

Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in, depth 73 ft, screened 71 to 73 ft.

DATUM.--Altitude of land-surface datum is 800 ft. Measuring point: Top of casing, 4.00 ft above land-surface datum.

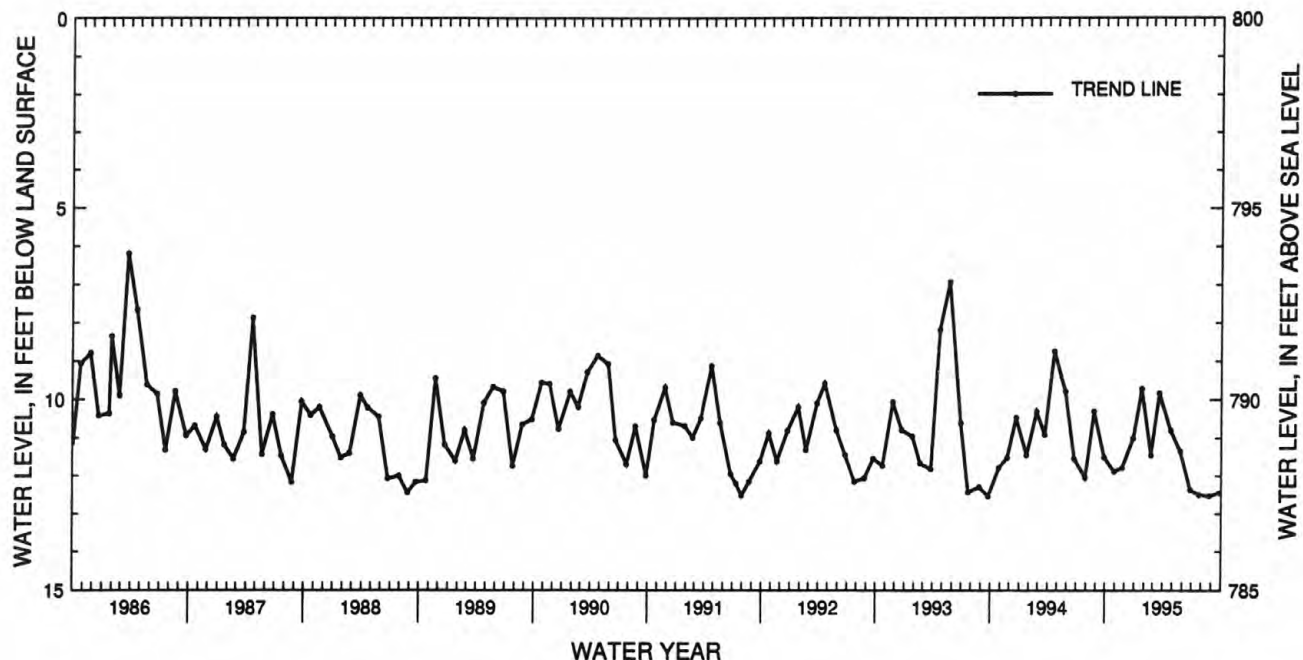
PERIOD OF RECORD.--November 1966 to current year. Prior to 1977, published as Rochester 1.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.50 ft below land-surface datum, Mar. 26, 1968; lowest measured, 13.05 ft below land-surface datum, Aug. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.88	JAN 24	9.72	APR 26	10.80	JUL 24	12.50
NOV 23	11.78	FEB 22	11.45	MAY 26	11.35	AUG 25	12.53
DEC 28	11.00	MAR 21	9.83	JUN 27	12.37	SEP 26	12.45

WATER YEAR 1995 HIGHEST 9.72 JAN. 24, 1995 LOWEST 12.53 SEP. 26, 1995



**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS 189
IN NEW HAMPSHIRE AND VERMONT**

**WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRAM**

LOCAL IDENT- I- FIER	STATION	NUMBER	GEO- LOGIC UNIT	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)
CHESHIRE COUNTY, NH										
KEW 118	425558072171701	112SRFD		18.00	8.48	07-31-95	1345	10.0	139	0.400
KEW 119	425801072182001	112SRFD		23.70	8.70	07-31-95	1155	6.5	272	0.400
NBW 36	425953072083801	300CRSL		200.00	17.6	08-01-95	0930	9.5	99	0.500
COOS COUNTY, NH										
BRW 49	443042071142501	300CRSL		225.00	--	08-03-95	1050	9.0	132	7.90
GRAFTON COUNTY, NH										
LLW 45	441358071543201	BEDROCK		155.00	--	08-02-95	1025	9.0	216	0.300
SULLIVAN COUNTY, NH										
SWW 85	432240072053701	300CRSL		125.00	12.9	08-01-95	1355	9.0	111	2.00
ESSEX COUNTY, VT										
B1W 1	444723071494801	300CRSL		41.00	17.6	08-03-95	1445	8.5	500	9.40
LXW 12	442949071412701	300CRSL		150.00	--	08-02-95	1350	9.0	150	0.200
ORANGE COUNTY, VT										
CPW 1	440011072164201	112SRFD		16.90	5.80	08-04-95	0920	7.0	271	0.400
WINDHAM COUNTY, VT										
BTW 10	425103072333501	112SRFD		25.40	14.5	07-25-95	1105	15.5	338	0.800
BTW 11	425117072355901	112SRFD		9.60	5.90	07-25-95	1345	12.0	353	7.50
GXW 1	424738072395301	112SRFD		10.60	7.30	07-28-95	1015	10.5	227	7.00
RKW 121	430813072301901	112SRFD		37.60	-0.44	07-27-95	1015	9.0	225	0.700
WINDSOR COUNTY, VT										
GRW 1	435710072501901	300CRSL		500.00	18.9	07-26-95	1155	8.0	188	4.80
PMW 12	433326072422601	300CRSL		445.00	--	07-26-95	1630	10.0	234	4.50
WMW 128	432325072242101	112SRFD		52.70	25.5	07-27-95	1330	8.5	224	0.500

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS IN NEW HAMPSHIRE AND VERMONT

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995 NATIONAL WATER QUALITY ASSESSMENT PROGRAM

LOCAL IDENT- I- FIER		DATE	PH	ALKA-	CAR-	BICAR-	NITRO-	NITRO-	NITRO-	NITRO-	PHOS-
			WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHORUS DIS- SOLVED (MG/L AS P) (00666)
CHESHIRE COUNTY, NH											
KEW	118	07-31-95	6.32	47	0	57	0.460	<0.010	0.50	0.070	0.030
KEW	119	07-31-95	6.58	47	0	57	0.090	<0.010	<0.20	0.070	0.020
NBW	36	08-01-95	8.70	36	0	44	0.030	<0.010	<0.20	<0.050	0.010
COOS COUNTY, NH											
BRW	49	08-03-95	8.26	33	4	32	<0.015	<0.010	<0.20	0.200	<0.010
GRAFTON COUNTY, NH											
LLW	45	08-02-95	8.31	88	0	107	0.030	<0.010	<0.20	<0.050	<0.010
SULLIVAN COUNTY, NH											
SWW	85	08-01-95	6.47	43	0	53	<0.015	<0.010	<0.20	<0.050	<0.010
ESSEX COUNTY, VT											
B1W	1	08-03-95	6.52	20	0	25	<0.015	<0.010	<0.20	1.00	<0.010
LXW	12	08-02-95	8.05	68	0	83	<0.015	<0.010	<0.20	0.060	0.060
ORANGE COUNTY, VT											
CPW	1	08-04-95	7.77	130	0	159	0.020	<0.010	0.20	<0.050	0.020
WINDHAM COUNTY, VT											
BTW	10	07-25-95	6.68	53	0	65	<0.015	<0.010	<0.20	0.990	<0.010
BTW	11	07-25-95	6.66	57	0	69	<0.015	<0.010	<0.20	1.80	<0.010
GXW	1	07-28-95	7.94	91	0	111	0.020	<0.010	<0.20	<0.050	<0.010
RKW	121	07-27-95	8.25	87	0	106	<0.015	<0.010	<0.20	<0.050	0.040
WINDSOR COUNTY, VT											
GRW	1	07-26-95	7.90	66	0	80	0.020	<0.010	<0.20	0.410	<0.010
PMW	12	07-26-95	7.60	84	0	103	<0.015	<0.010	<0.20	0.090	<0.010
WMW	128	07-27-95	8.70	86	0	105	0.070	<0.010	<0.20	<0.050	<0.010

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS 191
IN NEW HAMPSHIRE AND VERMONT**

**WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRAM**

LOCAL IDENT- I- PIER	DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
CHESHIRE COUNTY, NH										
KEW 118	07-31-95	0.020	3.3	38	13	1.4	8.0	1.3	11	1.3
KEW 119	07-31-95	0.020	1.2	66	19	4.4	5.7	4.7	16	54
NBW 36	08-01-95	0.020	0.1	30	8.7	2.0	6.9	1.3	0.80	8.7
COOS COUNTY, NH										
BRW 49	08-03-95	<0.010	0.5	44	13	2.7	3.6	2.9	5.4	12
GRAFTON COUNTY, NH										
LLW 45	08-02-95	<0.010	0.2	91	24	7.5	7.8	0.80	1.4	18
SULLIVAN COUNTY, NH										
SWW 85	08-01-95	<0.010	0.3	42	14	1.7	4.4	1.1	1.4	9.5
ESSEX COUNTY, VT										
B1W 1	08-03-95	<0.010	1.3	46	15	2.0	69	2.7	120	9.0
LXW 12	08-02-95	0.030	0.2	63	18	4.3	5.3	0.50	0.30	6.9
ORANGE COUNTY, VT										
CPW 1	08-04-95	<0.010	6.2	130	48	2.7	2.0	2.2	1.0	14
WINDHAM COUNTY, VT										
BTW 10	07-25-95	<0.010	--	68	23	2.6	37	2.8	52	12
BTW 11	07-25-95	<0.010	0.3	88	30	3.2	27	2.7	56	11
GXW 1	07-28-95	<0.010	1.5	87	30	3.0	5.0	5.7	3.4	10
RKW 121	07-27-95	0.060	0.3	95	30	4.8	5.8	3.4	7.6	15
WINDSOR COUNTY, VT										
GRW 1	07-26-95	<0.010	0.2	81	28	2.7	4.3	1.1	3.0	17
PMW 12	07-26-95	<0.010	0.2	93	31	3.8	9.8	0.20	3.8	27
WMW 128	07-27-95	0.010	1.1	90	26	6.0	5.5	5.4	4.9	11

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS IN NEW HAMPSHIRE AND VERMONT

**WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRA**

LOCAL IDENT- I- FIER	DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	RADIUM 228 DIS- SOLVED (PCI/L AS RA-228) (81366)
CHESHIRE COUNTY, NH										
KEW 118	07-31-95	<0.10	0.020	7.1	80	--	2600	490	--	--
KEW 119	07-31-95	<0.10	0.10	15	136	--	22000	790	--	--
NBW 36	08-01-95	0.60	0.010	17	40	<1	100	95	<0.40	<1.0
COOS COUNTY, NH										
BRW 49	08-03-95	0.70	<0.010	8.7	80	<1	20	4	0.70	<1.0
GRAFTON COUNTY, NH										
LLW 45	08-02-95	0.60	0.020	11	126	<1	49	25	<0.40	<1.0
SULLIVAN COUNTY, NH										
SWW 85	08-01-95	0.20	0.020	19	72	<1	41	14	1.8	<1.0
ESSEX COUNTY, VT										
B1W 1	08-03-95	<0.10	0.020	6.3	262	<1	57	1	<0.40	<1.0
LXW 12	08-02-95	0.20	0.020	13	80	<1	17	1	0.80	<1.0
ORANGE COUNTY, VT										
CPW 1	08-04-95	<0.10	--	8.3	160	--	740	260	--	--
WINDHAM COUNTY, VT										
BTW 10	07-25-95	<0.10	0.030	10	186	--	28	80	--	--
BTW 11	07-25-95	<0.10	0.030	11	202	--	6	40	--	--
GXW 1	07-28-95	<0.10	<0.010	6.4	124	--	13	350	--	--
RKW 121	07-27-95	0.10	0.020	8.5	136	--	13	85	--	--
WINDSOR COUNTY, VT										
GRW 1	07-26-95	<0.10	0.030	5.9	108	<1	4	1	<0.40	<1.0
PMW 12	07-26-95	<0.10	0.020	9.0	130	<1	6	13	2.7	<1.0
WMW 128	07-27-95	0.20	<0.010	8.1	124	--	45	70	--	--

SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS 193
IN NEW HAMPSHIRE AND VERMONT

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRAM

[illegible]

ESSEX COUNTY, VT

ORANGE COUNTY, VT

WINDHAM COUNTY, VT

WINDSOR COUNTY, VT

[illegible]

195

NATIONAL WATER QUALITY ASSESSMENT PROGRAM

[illegible]

197

NATIONAL WATER QUALITY ASSESSMENT PROGRAM

[illegible]

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS
IN NEW HAMPSHIRE AND VERMONT**

**WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRAM**

LOCAL IDENT- I- FIER		DATE	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)		
			CHESHIRE COUNTY, NH									
			KEW	118	07-31-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2
			KEW	119	07-31-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2
NBW	36	08-01-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2			
COOS COUNTY, NH												
BRW	49	08-03-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
GRAFTON COUNTY, NH												
LLW	45	08-02-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
SULLIVAN COUNTY, NH												
SWW	85	08-01-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
ESSEX COUNTY, VT												
B1W	1	08-03-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
LXW	12	08-02-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
ORANGE COUNTY, VT												
CPW	1	08-04-95	--	--	--	--	--	--	--	--		
WINDHAM COUNTY, VT												
BTW	10	07-25-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
BTW	11	07-25-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
GXW	1	07-28-95	--	--	--	--	--	--	--	--		
RKW	121	07-27-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
WINDSOR COUNTY, VT												
GRW	1	07-26-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
PMW	12	07-26-95	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2		
WMW	128	07-27-95	--	--	--	--	--	--	--	--		

**SUPPLEMENTAL NATIONAL WATER-QUALITY ASSESSMENT DATA FOR GROUND-WATER STATIONS 199
IN NEW HAMPSHIRE AND VERMONT**

**WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
NATIONAL WATER QUALITY ASSESSMENT PROGRAM**

LOCAL IDENT- I- FIER		DATE	ETHANE,	1,2,3-	1,2-	METHYL			DIBROMO	
			1112-	TRI-	DIBROMO	FREON-	TERT-		BROMO-	CHLORO-
			TETRA-	CHLORO	ETHANE	113	BUTYL	XYLENE	BENZENE	PROPANE
			CHLORO-	BENZENE	WATER	WATER	ETHER	WATER	WATER,	WATER
			WAT UNF	WAT, WH	WHOLE	UNFLTRD	WAT UNF	UNFLTRD	WHOLE,	WHOLE
			REC	REC	TOTAL	REC	REC	REC	TOTAL	TOT.REC
			(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
			(77562)	(77613)	(77651)	(77652)	(78032)	(81551)	(81555)	(82625)
CHESHIRE COUNTY, NH										
KEW	118	07-31-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
KEW	119	07-31-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
NBW	36	08-01-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
COOS COUNTY, NH										
BRW	49	08-03-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
GRAFTON COUNTY, NH										
LLW	45	08-02-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
SULLIVAN COUNTY, NH										
SWW	85	08-01-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
ESSEX COUNTY, VT										
B1W	1	08-03-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
LXW	12	08-02-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
ORANGE COUNTY, VT										
CPW	1	08-04-95	--	--	--	--	--	--	--	--
WINDHAM COUNTY, VT										
BTW	10	07-25-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
BTW	11	07-25-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
GXW	1	07-28-95	--	--	--	--	--	--	--	--
RKW	121	07-27-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
WINDSOR COUNTY, VT										
GRW	1	07-26-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
PMW	12	07-26-95	<0.2	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0
WMW	128	07-27-95	--	--	--	--	--	--	--	--

INDEX

A	
Access to WATSTORE data	19
Accuracy of the Records, explanation of	14
Acre-foot, definition of	20
Adenosine triphosphate, definition of	20
Algae, definition of	20
Ammonoosuc River	
at Bath, N.H.	148
at Bethlehem Junction, N.H.	72-74, 138
Androscoggin River Basin,	
gaging-station records in	32
lakes in, capacity of	33, 34
gaging-station records in	33, 34
Androscoggin River near Gorham, N.H.	34
Androscoggin River, at Errol, N.H.	33
Annual 7-day minimum, definition of	21
Aquifer, definition of	20
Arrangement of records, explanation of	15
Artesian, definition of	20
Artificial substrate, definition of	25
Ash mass, definition of	21
Ashland, N.H., Squam River at	46
Ashland, NH, Squam River at	135
Ashuelot River	
above the Branch at Keene, N.H.	162
at Hinsdale, N.H.	95, 142
at West Swanzey, N.H.	93, 94, 142
below Surry Mountain near Keene, N.H.	129, 142
Ayers Brook at Randolph, Vt.	80, 139
B	
Bacteria, definition of	20
Baker River near Rumney, N.H.	127, 135
Ball Mountain Reservoir, Vt., contents of	96
Bath, N.H., Ammonoosuc River at	148
Bear Camp River N.H. South Tamworth, N.H.	133
Bear Camp River near South Tamworth, N.H.	37
Beaver Brook at North Pelham, N.H.	56, 137
Bed load discharge, definition of	25
Bed load, definition of	25
Bed material, definition of	20
Bennington County, ground-water levels in	175
Bethlehem Junction, N.H., Ammonoosuc River at	72- 74, 138
Biochemical oxygen demand, definition of	20
Biomass, definition of	21
Black River at Coventry, Vt.	125, 146
Black River at Goulds Mill, near Springfield, Vt.	157
Black River at North Springfield, Vt.	129, 141
Blackwater Reservoir, N.H., contents of	57
Blackwater River near Webster, N.H.	128, 136
Blow-me-down Brook at Squag City near Plainfield, N.H.	155
Blue-green algae, definition of	24
Bottom material, definition of	21
Bradford, N.H., West Branch Warner near	136
Bradford, N.H., West Branch Warner River near	51
Brattleboro, Vt., Whetstone Brook at	161
Bristol River, NH, Smith River near	135
Bristol, N.H., Smith River near	47
Bristol, NH, Newfound River at Newfound Lake outlet near	135
Burlington, Vt., Lake Champlain at	120
C	
Cells/volume, definition of	21
Center Rutland, Vt., Otter Creek at	100, 143
Chemical oxygen demand, definition of	21
Cheshire County, ground-water levels in	163
Cheshire County, N.H.	
supplemental national water- quality assesement data	189-199
Chittenden County, ground-water levels in	176
Chlorophyll, definition of	21
Classification of records, definition of	14
Clyde River at Newport, Vt.	126, 146
Cochecho River at Dover, N.H.	40, 133
Cochecho River near Rochester, N.H.	39, 133
Cold River at Drewsville, N.H.	158
Colebrook, N.H., Mohawk River near	59, 137
Color unit, definition of	21
Comerford Reservoir, N.H., contents of	96
Concord, N.H., Soucook River at Pembroke Road near	52
Concord, N.H., Soucook River Pembroke Road near	136
Connecticut River	
at North Stratford, N.H.	137
at North Walpole, N.H.	91, 141
at Wells River, Vt.	139
at West Lebanon, N.H.	140
Connecticut River Basin	
below Indian Stream near Pittsburg, N.H.	137
discharge at partial-record stations and miscellaneous sites in	128, 129, 131, 132
gaging stations in	58- 95
reservoirs in	96
supplemental water-quality data for gaging stations	137-142
Connecticut River near Dalton, N.H.	63, 64, 138
Connecticut River, at North Stratford, N.H.	60, 61
Connecticut River, at Wells River, Vt.	75
Connecticut River, at West Lebanon, N.H.	84
Connecticut River, below Indian Stream, near Pittsburg, N.H.	58
Contents, definition of	21
Contoocook River	
at Peterborough, N.H.	127, 135
below Hopkinton Dam at W. Hopkinton, N.H.	136
below Hopkinton Dam at West Hopkinton, N.H.	128
near Henniker, N.H.	127, 136
Control structure, definition of	21
Control, definition of	21
Conway, N.H., Saco River near	36
Cooperation, explanation of	3
Coos County,	
ground-water levels in	164, 165
supplemental national water-quality assessment data	189-199
Coventry, Vt., Black River at	125, 146
Cubic feet per second per square mile, definition of	21
Cubic foot per second, definition of	21
D	
Dalton, N.H., Connecticut River near	63, 64, 138
Data collection and computation, explanation of	9, 17
Data Presentation, explanation of	10, 16, 19
Data table of daily mean values	12
Data table of daily mean values, explanation of	12
Definition of terms	20
Diamond River near Wentworth Location, N.H.	32
Diatoms, definition of	24
Discharge at partial-record stations and miscellaneous sites	127-132
Connecticut River Basin	128, 129
Merrimack River Basin	131, 132
Merrimack River Basin	127, 128
Merrimack River Basin	130, 131
Discharge, definition of	21
Dissolved, definition of	21
Dissolved-solids concentration, definition of	22
Dog River at Northfield Falls, Vt.	109, 144
Dover, N.H., Cochecho River at	39, 40
Dover, NH, Cochecho River at	133
Downstream order system, explanation of	8
Drainage area, definition of	22
Drainage Basin, definition of	22
Drewsville, N.H., Cold River at	158
Dry mass, definition of	21
Durham, N.H., Oyster River Near	41, 134
E	
East Barre Detention Reservoir, Vt., contents of	107
East Berkshire, Vt., Missisquoi River near	118, 145
East Bethel, Vt., Second Branch White River near	152
East Branch Pemigewasset River at Lincoln, N.H.	43, 134
East Georgia, Vt., Lamoille River at	115, 145

INDEX

East Orange Branch at East Orange, Vt.	78, 139	Ashuelot river below Surry Mountain near.....	129, 142
East Orange, Vt., East Orange Branch at.....	78	Otter Brook below Otter Brook Dam near.....	129, 142
East Weare, N.H., Picataquod River below Everett Dam near.....	128, 136	L	
Eastman Brook at Piermont, N.H., unnamed tributary to.....	150	Laboratory measurements, explanation of.....	16
Eastman Brook at Route 10, at Piermont, N.H.....	149	Lake Champlain at Burlington, Vt.	120
Edward MacDowell Reservoir, N.H., contents of.....	57	Lake Memphremagog at Newport, Vt.	124
Ellis River Basin near Jackson, N.H.	133	Lake Winnepesaukee at Weirs Beach, N.H.	48
Ellis River, near Jackson, N.H.	35	Lake Winnepesaukee Outlet at Lakeport, N.H.	49
Errol, N.H., Androscoggin River at.....	33	Lakeport, N.H., Lake Winnepesaukee Outlet at.....	49
Essex County, ground-water levels in.....	177	Lakes and reservoirs	
Essex County, Vt.,		Ball Mountain Reservoir, Vt.	96
supplemental national water-quality assessment data	189-199	Blackwater Reservoir, N.H.....	57
Essex Junction, Vt., Winooski River near.....	113, 145	Comerford Reservoirs, N.H.	96
Etna, N.H., Mink Brook at.....	139	East Barre Detention Reservoir, Vt.	107
Etna, N.H., Mink Brook near.....	79	Edward MacDowell Reservoir, N.H.	57
Everett Lake, N.H., contents of.....	57	Everett Lake, N.H.	57
Explanation of the records, explanation of.....	7	First Connecticut lake, N.H.	96
F		Franklin Falls, N.H.	57
Fair Haven, Vt., Poultney River below.....	98, 143	Lake Francis, N.H.....	96
Fecal coliform bacteria, definition of.....	20	Lakes and ponds in Mascoma River Basin.....	96
Fecal streptococcal bacteria, definition of.....	20	Mollys Falls Reservoir, Vt.	108
Ferrisburg, Vt.,		Moore Reservoirs, N.H.....	96
Lewis Creek at.....	104	Newfound Lake, N.H.	57
Little Otter Creek at.....	103	North Hartland, Vt.	96
Little Otter Creek at.....	143	North Springfield Lake, Vt.	96
First Connecticut Lake, N.H., contents of.....	96	Otter Brook Lake, N.H.	96
Floods and droughts.....	3	Peacham Pond, Vt.	108
Francis, Lake, N.H., contents of.....	96	Second Connecticut Lake, N.H.....	96
Franklin County, ground-water levels in.....	178	Sunapee Lake, N.H.	96
Franklin Falls Reservoir, N.H., contents of.....	57	Surry Mountain Lake, N.H.	96
Franklin Junction, N.H., Merrimack River at.....	127	Townshend Reservoir, Vt.	96
Franklin Junction, NH, Merrimack River at.....	135	Union Village Reservoirs, Vt.	96
G		Wrightsville Detention Reservoir, Vt.	107
Gage height, definition of.....	22	Lamoille County, ground-water levels in.....	179
Gaging station, definition of.....	22	Lamoille River at East Georgia, Vt.	115, 145
Gassetts, Vt., Williams River near.....	156	Lamoille River at Johnson, Vt.	114, 145
Georgia Plains, Vt., Stone Bridge Brook near.....	116, 145	Lamprey River Basin near Newmarket, N.H.	134
Goffstown, N.H., Piscataquog River near.....	128, 136	Lamprey River Basin, capacity of ponds in.....	42
Gorham, N.H., Androscoggin River near.....	34	Lamprey River near Newmarket, N.H.	42
Grafton County, NH,		Land-surface datum, definition of.....	22
supplemental national water-quality assessment data	189-199	Laplatte River at Shelburne Falls, Vt.	105, 144
Great Brook near Walpole, N.H.	159	Latitude-longitude system, explanation of.....	8
Green algae, definition of.....	24	Lewis Creek at North Ferrisburg, Vt.	104, 143
Ground-water levels.....	5	Lincoln, N.H., East Branch Pemigewasset River at.....	43
Ground-water levels in New Hampshire.....	163-174	Lincoln, NH, East Branch Pemigewasset River at.....	134
Ground-water levels in Vermont.....	175-188	Little Otter Creek at Ferrisburg, Vt.	103, 143
Groveton, N.H., Ammonoosuc River near.....	138	Little River near Waterbury, Vt.	112, 144
Groveton, N.H., Upper Ammonoosuc River near.....	62	M	
H		Mad River near Moretown, Vt.	110, 144
Hardness of water, definition of.....	22	Manchester, N.H., Merrimack River near Goffs Falls below.....	53, 137
Henniker, N.H., Contoocook River near.....	127, 136	Mascoma Lake, N.H., capacity of.....	96
Hillsborough County, ground-water levels in.....	166, 167	Mascoma River	
Hindsdale, N.H., Ashuelot River at.....	95, 142	at Mascoma, N.H.	85, 140
Hudson River Basin, gaging-station records in.....	97	at West Canaan, N.H.	140
Hudson River Basin,		at West Canann, N.H.	129
supplemental water-quality data for gaging stations...	142	Mascoma River Basin, lakes and ponds in, contents of.....	96
Hydrologic Bench Mark Network.....	6	Mascoma, lakes and ponds, N.H., contents of.....	96
Hydrologic Bench-Mark Network, definition of.....	22	Mascoma, N.H., Mascoma River at.....	85
Hydrologic conditions, summary of.....	3	Mean concentration(sediment), definition of.....	25
Hydrologic unit, definition of.....	22	Mean discharge, definition of.....	21
I		Measuring point, definition of.....	22
Identifying estimated daily discharge, definition of.....	14	Merrimack County, ground-water levels in.....	168-174
Instantaneous discharge, definition of.....	21	Merrimack River at Franklin Junction, N.H.	127
Introduction, explanation of.....	1	Merrimack River at Franklin Junction, N.H.	135
J		Merrimack River Basin,	
Jackson, N.H., Ellis River near.....	35	discharge at partial-record stations and miscellaneous sites.....	130
Jackson, NH, Ellis River near.....	133	discharge measurements at miscellaneous sites in.....	127, 128
Jamaica, Vt., West River at.....	129, 141	gaging station records in.....	43-56
Johnson, Vt., Lamoille River at.....	114, 145	reservoirs in.....	57
K		supplemental water-quality data for gaging stations...	134-137
Keene, N.H., Ashuelot River above the branch at.....	162	Merrimack River near Goffs Falls, below Manchester, N.H.	53, 137
Keene, N.H.,		Merrimack, N.H., Souhegan River at.....	128, 137

INDEX

Metamorphic stage, definition of	22	Ottawaquechee River at Norht Hartland, Vt.	140
Methylene blue active substances, definition of.....	22	Ottawaquechee River at North Hartland, Vt.	87
Mettawee River near Pawlet, Vt.	99, 143	Ottawaquechee River near Bridgewater, Vt.	140
Micrograms per gram, definition of	22	Ottawaquechee River near West Bridgewater, Vt.	86
Micrograms per liter, definition of	22	Otter Brook below Otter Brook Dam, near Keene, N.H.	142
Middlebury, Vt., New Haven River at Brooksville near	102, 143	Otter Brook Dam near Keene, N.H.	129
Middlebury, Vt., Otter Creek at	101, 143	Otter Brook Lake, N.H., contents of	96
Milligrams of carbon, definition of	24	Otter Creek at Center Rutland, Vt.	100, 143
Milligrams of oxygen, definition of	24	Otter Creek at Middlebury, Vt.	101, 143
Milligrams per liter, definition of	22	Oyster River Near Durham, N.H.	41, 134
Milton, N.H., Salmon Falls River at	38, 133	P	
Mink Brook near Etna, N.H.	79, 139	Parameter Code, definition of	23
Missiquoi River		Park Hill, N.H., Partridge Brook at	160
at Swanton, Vt.	145	Partial-record station, definition of	23
near East Berkshire, Vt.	145	Particle size, definition of	23
at Swanton, Vt.	119	Particle-size classification, definition of	23
near East Berkshire, Vt.	118	Partridge Brook at Park Hill, N.H.	160
near North Troy, Vt.	117, 145	Passumpsic River at Passumpsic, Vt.	71, 138
Mohawk River near Colebrook, N.H.	59, 137	Passumpsic, Vt., Passumpsic River at	71
Mollys Falls Reservoir, Vt., contents in	108	Pawlet, Vt., Mettawee River near	99, 143
Montpelier, Vt., reservoirs in Winooski River Basin above	107	Peacham Pond, Vt., contents in	108
Montpelier, Vt., Winooski River at	108, 144	Pemigewasset River	
Moore Reservoir, N.H., contents of	96	at Plymouth, N.H.	45, 135
Moose River at Passumpsic, Vt.	138	at Woodstock, N.H.	127, 134
Moose River at Victory, Vt.	65, 66	Percent composition, definition of	23
Moretown, Vt., Mad River near	110, 144	Periphyton, definition of	23
N		Pesticides, definition of	23
National Geodetic Vertical Datum of 1929 (NGVD of 1929),		Peterborough, N.H.	
definition of	22	Contocook River at	
National Stream Quality Accounting Network (NASQAN)....	6	Peterborough, N.H.,	127, 135
National Stream Quality Accounting Network (NASQAN),		Nubanusit Brook near	127, 136
definition of	23	Phytoplankton, definition of	24
National Water Quality Assessment Program (NAWQA)	190-199	Picocurie, definition of	24
Natural substrate, definition of	25	Piermont, N.H., Eastman Brook at Route 10 at	149
Networks, special, explanation of	6	Piermont, N.H., unnamed tributary to Eastman Brook at	150
New Haven River at Brooksville near Middlebury, Vt.	102, 143	Piscataqua River Basin,	
New Market, NH, Lamprey River near	134	gaging station records in	38-42
Newfane, Vt., West River at	129, 141	supplemental water-quality data for gaging stations ..	133, 134
Newfound Lake, N.H., contents of	57	Piscataquod River	
Newfound River at Newfound Lake outlet near Bristol, N.H.	135	below Everett Dam near East Weare, N.H.	136
Newmarket, N.H., Lamprey River near	42	below Everett Dam near East Weare, N.H.	128
Newport, Vt., Clyde River at	126, 146	near Goffstown, N.H.	128, 136
Newport, Vt., Lake Memphremagog at	124	Pittsburg, N.H., Connecticut River below Indian Stream near	58, 137
North Bennington, Vt., Wallomsac River near	97, 142	Plainfield, N.H., Blow-me-down Brook at Squag City near ...	155
North Branch Winooski River at Wrightsville, Vt.	106, 144	Plankton, definition of	24
North Danville, Vt., Pope Brook (site W-3) near	67	Plymouth, N.H., Pemigewasset River at	45
North Danville, Vt., Pope Brook near	138	Plymouth, NH, Pemigewasset River at	135
North Ferrisburgh, Vt., Lewis Creek at	143	Pope Brook (site W-3) near North Danville, Vt.	67
North Hartland Reservoir, Vt., contents of	96	Pope Brook near N. Danville, Vt.	138
North Hartland, Vt., Ottawaquechee River at	87, 140	Poultney River below Fair Haven, Vt.	98, 143
North Pelham, N.H., Beaver Brook at	56, 137	Publications on techniques of water-resources investigations	27-30
North Springfield Lake, Vt., contents of	96	Primary productivity, definition of	24
North Springfield, Vt., Black River at	129, 141	Programs, special networks and, explanation of	6
North Stratford, N.H., Connecticut River at	60, 61, 137	R	
North Troy, Vt., Missisquoi River near	117, 145	Radiochemical program, definition of	24
North Walpole, N.H., Connecticut River at	91, 141	Radiochemical Programs	7
Northfield Falls, Vt., Dog River at	109, 144	Randolph, Vt., Ayers Brook at	80, 139
Nubanusit Brook near Peterborough, N.H.	127, 136	Records of ground-water levels, explanation of	17-18
Numbering system for wells, description of	8	Records of ground-water quality, explanation of	18-19
O		Records of stage and water discharge, explanation of	9
Ompompanoosuc River at Union Village, Vt.	128, 139	Records of surface-water quality, definition of	14
On-site measurements and sample collection, explanation of	15	Recoverable from bottom material, definiton of	24
Orange County, ground-water levels in	180	Remark codes, explanation of	31
Orange County, Vt.,		Reservoir storage	5
supplemental national water-quality assessment data	189-199	Reservoirs (see Lakes and reservoirs)	57, 96
Order of listing stations	8	Return period, definition of	24
Organic mass, definition of	21	Richelieu River (Lake Champlain) at Rouses Point, N.Y.	121-123
Organism count/volume, definition of	23	Rochester, N.H., Cochecho River near	133
Orleans County, ground-water levels in	181	Rockingham, Vt., Williams River near	90, 141
Other records available, explanation of	14	Rouses Point, N.Y., Richelieu River (Lake Champlain) at	121- 123
Ottawaquechee River at West Woodstock, Vt.	154	Rumney, N.H., Baker River near	127, 135
Ottawaquechee River near West Woodstock, Vt.	153	Runoff in inches, definition of	25

INDEX

Rutland County, ground-water levels in.....	182	Surry Mountain Lake, N.H., contents of	96
S		Suspended sediment, definition of	25
Saco River Basin,		Suspended, definition of	26
gaging-station records in	36, 37	Suspended, recoverable, definition of	26
gaging-station records in	35	Suspended, total, definition of	26
supplemental water-quality data for gaging stations ..	133	Suspended-sediment load, definition of	25
Saco River near Conway, N.H.	36	Swanton, Vt., Missisquoi River at	119, 145
Salmon Falls River at Milton, N.H.	38, 133	Swanzy, N.H., South Branch Ashuelot River at	142
Salmon Falls River Basin, contents in lakes and ponds	38	T	
Sea Level, definition of	25	Taxonomy, definition of	26
Second Branch White River at South Randolph, Vt.	151	Temple, N.H., Stony Brook tributary near	54, 137
Second Branch White River near East Bethel, Vt.	152	Terms, definition of	20
Second Connecticut Lake, N.H., contents of	96	The National Trends Network (NTN)	7
Sediment, definition of	25	The National Trends Network, definition of	23
Sediment, explanation of	16	The National Water-Quality Assessment (NAWQA) Program ..	7
Seven day ten year low flow, definition of	25	Thermograph, definition of	26
Shelburne Falls, Vt., Laplatte River at	105, 144	Tilton, N.H., Winnepesaukee River at	50
Sleepers River (site W-5) near St. Johnsbury, Vt.	68-70	Time-weighted average, definition of	26
Smith River near Bristol, N.H.	47, 135	Titlton, NH, Winnepesaukee River at	135
Sodium-adsorption-ratio, definition of	25	Tons per acre-foot, definition of	26
Solute, definition of	25	Tons per day, definition of	26
Soucook River at Pembroke Road near Concord, N.H.	52, 136	Total discharge, definition of	27
Souhegan River at Merrimack, N.H.	128, 137	Total organism count, definition of	23
South Branch Ashuelot River at Swanzy, N.H.	142	Total sediment discharge, definition of	25
South Randolph, Vt., Second Branch White River at	151	Total, definition of	26
South Tamworth, N.H., Bear Camp River near	37, 133	Total, recoverable, definition of	27
Special networks and programs	6	Total-sediment load, definition of	25
Specific conductance, definition of	25	Townsend, Vt., West River below Townsend Dam near	141
Springfield, Vt., Black River at Goulds Mill near	157	Townshend Reservoir, Vt., contents of	96
Squam River at Ashland, N.H.	46, 135	Tritium Network	7
St. Johnsbury, Vt., Sleepers River (site W-5) near	68-70	Tritium network, definition of	27
St. Lawrence River Basin,		U	
gaging stations in	98-126	Union Village Reservoir, Vt., contents of	96
supplemental water-quality data for gaging stations ..	143-146	Union Village, Vt., Ompompanoosuc River at	128, 139
Stage-discharge relation, definition of	25	Unnamed Tributary to Eastman Brook at Piermont, N.H.	150
Stark, N.H., Upper Ammonoosuc River at	147	Upper Ammonoosuc River at Stark, N.H.	147
Station manuscript, explanation of	11	Upper Ammonoosuc River near Groveton, N.H.	62, 138
Station-identification numbers, explanation of	8	V	
Station records,		Victory, Vt., Moose River at	65, 66, 138
surface water	31-126	W	
ground water	163-188	W. Hopkinton, N.H., Contoocook River below Hopkinton Dam at ..	136
Statistics of monthly mean data, explanation of	12	Walloomsac River near North Bennington, Vt.	142
Stevens Brook near Wentworth, N.H.	44, 134	Walloomsac River near North Bennington, Vt.	97
Stone Bridge Brook near Georgia Plains, Vt.	116, 145	Walpole, N.H., Great Brook near	159
Stony Brook Tributary near Temple, N.H.	54, 137	Washington County, ground-water levels in	183-185
Streamflow, definition of	25	Water quality	5
Streamflow, explanation of	3	Water Quality Data	189-199
Substrate, definition of	25	Water temperature, explanation of	16
Sugar River at Sunapee, N.H.	140	Water year, definition of	27
Sugar River at West Claremont, N.H.	88, 89, 141	Waterbury Reservoir near Waterbury, Vt.	111
Sullivan County, N.H.,		Waterbury, Vt., Little River near	112, 144
supplemental national water-quality assessment data ..	189-199	Waterbury, Vt., Waterbury Reservoir near	111
Summary of hydrologic conditions, summary of	3	WDR, definition of	27
Summary statistics	12	Webster, N.H., Blackwater River near	128, 136
Summary statistics, explanation of	12	Weighted average, definition of	27
Sunapee Lake, N.H., contents of	96	Weirs, Beach, N.H., Lake Winnepesaukee at	48
Sunapee, N.H., Sugar River at	140	Wells River at Wells River, Vt.	76, 77, 139
Supplemental national water quality assesment data for ..		Wells River, Vt., Connecticut River at	75, 139
gaging statinons in New Hampshire and Vermont	147-162	Wells River, Vt., Wells River at	76, 77
Supplemental national water-quality assessment data for ..		Wentworth Location, N.H., Diamond River near	32
ground-water stations in N.H. and Vt.		Wentworth, N.H., Stevens Brook near	44, 134
Cheshire County, N.H.	189-199	West Branch Warner River near Bradford, N.H.	51, 136
Coos County, N.H.	189-199	West Bridgewater, Vt., Ottauquechee River near	86, 140
Essex County, Vt.	189-199	West Canaan, N.H., Mascoma River at	129, 140
Grafton County, N.H.	189-199	West Claremont, N.H., Sugar River at	88, 89, 141
Oranage County, Vt.	189-199	West Hartford, Vt., White River at	81-83, 140
Sullivan County, N.H.	189-199	West Hopkinton, N.H., Contoocook River below Hopkinton Dam at ..	128
Windham County, Vt.	189-199	West Lebanon, N.H., Connecticut River at	84, 140
Windsor County, Vt.	189-199	West River at Jamaica, Vt.	129, 141
Supplemental water-quality data for gaging stations	133-146	West River at Newfane, Vt.	129, 141
Surface area, definition of	26	West River below Townsend Dam near Townsend, Vt.	141
Surficial bed material, definition of	26	West Swanzy, N.H., Ashuelot River at	93, 94, 142

INDEX

West Woodstock, Vt. Ottaquechee River at	154
West Woodstock, Vt., Ottaquechee River near	153
Wet mass, definition of	21
Whetstone Brook at Brattleboro, Vt.....	161
White River at West Hartford, Vt.	81-83, 140
Williams River near Gassetts, Vt.....	156
Williams River near Rockingham, Vt.	90, 141
Windham County, Vt., supplemental national water-quality assessment data	189-199
Windsor County, ground-water levels in	186-188
Windsor County, Vt., supplemental national water-quality assessment data	189-199
Winnepeasukee River at Tilton, N.H.	50, 135
Winooski River at Montpelier, Vt.	108, 144
Winooski River Basin above Montpelier, Vt., reservoirs in ...	107
Winooski River near Essex Junction, Vt.	113, 145
Woodstock, N.H., Pemigewasset River at	127, 134
Wrightsville Detention Reservoir, Vt., contents of	107
Wrightsville, Vt., North Branch Winooski River at	106, 144
WSP, definition of	27
Z	
Zooplankton, definition of	24

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

USGS LIBRARY - RESTON



3 1818 00238583 7

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
525 Clinton Street
Bow, New Hampshire 03304
